



ENVIRONMENTAL SITE CHARACTERIZATION

Chapel Hill Police Department Property

828 Martin Luther King Jr. Boulevard

Chapel Hill, Orange County, NC

Revised: August 18, 2015



ENVIRONMENTAL SITE CHARACTERIZATION

Chapel Hill Police Department Property
828 Martin Luther King Jr. Boulevard
Chapel Hill, Orange County, NC

Prepared for:

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SECTION 1

INTRODUCTION

Falcon Engineering, Inc. (Falcon) completed an Environmental Site Characterization (ESC) Report for the Town of Chapel Hill property located at 828 Martin Luther King Jr. Boulevard in Chapel Hill, Orange County, North Carolina. The purpose of the investigation was to evaluate the on-site groundwater for potential impacts from previously identified coal combustion products (CCPs) within the property boundaries. Falcon has previously mobilized to the site in an effort to install, purge, and sample monitoring wells. However, due to the local recharge rates and the nature of the CCPs to increase turbidity the initial wells were either too turbid or ran dry before they could be adequately purged and stabilized. New wells were installed to greater depth and purged; however, due to inclement weather and time constraints the wells were initially sampled prior to stabilizing and therefore, did not yield accurate analysis of the dissolved phase contamination. This report discusses the initial sampling results from the reinstalled wells as well as the successful results of additional sampling performed after the wells were purged a second time and stabilized.

The most recent sampling activities were successful in sampling for dissolved phase constituents through monitoring the wells for stability and sampling immediately after purging. Sampling included the collection of three (3) groundwater samples from the two existing down gradient monitoring wells, one un-filtered sample each from MW3A and MW4A along with filtered MW4A samples due to the slightly elevated turbidity of 24.7 NTU in MW4A. This sampling event was monitored by the North Carolina Department of Environment and Natural Resources (NCDENR) through ongoing correspondence before and during the sampling event.

The following list provides the identified constituents (barium and boron) and their concentrations. The identified contaminant's do not exceed the 15A NCAC 02L .0202 Groundwater Standards. Hexavalent Chromium was not identified in the collected samples. It appears that the previously identified CCPs have not exceeded the groundwater standards down gradient of the landfill within the property boundaries.

MW3A	MW4A	MW4A Filtered
Barium – 67 µg/L	Barium - 64 µg/L	Barium – 61 µg/L
Boron – 520 µg/L	BRL	BRL

The Environmental Site Characterization (ESC) was conducted in general accordance with the January 2014 Inactive Hazardous Sites Program's Guidelines for Assessment and Cleanup. The assessment was performed on a property with the property identification number (PIN) 9789413949. Figure 1 (Appendix A) provides a general site location map of the subject property. An additional figure detailing sample locations is also provided in Appendix A of this report.

1.1 Site Location and Description

The evaluated property is approximately a 10.24-acre property located along Martin Luther King Jr. Blvd. in Chapel Hill, North Carolina. The site is located to the east of Martin Luther King Jr. Blvd., with development primarily focused in the northwest corner. The property is located immediately north of Bolin Creek, beginning approximately 200 feet north of the centerline of Hillsborough Street.

The property is currently developed with a 2 story structure approximately 25,000 square feet in size. There are also two parking lots and a few cargo containers used for storage present on site. The site is currently occupied by the Chapel Hill Police Department. The building is located in the northwest corner, with the majority of parking in the center of the site. The eastern and southern portions of the site are wooded.

1.2 Site History and Previous Scope of Work

The Town of Chapel Hill retained Falcon to conduct the ESC. Previous work conducted at the site (Phase I ESA & Limited Phase II) is detailed below and was previously provided under separate cover.

The past project goals of the Phase I were accomplished through the completion of the following tasks:

- Review of environmental databases and lists obtained from Federal, State, and local regulatory agencies including historic maps and directories of the site and the surrounding areas.
- Visual inspection of the subject site, including photographic documentation of existing conditions and notation of adjacent property use and conditions.
- Interviews with those knowledgeable of the site's history (as appropriate or required).

The past project goals of the Limited Phase II were accomplished through the completion of the following tasks:



- Sediment and groundwater sampling to determine the existing conditions within identified areas on the subject property. Sampling included two sediment samples and 3 water samples.
- Laboratory analyses of samples for Chemicals of Concern (COC).
- Comparison of analytical results to applicable criteria.

Based on findings of those investigations NCDENR requested the lab results from two down gradient monitoring wells. Falcon also conducted geoprobe drilling on site to better assess the extent of potential Coal Combustion Products (CCPs) on the subject property.

1.3 Current Project Objective and Scope of Work

The Town of Chapel Hill retained Falcon to continue efforts in completing the ESC. The purpose of the ESC was to further delineate environmental conditions present at the site in regards to the former use as a landfill. Previous work at the site is mentioned in the above section.

The current project goals of the ESC were accomplished through the completion of the following tasks:

- Abandonment of the two (2) original down gradient monitoring wells that produced highly turbid samples.
- Installation and development of two (2) new down gradient monitoring wells at increased depths.
- Sampling groundwater to determine the existing conditions within identified areas on the subject property.
- Laboratory analyses of samples for Chemicals of Concern.
- Comparison of analytical results to applicable criteria.

1.4 Current Land Use

The subject property was generally undeveloped until the current police station was constructed after 1980. However, as discussed in the Historical Usage section, it appears the site was used as a borrow pit in the late 1950's through early 1960's then as a fill site from the mid-1960's to mid-1970's. The site has been the home of the Chapel Hill Police Station since the town acquired it in 1980. During the site reconnaissance, it became apparent that fill materials including some coal combustion products (CCPs) were previously placed adjacent to a steep slope along the southern portion of the property.

1.5 Description of Soils

The US Natural Resource Conservation Service's Orange County Soil Survey provides two (2) different native soil types on the subject site:

- TaE – Tatum Silt Loam Complex (15 to 25 percent slopes) - well drained soil derived from red saprolite (50% of the overall subject site).
- WmE – Wedowee Sandy Loam Complex (15 to 25 percent slopes) - well drained soil derived from red saprolite (50% of the overall subject site).

1.6 Hydrogeologic Conditions

A review of the Chapel Hill, NC USGS 7.5-minute 1946 topographic map, which includes the project site, indicates that the site is located on varying elevations from 375 feet above mean sea level (msl) in the northwest corner of the site to 284 feet msl in the southeast corner where the site meets Bolin Creek. The 2010 Topographic Map from Orange County GIS indicates significantly different contours from the USGS maps. This data supports the filling and leveling of the site which would explain the soil/debris layers observed within the (previously taken) geoprobe soil profiles seen.

The site is bounded on the north and west by paved streets, to the east by residential developed woodlands and to the south by Bolin Creek. The general site drainage is to the South via overland flow and along stormwater trenches aside Martin Luther King Jr. Blvd. Stormwater drains from this site into Bolin Creek. Very little, if any, surface water comes onto the site from offsite.

The property and surrounding area are serviced by municipal water from Orange Water and Sewer Authority (OWASA) and does not currently utilize groundwater. Falcon contacted the Orange County Health Department (OCHD) to request information on potable water wells registered and/or known within the area. According to OCHD, the closest drinking water or other potable water well is located approximately 460 feet from the subject property. This well is located at 3 Mt Bolus Road and is up-gradient from the subject property. Known or registered down-gradient drinking water wells within 500 feet of site property line were not reported or visually observed by Falcon staff. The closest down-stream water supply system is Jordan Lake. The closest public water supply intake for this lake is located approximately 12.5 miles away from the subject property.

METHODS OF INVESTIGATION

2.1 Monitoring Well Abandonment, Installation, and Development

During previous investigative efforts, three (3) groundwater monitoring wells had been installed, MW1, MW3, and MW4. MW1 was installed within the area of fill including some CCPs adjacent to the southwest corner of the Police Station Building. NC DENR requested the remaining two (2) wells (MW3 and MW4) be installed down gradient of the fill. MW3 was placed towards the western side of property within the wooded area north of Bolin Creek Greenway Trail. MW4 was placed towards the eastern side of property also within the wooded area north of Bolin Creek Greenway Trail. It should be noted that shallow depths and auger refusal were encountered. This may have been due to the natural geology and proximity to Bolin Creek. During previous attempts to collect samples, MW3 and MW4 produced insufficient groundwater with high turbidity readings that prevented accurate results. Results from these sampling activities were provided in previously submitted reports to NC DENR.

The first phase of this investigation involved abandoning MW3 and MW4. Trigon Exploration was contracted by Falcon to abandon the two wells on January 6 and 7, 2015, respectively. The Well Abandonment Records are provided in Appendix C of this report.

Additional phase of the investigation involved the installation of two (2) new down gradient monitoring wells, MW3A and MW4A, on May 12 and 15, 2015, respectively. Falcon contracted American Environmental Drilling, Inc. to complete well installation. MW3A was located directly down gradient of the exposed fill materials just outside of the fence north of the Bolin Creek Greenway Trail. MW4A was placed farther east towards the eastern property boundary and just outside of the gate to the fence north of the Bolin Creek Greenway Trail. Refer to Figure 2 in Appendix A for well locations. The installation depth of MW3A was 16.0 ft below ground surface (bgs) and the installation depth of MW4A was 19.0 ft bgs. The static water level depth at time of install for MW3A was 10.0 ft bgs and MW4A was 4.0 ft bgs. Drill cuttings and purge water were contained to the proximity of well locations through the use of earthen berms as needed. The wells were constructed in accordance with 15A NCAC 02C .0100 or 15A NCAC 02C .0200 Well Construction Standards. Well Construction records are provided in Appendix C of this report.

The wells were purged on May 21-22 and July 20-22, 2015. MW1 was purged on Aug 5, and 6, 2015. The method of purging the wells was by low flow pumping. Per the established guidance, After installing the wells 24- hours was allowed for the surface pad and protective casing to cure

prior to purging. The wells recharged following adequate purging of five (5) or more well volumes. To determine the number of gallons within one (1) well volume, the following equation was used: (Total depth of water) X (0.48 –conversion to well volumes in gallons) = # of gallons to purge.

According to the US Environmental Protection Agency’s (EPA’s) Sampling Guidelines; “With respect to the ground water chemistry, an adequate purge is achieved when the pH and specific conductance of the ground water have stabilized and the turbidity has either stabilized or is below 10 Nephelometric Turbidity Units (NTUs)”. While purging the three (3) wells, to determine when sampling could commence, a Hanna HI 98703 Turbidity Meter and YSI 556 MPS instrument were utilized to define turbidity, specific conductivity, temperature, and pH of groundwater within.

2.2 Groundwater Analytical Methods

Samples were analyzed for volatile organic compounds (VOCs), 1,4-dioxane, semi-volatile organic compounds (SVOCs), metals, and hexavalent chromium. Table 1 provides the analytical methods that were used in the collection of these samples. Analytical methods including laboratory quality control and quality assurance (QA/QC) procedures were performed by Prism Laboratories, Inc. (NC Certification No. 402).

Table 1 | Groundwater Analytical Methods

Groundwater Constituents	Analytical Method
Volatile Organic Compounds (VOC)	SW 846 Method 8260
1,4-Dioxane	SW 846 Method 8260 SIM
Semi-volatile Organic Compounds (SVOC)	SW-846 Method 8270
Metals	USEPA method for detection limits below the 15A NCAC 2L standards
Hexavalent chromium	USEPA Method 218.7 or 218.6 as modified by US EPA Region IV

2.3 Groundwater Sampling Methods

Sampling was done in general accordance with the January 2014 Inactive Hazardous Sites Program’s Guidelines for Assessment and Cleanup (DENR Guidance\NC DENR Guidance Inactive Haz Sites.pdf) and the USEPA Technical Guidance (DENR Guidance\EPA Groundwater-Sampling.pdf) documents except as noted below. Sampling was performed following adequate

purging and after chemical parameter stabilization criteria have been reasonably met. According to the EPA sampling guidelines “Stabilization occurs when, for at least three consecutive measurements, the pH remains constant within 0.1 Standard Unit (SU) and specific conductance varies no more than approximately 5 percent.”

SECTION 3

ANALYTICAL RESULTS

MW1, MW3A, and MW4A were initially sampled on May 26, 2015. The May 26 sampling event occurred before the wells met the chemical parameter stabilization criteria (as defined above) including low turbidity; therefore, the May sampling results are not an accurate indication of the dissolved phase concentration levels of the constituents of concern. However, most constituents were not identified during the May sampling event with the exception of the following metals: mercury, arsenic, barium, chromium, and lead. Table 2 below provides a summary of constituents of interest including those above the analytical reporting limits. A full laboratory report including QC/QA data is provided in Appendix D of this report.

Table 2 | May 2015 Initial Sampling Results (pre-well stabilization)

Constituent of Potential Concern (COPC)	Units	Sampling Locations			NC DENR GW Standard (15A NCAC 02L .0202)
		MW4A	MW3A	MW1	
Hexavalent Chromium	µg/L	BRL	BRL	BRL	N/A*
Mercury	µg/L	BRL	BRL	0.31	1
Arsenic	µg/L	BRL	42	110	10
Barium	µg/L	54	770	150	700
Boron	µg/L	BRL	BRL	BRL	700
Cadmium	µg/L	BRL	BRL	BRL	2
Chromium (total)	µg/L	BRL	460	98	10
Lead	µg/L	BRL	89	61	15
Selenium	µg/L	BRL	BRL	BRL	20
Silver	µg/L	BRL	BRL	BRL	20

* There is no 15A NCAC 02L .0202 Standard for Hexavalent Chromium, The Nation Primary Drinking Water Regulations set the Maximum Concentration Level for Total Chromium (which includes Hexavalent Chromium) at 100 µg/L. The 15A NCAC 02L .0202 Standard for Total Chromium is 10 µg/L



Falcon returned to the site to purge and sample the three (3) wells. The analytical methods were also the same as provide in Table 1 above with the exception of not sampling for VOCs and SVOCs. Not sampling for organic compounds was pre-approved by NCDENR due to not detecting organic compound's during previous sampling events.

MW3A and MW4A were purged of 9 well volumes on July 20 and 21 2015. MW3A stabilized with less than 10 NTUs. MW4A was also stable; however, the turbidity was at 24.7. NCDENR pre-approved filtered and non-filtered samples from MW4A. MW1 was purged of 17 well volumes on July 21 and 22 but did not stabilize. Turbidity remained in the mid 100 NTUs. MW1 was not sampled in July. MW1 was purged again on August 5 and 6, 2015 in another effort to obtain samples from a stable well with low turbidity. However, turbidly ranged from unreadable to the high 100 NTUs. MW1 was not sampled in August. Not sampling MW1 was also monitored by NCDENR before and during sampling due to MW1 being installed already within the landfill material and having previously documented contamination. Table 3 below provides a summary of constituents of interest including those above the analytical reporting limits. A full laboratory report including QC/QA data is provided in Appendix D of this report.

Table 3 | July 2015 Additional Sampling Results (post-well stabilization)

Constituent of Potential Concern (COPC)	Units	Sampling Locations			NC DENR GW Standard (15A NCAC 02L .0202)
		MW3A	MW4A FILTERED	MW4A	
Hexavalent Chromium	µg/L	BRL	BRL	BRL	N/A*
Mercury	µg/L	BRL	BRL	BRL	1
Arsenic	µg/L	BRL	BRL	BRL	10
Barium	µg/L	67	61	64	700
Boron	µg/L	520	BRL	BRL	700
Cadmium	µg/L	BRL	BRL	BRL	2
Total Chromium	µg/L	BRL	BRL	BRL	10
Lead	µg/L	BRL	BRL	BRL	15
Selenium	µg/L	BRL	BRL	BRL	20
Silver	µg/L	BRL	BRL	BRL	20

Values shown in **BOLD** are above the applicable standard

BRL = Below Reporting Limit

* There is no 15A NCAC 02L .0202 Standard for Hexavalent Chromium, The Nation Primary Drinking Water Regulations set the Maximum Concentration Level for Total Chromium (which includes Hexavalent Chromium) at 100 µg/L The 15A NCAC 02L .0202 Standard for Total Chromium is 10 µg/L



SECTION 4

SUMMARY OF FINDINGS

Falcon completed an ESC Report for the Town of Chapel Hill at 828 Martin Luther King Jr. Boulevard located in Chapel Hill, Orange County, North Carolina. The purpose of the investigation was to evaluate the on-site groundwater for potential impacts within the property boundaries.

Based upon our completed field activities and subsequent laboratory analysis Falcon was able to provide the following findings:

1. MW1 was purged for two (2) additional days but failed to stabilize and was not sampled;
2. Barium, and Boron were detected at a concentration below the NC DENR 2L Groundwater Standard at MW3A;
3. Barium was detected at a concentration below the NC DENR 2L Groundwater Standard at MW4A in both the filtered and unfiltered samples;
4. Hexavalent Chromium was not detected in either down-gradient well.

SECTION 5

RECOMMENDATIONS

Falcon recommends that this report be submitted to NC DENR for their further review to assist them in recommending next steps. Based on the sampling results, it appears the previously identified coal combustion products have not exceeded the groundwater standards down gradient of the landfill within the property boundaries. NC DENR will likely consider the Town of Chapel Hill Police Department a low priority site. Following NC DENR review Falcon is available to provide additional consultation and recommended courses of action to comply with possible next steps.

APPENDIX A

FIGURES





FIGURE 1 | GENERAL SITE LOCATION





FIGURE 2 | APPROXIMATE SAMPLING LOCATION MAP



APPENDIX B
PHOTOGRAPHS



ENVIRONMENTAL SITE CHARACTERIZATION

Chapel Hill Police Department Property

Groundwater Monitoring Well Installation – May 2015



Typical Drill Rig



Under-reamer Bit

ENVIRONMENTAL SITE CHARACTERIZATION

Chapel Hill Police Department Property

Groundwater Monitoring Well Installation – May 2015



Typical set up



Tarp used to protect the greenway

ENVIRONMENTAL SITE CHARACTERIZATION

Chapel Hill Police Department Property

Groundwater Monitoring Well Installation – May 2015



Typical well



MW3-A

ENVIRONMENTAL SITE CHARACTERIZATION

Chapel Hill Police Department Property

Groundwater Monitoring Well Installation – May 2015



MW4-A



MW3-A

ENVIRONMENTAL SITE CHARACTERIZATION

Chapel Hill Police Department Property

Groundwater Monitoring Well Installation – May 2015



MW4-A



Typical signage

ENVIRONMENTAL SITE CHARACTERIZATION
Chapel Hill Police Department Property
Groundwater Sampling Event – July 2015



MW-3A Purging 7/20/2015



First Purge Turbidity Reading – MW-3A

ENVIRONMENTAL SITE CHARACTERIZATION

Chapel Hill Police Department Property

Groundwater Sampling Event – July 2015



Second Purge Turbidity Reading – MW-3A



YSI Instrument Reading – Between 1st and 2nd Purge – MW-3A

ENVIRONMENTAL SITE CHARACTERIZATION

Chapel Hill Police Department Property

Groundwater Sampling Event – July 2015



MW-4A Purging 7/20/2015



YSI Instrument Reading – Before 1st Purge MW-4A

ENVIRONMENTAL SITE CHARACTERIZATION

Chapel Hill Police Department Property

Groundwater Sampling Event – July 2015



Turbidity Reading – MW-4A – Before 1st Purge



Turbidity Reading – MW-4A – Before 2nd Purge

ENVIRONMENTAL SITE CHARACTERIZATION

Chapel Hill Police Department Property

Groundwater Sampling Event – July 2015



YSI Instrument Reading – Before 2nd Purge – MW-4A



Purging Well-1 – 7/20/2015

ENVIRONMENTAL SITE CHARACTERIZATION

Chapel Hill Police Department Property

Groundwater Sampling Event – July 2015



YSI Instrument Reading – 3rd Purge – MW-4A



Turbidity Reading – MW-4A

ENVIRONMENTAL SITE CHARACTERIZATION

Chapel Hill Police Department Property

Groundwater Sampling Event – July 2015



YSI Instrument Reading – 4th Purge – MW-4A



Turbidity Reading – MW-4A 5th Purge 7/21/2015

ENVIRONMENTAL SITE CHARACTERIZATION

Chapel Hill Police Department Property

Groundwater Sampling Event – July 2015



YSI Instrument Reading – 6th Purge – MW-3A 7/21/2015

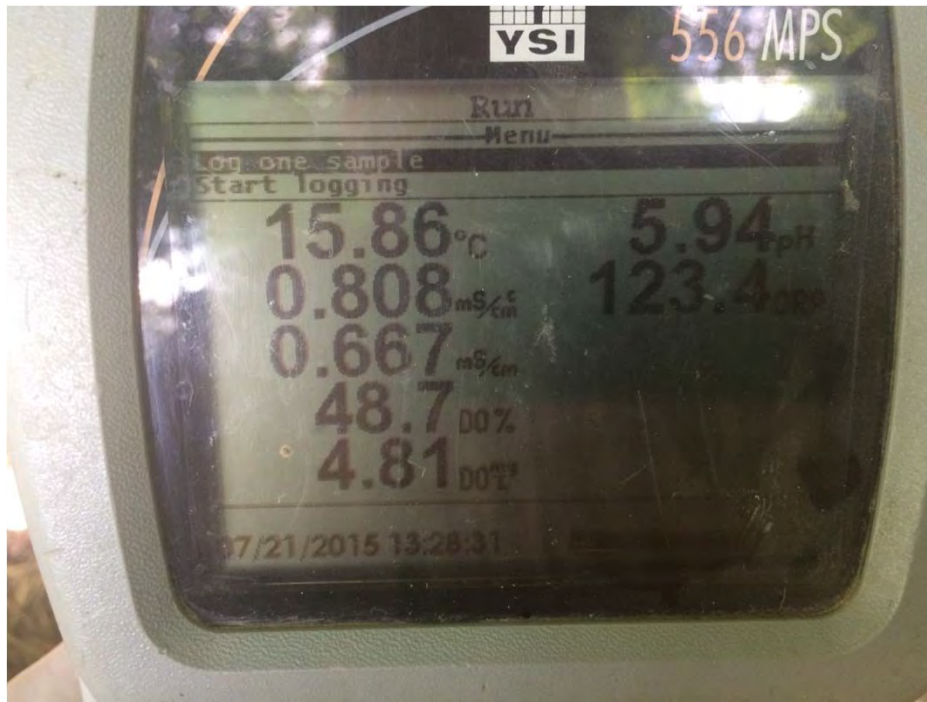


Turbidity Reading – MW-3A – 6th Purge

ENVIRONMENTAL SITE CHARACTERIZATION

Chapel Hill Police Department Property

Groundwater Sampling Event – July 2015



YSI Instrument Reading – 6th Purge – MW-4A



Turbidity Reading – MW-4A – 6th Purge

ENVIRONMENTAL SITE CHARACTERIZATION

Chapel Hill Police Department Property

Groundwater Sampling Event – July 2015



YSI Instrument Reading – 7th Purge – MW-3A



YSI Instrument Reading – MW-3A – 8th Purge

ENVIRONMENTAL SITE CHARACTERIZATION

Chapel Hill Police Department Property

Groundwater Sampling Event – July 2015



Turbidity Reading – 8th Purge – MW-3A



Turbidity Reading – Well-1 – 8th Purge 7/21/2015

ENVIRONMENTAL SITE CHARACTERIZATION

Chapel Hill Police Department Property

Groundwater Sampling Event – July 2015



Turbidity Reading – 10th Purge – Well 1 7/22/2015



Purging Well-1 –7/22/2015

ENVIRONMENTAL SITE CHARACTERIZATION

Chapel Hill Police Department Property

Groundwater Sampling Event – July 2015



Turbidity Reading – 11th Purge – Well-1



Turbidity Reading – 13th Purge at Well-1

ENVIRONMENTAL SITE CHARACTERIZATION

Chapel Hill Police Department Property

Groundwater Sampling Event – July 2015



YSI Instrument Reading – 13th Purge – Well-1



YSI Instrument Reading – 14th Purge at Well-1

ENVIRONMENTAL SITE CHARACTERIZATION

Chapel Hill Police Department Property

Groundwater Sampling Event – July 2015



Turbidity Reading – 14th Purge – Well-1



Turbidity Reading – 16th Purge at Well-1

ENVIRONMENTAL SITE CHARACTERIZATION

Chapel Hill Police Department Property

Groundwater Sampling Event – July 2015



YSI Instrument Reading – 16th Purge – Well-1



Turbidity Reading – 17th Purge at Well-1

ENVIRONMENTAL SITE CHARACTERIZATION

Chapel Hill Police Department Property

Groundwater Sampling Event – July 2015



YSI Instrument Reading – 17th Purge – Well-1

ENVIRONMENTAL SITE CHARACTERIZATION

Chapel Hill Police Department Property

Purging Well-1 – August 2015



Purging – Well-1 8/5/2015



YSI Instrument Reading – Well-1 – First Purge

ENVIRONMENTAL SITE CHARACTERIZATION
Chapel Hill Police Department Property
Purging Well-1 – August 2015



Turbidity Reading – 1st Purge, too high



Purged Well Water – Well 1

ENVIRONMENTAL SITE CHARACTERIZATION
Chapel Hill Police Department Property
Purging Well-1 – August 2015



YSI Instrument Reading – 2nd Purge – Well-1



Turbidity Reading – Well-1 – 2nd Purge

ENVIRONMENTAL SITE CHARACTERIZATION
Chapel Hill Police Department Property
Purging Well-1 – August 2015



YSI Instrument Reading – 3rd Purge – Well-1



Turbidity Reading – Well-1 – 3rd Purge

ENVIRONMENTAL SITE CHARACTERIZATION
Chapel Hill Police Department Property
Purging Well-1 – August 2015



Turbidity Reading – 4th Purge – Well-1



YSI Instrument Reading – Well-1 – 4th Purge

ENVIRONMENTAL SITE CHARACTERIZATION
Chapel Hill Police Department Property
Purging Well-1 – August 2015

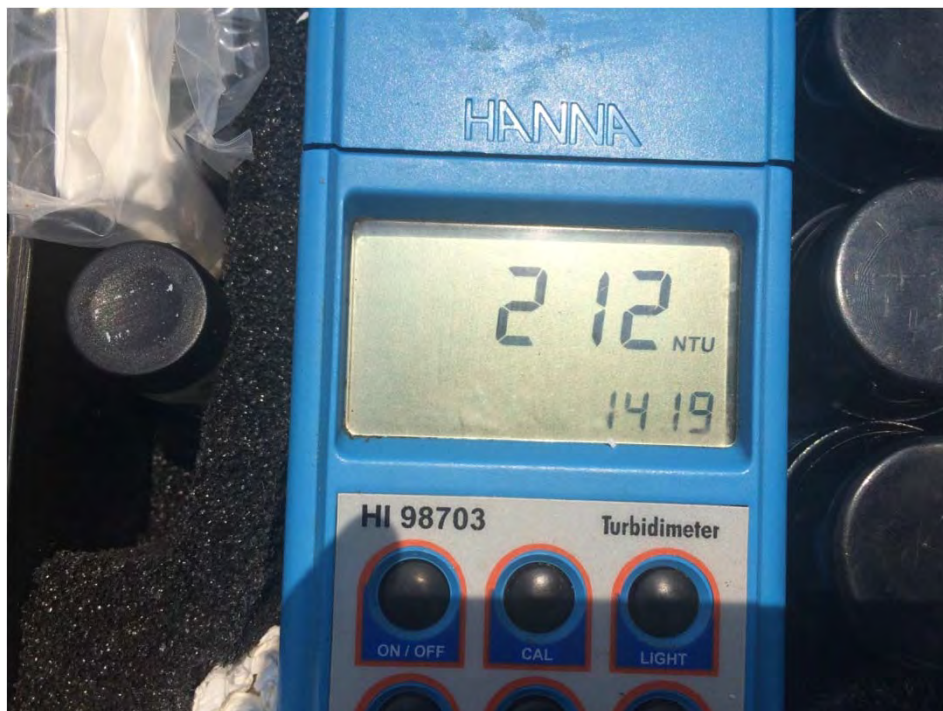


Turbidity Reading – 5th Purge – Well-1



YSI Instrument Reading – Well-1 – 5th Purge

ENVIRONMENTAL SITE CHARACTERIZATION
Chapel Hill Police Department Property
Purging Well-1 – August 2015



Turbidity Reading – 6th Purge – Well-1 8/6/2015



YSI Instrument Reading – Well-1 – 6th Purge

ENVIRONMENTAL SITE CHARACTERIZATION
Chapel Hill Police Department Property
Purging Well-1 – August 2015



Turbidity Reading – 7th Purge – Well-1

APPENDIX C
WELL RECORDS



WELL CONSTRUCTION RECORD

This form can be used for single or multiple wells

1. Well Contractor Information:

Kelly Grant

Well Contractor Name

2730 A

NC Well Contractor Certification Number

American Environmental Drilling, Inc.

Company Name

2. Well Construction Permit #:

List all applicable well permits (i.e. County, State, Variance, ~~fl~~gevkp."etc.)

3. Well Use (check well use):

Water Supply Well:

- Agricultural Municipal/Public
 Geothermal (Heating/Cooling Supply) Residential Water Supply (single)
 Industrial/Commercial Residential Water Supply (shared)
 Irrigation

Non-Water Supply Well:

- Monitoring Recovery

Injection Well:

- Aquifer Recharge Groundwater Remediation
 Aquifer Storage and Recovery Salinity Barrier
 Aquifer Test Stormwater Drainage
 Experimental Technology Subsidence Control
 Geothermal (Closed Loop) Tracer
 Geothermal (Heating/Cooling Return) Other (explain under #21 Remarks)

4. Date Well(s) Completed: 5-12-15 Well ID# MW-3A

5a. Well Location:

CITY OF CHAPEL HILL

Facility/Owner Name

Facility ID# (if applicable)

828 Martin Luther King Blvd.

Physical Address, City, and Zip

ORANGE

County

Parcel Identification No. (PIN)

5b. Latitude and Longitude in degrees/minutes/seconds or decimal degrees:

(if well field, one lat/long is sufficient)

35.925603 N -79.052656 W

6. Is (are) the well(s): Permanent or Temporary

7. Is this a repair to an existing well: Yes or No

If this is a repair, fill out known well construction information and explain the nature of the repair under #21 remarks section or on the back of this form.

8. Number of wells constructed: 1

For multiple injection or non-water supply wells ONLY with the same construction, you can submit one form.

9. Total well depth below land surface: 16 (ft.)
For multiple wells list all depths if different (example- 3@200' and 2@100')

10. Static water level below top of casing: 10 (ft.)
If water level is above casing, use "+"

11. Borehole diameter: 6" (in.)

12. Well construction method: AIR ROTARY
(i.e. auger, rotary, cable, direct push, etc.)

FOR WATER SUPPLY WELLS ONLY:

13a. Yield (gpm) _____ Method of test: _____

13b. Disinfection type: _____ Amount: _____

For Internal Use ONLY:

14. WATER ZONES

FROM	TO	DESCRIPTION
10 ft.	16 ft.	
ft.	ft.	

15. OUTER CASING (for multi-cased wells) OR LINER (if applicable)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
ft.	ft.	in.		

16. INNER CASING OR TUBING (geothermal closed-loop)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
-.6 ft.	1 ft.	2 in.	SCH40	PVC
ft.	ft.	in.		

17. SCREEN

FROM	TO	DIAMETER	SLOT SIZE	THICKNESS	MATERIAL
1 ft.	16 ft.	2 in.	.010	SCH40	PVC
ft.	ft.	in.			

18. GROUT

FROM	TO	MATERIAL	EMPLACEMENT METHOD & AMOUNT
.6 ft.	1 ft.	BENTONITE	POUR
0 ft.	.6 ft.	NEAT CEMEN	POUR
ft.	ft.		

19. SAND/GRAVEL PACK (if applicable)


FROM	TO	MATERIAL	EMPLACEMENT METHOD
1 ft.	16 ft.	#2	POUR
ft.	ft.		

20. DRILLING LOG (attach additional sheets if necessary)

FROM	TO	DESCRIPTION (color, hardness, soil/rock type, grain size, etc.)
0 ft.	5 ft.	BROWN CLAY AND ROCK
5 ft.	16 ft.	GRAY BLACK ROCK
ft.	ft.	
ft.	ft.	
ft.	ft.	
ft.	ft.	
ft.	ft.	

21. REMARKS

22. Certification:

 5-18-15
Signature of Certified Well Contractor Date

By signing this form, I hereby certify that the well(s) was (were) constructed in accordance with 15A NCAC 02C .0100 or 15A NCAC 02C .0200 Well Construction Standards and that a copy of this record has been provided to the well owner.

23. Site diagram or additional well details:

You may use the back of this page to provide additional well site details or well construction details. You may also attach additional pages if necessary.

SUBMITTAL INSTRUCTIONS

24a. For All Wells: Submit this form within 30 days of completion of well construction to the following:

Division of Water Resources, Information Processing Unit,
1617 Mail Service Center, Raleigh, NC 27699-1617

24b. For Injection Wells ONLY: In addition to sending the form to the address in 24a above, also submit a copy of this form within 30 days of completion of well construction to the following:

Division of Water Resources, Underground Injection Control Program,
1636 Mail Service Center, Raleigh, NC 27699-1636

24c. For Water Supply & Injection Wells:

Also submit one copy of this form within 30 days of completion of well construction to the county health department of the county where constructed.

WELL CONSTRUCTION RECORD

This form can be used for single or multiple wells

1. Well Contractor Information:

Kelly Grant

Well Contractor Name

2730 A

NC Well Contractor Certification Number

American Environmental Drilling, Inc.

Company Name

2. Well Construction Permit #:

List all applicable well permits (i.e. County, State, Variance, ~~HP~~geokp,"etc.)

3. Well Use (check well use):

Water Supply Well:

- Agricultural Municipal/Public
 Geothermal (Heating/Cooling Supply) Residential Water Supply (single)
 Industrial/Commercial Residential Water Supply (shared)
 Irrigation

Non-Water Supply Well:

- Monitoring Recovery

Injection Well:

- Aquifer Recharge Groundwater Remediation
 Aquifer Storage and Recovery Salinity Barrier
 Aquifer Test Stormwater Drainage
 Experimental Technology Subsidence Control
 Geothermal (Closed Loop) Tracer
 Geothermal (Heating/Cooling Return) Other (explain under #21 Remarks)

4. Date Well(s) Completed: 5-14-15 Well ID# MW-4A

5a. Well Location:

CITY OF CHAPEL HILL

Facility/Owner Name

Facility ID# (if applicable)

828 Martin Luther King Blvd.

Physical Address, City, and Zip

ORANGE

County

Parcel Identification No. (PIN)

5b. Latitude and Longitude in degrees/minutes/seconds or decimal degrees:

(if well field, one lat/long is sufficient)

35.925526 N -79.052109 W

6. Is (are) the well(s): Permanent or Temporary

7. Is this a repair to an existing well: Yes or No

If this is a repair, fill out known well construction information and explain the nature of the repair under #21 remarks section or on the back of this form.

8. Number of wells constructed: 1

For multiple injection or non-water supply wells ONLY with the same construction, you can submit one form.

9. Total well depth below land surface: 19 (ft.)
For multiple wells list all depths if different (example- 3@200' and 2@100')

10. Static water level below top of casing: 4 (ft.)
If water level is above casing, use "+"

11. Borehole diameter: 6" (in.)

12. Well construction method: AIR ROTARY
(i.e. auger, rotary, cable, direct push, etc.)

FOR WATER SUPPLY WELLS ONLY:

13a. Yield (gpm) _____ Method of test: _____

13b. Disinfection type: _____ Amount: _____

For Internal Use ONLY:

14. WATER ZONES

FROM	TO	DESCRIPTION
4 ft.	19 ft.	
ft.	ft.	

15. OUTER CASING (for multi-cased wells) OR LINER (if applicable)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
ft.	ft.	in.		

16. INNER CASING OR TUBING (geothermal closed-loop)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
-1.6 ft.	4 ft.	2 in.	SCH40	PVC
ft.	ft.	in.		

17. SCREEN

FROM	TO	DIAMETER	SLOT SIZE	THICKNESS	MATERIAL
4 ft.	19 ft.	2 in.	.010	SCH40	PVC
ft.	ft.	in.			

18. GROUT

FROM	TO	MATERIAL	EMPLACEMENT METHOD & AMOUNT
1 ft.	2 ft.	BENTONITE	POUR
0 ft.	1 ft.	NEAT CEMENT	POUR
ft.	ft.		

19. SAND/GRAVEL PACK (if applicable)


FROM	TO	MATERIAL	EMPLACEMENT METHOD
2 ft.	19 ft.	#2	POUR
ft.	ft.		

20. DRILLING LOG (attach additional sheets if necessary)

FROM	TO	DESCRIPTION (color, hardness, soil/rock type, grain size, etc.)
0 ft.	15 ft.	BROWN CLAY AND ROCK
15 ft.	19 ft.	GRAY BLACK ROCK
ft.	ft.	
ft.	ft.	
ft.	ft.	
ft.	ft.	
ft.	ft.	

21. REMARKS

22. Certification:

 5-18-15
Signature of Certified Well Contractor Date

By signing this form, I hereby certify that the well(s) was (were) constructed in accordance with 15A NCAC 02C .0100 or 15A NCAC 02C .0200 Well Construction Standards and that a copy of this record has been provided to the well owner.

23. Site diagram or additional well details:

You may use the back of this page to provide additional well site details or well construction details. You may also attach additional pages if necessary.

SUBMITTAL INSTRUCTIONS

24a. **For All Wells:** Submit this form within 30 days of completion of well construction to the following:

Division of Water Resources, Information Processing Unit,
1617 Mail Service Center, Raleigh, NC 27699-1617

24b. **For Injection Wells ONLY:** In addition to sending the form to the address in 24a above, also submit a copy of this form within 30 days of completion of well construction to the following:

Division of Water Resources, Underground Injection Control Program,
1636 Mail Service Center, Raleigh, NC 27699-1636

24c. For Water Supply & Injection Wells:

Also submit one copy of this form within 30 days of completion of well construction to the county health department of the county where constructed.

WELL ABANDONMENT RECORD

This form can be used for single or multiple wells

1. Well Contractor Information:

SOLDN WENWELL (W) HICHAU
Well Contractor Name (or well owner personally abandoning well on his/her property)

2077-A
NC Well Contractor Certification Number

TRIGON EXPLORATION
Company Name

2. Well Construction Permit #: N/A
List all applicable well permits (i.e. County, State, Variance, Injection, etc.) if known

3. Well use (check well use):

Water Supply Well:	
<input type="checkbox"/> Agricultural	<input type="checkbox"/> Municipal/Public
<input type="checkbox"/> Geothermal (Heating/Cooling Supply)	<input type="checkbox"/> Residential Water Supply (single)
<input type="checkbox"/> Industrial/Commercial	<input type="checkbox"/> Residential Water Supply (shared)
<input type="checkbox"/> Irrigation	
Non-Water Supply Well:	
<input checked="" type="checkbox"/> Monitoring	<input type="checkbox"/> Recovery
Injection Well:	
<input type="checkbox"/> Aquifer Recharge	<input type="checkbox"/> Groundwater Remediation
<input type="checkbox"/> Aquifer Storage and Recovery	<input type="checkbox"/> Salinity Barrier
<input type="checkbox"/> Aquifer Test	<input type="checkbox"/> Stormwater Drainage
<input type="checkbox"/> Experimental Technology	<input type="checkbox"/> Subsidence Control
<input type="checkbox"/> Geothermal (Closed Loop)	<input type="checkbox"/> Tracer
<input type="checkbox"/> Geothermal (Heating/Cooling Return)	<input type="checkbox"/> Other (explain under 7g)

4. Date well(s) abandoned: 1-7-15

5a. Well location:

Town of Chapel Hill Facility/Owner Name
N/A Facility ID# (if applicable)
828 Martin Luther King Jr. Blvd Chapel Hill, NC Physical Address, City, and Zip
Orange County
27517 Parcel Identification No. (PIN)
9789413949

5b. Latitude and longitude in degrees/minutes/seconds or decimal degrees:
(if well field, one lat/long is sufficient)

35°55'32.97" N 79°03'09.98" W

CONSTRUCTION DETAILS OF WELL(S) BEING ABANDONED

Attach well construction record(s) if available. For multiple injection or non-water supply wells ONLY with the same construction/abandonment, you can submit one form.

6a. Well ID#: MVW3

6b. Total well depth: 11 (ft.)

6c. Borehole diameter: 8 (in.)

6d. Water level below ground surface: 4 (ft.)

6e. Outer casing length (if known): _____ (ft.)

6f. Inner casing/tubing length (if known): _____ (ft.)

6g. Screen length (if known): 5 (ft.)

For Internal Use ONLY:

WELL ABANDONMENT DETAILS

7a. Number of wells being abandoned: 1
For multiple injection or non-water supply wells ONLY with the same construction/abandonment, you can submit one form.

7b. Approximate volume of water remaining in well(s): _____ (gal.)

FOR WATER SUPPLY WELLS ONLY:

7c. Type of disinfectant used: _____

7d. Amount of disinfectant used: _____

7e. Sealing materials used (check all that apply):

- | | |
|--|--|
| <input type="checkbox"/> Neat Cement Grout | <input type="checkbox"/> Bentonite Chips or Pellets |
| <input type="checkbox"/> Sand Cement Grout | <input type="checkbox"/> Dry Clay |
| <input type="checkbox"/> Concrete Grout | <input type="checkbox"/> Drill Cuttings |
| <input type="checkbox"/> Specialty Grout | <input type="checkbox"/> Gravel |
| <input type="checkbox"/> Bentonite Slurry | <input checked="" type="checkbox"/> Other (explain under 7g) |

7f. For each material selected above, provide amount of materials used:

7g. Provide a brief description of the abandonment procedure:

grout bentonite mix treated into well well cover remained pvc well pipe left in hole below ground surface

8. Certification:

[Signature] Signature of Certified Well Contractor or Well Owner
1-7-15 Date

By signing this form, I hereby certify that the well(s) was (were) abandoned in accordance with 15A NCAC 02C .0100 or 2C .0200 Well Construction Standards and that a copy of this record has been provided to the well owner.

9. Site diagram or additional well details:

You may use the back of this page to provide additional well site details or well abandonment details. You may also attach additional pages if necessary.

SUBMITTAL INSTRUCTIONS

10a. For All Wells: Submit this form within 30 days of completion of well abandonment to the following:

Division of Water Resources, Information Processing Unit,
1617 Mail Service Center, Raleigh, NC 27699-1617

10b. For Injection Wells: In addition to sending the form to the address in 10a above, also submit one copy of this form within 30 days of completion of well abandonment to the following:

Division of Water Resources, Underground Injection Control Program,
1636 Mail Service Center, Raleigh, NC 27699-1636

10c. For Water Supply & Injection Wells: In addition to sending the form to the address(es) above, also submit one copy of this form within 30 days of completion of well abandonment to the county health department of the county where abandoned.

WELL ABANDONMENT RECORD

This form can be used for single or multiple wells

For Internal Use ONLY:

1. Well Contractor Information:

SOLON WENDELL WHITCHARD
Well Contractor Name (or well owner personally abandoning well on his/her property)

2077-A
NC Well Contractor Certification Number

TEIGON EXPLORATION
Company Name

2. Well Construction Permit #: N/A
List all applicable well permits (i.e. County, State, Variance, Injection, etc.) if known

3. Well use (check well use):

Water Supply Well:	
<input type="checkbox"/> Agricultural	<input type="checkbox"/> Municipal/Public
<input type="checkbox"/> Geothermal (Heating/Cooling Supply)	<input type="checkbox"/> Residential Water Supply (single)
<input type="checkbox"/> Industrial/Commercial	<input type="checkbox"/> Residential Water Supply (shared)
<input type="checkbox"/> Irrigation	
Non-Water Supply Well:	
<input checked="" type="checkbox"/> Monitoring	<input type="checkbox"/> Recovery
Injection Well:	
<input type="checkbox"/> Aquifer Recharge	<input type="checkbox"/> Groundwater Remediation
<input type="checkbox"/> Aquifer Storage and Recovery	<input type="checkbox"/> Salinity Barrier
<input type="checkbox"/> Aquifer Test	<input type="checkbox"/> Stormwater Drainage
<input type="checkbox"/> Experimental Technology	<input type="checkbox"/> Subsidence Control
<input type="checkbox"/> Geothermal (Closed Loop)	<input type="checkbox"/> Tracer
<input type="checkbox"/> Geothermal (Heating/Cooling Return)	<input type="checkbox"/> Other (explain under 7g)

WELL ABANDONMENT DETAILS

7a. Number of wells being abandoned: 1
For multiple injection or non-water supply wells ONLY with the same construction/abandonment, you can submit one form.

7b. Approximate volume of water remaining in well(s): _____ (gal.)

FOR WATER SUPPLY WELLS ONLY:

7c. Type of disinfectant used: _____

7d. Amount of disinfectant used: _____

7e. Sealing materials used (check all that apply):

<input type="checkbox"/> Neat Cement Grout	<input type="checkbox"/> Bentonite Chips or Pellets
<input type="checkbox"/> Sand Cement Grout	<input type="checkbox"/> Dry Clay
<input type="checkbox"/> Concrete Grout	<input type="checkbox"/> Drill Cuttings
<input type="checkbox"/> Specialty Grout	<input type="checkbox"/> Gravel
<input type="checkbox"/> Bentonite Slurry	<input checked="" type="checkbox"/> Other (explain under 7g)

7f. For each material selected above, provide amount of materials used:

7g. Provide a brief description of the abandonment procedure:
grout bentonite mix trenched into well well cover removed pvc pipe left in hole below ground surface

4. Date well(s) abandoned: 1-6-15

5a. Well location:
Town of Chapel Hill Facility/Owner Name

N/A Facility ID# (if applicable)

828 Martin Luther King Jr Blvd Chapel Hill, NC Physical Address, City, and Zip

Orange County

5b. Latitude and longitude in degrees/minutes/seconds or decimal degrees: (if well field, one lat/long is sufficient)
35°55'32.22" N 79°03'09.40" W

CONSTRUCTION DETAILS OF WELL(S) BEING ABANDONED
Attach well construction record(s) if available. For multiple injection or non-water supply wells ONLY with the same construction/abandonment, you can submit one form.

6a. Well ID#: NW4

6b. Total well depth: 9.2 (ft.)

6c. Borehole diameter: 8 (in.)

6d. Water level below ground surface: 6 (ft.)

6e. Outer casing length (if known): _____ (ft.)

6f. Inner casing/tubing length (if known): _____ (ft.)

6g. Screen length (if known): 5 (ft.)

8. Certification:
[Signature] Signature of Certified Well Contractor or Well Owner

1-6-15 Date

By signing this form, I hereby certify that the well(s) was (were) abandoned in accordance with 15A NCAC 02C .0100 or 2C .0200 Well Construction Standards and that a copy of this record has been provided to the well owner.

9. Site diagram or additional well details:
You may use the back of this page to provide additional well site details or well abandonment details. You may also attach additional pages if necessary.

SUBMITTAL INSTRUCTIONS

10a. For All Wells: Submit this form within 30 days of completion of well abandonment to the following:

Division of Water Resources, Information Processing Unit,
1617 Mail Service Center, Raleigh, NC 27699-1617

10b. For Injection Wells: In addition to sending the form to the address in 10a above, also submit one copy of this form within 30 days of completion of well abandonment to the following:

Division of Water Resources, Underground Injection Control Program,
1636 Mail Service Center, Raleigh, NC 27699-1636

10c. For Water Supply & Injection Wells: In addition to sending the form to the address(es) above, also submit one copy of this form within 30 days of completion of well abandonment to the county health department of the county where abandoned.

APPENDIX D
LABORATORY DATA



08/10/2015

Falcon Engineering
Jessica Hoglen
1210 Trinity Road #110
Raleigh, NC 27607

Project: 828 MLK - CHPD

Lab Submittal Date: 07/22/2015

Prism Work Order: 5070434

This data package contains the analytical results for the project identified above and includes a Case Narrative, Sample Results and Chain of Custody. Unless otherwise noted, all samples were received in acceptable condition and processed according to the referenced methods.

Data qualifiers are flagged individually on each sample. A key reference for the data qualifiers appears at the end of this case narrative.

Please call if you have any questions relating to this analytical report.

Respectfully,

PRISM LABORATORIES, INC.



Angela D. Overcash

VP Laboratory Services



Reviewed By Terri W. Cole For Angela D. Overcash

Project Manager

Data Qualifiers Key Reference:

D	RPD value outside of the control limits.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
SR	Surrogate recovery outside the QC limits.
BRL	Below Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
*	Results reported to the reporting limit. All other results are reported to the MDL with values between MDL and reporting limit indicated with a J.

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Client Sample ID	Lab Sample ID	Matrix	Date Sampled	Date Received
MW3A	5070434-01	Water	07/21/15	07/22/15
MW4A	5070434-02	Water	07/21/15	07/22/15
MW4A Filtered	5070434-03	Water	07/21/15	07/22/15

Samples were received in good condition at 3.1 degrees C unless otherwise noted.

Prism ID	Client ID	Parameter	Method	Result	Units
5070434-01	MW3A	Barium	*6010C	0.067	mg/L
5070434-01	MW3A	Boron	*6010C	0.52	mg/L
5070434-02	MW4A	Barium	*6010C	0.064	mg/L
5070434-03	MW4A Filtered	Barium	*6010C	0.061	mg/L

Falcon Engineering
 Attn: Jessica Hoglen
 1210 Trinity Road #110
 Raleigh, NC 27607

Project: 828 MLK - CHPD

Sample Matrix: Water

Client Sample ID: MW3A
 Prism Sample ID: 5070434-01
 Prism Work Order: 5070434
 Time Collected: 07/21/15 15:33
 Time Submitted: 07/22/15 10:40

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
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General Chemistry Parameters

Hexavalent Chromium	BRL	mg/L	0.010	0.0037	1	*SM3500-Cr B	7/22/15 13:30	CDL	P5G0401
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Organochlorine Pesticides by GC/ECD

4,4'-DDD	BRL	ug/L	0.050	0.028	1	8081B	8/6/15 22:28	JMC	P5G0466
4,4'-DDE	BRL	ug/L	0.050	0.028	1	8081B	8/6/15 22:28	JMC	P5G0466
4,4'-DDT	BRL	ug/L	0.050	0.027	1	8081B	8/6/15 22:28	JMC	P5G0466
Aldrin	BRL	ug/L	0.050	0.015	1	8081B	8/6/15 22:28	JMC	P5G0466
alpha-BHC	BRL	ug/L	0.050	0.012	1	8081B	8/6/15 22:28	JMC	P5G0466
cis-Chlordane	BRL	ug/L	0.050	0.018	1	8081B	8/6/15 22:28	JMC	P5G0466
beta-BHC	BRL	ug/L	0.050	0.019	1	8081B	8/6/15 22:28	JMC	P5G0466
Chlordane	BRL	ug/L	0.50	0.34	1	8081B	8/6/15 22:28	JMC	P5G0466
delta-BHC	BRL	ug/L	0.050	0.017	1	8081B	8/6/15 22:28	JMC	P5G0466
Dieldrin	BRL	ug/L	0.050	0.022	1	8081B	8/6/15 22:28	JMC	P5G0466
Endosulfan I	BRL	ug/L	0.050	0.019	1	8081B	8/6/15 22:28	JMC	P5G0466
Endosulfan II	BRL	ug/L	0.050	0.025	1	8081B	8/6/15 22:28	JMC	P5G0466
Endosulfan Sulfate	BRL	ug/L	0.050	0.027	1	8081B	8/6/15 22:28	JMC	P5G0466
Endrin	BRL	ug/L	0.050	0.020	1	8081B	8/6/15 22:28	JMC	P5G0466
Endrin Aldehyde	BRL	ug/L	0.050	0.027	1	8081B	8/6/15 22:28	JMC	P5G0466
Endrin Ketone	BRL	ug/L	0.050	0.028	1	8081B	8/6/15 22:28	JMC	P5G0466
gamma-BHC	BRL	ug/L	0.050	0.013	1	8081B	8/6/15 22:28	JMC	P5G0466
trans-Chlordane	BRL	ug/L	0.050	0.019	1	8081B	8/6/15 22:28	JMC	P5G0466
Heptachlor	BRL	ug/L	0.050	0.015	1	8081B	8/6/15 22:28	JMC	P5G0466
Heptachlor Epoxide	BRL	ug/L	0.050	0.018	1	8081B	8/6/15 22:28	JMC	P5G0466
Methoxychlor	BRL	ug/L	0.050	0.033	1	8081B	8/6/15 22:28	JMC	P5G0466
Toxaphene	BRL	ug/L	0.50	0.16	1	8081B	8/6/15 22:28	JMC	P5G0466

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	70 %	13-186
Tetrachloro-m-xylene	64 %	40-134

Polychlorinated Biphenyls (PCBs) by GC/ECD

Aroclor 1016	BRL	ug/L	0.50	0.18	1	8082A	8/6/15 22:28	JMC	P5G0467
Aroclor 1221	BRL	ug/L	1.0	0.11	1	8082A	8/6/15 22:28	JMC	P5G0467
Aroclor 1232	BRL	ug/L	0.50	0.16	1	8082A	8/6/15 22:28	JMC	P5G0467
Aroclor 1242	BRL	ug/L	0.50	0.14	1	8082A	8/6/15 22:28	JMC	P5G0467
Aroclor 1248	BRL	ug/L	0.50	0.14	1	8082A	8/6/15 22:28	JMC	P5G0467
Aroclor 1254	BRL	ug/L	0.50	0.16	1	8082A	8/6/15 22:28	JMC	P5G0467
Aroclor 1260	BRL	ug/L	0.50	0.18	1	8082A	8/6/15 22:28	JMC	P5G0467

Surrogate	Recovery	Control Limits
Tetrachloro-m-xylene	64 %	30-161
Decachlorobiphenyl	69 %	32-178

Semivolatile Organic Compounds by GC/MS

1,2,4-Trichlorobenzene	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:01	JMV	P5G0413
1,2-Dichlorobenzene	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:01	JMV	P5G0413

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Falcon Engineering
Attn: Jessica Hoglen
1210 Trinity Road #110
Raleigh, NC 27607

Project: 828 MLK - CHPD

Sample Matrix: Water

Client Sample ID: MW3A
Prism Sample ID: 5070434-01
Prism Work Order: 5070434
Time Collected: 07/21/15 15:33
Time Submitted: 07/22/15 10:40

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
1,3-Dichlorobenzene	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:01	JMV	P5G0413
1,4-Dichlorobenzene	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:01	JMV	P5G0413
1-Methylnaphthalene	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:01	JMV	P5G0413
2,4,5-Trichlorophenol	BRL	ug/L	10	2.3	1	8270D	7/24/15 17:01	JMV	P5G0413
2,4,6-Trichlorophenol	BRL	ug/L	10	2.6	1	8270D	7/24/15 17:01	JMV	P5G0413
2,4-Dichlorophenol	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:01	JMV	P5G0413
2,4-Dimethylphenol	BRL	ug/L	10	2.3	1	8270D	7/24/15 17:01	JMV	P5G0413
2,4-Dinitrophenol	BRL	ug/L	10	3.7	1	8270D	7/24/15 17:01	JMV	P5G0413
2,4-Dinitrotoluene	BRL	ug/L	10	1.9	1	8270D	7/24/15 17:01	JMV	P5G0413
2,6-Dinitrotoluene	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:01	JMV	P5G0413
2-Chloronaphthalene	BRL	ug/L	10	3.4	1	8270D	7/24/15 17:01	JMV	P5G0413
2-Chlorophenol	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:01	JMV	P5G0413
2-Methylnaphthalene	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:01	JMV	P5G0413
2-Methylphenol	BRL	ug/L	10	2.1	1	8270D	7/24/15 17:01	JMV	P5G0413
2-Nitroaniline	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:01	JMV	P5G0413
2-Nitrophenol	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:01	JMV	P5G0413
3,3'-Dichlorobenzidine	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:01	JMV	P5G0413
3/4-Methylphenol	BRL	ug/L	10	1.9	1	8270D	7/24/15 17:01	JMV	P5G0413
3-Nitroaniline	BRL	ug/L	10	1.2	1	8270D	7/24/15 17:01	JMV	P5G0413
4,6-Dinitro-2-methylphenol	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:01	JMV	P5G0413
4-Bromophenyl phenyl ether	BRL	ug/L	10	1.8	1	8270D	7/24/15 17:01	JMV	P5G0413
4-Chloro-3-methylphenol	BRL	ug/L	10	1.9	1	8270D	7/24/15 17:01	JMV	P5G0413
4-Chloroaniline	BRL	ug/L	10	1.8	1	8270D	7/24/15 17:01	JMV	P5G0413
4-Chlorophenyl phenyl ether	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:01	JMV	P5G0413
4-Nitroaniline	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:01	JMV	P5G0413
4-Nitrophenol	BRL	ug/L	10	0.66	1	8270D	7/24/15 17:01	JMV	P5G0413
Acenaphthene	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:01	JMV	P5G0413
Acenaphthylene	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:01	JMV	P5G0413
Aniline	BRL	ug/L	10	2.1	1	8270D	7/24/15 17:01	JMV	P5G0413
Anthracene	BRL	ug/L	10	3.0	1	8270D	7/24/15 17:01	JMV	P5G0413
Azobenzene	BRL	ug/L	10	1.8	1	8270D	7/24/15 17:01	JMV	P5G0413
Benzo(a)anthracene	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:01	JMV	P5G0413
Benzo(a)pyrene	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:01	JMV	P5G0413
Benzo(b)fluoranthene	BRL	ug/L	10	1.4	1	8270D	7/24/15 17:01	JMV	P5G0413
Benzo(g,h,i)perylene	BRL	ug/L	10	1.8	1	8270D	7/24/15 17:01	JMV	P5G0413
Benzo(k)fluoranthene	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:01	JMV	P5G0413
Benzoic Acid	BRL	ug/L	100	2.7	1	8270D	7/24/15 17:01	JMV	P5G0413
Benzyl alcohol	BRL	ug/L	10	1.8	1	8270D	7/24/15 17:01	JMV	P5G0413
bis(2-Chloroethoxy)methane	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:01	JMV	P5G0413
Bis(2-Chloroethyl)ether	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:01	JMV	P5G0413
Bis(2-chloroisopropyl)ether	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:01	JMV	P5G0413
Bis(2-Ethylhexyl)phthalate	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:01	JMV	P5G0413
Butyl benzyl phthalate	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:01	JMV	P5G0413

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Falcon Engineering
 Attn: Jessica Hoglen
 1210 Trinity Road #110
 Raleigh, NC 27607

Project: 828 MLK - CHPD

Sample Matrix: Water

Client Sample ID: MW3A
 Prism Sample ID: 5070434-01
 Prism Work Order: 5070434
 Time Collected: 07/21/15 15:33
 Time Submitted: 07/22/15 10:40

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Chrysene	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:01	JMV	P5G0413
Dibenzo(a,h)anthracene	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:01	JMV	P5G0413
Dibenzofuran	BRL	ug/L	10	2.3	1	8270D	7/24/15 17:01	JMV	P5G0413
Diethyl phthalate	BRL	ug/L	10	1.9	1	8270D	7/24/15 17:01	JMV	P5G0413
Dimethyl phthalate	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:01	JMV	P5G0413
Di-n-butyl phthalate	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:01	JMV	P5G0413
Di-n-octyl phthalate	BRL	ug/L	10	1.7	1	8270D	7/24/15 17:01	JMV	P5G0413
Fluoranthene	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:01	JMV	P5G0413
Fluorene	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:01	JMV	P5G0413
Hexachlorobenzene	BRL	ug/L	10	1.9	1	8270D	7/24/15 17:01	JMV	P5G0413
Hexachlorobutadiene	BRL	ug/L	10	2.6	1	8270D	7/24/15 17:01	JMV	P5G0413
Hexachlorocyclopentadiene	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:01	JMV	P5G0413
Hexachloroethane	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:01	JMV	P5G0413
Indeno(1,2,3-cd)pyrene	BRL	ug/L	10	2.1	1	8270D	7/24/15 17:01	JMV	P5G0413
Isophorone	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:01	JMV	P5G0413
Naphthalene	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:01	JMV	P5G0413
Nitrobenzene	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:01	JMV	P5G0413
N-Nitroso-di-n-propylamine	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:01	JMV	P5G0413
N-Nitrosodiphenylamine	BRL	ug/L	10	1.8	1	8270D	7/24/15 17:01	JMV	P5G0413
Pentachlorophenol	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:01	JMV	P5G0413
Phenanthrene	BRL	ug/L	10	1.8	1	8270D	7/24/15 17:01	JMV	P5G0413
Phenol	BRL	ug/L	10	1.2	1	8270D	7/24/15 17:01	JMV	P5G0413
Pyrene	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:01	JMV	P5G0413

Surrogate	Recovery	Control Limits
2,4,6-Tribromophenol	90 %	49-109
2-Fluorobiphenyl	75 %	55-96
2-Fluorophenol	46 %	27-74
Nitrobenzene-d5	66 %	53-99
Phenol-d5	31 %	11-52
Terphenyl-d14	99 %	42-133

Total Metals

Mercury	BRL	mg/L	0.00020	0.000011	1	*7470A	7/23/15 12:52	JAB	P5G0417
Arsenic	BRL	mg/L	0.010	0.00070	1	*6010C	7/30/15 17:29	BGM	P5G0450
Barium	0.067	mg/L	0.010	0.00070	1	*6010C	7/30/15 17:29	BGM	P5G0450
Boron	0.52	mg/L	0.50	0.0043	1	*6010C	7/30/15 17:29	BGM	P5G0450
Cadmium	BRL	mg/L	0.0010	0.00010	1	*6010C	7/30/15 17:29	BGM	P5G0450
Chromium	BRL	mg/L	0.0050	0.00060	1	*6010C	7/30/15 17:29	BGM	P5G0450
Lead	BRL	mg/L	0.0050	0.0013	1	*6010C	7/30/15 17:29	BGM	P5G0450
Selenium	BRL	mg/L	0.020	0.0032	1	*6010C	7/31/15 16:48	BGM	P5G0450
Silver	BRL	mg/L	0.0050	0.00020	1	*6010C	7/30/15 17:29	BGM	P5G0450

Volatile Organic Compounds by GC/MS

1,1,1,2-Tetrachloroethane	BRL	ug/L	0.50	0.11	1	8260B	7/28/15 15:29	MSC	P5G0524
1,1,1-Trichloroethane	BRL	ug/L	0.50	0.061	1	8260B	7/28/15 15:29	MSC	P5G0524

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Falcon Engineering
 Attn: Jessica Hoglen
 1210 Trinity Road #110
 Raleigh, NC 27607

Project: 828 MLK - CHPD

Sample Matrix: Water

Client Sample ID: MW3A
 Prism Sample ID: 5070434-01
 Prism Work Order: 5070434
 Time Collected: 07/21/15 15:33
 Time Submitted: 07/22/15 10:40

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
1,1,2,2-Tetrachloroethane	BRL	ug/L	0.50	0.036	1	8260B	7/28/15 15:29	MSC	P5G0524
1,1,2-Trichloroethane	BRL	ug/L	0.50	0.066	1	8260B	7/28/15 15:29	MSC	P5G0524
1,1-Dichloroethane	BRL	ug/L	0.50	0.083	1	8260B	7/28/15 15:29	MSC	P5G0524
1,1-Dichloroethylene	BRL	ug/L	0.50	0.083	1	8260B	7/28/15 15:29	MSC	P5G0524
1,1-Dichloropropylene	BRL	ug/L	0.50	0.051	1	8260B	7/28/15 15:29	MSC	P5G0524
1,2,3-Trichlorobenzene	BRL	ug/L	2.0	0.40	1	8260B	7/28/15 15:29	MSC	P5G0524
1,2,3-Trichloropropane	BRL	ug/L	1.0	0.14	1	8260B	7/28/15 15:29	MSC	P5G0524
1,2,4-Trichlorobenzene	BRL	ug/L	1.0	0.13	1	8260B	7/28/15 15:29	MSC	P5G0524
1,2,4-Trimethylbenzene	BRL	ug/L	0.50	0.054	1	8260B	7/28/15 15:29	MSC	P5G0524
1,2-Dibromo-3-chloropropane	BRL	ug/L	2.0	0.17	1	8260B	7/28/15 15:29	MSC	P5G0524
1,2-Dibromoethane	BRL	ug/L	0.50	0.051	1	8260B	7/28/15 15:29	MSC	P5G0524
1,2-Dichlorobenzene	BRL	ug/L	0.50	0.076	1	8260B	7/28/15 15:29	MSC	P5G0524
1,2-Dichloroethane	BRL	ug/L	0.50	0.066	1	8260B	7/28/15 15:29	MSC	P5G0524
1,2-Dichloropropane	BRL	ug/L	0.50	0.11	1	8260B	7/28/15 15:29	MSC	P5G0524
1,3,5-Trimethylbenzene	BRL	ug/L	0.50	0.076	1	8260B	7/28/15 15:29	MSC	P5G0524
1,3-Dichlorobenzene	BRL	ug/L	0.50	0.054	1	8260B	7/28/15 15:29	MSC	P5G0524
1,3-Dichloropropane	BRL	ug/L	0.50	0.043	1	8260B	7/28/15 15:29	MSC	P5G0524
1,4-Dichlorobenzene	BRL	ug/L	0.50	0.050	1	8260B	7/28/15 15:29	MSC	P5G0524
2,2-Dichloropropane	BRL	ug/L	2.0	0.11	1	8260B	7/28/15 15:29	MSC	P5G0524
2-Chloroethyl Vinyl Ether	BRL	ug/L	5.0	0.37	1	8260B	7/28/15 15:29	MSC	P5G0524
2-Chlorotoluene	BRL	ug/L	0.50	0.066	1	8260B	7/28/15 15:29	MSC	P5G0524
4-Chlorotoluene	BRL	ug/L	0.50	0.050	1	8260B	7/28/15 15:29	MSC	P5G0524
4-Isopropyltoluene	BRL	ug/L	0.50	0.089	1	8260B	7/28/15 15:29	MSC	P5G0524
Acetone	BRL	ug/L	5.0	0.31	1	8260B	7/28/15 15:29	MSC	P5G0524
Acrolein	BRL	ug/L	20	0.20	1	8260B	7/28/15 15:29	MSC	P5G0524
Acrylonitrile	BRL	ug/L	20	0.20	1	8260B	7/28/15 15:29	MSC	P5G0524
Benzene	BRL	ug/L	0.50	0.048	1	8260B	7/28/15 15:29	MSC	P5G0524
Bromobenzene	BRL	ug/L	0.50	0.057	1	8260B	7/28/15 15:29	MSC	P5G0524
Bromochloromethane	BRL	ug/L	0.50	0.14	1	8260B	7/28/15 15:29	MSC	P5G0524
Bromodichloromethane	BRL	ug/L	0.50	0.062	1	8260B	7/28/15 15:29	MSC	P5G0524
Bromoform	BRL	ug/L	1.0	0.040	1	8260B	7/28/15 15:29	MSC	P5G0524
Bromomethane	BRL	ug/L	1.0	0.18	1	8260B	7/28/15 15:29	MSC	P5G0524
Carbon disulfide	BRL	ug/L	5.0	0.075	1	8260B	7/28/15 15:29	MSC	P5G0524
Carbon Tetrachloride	BRL	ug/L	0.50	0.11	1	8260B	7/28/15 15:29	MSC	P5G0524
Chlorobenzene	BRL	ug/L	0.50	0.062	1	8260B	7/28/15 15:29	MSC	P5G0524
Chloroethane	BRL	ug/L	0.50	0.22	1	8260B	7/28/15 15:29	MSC	P5G0524
Chloroform	BRL	ug/L	0.50	0.076	1	8260B	7/28/15 15:29	MSC	P5G0524
Chloromethane	BRL	ug/L	0.50	0.079	1	8260B	7/28/15 15:29	MSC	P5G0524
cis-1,2-Dichloroethylene	BRL	ug/L	0.50	0.056	1	8260B	7/28/15 15:29	MSC	P5G0524
cis-1,3-Dichloropropylene	BRL	ug/L	0.50	0.079	1	8260B	7/28/15 15:29	MSC	P5G0524
Dibromochloromethane	BRL	ug/L	0.50	0.081	1	8260B	7/28/15 15:29	MSC	P5G0524
Dibromomethane	BRL	ug/L	0.50	0.065	1	8260B	7/28/15 15:29	MSC	P5G0524
Dichlorodifluoromethane	BRL	ug/L	1.0	0.11	1	8260B	7/28/15 15:29	MSC	P5G0524

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Falcon Engineering
 Attn: Jessica Hoglen
 1210 Trinity Road #110
 Raleigh, NC 27607

Project: 828 MLK - CHPD

Sample Matrix: Water

Client Sample ID: MW3A
 Prism Sample ID: 5070434-01
 Prism Work Order: 5070434
 Time Collected: 07/21/15 15:33
 Time Submitted: 07/22/15 10:40

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Ethylbenzene	BRL	ug/L	0.50	0.061	1	8260B	7/28/15 15:29	MSC	P5G0524
Hexachlorobutadiene	BRL	ug/L	2.0	0.16	1	8260B	7/28/15 15:29	MSC	P5G0524
Isopropyl Ether	BRL	ug/L	0.50	0.050	1	8260B	7/28/15 15:29	MSC	P5G0524
Isopropylbenzene (Cumene)	BRL	ug/L	0.50	0.054	1	8260B	7/28/15 15:29	MSC	P5G0524
m,p-Xylenes	BRL	ug/L	1.0	0.12	1	8260B	7/28/15 15:29	MSC	P5G0524
Methyl Butyl Ketone (2-Hexanone)	BRL	ug/L	5.0	0.065	1	8260B	7/28/15 15:29	MSC	P5G0524
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.24	1	8260B	7/28/15 15:29	MSC	P5G0524
Methyl Isobutyl Ketone	BRL	ug/L	5.0	0.078	1	8260B	7/28/15 15:29	MSC	P5G0524
Methylene Chloride	BRL	ug/L	1.0	0.083	1	8260B	7/28/15 15:29	MSC	P5G0524
Methyl-tert-Butyl Ether	BRL	ug/L	0.50	0.042	1	8260B	7/28/15 15:29	MSC	P5G0524
Naphthalene	BRL	ug/L	1.0	0.19	1	8260B	7/28/15 15:29	MSC	P5G0524
n-Butylbenzene	BRL	ug/L	1.0	0.076	1	8260B	7/28/15 15:29	MSC	P5G0524
n-Propylbenzene	BRL	ug/L	0.50	0.087	1	8260B	7/28/15 15:29	MSC	P5G0524
o-Xylene	BRL	ug/L	0.50	0.044	1	8260B	7/28/15 15:29	MSC	P5G0524
sec-Butylbenzene	BRL	ug/L	0.50	0.076	1	8260B	7/28/15 15:29	MSC	P5G0524
Styrene	BRL	ug/L	0.50	0.047	1	8260B	7/28/15 15:29	MSC	P5G0524
tert-Butylbenzene	BRL	ug/L	0.50	0.088	1	8260B	7/28/15 15:29	MSC	P5G0524
Tetrachloroethylene	BRL	ug/L	0.50	0.098	1	8260B	7/28/15 15:29	MSC	P5G0524
Toluene	BRL	ug/L	0.50	0.044	1	8260B	7/28/15 15:29	MSC	P5G0524
trans-1,2-Dichloroethylene	BRL	ug/L	0.50	0.094	1	8260B	7/28/15 15:29	MSC	P5G0524
trans-1,3-Dichloropropylene	BRL	ug/L	0.50	0.070	1	8260B	7/28/15 15:29	MSC	P5G0524
Trichloroethylene	BRL	ug/L	0.50	0.078	1	8260B	7/28/15 15:29	MSC	P5G0524
Trichlorofluoromethane	BRL	ug/L	0.50	0.062	1	8260B	7/28/15 15:29	MSC	P5G0524
Vinyl acetate	BRL	ug/L	2.0	0.060	1	8260B	7/28/15 15:29	MSC	P5G0524
Vinyl chloride	BRL	ug/L	0.50	0.097	1	8260B	7/28/15 15:29	MSC	P5G0524
						Surrogate	Recovery	Control Limits	
						4-Bromofluorobenzene	101 %	80-124	
						Dibromofluoromethane	102 %	75-129	
						Toluene-d8	101 %	77-123	

Falcon Engineering
 Attn: Jessica Hoglen
 1210 Trinity Road #110
 Raleigh, NC 27607

Project: 828 MLK - CHPD

Sample Matrix: Water

Client Sample ID: MW4A
 Prism Sample ID: 5070434-02
 Prism Work Order: 5070434
 Time Collected: 07/21/15 15:50
 Time Submitted: 07/22/15 10:40

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
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General Chemistry Parameters

Hexavalent Chromium	BRL	mg/L	0.010	0.0037	1	*SM3500-Cr B	7/22/15 13:30	CDL	P5G0401
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Organochlorine Pesticides by GC/ECD

4,4'-DDD	BRL	ug/L	0.050	0.028	1	8081B	8/6/15 22:40	JMC	P5G0466
4,4'-DDE	BRL	ug/L	0.050	0.028	1	8081B	8/6/15 22:40	JMC	P5G0466
4,4'-DDT	BRL	ug/L	0.050	0.027	1	8081B	8/6/15 22:40	JMC	P5G0466
Aldrin	BRL	ug/L	0.050	0.015	1	8081B	8/6/15 22:40	JMC	P5G0466
alpha-BHC	BRL	ug/L	0.050	0.012	1	8081B	8/6/15 22:40	JMC	P5G0466
cis-Chlordane	BRL	ug/L	0.050	0.018	1	8081B	8/6/15 22:40	JMC	P5G0466
beta-BHC	BRL	ug/L	0.050	0.019	1	8081B	8/6/15 22:40	JMC	P5G0466
Chlordane	BRL	ug/L	0.50	0.34	1	8081B	8/6/15 22:40	JMC	P5G0466
delta-BHC	BRL	ug/L	0.050	0.017	1	8081B	8/6/15 22:40	JMC	P5G0466
Dieldrin	BRL	ug/L	0.050	0.022	1	8081B	8/6/15 22:40	JMC	P5G0466
Endosulfan I	BRL	ug/L	0.050	0.019	1	8081B	8/6/15 22:40	JMC	P5G0466
Endosulfan II	BRL	ug/L	0.050	0.025	1	8081B	8/6/15 22:40	JMC	P5G0466
Endosulfan Sulfate	BRL	ug/L	0.050	0.027	1	8081B	8/6/15 22:40	JMC	P5G0466
Endrin	BRL	ug/L	0.050	0.020	1	8081B	8/6/15 22:40	JMC	P5G0466
Endrin Aldehyde	BRL	ug/L	0.050	0.027	1	8081B	8/6/15 22:40	JMC	P5G0466
Endrin Ketone	BRL	ug/L	0.050	0.028	1	8081B	8/6/15 22:40	JMC	P5G0466
gamma-BHC	BRL	ug/L	0.050	0.013	1	8081B	8/6/15 22:40	JMC	P5G0466
trans-Chlordane	BRL	ug/L	0.050	0.019	1	8081B	8/6/15 22:40	JMC	P5G0466
Heptachlor	BRL	ug/L	0.050	0.015	1	8081B	8/6/15 22:40	JMC	P5G0466
Heptachlor Epoxide	BRL	ug/L	0.050	0.018	1	8081B	8/6/15 22:40	JMC	P5G0466
Methoxychlor	BRL	ug/L	0.050	0.033	1	8081B	8/6/15 22:40	JMC	P5G0466
Toxaphene	BRL	ug/L	0.50	0.16	1	8081B	8/6/15 22:40	JMC	P5G0466

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	79 %	13-186
Tetrachloro-m-xylene	73 %	40-134

Polychlorinated Biphenyls (PCBs) by GC/ECD

Aroclor 1016	BRL	ug/L	0.50	0.18	1	8082A	8/6/15 22:40	JMC	P5G0467
Aroclor 1221	BRL	ug/L	1.0	0.11	1	8082A	8/6/15 22:40	JMC	P5G0467
Aroclor 1232	BRL	ug/L	0.50	0.16	1	8082A	8/6/15 22:40	JMC	P5G0467
Aroclor 1242	BRL	ug/L	0.50	0.14	1	8082A	8/6/15 22:40	JMC	P5G0467
Aroclor 1248	BRL	ug/L	0.50	0.14	1	8082A	8/6/15 22:40	JMC	P5G0467
Aroclor 1254	BRL	ug/L	0.50	0.16	1	8082A	8/6/15 22:40	JMC	P5G0467
Aroclor 1260	BRL	ug/L	0.50	0.18	1	8082A	8/6/15 22:40	JMC	P5G0467

Surrogate	Recovery	Control Limits
Tetrachloro-m-xylene	73 %	30-161
Decachlorobiphenyl	81 %	32-178

Semivolatile Organic Compounds by GC/MS

1,2,4-Trichlorobenzene	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:23	JMV	P5G0413
1,2-Dichlorobenzene	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:23	JMV	P5G0413

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Falcon Engineering
Attn: Jessica Hoglen
1210 Trinity Road #110
Raleigh, NC 27607

Project: 828 MLK - CHPD

Sample Matrix: Water

Client Sample ID: MW4A
Prism Sample ID: 5070434-02
Prism Work Order: 5070434
Time Collected: 07/21/15 15:50
Time Submitted: 07/22/15 10:40

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
1,3-Dichlorobenzene	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:23	JMV	P5G0413
1,4-Dichlorobenzene	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:23	JMV	P5G0413
1-Methylnaphthalene	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:23	JMV	P5G0413
2,4,5-Trichlorophenol	BRL	ug/L	10	2.3	1	8270D	7/24/15 17:23	JMV	P5G0413
2,4,6-Trichlorophenol	BRL	ug/L	10	2.6	1	8270D	7/24/15 17:23	JMV	P5G0413
2,4-Dichlorophenol	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:23	JMV	P5G0413
2,4-Dimethylphenol	BRL	ug/L	10	2.3	1	8270D	7/24/15 17:23	JMV	P5G0413
2,4-Dinitrophenol	BRL	ug/L	10	3.7	1	8270D	7/24/15 17:23	JMV	P5G0413
2,4-Dinitrotoluene	BRL	ug/L	10	1.9	1	8270D	7/24/15 17:23	JMV	P5G0413
2,6-Dinitrotoluene	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:23	JMV	P5G0413
2-Chloronaphthalene	BRL	ug/L	10	3.4	1	8270D	7/24/15 17:23	JMV	P5G0413
2-Chlorophenol	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:23	JMV	P5G0413
2-Methylnaphthalene	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:23	JMV	P5G0413
2-Methylphenol	BRL	ug/L	10	2.1	1	8270D	7/24/15 17:23	JMV	P5G0413
2-Nitroaniline	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:23	JMV	P5G0413
2-Nitrophenol	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:23	JMV	P5G0413
3,3'-Dichlorobenzidine	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:23	JMV	P5G0413
3/4-Methylphenol	BRL	ug/L	10	1.9	1	8270D	7/24/15 17:23	JMV	P5G0413
3-Nitroaniline	BRL	ug/L	10	1.2	1	8270D	7/24/15 17:23	JMV	P5G0413
4,6-Dinitro-2-methylphenol	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:23	JMV	P5G0413
4-Bromophenyl phenyl ether	BRL	ug/L	10	1.8	1	8270D	7/24/15 17:23	JMV	P5G0413
4-Chloro-3-methylphenol	BRL	ug/L	10	1.9	1	8270D	7/24/15 17:23	JMV	P5G0413
4-Chloroaniline	BRL	ug/L	10	1.8	1	8270D	7/24/15 17:23	JMV	P5G0413
4-Chlorophenyl phenyl ether	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:23	JMV	P5G0413
4-Nitroaniline	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:23	JMV	P5G0413
4-Nitrophenol	BRL	ug/L	10	0.66	1	8270D	7/24/15 17:23	JMV	P5G0413
Acenaphthene	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:23	JMV	P5G0413
Acenaphthylene	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:23	JMV	P5G0413
Aniline	BRL	ug/L	10	2.1	1	8270D	7/24/15 17:23	JMV	P5G0413
Anthracene	BRL	ug/L	10	3.0	1	8270D	7/24/15 17:23	JMV	P5G0413
Azobenzene	BRL	ug/L	10	1.8	1	8270D	7/24/15 17:23	JMV	P5G0413
Benzo(a)anthracene	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:23	JMV	P5G0413
Benzo(a)pyrene	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:23	JMV	P5G0413
Benzo(b)fluoranthene	BRL	ug/L	10	1.4	1	8270D	7/24/15 17:23	JMV	P5G0413
Benzo(g,h,i)perylene	BRL	ug/L	10	1.8	1	8270D	7/24/15 17:23	JMV	P5G0413
Benzo(k)fluoranthene	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:23	JMV	P5G0413
Benzoic Acid	BRL	ug/L	100	2.7	1	8270D	7/24/15 17:23	JMV	P5G0413
Benzyl alcohol	BRL	ug/L	10	1.8	1	8270D	7/24/15 17:23	JMV	P5G0413
bis(2-Chloroethoxy)methane	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:23	JMV	P5G0413
Bis(2-Chloroethyl)ether	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:23	JMV	P5G0413
Bis(2-chloroisopropyl)ether	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:23	JMV	P5G0413
Bis(2-Ethylhexyl)phthalate	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:23	JMV	P5G0413
Butyl benzyl phthalate	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:23	JMV	P5G0413

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Falcon Engineering
 Attn: Jessica Hoglen
 1210 Trinity Road #110
 Raleigh, NC 27607

Project: 828 MLK - CHPD

Sample Matrix: Water

Client Sample ID: MW4A
 Prism Sample ID: 5070434-02
 Prism Work Order: 5070434
 Time Collected: 07/21/15 15:50
 Time Submitted: 07/22/15 10:40

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Chrysene	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:23	JMV	P5G0413
Dibenzo(a,h)anthracene	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:23	JMV	P5G0413
Dibenzofuran	BRL	ug/L	10	2.3	1	8270D	7/24/15 17:23	JMV	P5G0413
Diethyl phthalate	BRL	ug/L	10	1.9	1	8270D	7/24/15 17:23	JMV	P5G0413
Dimethyl phthalate	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:23	JMV	P5G0413
Di-n-butyl phthalate	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:23	JMV	P5G0413
Di-n-octyl phthalate	BRL	ug/L	10	1.7	1	8270D	7/24/15 17:23	JMV	P5G0413
Fluoranthene	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:23	JMV	P5G0413
Fluorene	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:23	JMV	P5G0413
Hexachlorobenzene	BRL	ug/L	10	1.9	1	8270D	7/24/15 17:23	JMV	P5G0413
Hexachlorobutadiene	BRL	ug/L	10	2.6	1	8270D	7/24/15 17:23	JMV	P5G0413
Hexachlorocyclopentadiene	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:23	JMV	P5G0413
Hexachloroethane	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:23	JMV	P5G0413
Indeno(1,2,3-cd)pyrene	BRL	ug/L	10	2.1	1	8270D	7/24/15 17:23	JMV	P5G0413
Isophorone	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:23	JMV	P5G0413
Naphthalene	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:23	JMV	P5G0413
Nitrobenzene	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:23	JMV	P5G0413
N-Nitroso-di-n-propylamine	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:23	JMV	P5G0413
N-Nitrosodiphenylamine	BRL	ug/L	10	1.8	1	8270D	7/24/15 17:23	JMV	P5G0413
Pentachlorophenol	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:23	JMV	P5G0413
Phenanthrene	BRL	ug/L	10	1.8	1	8270D	7/24/15 17:23	JMV	P5G0413
Phenol	BRL	ug/L	10	1.2	1	8270D	7/24/15 17:23	JMV	P5G0413
Pyrene	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:23	JMV	P5G0413

Surrogate	Recovery	Control Limits
2,4,6-Tribromophenol	93 %	49-109
2-Fluorobiphenyl	88 %	55-96
2-Fluorophenol	57 %	27-74
Nitrobenzene-d5	83 %	53-99
Phenol-d5	40 %	11-52
Terphenyl-d14	105 %	42-133

Total Metals

Mercury	BRL	mg/L	0.00020	0.000011	1	*7470A	7/23/15 13:04	JAB	P5G0417
Arsenic	BRL	mg/L	0.010	0.00070	1	*6010C	7/30/15 17:37	BGM	P5G0450
Barium	0.064	mg/L	0.010	0.00070	1	*6010C	7/30/15 17:37	BGM	P5G0450
Boron	BRL	mg/L	0.50	0.0043	1	*6010C	7/30/15 17:37	BGM	P5G0450
Cadmium	BRL	mg/L	0.0010	0.00010	1	*6010C	7/30/15 17:37	BGM	P5G0450
Chromium	BRL	mg/L	0.0050	0.00060	1	*6010C	7/30/15 17:37	BGM	P5G0450
Lead	BRL	mg/L	0.0050	0.0013	1	*6010C	7/30/15 17:37	BGM	P5G0450
Selenium	BRL	mg/L	0.020	0.0032	1	*6010C	7/31/15 16:56	BGM	P5G0450
Silver	BRL	mg/L	0.0050	0.00020	1	*6010C	7/30/15 17:37	BGM	P5G0450

Volatile Organic Compounds by GC/MS

1,1,1,2-Tetrachloroethane	BRL	ug/L	0.50	0.11	1	8260B	7/28/15 15:56	MSC	P5G0524
1,1,1-Trichloroethane	BRL	ug/L	0.50	0.061	1	8260B	7/28/15 15:56	MSC	P5G0524

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Falcon Engineering
 Attn: Jessica Hoglen
 1210 Trinity Road #110
 Raleigh, NC 27607

Project: 828 MLK - CHPD

Sample Matrix: Water

Client Sample ID: MW4A
 Prism Sample ID: 5070434-02
 Prism Work Order: 5070434
 Time Collected: 07/21/15 15:50
 Time Submitted: 07/22/15 10:40

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
1,1,2,2-Tetrachloroethane	BRL	ug/L	0.50	0.036	1	8260B	7/28/15 15:56	MSC	P5G0524
1,1,2-Trichloroethane	BRL	ug/L	0.50	0.066	1	8260B	7/28/15 15:56	MSC	P5G0524
1,1-Dichloroethane	BRL	ug/L	0.50	0.083	1	8260B	7/28/15 15:56	MSC	P5G0524
1,1-Dichloroethylene	BRL	ug/L	0.50	0.083	1	8260B	7/28/15 15:56	MSC	P5G0524
1,1-Dichloropropylene	BRL	ug/L	0.50	0.051	1	8260B	7/28/15 15:56	MSC	P5G0524
1,2,3-Trichlorobenzene	BRL	ug/L	2.0	0.40	1	8260B	7/28/15 15:56	MSC	P5G0524
1,2,3-Trichloropropane	BRL	ug/L	1.0	0.14	1	8260B	7/28/15 15:56	MSC	P5G0524
1,2,4-Trichlorobenzene	BRL	ug/L	1.0	0.13	1	8260B	7/28/15 15:56	MSC	P5G0524
1,2,4-Trimethylbenzene	BRL	ug/L	0.50	0.054	1	8260B	7/28/15 15:56	MSC	P5G0524
1,2-Dibromo-3-chloropropane	BRL	ug/L	2.0	0.17	1	8260B	7/28/15 15:56	MSC	P5G0524
1,2-Dibromoethane	BRL	ug/L	0.50	0.051	1	8260B	7/28/15 15:56	MSC	P5G0524
1,2-Dichlorobenzene	BRL	ug/L	0.50	0.076	1	8260B	7/28/15 15:56	MSC	P5G0524
1,2-Dichloroethane	BRL	ug/L	0.50	0.066	1	8260B	7/28/15 15:56	MSC	P5G0524
1,2-Dichloropropane	BRL	ug/L	0.50	0.11	1	8260B	7/28/15 15:56	MSC	P5G0524
1,3,5-Trimethylbenzene	BRL	ug/L	0.50	0.076	1	8260B	7/28/15 15:56	MSC	P5G0524
1,3-Dichlorobenzene	BRL	ug/L	0.50	0.054	1	8260B	7/28/15 15:56	MSC	P5G0524
1,3-Dichloropropane	BRL	ug/L	0.50	0.043	1	8260B	7/28/15 15:56	MSC	P5G0524
1,4-Dichlorobenzene	BRL	ug/L	0.50	0.050	1	8260B	7/28/15 15:56	MSC	P5G0524
2,2-Dichloropropane	BRL	ug/L	2.0	0.11	1	8260B	7/28/15 15:56	MSC	P5G0524
2-Chloroethyl Vinyl Ether	BRL	ug/L	5.0	0.37	1	8260B	7/28/15 15:56	MSC	P5G0524
2-Chlorotoluene	BRL	ug/L	0.50	0.066	1	8260B	7/28/15 15:56	MSC	P5G0524
4-Chlorotoluene	BRL	ug/L	0.50	0.050	1	8260B	7/28/15 15:56	MSC	P5G0524
4-Isopropyltoluene	BRL	ug/L	0.50	0.089	1	8260B	7/28/15 15:56	MSC	P5G0524
Acetone	BRL	ug/L	5.0	0.31	1	8260B	7/28/15 15:56	MSC	P5G0524
Acrolein	BRL	ug/L	20	0.20	1	8260B	7/28/15 15:56	MSC	P5G0524
Acrylonitrile	BRL	ug/L	20	0.20	1	8260B	7/28/15 15:56	MSC	P5G0524
Benzene	BRL	ug/L	0.50	0.048	1	8260B	7/28/15 15:56	MSC	P5G0524
Bromobenzene	BRL	ug/L	0.50	0.057	1	8260B	7/28/15 15:56	MSC	P5G0524
Bromochloromethane	BRL	ug/L	0.50	0.14	1	8260B	7/28/15 15:56	MSC	P5G0524
Bromodichloromethane	BRL	ug/L	0.50	0.062	1	8260B	7/28/15 15:56	MSC	P5G0524
Bromoform	BRL	ug/L	1.0	0.040	1	8260B	7/28/15 15:56	MSC	P5G0524
Bromomethane	BRL	ug/L	1.0	0.18	1	8260B	7/28/15 15:56	MSC	P5G0524
Carbon disulfide	BRL	ug/L	5.0	0.075	1	8260B	7/28/15 15:56	MSC	P5G0524
Carbon Tetrachloride	BRL	ug/L	0.50	0.11	1	8260B	7/28/15 15:56	MSC	P5G0524
Chlorobenzene	BRL	ug/L	0.50	0.062	1	8260B	7/28/15 15:56	MSC	P5G0524
Chloroethane	BRL	ug/L	0.50	0.22	1	8260B	7/28/15 15:56	MSC	P5G0524
Chloroform	BRL	ug/L	0.50	0.076	1	8260B	7/28/15 15:56	MSC	P5G0524
Chloromethane	BRL	ug/L	0.50	0.079	1	8260B	7/28/15 15:56	MSC	P5G0524
cis-1,2-Dichloroethylene	BRL	ug/L	0.50	0.056	1	8260B	7/28/15 15:56	MSC	P5G0524
cis-1,3-Dichloropropylene	BRL	ug/L	0.50	0.079	1	8260B	7/28/15 15:56	MSC	P5G0524
Dibromochloromethane	BRL	ug/L	0.50	0.081	1	8260B	7/28/15 15:56	MSC	P5G0524
Dibromomethane	BRL	ug/L	0.50	0.065	1	8260B	7/28/15 15:56	MSC	P5G0524
Dichlorodifluoromethane	BRL	ug/L	1.0	0.11	1	8260B	7/28/15 15:56	MSC	P5G0524

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Falcon Engineering
 Attn: Jessica Hoglen
 1210 Trinity Road #110
 Raleigh, NC 27607

Project: 828 MLK - CHPD

Sample Matrix: Water

Client Sample ID: MW4A
 Prism Sample ID: 5070434-02
 Prism Work Order: 5070434
 Time Collected: 07/21/15 15:50
 Time Submitted: 07/22/15 10:40

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Ethylbenzene	BRL	ug/L	0.50	0.061	1	8260B	7/28/15 15:56	MSC	P5G0524
Hexachlorobutadiene	BRL	ug/L	2.0	0.16	1	8260B	7/28/15 15:56	MSC	P5G0524
Isopropyl Ether	BRL	ug/L	0.50	0.050	1	8260B	7/28/15 15:56	MSC	P5G0524
Isopropylbenzene (Cumene)	BRL	ug/L	0.50	0.054	1	8260B	7/28/15 15:56	MSC	P5G0524
m,p-Xylenes	BRL	ug/L	1.0	0.12	1	8260B	7/28/15 15:56	MSC	P5G0524
Methyl Butyl Ketone (2-Hexanone)	BRL	ug/L	5.0	0.065	1	8260B	7/28/15 15:56	MSC	P5G0524
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.24	1	8260B	7/28/15 15:56	MSC	P5G0524
Methyl Isobutyl Ketone	BRL	ug/L	5.0	0.078	1	8260B	7/28/15 15:56	MSC	P5G0524
Methylene Chloride	BRL	ug/L	1.0	0.083	1	8260B	7/28/15 15:56	MSC	P5G0524
Methyl-tert-Butyl Ether	BRL	ug/L	0.50	0.042	1	8260B	7/28/15 15:56	MSC	P5G0524
Naphthalene	BRL	ug/L	1.0	0.19	1	8260B	7/28/15 15:56	MSC	P5G0524
n-Butylbenzene	BRL	ug/L	1.0	0.076	1	8260B	7/28/15 15:56	MSC	P5G0524
n-Propylbenzene	BRL	ug/L	0.50	0.087	1	8260B	7/28/15 15:56	MSC	P5G0524
o-Xylene	BRL	ug/L	0.50	0.044	1	8260B	7/28/15 15:56	MSC	P5G0524
sec-Butylbenzene	BRL	ug/L	0.50	0.076	1	8260B	7/28/15 15:56	MSC	P5G0524
Styrene	BRL	ug/L	0.50	0.047	1	8260B	7/28/15 15:56	MSC	P5G0524
tert-Butylbenzene	BRL	ug/L	0.50	0.088	1	8260B	7/28/15 15:56	MSC	P5G0524
Tetrachloroethylene	BRL	ug/L	0.50	0.098	1	8260B	7/28/15 15:56	MSC	P5G0524
Toluene	BRL	ug/L	0.50	0.044	1	8260B	7/28/15 15:56	MSC	P5G0524
trans-1,2-Dichloroethylene	BRL	ug/L	0.50	0.094	1	8260B	7/28/15 15:56	MSC	P5G0524
trans-1,3-Dichloropropylene	BRL	ug/L	0.50	0.070	1	8260B	7/28/15 15:56	MSC	P5G0524
Trichloroethylene	BRL	ug/L	0.50	0.078	1	8260B	7/28/15 15:56	MSC	P5G0524
Trichlorofluoromethane	BRL	ug/L	0.50	0.062	1	8260B	7/28/15 15:56	MSC	P5G0524
Vinyl acetate	BRL	ug/L	2.0	0.060	1	8260B	7/28/15 15:56	MSC	P5G0524
Vinyl chloride	BRL	ug/L	0.50	0.097	1	8260B	7/28/15 15:56	MSC	P5G0524
						Surrogate	Recovery	Control Limits	
						4-Bromofluorobenzene	102 %	80-124	
						Dibromofluoromethane	99 %	75-129	
						Toluene-d8	99 %	77-123	

Falcon Engineering
 Attn: Jessica Hoglen
 1210 Trinity Road #110
 Raleigh, NC 27607

Project: 828 MLK - CHPD

Sample Matrix: Water

Client Sample ID: MW4A Filtered
 Prism Sample ID: 5070434-03
 Prism Work Order: 5070434
 Time Collected: 07/21/15 16:15
 Time Submitted: 07/22/15 10:40

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
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General Chemistry Parameters

Hexavalent Chromium	BRL	mg/L	0.010	0.0037	1	*SM3500-Cr B	7/22/15 13:30	CDL	P5G0401
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Organochlorine Pesticides by GC/ECD

4,4'-DDD	BRL	ug/L	0.050	0.028	1	8081B	8/6/15 22:51	JMC	P5G0466
4,4'-DDE	BRL	ug/L	0.050	0.028	1	8081B	8/6/15 22:51	JMC	P5G0466
4,4'-DDT	BRL	ug/L	0.050	0.027	1	8081B	8/6/15 22:51	JMC	P5G0466
Aldrin	BRL	ug/L	0.050	0.015	1	8081B	8/6/15 22:51	JMC	P5G0466
alpha-BHC	BRL	ug/L	0.050	0.012	1	8081B	8/6/15 22:51	JMC	P5G0466
cis-Chlordane	BRL	ug/L	0.050	0.018	1	8081B	8/6/15 22:51	JMC	P5G0466
beta-BHC	BRL	ug/L	0.050	0.019	1	8081B	8/6/15 22:51	JMC	P5G0466
Chlordane	BRL	ug/L	0.50	0.34	1	8081B	8/6/15 22:51	JMC	P5G0466
delta-BHC	BRL	ug/L	0.050	0.017	1	8081B	8/6/15 22:51	JMC	P5G0466
Dieldrin	BRL	ug/L	0.050	0.022	1	8081B	8/6/15 22:51	JMC	P5G0466
Endosulfan I	BRL	ug/L	0.050	0.019	1	8081B	8/6/15 22:51	JMC	P5G0466
Endosulfan II	BRL	ug/L	0.050	0.025	1	8081B	8/6/15 22:51	JMC	P5G0466
Endosulfan Sulfate	BRL	ug/L	0.050	0.027	1	8081B	8/6/15 22:51	JMC	P5G0466
Endrin	BRL	ug/L	0.050	0.020	1	8081B	8/6/15 22:51	JMC	P5G0466
Endrin Aldehyde	BRL	ug/L	0.050	0.027	1	8081B	8/6/15 22:51	JMC	P5G0466
Endrin Ketone	BRL	ug/L	0.050	0.028	1	8081B	8/6/15 22:51	JMC	P5G0466
gamma-BHC	BRL	ug/L	0.050	0.013	1	8081B	8/6/15 22:51	JMC	P5G0466
trans-Chlordane	BRL	ug/L	0.050	0.019	1	8081B	8/6/15 22:51	JMC	P5G0466
Heptachlor	BRL	ug/L	0.050	0.015	1	8081B	8/6/15 22:51	JMC	P5G0466
Heptachlor Epoxide	BRL	ug/L	0.050	0.018	1	8081B	8/6/15 22:51	JMC	P5G0466
Methoxychlor	BRL	ug/L	0.050	0.033	1	8081B	8/6/15 22:51	JMC	P5G0466
Toxaphene	BRL	ug/L	0.50	0.16	1	8081B	8/6/15 22:51	JMC	P5G0466

Surrogate	Recovery	Control Limits
Decachlorobiphenyl	74 %	13-186
Tetrachloro-m-xylene	71 %	40-134

Polychlorinated Biphenyls (PCBs) by GC/ECD

Aroclor 1016	BRL	ug/L	0.50	0.18	1	8082A	8/6/15 22:51	JMC	P5G0467
Aroclor 1221	BRL	ug/L	1.0	0.11	1	8082A	8/6/15 22:51	JMC	P5G0467
Aroclor 1232	BRL	ug/L	0.50	0.16	1	8082A	8/6/15 22:51	JMC	P5G0467
Aroclor 1242	BRL	ug/L	0.50	0.14	1	8082A	8/6/15 22:51	JMC	P5G0467
Aroclor 1248	BRL	ug/L	0.50	0.14	1	8082A	8/6/15 22:51	JMC	P5G0467
Aroclor 1254	BRL	ug/L	0.50	0.16	1	8082A	8/6/15 22:51	JMC	P5G0467
Aroclor 1260	BRL	ug/L	0.50	0.18	1	8082A	8/6/15 22:51	JMC	P5G0467

Surrogate	Recovery	Control Limits
Tetrachloro-m-xylene	70 %	30-161
Decachlorobiphenyl	75 %	32-178

Semivolatile Organic Compounds by GC/MS

1,2,4-Trichlorobenzene	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:44	JMV	P5G0413
1,2-Dichlorobenzene	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:44	JMV	P5G0413

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Falcon Engineering
 Attn: Jessica Hoglen
 1210 Trinity Road #110
 Raleigh, NC 27607

Project: 828 MLK - CHPD

Sample Matrix: Water

Client Sample ID: MW4A Filtered
 Prism Sample ID: 5070434-03
 Prism Work Order: 5070434
 Time Collected: 07/21/15 16:15
 Time Submitted: 07/22/15 10:40

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
1,3-Dichlorobenzene	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:44	JMV	P5G0413
1,4-Dichlorobenzene	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:44	JMV	P5G0413
1-Methylnaphthalene	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:44	JMV	P5G0413
2,4,5-Trichlorophenol	BRL	ug/L	10	2.3	1	8270D	7/24/15 17:44	JMV	P5G0413
2,4,6-Trichlorophenol	BRL	ug/L	10	2.6	1	8270D	7/24/15 17:44	JMV	P5G0413
2,4-Dichlorophenol	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:44	JMV	P5G0413
2,4-Dimethylphenol	BRL	ug/L	10	2.3	1	8270D	7/24/15 17:44	JMV	P5G0413
2,4-Dinitrophenol	BRL	ug/L	10	3.7	1	8270D	7/24/15 17:44	JMV	P5G0413
2,4-Dinitrotoluene	BRL	ug/L	10	1.9	1	8270D	7/24/15 17:44	JMV	P5G0413
2,6-Dinitrotoluene	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:44	JMV	P5G0413
2-Chloronaphthalene	BRL	ug/L	10	3.4	1	8270D	7/24/15 17:44	JMV	P5G0413
2-Chlorophenol	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:44	JMV	P5G0413
2-Methylnaphthalene	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:44	JMV	P5G0413
2-Methylphenol	BRL	ug/L	10	2.1	1	8270D	7/24/15 17:44	JMV	P5G0413
2-Nitroaniline	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:44	JMV	P5G0413
2-Nitrophenol	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:44	JMV	P5G0413
3,3'-Dichlorobenzidine	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:44	JMV	P5G0413
3/4-Methylphenol	BRL	ug/L	10	1.9	1	8270D	7/24/15 17:44	JMV	P5G0413
3-Nitroaniline	BRL	ug/L	10	1.2	1	8270D	7/24/15 17:44	JMV	P5G0413
4,6-Dinitro-2-methylphenol	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:44	JMV	P5G0413
4-Bromophenyl phenyl ether	BRL	ug/L	10	1.8	1	8270D	7/24/15 17:44	JMV	P5G0413
4-Chloro-3-methylphenol	BRL	ug/L	10	1.9	1	8270D	7/24/15 17:44	JMV	P5G0413
4-Chloroaniline	BRL	ug/L	10	1.8	1	8270D	7/24/15 17:44	JMV	P5G0413
4-Chlorophenyl phenyl ether	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:44	JMV	P5G0413
4-Nitroaniline	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:44	JMV	P5G0413
4-Nitrophenol	BRL	ug/L	10	0.66	1	8270D	7/24/15 17:44	JMV	P5G0413
Acenaphthene	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:44	JMV	P5G0413
Acenaphthylene	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:44	JMV	P5G0413
Aniline	BRL	ug/L	10	2.1	1	8270D	7/24/15 17:44	JMV	P5G0413
Anthracene	BRL	ug/L	10	3.0	1	8270D	7/24/15 17:44	JMV	P5G0413
Azobenzene	BRL	ug/L	10	1.8	1	8270D	7/24/15 17:44	JMV	P5G0413
Benzo(a)anthracene	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:44	JMV	P5G0413
Benzo(a)pyrene	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:44	JMV	P5G0413
Benzo(b)fluoranthene	BRL	ug/L	10	1.4	1	8270D	7/24/15 17:44	JMV	P5G0413
Benzo(g,h,i)perylene	BRL	ug/L	10	1.8	1	8270D	7/24/15 17:44	JMV	P5G0413
Benzo(k)fluoranthene	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:44	JMV	P5G0413
Benzoic Acid	BRL	ug/L	100	2.7	1	8270D	7/24/15 17:44	JMV	P5G0413
Benzyl alcohol	BRL	ug/L	10	1.8	1	8270D	7/24/15 17:44	JMV	P5G0413
bis(2-Chloroethoxy)methane	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:44	JMV	P5G0413
Bis(2-Chloroethyl)ether	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:44	JMV	P5G0413
Bis(2-chloroisopropyl)ether	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:44	JMV	P5G0413
Bis(2-Ethylhexyl)phthalate	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:44	JMV	P5G0413
Butyl benzyl phthalate	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:44	JMV	P5G0413

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Falcon Engineering
Attn: Jessica Hoglen
1210 Trinity Road #110
Raleigh, NC 27607

Project: 828 MLK - CHPD

Sample Matrix: Water

Client Sample ID: MW4A Filtered
Prism Sample ID: 5070434-03
Prism Work Order: 5070434
Time Collected: 07/21/15 16:15
Time Submitted: 07/22/15 10:40

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Chrysene	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:44	JMV	P5G0413
Dibenzo(a,h)anthracene	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:44	JMV	P5G0413
Dibenzofuran	BRL	ug/L	10	2.3	1	8270D	7/24/15 17:44	JMV	P5G0413
Diethyl phthalate	BRL	ug/L	10	1.9	1	8270D	7/24/15 17:44	JMV	P5G0413
Dimethyl phthalate	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:44	JMV	P5G0413
Di-n-butyl phthalate	BRL	ug/L	10	2.0	1	8270D	7/24/15 17:44	JMV	P5G0413
Di-n-octyl phthalate	BRL	ug/L	10	1.7	1	8270D	7/24/15 17:44	JMV	P5G0413
Fluoranthene	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:44	JMV	P5G0413
Fluorene	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:44	JMV	P5G0413
Hexachlorobenzene	BRL	ug/L	10	1.9	1	8270D	7/24/15 17:44	JMV	P5G0413
Hexachlorobutadiene	BRL	ug/L	10	2.6	1	8270D	7/24/15 17:44	JMV	P5G0413
Hexachlorocyclopentadiene	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:44	JMV	P5G0413
Hexachloroethane	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:44	JMV	P5G0413
Indeno(1,2,3-cd)pyrene	BRL	ug/L	10	2.1	1	8270D	7/24/15 17:44	JMV	P5G0413
Isophorone	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:44	JMV	P5G0413
Naphthalene	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:44	JMV	P5G0413
Nitrobenzene	BRL	ug/L	10	2.4	1	8270D	7/24/15 17:44	JMV	P5G0413
N-Nitroso-di-n-propylamine	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:44	JMV	P5G0413
N-Nitrosodiphenylamine	BRL	ug/L	10	1.8	1	8270D	7/24/15 17:44	JMV	P5G0413
Pentachlorophenol	BRL	ug/L	10	2.5	1	8270D	7/24/15 17:44	JMV	P5G0413
Phenanthrene	BRL	ug/L	10	1.8	1	8270D	7/24/15 17:44	JMV	P5G0413
Phenol	BRL	ug/L	10	1.2	1	8270D	7/24/15 17:44	JMV	P5G0413
Pyrene	BRL	ug/L	10	2.2	1	8270D	7/24/15 17:44	JMV	P5G0413

Surrogate	Recovery	Control Limits
2,4,6-Tribromophenol	84 %	49-109
2-Fluorobiphenyl	76 %	55-96
2-Fluorophenol	45 %	27-74
Nitrobenzene-d5	69 %	53-99
Phenol-d5	29 %	11-52
Terphenyl-d14	93 %	42-133

Total Metals

Mercury	BRL	mg/L	0.00020	0.000011	1	*7470A	7/23/15 13:08	JAB	P5G0417
Arsenic	BRL	mg/L	0.010	0.00070	1	*6010C	7/30/15 17:44	BGM	P5G0450
Barium	0.061	mg/L	0.010	0.00070	1	*6010C	7/30/15 17:44	BGM	P5G0450
Boron	BRL	mg/L	0.50	0.0043	1	*6010C	7/30/15 17:44	BGM	P5G0450
Cadmium	BRL	mg/L	0.0010	0.00010	1	*6010C	7/30/15 17:44	BGM	P5G0450
Chromium	BRL	mg/L	0.0050	0.00060	1	*6010C	7/30/15 17:44	BGM	P5G0450
Lead	BRL	mg/L	0.0050	0.0013	1	*6010C	7/30/15 17:44	BGM	P5G0450
Selenium	BRL	mg/L	0.020	0.0032	1	*6010C	7/31/15 17:04	BGM	P5G0450
Silver	BRL	mg/L	0.0050	0.00020	1	*6010C	7/30/15 17:44	BGM	P5G0450

Volatile Organic Compounds by GC/MS

1,1,1,2-Tetrachloroethane	BRL	ug/L	0.50	0.11	1	8260B	7/28/15 16:23	MSC	P5G0524
1,1,1-Trichloroethane	BRL	ug/L	0.50	0.061	1	8260B	7/28/15 16:23	MSC	P5G0524

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Falcon Engineering
 Attn: Jessica Hoglen
 1210 Trinity Road #110
 Raleigh, NC 27607

Project: 828 MLK - CHPD

Sample Matrix: Water

Client Sample ID: MW4A Filtered
 Prism Sample ID: 5070434-03
 Prism Work Order: 5070434
 Time Collected: 07/21/15 16:15
 Time Submitted: 07/22/15 10:40

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
1,1,2,2-Tetrachloroethane	BRL	ug/L	0.50	0.036	1	8260B	7/28/15 16:23	MSC	P5G0524
1,1,2-Trichloroethane	BRL	ug/L	0.50	0.066	1	8260B	7/28/15 16:23	MSC	P5G0524
1,1-Dichloroethane	BRL	ug/L	0.50	0.083	1	8260B	7/28/15 16:23	MSC	P5G0524
1,1-Dichloroethylene	BRL	ug/L	0.50	0.083	1	8260B	7/28/15 16:23	MSC	P5G0524
1,1-Dichloropropylene	BRL	ug/L	0.50	0.051	1	8260B	7/28/15 16:23	MSC	P5G0524
1,2,3-Trichlorobenzene	BRL	ug/L	2.0	0.40	1	8260B	7/28/15 16:23	MSC	P5G0524
1,2,3-Trichloropropane	BRL	ug/L	1.0	0.14	1	8260B	7/28/15 16:23	MSC	P5G0524
1,2,4-Trichlorobenzene	BRL	ug/L	1.0	0.13	1	8260B	7/28/15 16:23	MSC	P5G0524
1,2,4-Trimethylbenzene	BRL	ug/L	0.50	0.054	1	8260B	7/28/15 16:23	MSC	P5G0524
1,2-Dibromo-3-chloropropane	BRL	ug/L	2.0	0.17	1	8260B	7/28/15 16:23	MSC	P5G0524
1,2-Dibromoethane	BRL	ug/L	0.50	0.051	1	8260B	7/28/15 16:23	MSC	P5G0524
1,2-Dichlorobenzene	BRL	ug/L	0.50	0.076	1	8260B	7/28/15 16:23	MSC	P5G0524
1,2-Dichloroethane	BRL	ug/L	0.50	0.066	1	8260B	7/28/15 16:23	MSC	P5G0524
1,2-Dichloropropane	BRL	ug/L	0.50	0.11	1	8260B	7/28/15 16:23	MSC	P5G0524
1,3,5-Trimethylbenzene	BRL	ug/L	0.50	0.076	1	8260B	7/28/15 16:23	MSC	P5G0524
1,3-Dichlorobenzene	BRL	ug/L	0.50	0.054	1	8260B	7/28/15 16:23	MSC	P5G0524
1,3-Dichloropropane	BRL	ug/L	0.50	0.043	1	8260B	7/28/15 16:23	MSC	P5G0524
1,4-Dichlorobenzene	BRL	ug/L	0.50	0.050	1	8260B	7/28/15 16:23	MSC	P5G0524
2,2-Dichloropropane	BRL	ug/L	2.0	0.11	1	8260B	7/28/15 16:23	MSC	P5G0524
2-Chloroethyl Vinyl Ether	BRL	ug/L	5.0	0.37	1	8260B	7/28/15 16:23	MSC	P5G0524
2-Chlorotoluene	BRL	ug/L	0.50	0.066	1	8260B	7/28/15 16:23	MSC	P5G0524
4-Chlorotoluene	BRL	ug/L	0.50	0.050	1	8260B	7/28/15 16:23	MSC	P5G0524
4-Isopropyltoluene	BRL	ug/L	0.50	0.089	1	8260B	7/28/15 16:23	MSC	P5G0524
Acetone	BRL	ug/L	5.0	0.31	1	8260B	7/28/15 16:23	MSC	P5G0524
Acrolein	BRL	ug/L	20	0.20	1	8260B	7/28/15 16:23	MSC	P5G0524
Acrylonitrile	BRL	ug/L	20	0.20	1	8260B	7/28/15 16:23	MSC	P5G0524
Benzene	BRL	ug/L	0.50	0.048	1	8260B	7/28/15 16:23	MSC	P5G0524
Bromobenzene	BRL	ug/L	0.50	0.057	1	8260B	7/28/15 16:23	MSC	P5G0524
Bromochloromethane	BRL	ug/L	0.50	0.14	1	8260B	7/28/15 16:23	MSC	P5G0524
Bromodichloromethane	BRL	ug/L	0.50	0.062	1	8260B	7/28/15 16:23	MSC	P5G0524
Bromoform	BRL	ug/L	1.0	0.040	1	8260B	7/28/15 16:23	MSC	P5G0524
Bromomethane	BRL	ug/L	1.0	0.18	1	8260B	7/28/15 16:23	MSC	P5G0524
Carbon disulfide	BRL	ug/L	5.0	0.075	1	8260B	7/28/15 16:23	MSC	P5G0524
Carbon Tetrachloride	BRL	ug/L	0.50	0.11	1	8260B	7/28/15 16:23	MSC	P5G0524
Chlorobenzene	BRL	ug/L	0.50	0.062	1	8260B	7/28/15 16:23	MSC	P5G0524
Chloroethane	BRL	ug/L	0.50	0.22	1	8260B	7/28/15 16:23	MSC	P5G0524
Chloroform	BRL	ug/L	0.50	0.076	1	8260B	7/28/15 16:23	MSC	P5G0524
Chloromethane	BRL	ug/L	0.50	0.079	1	8260B	7/28/15 16:23	MSC	P5G0524
cis-1,2-Dichloroethylene	BRL	ug/L	0.50	0.056	1	8260B	7/28/15 16:23	MSC	P5G0524
cis-1,3-Dichloropropylene	BRL	ug/L	0.50	0.079	1	8260B	7/28/15 16:23	MSC	P5G0524
Dibromochloromethane	BRL	ug/L	0.50	0.081	1	8260B	7/28/15 16:23	MSC	P5G0524
Dibromomethane	BRL	ug/L	0.50	0.065	1	8260B	7/28/15 16:23	MSC	P5G0524
Dichlorodifluoromethane	BRL	ug/L	1.0	0.11	1	8260B	7/28/15 16:23	MSC	P5G0524

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Falcon Engineering
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 1210 Trinity Road #110
 Raleigh, NC 27607

Project: 828 MLK - CHPD

Sample Matrix: Water

Client Sample ID: MW4A Filtered
 Prism Sample ID: 5070434-03
 Prism Work Order: 5070434
 Time Collected: 07/21/15 16:15
 Time Submitted: 07/22/15 10:40

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Ethylbenzene	BRL	ug/L	0.50	0.061	1	8260B	7/28/15 16:23	MSC	P5G0524
Hexachlorobutadiene	BRL	ug/L	2.0	0.16	1	8260B	7/28/15 16:23	MSC	P5G0524
Isopropyl Ether	BRL	ug/L	0.50	0.050	1	8260B	7/28/15 16:23	MSC	P5G0524
Isopropylbenzene (Cumene)	BRL	ug/L	0.50	0.054	1	8260B	7/28/15 16:23	MSC	P5G0524
m,p-Xylenes	BRL	ug/L	1.0	0.12	1	8260B	7/28/15 16:23	MSC	P5G0524
Methyl Butyl Ketone (2-Hexanone)	BRL	ug/L	5.0	0.065	1	8260B	7/28/15 16:23	MSC	P5G0524
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.24	1	8260B	7/28/15 16:23	MSC	P5G0524
Methyl Isobutyl Ketone	BRL	ug/L	5.0	0.078	1	8260B	7/28/15 16:23	MSC	P5G0524
Methylene Chloride	BRL	ug/L	1.0	0.083	1	8260B	7/28/15 16:23	MSC	P5G0524
Methyl-tert-Butyl Ether	BRL	ug/L	0.50	0.042	1	8260B	7/28/15 16:23	MSC	P5G0524
Naphthalene	BRL	ug/L	1.0	0.19	1	8260B	7/28/15 16:23	MSC	P5G0524
n-Butylbenzene	BRL	ug/L	1.0	0.076	1	8260B	7/28/15 16:23	MSC	P5G0524
n-Propylbenzene	BRL	ug/L	0.50	0.087	1	8260B	7/28/15 16:23	MSC	P5G0524
o-Xylene	BRL	ug/L	0.50	0.044	1	8260B	7/28/15 16:23	MSC	P5G0524
sec-Butylbenzene	BRL	ug/L	0.50	0.076	1	8260B	7/28/15 16:23	MSC	P5G0524
Styrene	BRL	ug/L	0.50	0.047	1	8260B	7/28/15 16:23	MSC	P5G0524
tert-Butylbenzene	BRL	ug/L	0.50	0.088	1	8260B	7/28/15 16:23	MSC	P5G0524
Tetrachloroethylene	BRL	ug/L	0.50	0.098	1	8260B	7/28/15 16:23	MSC	P5G0524
Toluene	BRL	ug/L	0.50	0.044	1	8260B	7/28/15 16:23	MSC	P5G0524
trans-1,2-Dichloroethylene	BRL	ug/L	0.50	0.094	1	8260B	7/28/15 16:23	MSC	P5G0524
trans-1,3-Dichloropropylene	BRL	ug/L	0.50	0.070	1	8260B	7/28/15 16:23	MSC	P5G0524
Trichloroethylene	BRL	ug/L	0.50	0.078	1	8260B	7/28/15 16:23	MSC	P5G0524
Trichlorofluoromethane	BRL	ug/L	0.50	0.062	1	8260B	7/28/15 16:23	MSC	P5G0524
Vinyl acetate	BRL	ug/L	2.0	0.060	1	8260B	7/28/15 16:23	MSC	P5G0524
Vinyl chloride	BRL	ug/L	0.50	0.097	1	8260B	7/28/15 16:23	MSC	P5G0524

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	99 %	80-124
Dibromofluoromethane	101 %	75-129
Toluene-d8	99 %	77-123

Falcon Engineering
Attn: Jessica Hoglen
1210 Trinity Road #110
Raleigh, NC 27607

Project: 828 MLK - CHPD

Prism Work Order: 5070434
Time Submitted: 7/22/2015 10:40:00AM

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P5G0524 - 5030B										
Blank (P5G0524-BLK1)										
Prepared & Analyzed: 07/28/15										
1,1,1,2-Tetrachloroethane	BRL	0.50	ug/L							
1,1,1-Trichloroethane	BRL	0.50	ug/L							
1,1,1,2-Tetrachloroethane	BRL	0.50	ug/L							
1,1,1,2-Trichloroethane	BRL	0.50	ug/L							
1,1-Dichloroethane	BRL	0.50	ug/L							
1,1-Dichloroethylene	BRL	0.50	ug/L							
1,1-Dichloropropylene	BRL	0.50	ug/L							
1,2,3-Trichlorobenzene	BRL	2.0	ug/L							
1,2,3-Trichloropropane	BRL	1.0	ug/L							
1,2,4-Trichlorobenzene	BRL	1.0	ug/L							
1,2,4-Trimethylbenzene	BRL	0.50	ug/L							
1,2-Dibromo-3-chloropropane	BRL	2.0	ug/L							
1,2-Dibromoethane	BRL	0.50	ug/L							
1,2-Dichlorobenzene	BRL	0.50	ug/L							
1,2-Dichloroethane	BRL	0.50	ug/L							
1,2-Dichloropropane	BRL	0.50	ug/L							
1,3,5-Trimethylbenzene	BRL	0.50	ug/L							
1,3-Dichlorobenzene	BRL	0.50	ug/L							
1,3-Dichloropropane	BRL	0.50	ug/L							
1,4-Dichlorobenzene	BRL	0.50	ug/L							
2,2-Dichloropropane	BRL	2.0	ug/L							
2-Chloroethyl Vinyl Ether	BRL	5.0	ug/L							
2-Chlorotoluene	BRL	0.50	ug/L							
4-Chlorotoluene	BRL	0.50	ug/L							
4-Isopropyltoluene	BRL	0.50	ug/L							
Acetone	BRL	5.0	ug/L							
Acrolein	BRL	20	ug/L							
Acrylonitrile	BRL	20	ug/L							
Benzene	BRL	0.50	ug/L							
Bromobenzene	BRL	0.50	ug/L							
Bromochloromethane	BRL	0.50	ug/L							
Bromodichloromethane	BRL	0.50	ug/L							
Bromoform	BRL	1.0	ug/L							
Bromomethane	BRL	1.0	ug/L							
Carbon disulfide	BRL	5.0	ug/L							
Carbon Tetrachloride	BRL	0.50	ug/L							
Chlorobenzene	BRL	0.50	ug/L							
Chloroethane	BRL	0.50	ug/L							
Chloroform	BRL	0.50	ug/L							
Chloromethane	BRL	0.50	ug/L							
cis-1,2-Dichloroethylene	BRL	0.50	ug/L							
cis-1,3-Dichloropropylene	BRL	0.50	ug/L							
Dibromochloromethane	BRL	0.50	ug/L							
Dibromomethane	BRL	0.50	ug/L							
Dichlorodifluoromethane	BRL	1.0	ug/L							
Ethylbenzene	BRL	0.50	ug/L							

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Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P5G0524 - 5030B										
Blank (P5G0524-BLK1)										
Prepared & Analyzed: 07/28/15										
Hexachlorobutadiene	BRL	2.0	ug/L							
Isopropyl Ether	BRL	0.50	ug/L							
Isopropylbenzene (Cumene)	BRL	0.50	ug/L							
m,p-Xylenes	BRL	1.0	ug/L							
Methyl Butyl Ketone (2-Hexanone)	BRL	5.0	ug/L							
Methyl Ethyl Ketone (2-Butanone)	BRL	5.0	ug/L							
Methyl Isobutyl Ketone	BRL	5.0	ug/L							
Methylene Chloride	BRL	1.0	ug/L							
Methyl-tert-Butyl Ether	BRL	0.50	ug/L							
Naphthalene	BRL	1.0	ug/L							
n-Butylbenzene	BRL	1.0	ug/L							
n-Propylbenzene	BRL	0.50	ug/L							
o-Xylene	BRL	0.50	ug/L							
sec-Butylbenzene	BRL	0.50	ug/L							
Styrene	BRL	0.50	ug/L							
tert-Butylbenzene	BRL	0.50	ug/L							
Tetrachloroethylene	BRL	0.50	ug/L							
Toluene	BRL	0.50	ug/L							
trans-1,2-Dichloroethylene	BRL	0.50	ug/L							
trans-1,3-Dichloropropylene	BRL	0.50	ug/L							
Trichloroethylene	BRL	0.50	ug/L							
Trichlorofluoromethane	BRL	0.50	ug/L							
Vinyl acetate	BRL	2.0	ug/L							
Vinyl chloride	BRL	0.50	ug/L							
Surrogate: 4-Bromofluorobenzene	48.6		ug/L	50.00		97	80-124			
Surrogate: Dibromofluoromethane	49.2		ug/L	50.00		98	75-129			
Surrogate: Toluene-d8	48.1		ug/L	50.00		96	77-123			

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Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P5G0524 - 5030B										
LCS (P5G0524-BS1)										
Prepared & Analyzed: 07/28/15										
1,1,1,2-Tetrachloroethane	20.3	0.50	ug/L	20.00		102	79-134			
1,1,1-Trichloroethane	19.7	0.50	ug/L	20.00		99	75-136			
1,1,2,2-Tetrachloroethane	22.5	0.50	ug/L	20.00		112	62-127			
1,1,2-Trichloroethane	20.1	0.50	ug/L	20.00		101	70-140			
1,1-Dichloroethane	19.7	0.50	ug/L	20.00		98	78-130			
1,1-Dichloroethylene	19.9	0.50	ug/L	20.00		100	70-154			
1,1-Dichloropropylene	20.3	0.50	ug/L	20.00		102	71-136			
1,2,3-Trichlorobenzene	17.9	2.0	ug/L	20.00		90	58-144			
1,2,3-Trichloropropane	21.7	1.0	ug/L	20.00		109	71-127			
1,2,4-Trichlorobenzene	22.0	1.0	ug/L	20.00		110	66-139			
1,2,4-Trimethylbenzene	21.0	0.50	ug/L	20.00		105	75-133			
1,2-Dibromo-3-chloropropane	20.8	2.0	ug/L	20.00		104	63-134			
1,2-Dibromoethane	20.7	0.50	ug/L	20.00		104	77-135			
1,2-Dichlorobenzene	21.2	0.50	ug/L	20.00		106	78-128			
1,2-Dichloroethane	20.1	0.50	ug/L	20.00		100	68-131			
1,2-Dichloropropane	20.9	0.50	ug/L	20.00		105	77-130			
1,3,5-Trimethylbenzene	21.3	0.50	ug/L	20.00		106	75-131			
1,3-Dichlorobenzene	21.3	0.50	ug/L	20.00		107	77-125			
1,3-Dichloropropane	21.2	0.50	ug/L	20.00		106	76-132			
1,4-Dichlorobenzene	20.7	0.50	ug/L	20.00		103	75-126			
2,2-Dichloropropane	23.5	2.0	ug/L	20.00		118	29-149			
2-Chloroethyl Vinyl Ether	18.6	5.0	ug/L	20.00		93	34-144			
2-Chlorotoluene	21.0	0.50	ug/L	20.00		105	74-126			
4-Chlorotoluene	21.3	0.50	ug/L	20.00		106	78-129			
4-Isopropyltoluene	21.4	0.50	ug/L	20.00		107	69-132			
Acetone	41.2	5.0	ug/L	40.00		103	40-166			
Acrolein	39.3	20	ug/L	40.00		98	70-130			
Acrylonitrile	40.1	20	ug/L	40.00		100	81-127			
Benzene	21.3	0.50	ug/L	20.00		107	77-128			
Bromobenzene	20.2	0.50	ug/L	20.00		101	78-129			
Bromochloromethane	21.5	0.50	ug/L	20.00		108	78-135			
Bromodichloromethane	19.3	0.50	ug/L	20.00		96	76-138			
Bromoform	19.0	1.0	ug/L	20.00		95	71-135			
Bromomethane	22.2	1.0	ug/L	20.00		111	41-168			
Carbon disulfide	23.9	5.0	ug/L	20.00		120	59-135			
Carbon Tetrachloride	21.5	0.50	ug/L	20.00		108	72-142			
Chlorobenzene	20.9	0.50	ug/L	20.00		104	78-119			
Chloroethane	21.6	0.50	ug/L	20.00		108	57-142			
Chloroform	18.5	0.50	ug/L	20.00		92	77-130			
Chloromethane	20.1	0.50	ug/L	20.00		100	47-145			
cis-1,2-Dichloroethylene	20.1	0.50	ug/L	20.00		100	76-141			
cis-1,3-Dichloropropylene	21.5	0.50	ug/L	20.00		108	65-140			
Dibromochloromethane	19.9	0.50	ug/L	20.00		99	75-134			
Dibromomethane	21.7	0.50	ug/L	20.00		108	76-138			
Dichlorodifluoromethane	20.9	1.0	ug/L	20.00		105	28-163			
Ethylbenzene	21.0	0.50	ug/L	20.00		105	80-127			

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Falcon Engineering
Attn: Jessica Hoglen
1210 Trinity Road #110
Raleigh, NC 27607

Project: 828 MLK - CHPD

Prism Work Order: 5070434
Time Submitted: 7/22/2015 10:40:00AM

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P5G0524 - 5030B										
LCS (P5G0524-BS1)										
Prepared & Analyzed: 07/28/15										
Hexachlorobutadiene	22.5	2.0	ug/L	20.00		113	61-134			
Isopropyl Ether	19.0	0.50	ug/L	20.00		95	60-154			
Isopropylbenzene (Cumene)	22.9	0.50	ug/L	20.00		114	70-130			
m,p-Xylenes	41.4	1.0	ug/L	40.00		103	77-133			
Methyl Butyl Ketone (2-Hexanone)	21.2	5.0	ug/L	20.00		106	64-137			
Methyl Ethyl Ketone (2-Butanone)	18.8	5.0	ug/L	20.00		94	71-134			
Methyl Isobutyl Ketone	20.1	5.0	ug/L	20.00		100	69-134			
Methylene Chloride	19.5	1.0	ug/L	20.00		98	73-131			
Methyl-tert-Butyl Ether	20.0	0.50	ug/L	20.00		100	68-135			
Naphthalene	21.7	1.0	ug/L	20.00		108	64-136			
n-Butylbenzene	22.0	1.0	ug/L	20.00		110	68-134			
n-Propylbenzene	21.9	0.50	ug/L	20.00		109	72-132			
o-Xylene	20.7	0.50	ug/L	20.00		104	78-128			
sec-Butylbenzene	22.4	0.50	ug/L	20.00		112	71-131			
Styrene	21.0	0.50	ug/L	20.00		105	78-129			
tert-Butylbenzene	21.2	0.50	ug/L	20.00		106	70-132			
Tetrachloroethylene	20.8	0.50	ug/L	20.00		104	80-129			
Toluene	20.7	0.50	ug/L	20.00		103	76-131			
trans-1,2-Dichloroethylene	20.4	0.50	ug/L	20.00		102	76-135			
trans-1,3-Dichloropropylene	21.7	0.50	ug/L	20.00		108	67-140			
Trichloroethylene	19.8	0.50	ug/L	20.00		99	77-133			
Trichlorofluoromethane	23.2	0.50	ug/L	20.00		116	62-148			
Vinyl acetate	21.0	2.0	ug/L	20.00		105	34-167			
Vinyl chloride	22.4	0.50	ug/L	20.00		112	57-141			
Surrogate: 4-Bromofluorobenzene	49.8		ug/L	50.00		100	80-124			
Surrogate: Dibromofluoromethane	49.2		ug/L	50.00		98	75-129			
Surrogate: Toluene-d8	50.3		ug/L	50.00		101	77-123			

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Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P5G0524 - 5030B										
LCS Dup (P5G0524-BSD1)										
Prepared & Analyzed: 07/28/15										
1,1,1,2-Tetrachloroethane	20.1	0.50	ug/L	20.00		101	79-134	1	20	
1,1,1-Trichloroethane	18.8	0.50	ug/L	20.00		94	75-136	5	20	
1,1,2,2-Tetrachloroethane	22.6	0.50	ug/L	20.00		113	62-127	0.4	20	
1,1,2-Trichloroethane	19.9	0.50	ug/L	20.00		100	70-140	0.9	20	
1,1-Dichloroethane	18.9	0.50	ug/L	20.00		94	78-130	4	20	
1,1-Dichloroethylene	18.8	0.50	ug/L	20.00		94	70-154	6	20	
1,1-Dichloropropylene	19.6	0.50	ug/L	20.00		98	71-136	4	20	
1,2,3-Trichlorobenzene	16.5	2.0	ug/L	20.00		82	58-144	9	20	
1,2,3-Trichloropropane	21.2	1.0	ug/L	20.00		106	71-127	2	20	
1,2,4-Trichlorobenzene	22.2	1.0	ug/L	20.00		111	66-139	0.8	20	
1,2,4-Trimethylbenzene	20.5	0.50	ug/L	20.00		102	75-133	3	20	
1,2-Dibromo-3-chloropropane	21.2	2.0	ug/L	20.00		106	63-134	2	20	
1,2-Dibromoethane	20.7	0.50	ug/L	20.00		104	77-135	0.05	20	
1,2-Dichlorobenzene	20.8	0.50	ug/L	20.00		104	78-128	2	20	
1,2-Dichloroethane	19.6	0.50	ug/L	20.00		98	68-131	2	20	
1,2-Dichloropropane	20.3	0.50	ug/L	20.00		102	77-130	3	20	
1,3,5-Trimethylbenzene	20.9	0.50	ug/L	20.00		104	75-131	2	20	
1,3-Dichlorobenzene	20.7	0.50	ug/L	20.00		104	77-125	3	20	
1,3-Dichloropropane	21.0	0.50	ug/L	20.00		105	76-132	0.9	20	
1,4-Dichlorobenzene	20.9	0.50	ug/L	20.00		104	75-126	1	20	
2,2-Dichloropropane	22.5	2.0	ug/L	20.00		112	29-149	4	20	
2-Chloroethyl Vinyl Ether	17.9	5.0	ug/L	20.00		89	34-144	4	20	
2-Chlorotoluene	20.6	0.50	ug/L	20.00		103	74-126	2	20	
4-Chlorotoluene	20.7	0.50	ug/L	20.00		104	78-129	3	20	
4-Isopropyltoluene	20.7	0.50	ug/L	20.00		103	69-132	4	20	
Acetone	41.7	5.0	ug/L	40.00		104	40-166	1	20	
Acrolein	43.9	20	ug/L	40.00		110	70-130	11	20	
Acrylonitrile	40.3	20	ug/L	40.00		101	81-127	0.6	20	
Benzene	20.3	0.50	ug/L	20.00		102	77-128	5	20	
Bromobenzene	19.9	0.50	ug/L	20.00		99	78-129	2	20	
Bromochloromethane	20.8	0.50	ug/L	20.00		104	78-135	3	20	
Bromodichloromethane	18.4	0.50	ug/L	20.00		92	76-138	5	20	
Bromoform	19.4	1.0	ug/L	20.00		97	71-135	2	20	
Bromomethane	21.2	1.0	ug/L	20.00		106	41-168	5	20	
Carbon disulfide	22.8	5.0	ug/L	20.00		114	59-135	5	20	
Carbon Tetrachloride	20.9	0.50	ug/L	20.00		105	72-142	3	20	
Chlorobenzene	20.5	0.50	ug/L	20.00		103	78-119	2	20	
Chloroethane	20.2	0.50	ug/L	20.00		101	57-142	7	20	
Chloroform	18.2	0.50	ug/L	20.00		91	77-130	1	20	
Chloromethane	18.9	0.50	ug/L	20.00		95	47-145	6	20	
cis-1,2-Dichloroethylene	19.5	0.50	ug/L	20.00		97	76-141	3	20	
cis-1,3-Dichloropropylene	20.9	0.50	ug/L	20.00		104	65-140	3	20	
Dibromochloromethane	19.2	0.50	ug/L	20.00		96	75-134	4	20	
Dibromomethane	21.6	0.50	ug/L	20.00		108	76-138	0.4	20	
Dichlorodifluoromethane	19.6	1.0	ug/L	20.00		98	28-163	6	20	
Ethylbenzene	20.2	0.50	ug/L	20.00		101	80-127	4	20	

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Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P5G0524 - 5030B										
LCS Dup (P5G0524-BSD1)										
Prepared & Analyzed: 07/28/15										
Hexachlorobutadiene	20.9	2.0	ug/L	20.00		105	61-134	7	20	
Isopropyl Ether	18.8	0.50	ug/L	20.00		94	60-154	1	20	
Isopropylbenzene (Cumene)	22.4	0.50	ug/L	20.00		112	70-130	2	20	
m,p-Xylenes	40.0	1.0	ug/L	40.00		100	77-133	3	20	
Methyl Butyl Ketone (2-Hexanone)	21.0	5.0	ug/L	20.00		105	64-137	1	20	
Methyl Ethyl Ketone (2-Butanone)	19.9	5.0	ug/L	20.00		99	71-134	5	20	
Methyl Isobutyl Ketone	19.5	5.0	ug/L	20.00		98	69-134	3	20	
Methylene Chloride	18.8	1.0	ug/L	20.00		94	73-131	4	20	
Methyl-tert-Butyl Ether	19.6	0.50	ug/L	20.00		98	68-135	2	20	
Naphthalene	21.7	1.0	ug/L	20.00		108	64-136	0.05	20	
n-Butylbenzene	21.1	1.0	ug/L	20.00		106	68-134	4	20	
n-Propylbenzene	21.3	0.50	ug/L	20.00		106	72-132	3	20	
o-Xylene	20.0	0.50	ug/L	20.00		100	78-128	3	20	
sec-Butylbenzene	22.1	0.50	ug/L	20.00		111	71-131	1	20	
Styrene	20.5	0.50	ug/L	20.00		103	78-129	2	20	
tert-Butylbenzene	20.8	0.50	ug/L	20.00		104	70-132	2	20	
Tetrachloroethylene	19.8	0.50	ug/L	20.00		99	80-129	5	20	
Toluene	20.0	0.50	ug/L	20.00		100	76-131	3	20	
trans-1,2-Dichloroethylene	19.4	0.50	ug/L	20.00		97	76-135	5	20	
trans-1,3-Dichloropropylene	21.3	0.50	ug/L	20.00		106	67-140	2	20	
Trichloroethylene	18.6	0.50	ug/L	20.00		93	77-133	6	20	
Trichlorofluoromethane	22.1	0.50	ug/L	20.00		110	62-148	5	20	
Vinyl acetate	20.7	2.0	ug/L	20.00		103	34-167	1	20	
Vinyl chloride	20.8	0.50	ug/L	20.00		104	57-141	8	20	
Surrogate: 4-Bromofluorobenzene	49.7		ug/L	50.00		99	80-124			
Surrogate: Dibromofluoromethane	48.8		ug/L	50.00		98	75-129			
Surrogate: Toluene-d8	49.7		ug/L	50.00		99	77-123			

Falcon Engineering
 Attn: Jessica Hoglen
 1210 Trinity Road #110
 Raleigh, NC 27607

Project: 828 MLK - CHPD

Prism Work Order: 5070434
 Time Submitted: 7/22/2015 10:40:00AM

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch P5G0413 - 3510C MS

Blank (P5G0413-BLK1)

Prepared: 07/23/15 Analyzed: 07/24/15

1,2,4-Trichlorobenzene	BRL	10	ug/L							
1,2-Dichlorobenzene	BRL	10	ug/L							
1,3-Dichlorobenzene	BRL	10	ug/L							
1,4-Dichlorobenzene	BRL	10	ug/L							
1-Methylnaphthalene	BRL	10	ug/L							
2,4,5-Trichlorophenol	BRL	10	ug/L							
2,4,6-Trichlorophenol	BRL	10	ug/L							
2,4-Dichlorophenol	BRL	10	ug/L							
2,4-Dimethylphenol	BRL	10	ug/L							
2,4-Dinitrophenol	BRL	10	ug/L							
2,4-Dinitrotoluene	BRL	10	ug/L							
2,6-Dinitrotoluene	BRL	10	ug/L							
2-Chloronaphthalene	BRL	10	ug/L							
2-Chlorophenol	BRL	10	ug/L							
2-Methylnaphthalene	BRL	10	ug/L							
2-Methylphenol	BRL	10	ug/L							
2-Nitroaniline	BRL	10	ug/L							
2-Nitrophenol	BRL	10	ug/L							
3,3'-Dichlorobenzidine	BRL	10	ug/L							
3/4-Methylphenol	BRL	10	ug/L							
3-Nitroaniline	BRL	10	ug/L							
4,6-Dinitro-2-methylphenol	BRL	10	ug/L							
4-Bromophenyl phenyl ether	BRL	10	ug/L							
4-Chloro-3-methylphenol	BRL	10	ug/L							
4-Chloroaniline	BRL	10	ug/L							
4-Chlorophenyl phenyl ether	BRL	10	ug/L							
4-Nitroaniline	BRL	10	ug/L							
4-Nitrophenol	BRL	10	ug/L							
Acenaphthene	BRL	10	ug/L							
Acenaphthylene	BRL	10	ug/L							
Aniline	BRL	10	ug/L							
Anthracene	BRL	10	ug/L							
Azobenzene	BRL	10	ug/L							
Benzo(a)anthracene	BRL	10	ug/L							
Benzo(a)pyrene	BRL	10	ug/L							
Benzo(b)fluoranthene	BRL	10	ug/L							
Benzo(g,h,i)perylene	BRL	10	ug/L							
Benzo(k)fluoranthene	BRL	10	ug/L							
Benzoic Acid	BRL	100	ug/L							
Benzyl alcohol	BRL	10	ug/L							
bis(2-Chloroethoxy)methane	BRL	10	ug/L							
Bis(2-Chloroethyl)ether	BRL	10	ug/L							
Bis(2-chloroisopropyl)ether	BRL	10	ug/L							
Bis(2-Ethylhexyl)phthalate	BRL	10	ug/L							
Butyl benzyl phthalate	BRL	10	ug/L							
Chrysene	BRL	10	ug/L							

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 Raleigh, NC 27607

Project: 828 MLK - CHPD

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Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch P5G0413 - 3510C MS

Blank (P5G0413-BLK1)

Prepared: 07/23/15 Analyzed: 07/24/15

Dibenzo(a,h)anthracene	BRL	10	ug/L							
Dibenzofuran	BRL	10	ug/L							
Diethyl phthalate	BRL	10	ug/L							
Dimethyl phthalate	BRL	10	ug/L							
Di-n-butyl phthalate	BRL	10	ug/L							
Di-n-octyl phthalate	BRL	10	ug/L							
Fluoranthene	BRL	10	ug/L							
Fluorene	BRL	10	ug/L							
Hexachlorobenzene	BRL	10	ug/L							
Hexachlorobutadiene	BRL	10	ug/L							
Hexachlorocyclopentadiene	BRL	10	ug/L							
Hexachloroethane	BRL	10	ug/L							
Indeno(1,2,3-cd)pyrene	BRL	10	ug/L							
Isophorone	BRL	10	ug/L							
Naphthalene	BRL	10	ug/L							
Nitrobenzene	BRL	10	ug/L							
N-Nitroso-di-n-propylamine	BRL	10	ug/L							
N-Nitrosodiphenylamine	BRL	10	ug/L							
Pentachlorophenol	BRL	10	ug/L							
Phenanthrene	BRL	10	ug/L							
Phenol	BRL	10	ug/L							
Pyrene	BRL	10	ug/L							
Surrogate: 2,4,6-Tribromophenol	120		ug/L	100.0		120	49-109			SR
Surrogate: 2-Fluorobiphenyl	55.3		ug/L	50.00		111	55-96			SR
Surrogate: 2-Fluorophenol	71.4		ug/L	100.0		71	27-74			
Surrogate: Nitrobenzene-d5	51.0		ug/L	50.00		102	53-99			SR
Surrogate: Phenol-d5	45.6		ug/L	100.0		46	11-52			
Surrogate: Terphenyl-d14	62.0		ug/L	50.00		124	42-133			



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Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P5G0413 - 3510C MS										
LCS (P5G0413-BS1)				Prepared: 07/23/15 Analyzed: 07/24/15						
1,2,4-Trichlorobenzene	37.9	10	ug/L	50.00		76	45-103			
1,2-Dichlorobenzene	37.6	10	ug/L	50.00		75	43-100			
1,3-Dichlorobenzene	36.8	10	ug/L	50.00		74	42-98			
1,4-Dichlorobenzene	36.9	10	ug/L	50.00		74	42-100			
1-Methylnaphthalene	39.0	10	ug/L	50.00		78	45-135			
2,4,5-Trichlorophenol	47.4	10	ug/L	50.00		95	66-120			
2,4,6-Trichlorophenol	45.8	10	ug/L	50.00		92	62-121			
2,4-Dichlorophenol	40.3	10	ug/L	50.00		81	58-113			
2,4-Dimethylphenol	40.1	10	ug/L	50.00		80	42-120			
2,4-Dinitrophenol	24.6	10	ug/L	50.00		49	27-129			
2,4-Dinitrotoluene	49.9	10	ug/L	50.00		100	62-136			
2,6-Dinitrotoluene	49.5	10	ug/L	50.00		99	64-129			
2-Chloronaphthalene	51.5	10	ug/L	50.00		103	38-141			
2-Chlorophenol	37.4	10	ug/L	50.00		75	49-107			
2-Methylnaphthalene	38.5	10	ug/L	50.00		77	55-112			
2-Methylphenol	35.6	10	ug/L	50.00		71	40-106			
2-Nitroaniline	46.6	10	ug/L	50.00		93	65-122			
2-Nitrophenol	40.3	10	ug/L	50.00		81	57-115			
3,3'-Dichlorobenzidine	51.6	10	ug/L	50.00		103	58-139			
3/4-Methylphenol	33.6	10	ug/L	50.00		67	34-101			
3-Nitroaniline	47.5	10	ug/L	50.00		95	52-155			
4,6-Dinitro-2-methylphenol	35.8	10	ug/L	50.00		72	49-138			
4-Bromophenyl phenyl ether	44.1	10	ug/L	50.00		88	63-135			
4-Chloro-3-methylphenol	44.6	10	ug/L	50.00		89	33-149			
4-Chloroaniline	41.3	10	ug/L	50.00		83	44-163			
4-Chlorophenyl phenyl ether	42.1	10	ug/L	50.00		84	63-129			
4-Nitroaniline	45.5	10	ug/L	50.00		91	63-147			
4-Nitrophenol	21.4	10	ug/L	50.00		43	10-77			
Acenaphthene	45.0	10	ug/L	50.00		90	64-118			
Acenaphthylene	45.1	10	ug/L	50.00		90	65-119			
Aniline	38.7	10	ug/L	50.00		77	12-197			
Anthracene	50.1	10	ug/L	50.00		100	69-134			
Azobenzene	50.8	10	ug/L	50.00		102	56-129			
Benzo(a)anthracene	46.8	10	ug/L	50.00		94	71-125			
Benzo(a)pyrene	49.7	10	ug/L	50.00		99	67-135			
Benzo(b)fluoranthene	49.2	10	ug/L	50.00		98	56-145			
Benzo(g,h,i)perylene	48.8	10	ug/L	50.00		98	44-149			
Benzo(k)fluoranthene	46.5	10	ug/L	50.00		93	65-138			
Benzoic Acid	8.00	100	ug/L	50.00		16	10-125			J
Benzyl alcohol	34.2	10	ug/L	50.00		68	35-111			
bis(2-Chloroethoxy)methane	37.8	10	ug/L	50.00		76	49-126			
Bis(2-Chloroethyl)ether	31.8	10	ug/L	50.00		64	47-124			
Bis(2-chloroisopropyl)ether	39.2	10	ug/L	50.00		78	42-126			
Bis(2-Ethylhexyl)phthalate	53.0	10	ug/L	50.00		106	59-139			
Butyl benzyl phthalate	53.3	10	ug/L	50.00		107	67-133			
Chrysene	48.3	10	ug/L	50.00		97	64-124			

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Falcon Engineering
Attn: Jessica Hoglen
1210 Trinity Road #110
Raleigh, NC 27607

Project: 828 MLK - CHPD

Prism Work Order: 5070434
Time Submitted: 7/22/2015 10:40:00AM

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch P5G0413 - 3510C MS

LCS (P5G0413-BS1)

Prepared: 07/23/15 Analyzed: 07/24/15

Dibenzo(a,h)anthracene	48.3	10	ug/L	50.00		97	49-144			
Dibenzofuran	46.7	10	ug/L	50.00		93	68-113			
Diethyl phthalate	48.7	10	ug/L	50.00		97	70-124			
Dimethyl phthalate	48.4	10	ug/L	50.00		97	71-117			
Di-n-butyl phthalate	51.2	10	ug/L	50.00		102	69-128			
Di-n-octyl phthalate	52.7	10	ug/L	50.00		105	52-150			
Fluoranthene	48.0	10	ug/L	50.00		96	66-135			
Fluorene	46.9	10	ug/L	50.00		94	67-124			
Hexachlorobenzene	49.0	10	ug/L	50.00		98	62-124			
Hexachlorobutadiene	35.2	10	ug/L	50.00		70	42-105			
Hexachlorocyclopentadiene	19.0	10	ug/L	50.00		38	32-117			
Hexachloroethane	34.8	10	ug/L	50.00		70	40-99			
Indeno(1,2,3-cd)pyrene	49.1	10	ug/L	50.00		98	40-150			
Isophorone	41.4	10	ug/L	50.00		83	54-125			
Naphthalene	37.8	10	ug/L	50.00		76	54-111			
Nitrobenzene	39.0	10	ug/L	50.00		78	51-117			
N-Nitroso-di-n-propylamine	39.6	10	ug/L	50.00		79	55-115			
N-Nitrosodiphenylamine	50.8	10	ug/L	50.00		102	70-152			
Pentachlorophenol	47.4	10	ug/L	50.00		95	23-139			
Phenanthrene	50.6	10	ug/L	50.00		101	68-128			
Phenol	19.2	10	ug/L	50.00		38	12-58			
Pyrene	51.3	10	ug/L	50.00		103	62-139			
Surrogate: 2,4,6-Tribromophenol	103		ug/L	100.0		103	49-109			
Surrogate: 2-Fluorobiphenyl	47.0		ug/L	50.00		94	55-96			
Surrogate: 2-Fluorophenol	56.4		ug/L	100.0		56	27-74			
Surrogate: Nitrobenzene-d5	41.9		ug/L	50.00		84	53-99			
Surrogate: Phenol-d5	36.8		ug/L	100.0		37	11-52			
Surrogate: Terphenyl-d14	52.6		ug/L	50.00		105	42-133			

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Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P5G0413 - 3510C MS										
LCS Dup (P5G0413-BSD1)										
				Prepared: 07/23/15 Analyzed: 07/24/15						
1,2,4-Trichlorobenzene	48.0	10	ug/L	50.00	96	45-103	23	20		D
1,2-Dichlorobenzene	49.3	10	ug/L	50.00	99	43-100	27	20		D
1,3-Dichlorobenzene	47.4	10	ug/L	50.00	95	42-98	25	20		D
1,4-Dichlorobenzene	48.3	10	ug/L	50.00	97	42-100	27	20		D
1-Methylnaphthalene	47.1	10	ug/L	50.00	94	45-135	19	20		
2,4,5-Trichlorophenol	53.4	10	ug/L	50.00	107	66-120	12	20		
2,4,6-Trichlorophenol	53.0	10	ug/L	50.00	106	62-121	15	20		
2,4-Dichlorophenol	50.0	10	ug/L	50.00	100	58-113	21	20		D
2,4-Dimethylphenol	48.7	10	ug/L	50.00	97	42-120	19	20		
2,4-Dinitrophenol	33.6	10	ug/L	50.00	67	27-129	31	20		D
2,4-Dinitrotoluene	53.6	10	ug/L	50.00	107	62-136	7	20		
2,6-Dinitrotoluene	55.8	10	ug/L	50.00	112	64-129	12	20		
2-Chloronaphthalene	60.1	10	ug/L	50.00	120	38-141	16	20		
2-Chlorophenol	47.6	10	ug/L	50.00	95	49-107	24	20		D
2-Methylnaphthalene	47.2	10	ug/L	50.00	94	55-112	20	20		
2-Methylphenol	44.8	10	ug/L	50.00	90	40-106	23	20		D
2-Nitroaniline	51.7	10	ug/L	50.00	103	65-122	10	20		
2-Nitrophenol	51.4	10	ug/L	50.00	103	57-115	24	20		D
3,3'-Dichlorobenzidine	57.5	10	ug/L	50.00	115	58-139	11	20		
3/4-Methylphenol	42.4	10	ug/L	50.00	85	34-101	23	20		D
3-Nitroaniline	51.7	10	ug/L	50.00	103	52-155	8	20		
4,6-Dinitro-2-methylphenol	41.3	10	ug/L	50.00	83	49-138	14	20		
4-Bromophenyl phenyl ether	48.7	10	ug/L	50.00	97	63-135	10	20		
4-Chloro-3-methylphenol	50.4	10	ug/L	50.00	101	33-149	12	20		
4-Chloroaniline	46.2	10	ug/L	50.00	92	44-163	11	20		
4-Chlorophenyl phenyl ether	46.3	10	ug/L	50.00	93	63-129	10	20		
4-Nitroaniline	49.4	10	ug/L	50.00	99	63-147	8	20		
4-Nitrophenol	22.9	10	ug/L	50.00	46	10-77	7	20		
Acenaphthene	51.6	10	ug/L	50.00	103	64-118	14	20		
Acenaphthylene	52.2	10	ug/L	50.00	104	65-119	15	20		
Aniline	46.8	10	ug/L	50.00	94	12-197	19	20		
Anthracene	53.6	10	ug/L	50.00	107	69-134	7	20		
Azobenzene	55.2	10	ug/L	50.00	110	56-129	8	20		
Benzo(a)anthracene	51.1	10	ug/L	50.00	102	71-125	9	20		
Benzo(a)pyrene	55.5	10	ug/L	50.00	111	67-135	11	20		
Benzo(b)fluoranthene	54.0	10	ug/L	50.00	108	56-145	9	20		
Benzo(g,h,i)perylene	55.1	10	ug/L	50.00	110	44-149	12	20		
Benzo(k)fluoranthene	52.3	10	ug/L	50.00	105	65-138	12	20		
Benzoic Acid	19.0	100	ug/L	50.00	38	10-125	82	20		D, J
Benzyl alcohol	42.8	10	ug/L	50.00	86	35-111	22	20		D
bis(2-Chloroethoxy)methane	47.6	10	ug/L	50.00	95	49-126	23	20		D
Bis(2-Chloroethyl)ether	41.0	10	ug/L	50.00	82	47-124	25	20		D
Bis(2-chloroisopropyl)ether	51.3	10	ug/L	50.00	103	42-126	27	20		D
Bis(2-Ethylhexyl)phthalate	59.0	10	ug/L	50.00	118	59-139	11	20		
Butyl benzyl phthalate	60.5	10	ug/L	50.00	121	67-133	13	20		
Chrysene	51.8	10	ug/L	50.00	104	64-124	7	20		

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Prism Work Order: 5070434
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Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P5G0413 - 3510C MS										
LCS Dup (P5G0413-BSD1)										
				Prepared: 07/23/15 Analyzed: 07/24/15						
Dibenzo(a,h)anthracene	53.7	10	ug/L	50.00	107	49-144	11	20		
Dibenzofuran	53.0	10	ug/L	50.00	106	68-113	13	20		
Diethyl phthalate	53.7	10	ug/L	50.00	107	70-124	10	20		
Dimethyl phthalate	54.0	10	ug/L	50.00	108	71-117	11	20		
Di-n-butyl phthalate	56.1	10	ug/L	50.00	112	69-128	9	20		
Di-n-octyl phthalate	59.1	10	ug/L	50.00	118	52-150	11	20		
Fluoranthene	51.3	10	ug/L	50.00	103	66-135	7	20		
Fluorene	52.6	10	ug/L	50.00	105	67-124	11	20		
Hexachlorobenzene	53.2	10	ug/L	50.00	106	62-124	8	20		
Hexachlorobutadiene	45.7	10	ug/L	50.00	91	42-105	26	20		D
Hexachlorocyclopentadiene	25.9	10	ug/L	50.00	52	32-117	31	20		D
Hexachloroethane	45.7	10	ug/L	50.00	91	40-99	27	20		D
Indeno(1,2,3-cd)pyrene	54.5	10	ug/L	50.00	109	40-150	10	20		
Isophorone	49.1	10	ug/L	50.00	98	54-125	17	20		
Naphthalene	47.2	10	ug/L	50.00	94	54-111	22	20		D
Nitrobenzene	48.8	10	ug/L	50.00	98	51-117	22	20		D
N-Nitroso-di-n-propylamine	50.0	10	ug/L	50.00	100	55-115	23	20		D
N-Nitrosodiphenylamine	55.6	10	ug/L	50.00	111	70-152	9	20		
Pentachlorophenol	52.3	10	ug/L	50.00	105	23-139	10	20		
Phenanthrene	55.1	10	ug/L	50.00	110	68-128	8	20		
Phenol	23.9	10	ug/L	50.00	48	12-58	22	20		D
Pyrene	56.3	10	ug/L	50.00	113	62-139	9	20		
Surrogate: 2,4,6-Tribromophenol	105		ug/L	100.0	105	49-109				
Surrogate: 2-Fluorobiphenyl	52.5		ug/L	50.00	105	55-96				SR
Surrogate: 2-Fluorophenol	67.1		ug/L	100.0	67	27-74				
Surrogate: Nitrobenzene-d5	47.7		ug/L	50.00	95	53-99				
Surrogate: Phenol-d5	41.9		ug/L	100.0	42	11-52				
Surrogate: Terphenyl-d14	53.2		ug/L	50.00	106	42-133				



Falcon Engineering
Attn: Jessica Hoglen
1210 Trinity Road #110
Raleigh, NC 27607

Project: 828 MLK - CHPD

Prism Work Order: 5070434
Time Submitted: 7/22/2015 10:40:00AM

Organochlorine Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch P5G0466 - 3510C GC

Blank (P5G0466-BLK1)

Prepared: 07/25/15 Analyzed: 08/06/15

4,4'-DDD	BRL	0.050	ug/L							
4,4'-DDE	BRL	0.050	ug/L							
4,4'-DDT	BRL	0.050	ug/L							
Aldrin	BRL	0.050	ug/L							
alpha-BHC	BRL	0.050	ug/L							
cis-Chlordane	BRL	0.050	ug/L							
beta-BHC	BRL	0.050	ug/L							
Chlordane	BRL	0.50	ug/L							
delta-BHC	BRL	0.050	ug/L							
Dieldrin	BRL	0.050	ug/L							
Endosulfan I	BRL	0.050	ug/L							
Endosulfan II	BRL	0.050	ug/L							
Endosulfan Sulfate	BRL	0.050	ug/L							
Endrin	BRL	0.050	ug/L							
Endrin Aldehyde	BRL	0.050	ug/L							
Endrin Ketone	BRL	0.050	ug/L							
gamma-BHC	BRL	0.050	ug/L							
trans-Chlordane	BRL	0.050	ug/L							
Heptachlor	BRL	0.050	ug/L							
Heptachlor Epoxide	BRL	0.050	ug/L							
Methoxychlor	BRL	0.050	ug/L							
Toxaphene	BRL	0.50	ug/L							
<i>Surrogate: Decachlorobiphenyl</i>	0.718		ug/L	1.000		72	13-186			
<i>Surrogate: Tetrachloro-m-xylene</i>	0.705		ug/L	1.000		71	40-134			

LCS (P5G0466-BS1)

Prepared: 07/25/15 Analyzed: 08/06/15

4,4'-DDD	0.971	0.050	ug/L	1.000		97	66-138			
4,4'-DDE	0.938	0.050	ug/L	1.000		94	67-127			
4,4'-DDT	0.933	0.050	ug/L	1.000		93	66-142			
Aldrin	0.848	0.050	ug/L	1.000		85	62-124			
alpha-BHC	0.889	0.050	ug/L	1.000		89	63-125			
cis-Chlordane	0.880	0.050	ug/L	1.000		88	68-126			
beta-BHC	0.892	0.050	ug/L	1.000		89	65-137			
delta-BHC	0.882	0.050	ug/L	1.000		88	65-132			
Dieldrin	0.916	0.050	ug/L	1.000		92	69-130			
Endosulfan I	0.839	0.050	ug/L	1.000		84	71-129			
Endosulfan II	0.911	0.050	ug/L	1.000		91	73-135			
Endosulfan Sulfate	0.901	0.050	ug/L	1.000		90	72-137			
Endrin	1.01	0.050	ug/L	1.000		101	69-144			
Endrin Aldehyde	0.736	0.050	ug/L	1.000		74	68-139			
Endrin Ketone	0.834	0.050	ug/L	1.000		83	68-150			
gamma-BHC	0.872	0.050	ug/L	1.000		87	66-129			
trans-Chlordane	0.892	0.050	ug/L	1.000		89	66-126			
Heptachlor	0.903	0.050	ug/L	1.000		90	61-136			
Heptachlor Epoxide	0.878	0.050	ug/L	1.000		88	69-131			
Methoxychlor	0.963	0.050	ug/L	1.000		96	70-157			

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

Falcon Engineering
 Attn: Jessica Hoglen
 1210 Trinity Road #110
 Raleigh, NC 27607

Project: 828 MLK - CHPD

Prism Work Order: 5070434
 Time Submitted: 7/22/2015 10:40:00AM

Organochlorine Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P5G0466 - 3510C GC										
LCS (P5G0466-BS1)				Prepared: 07/25/15 Analyzed: 08/06/15						
Surrogate: Decachlorobiphenyl	0.792		ug/L	1.000		79	13-186			
Surrogate: Tetrachloro-m-xylene	0.773		ug/L	1.000		77	40-134			
LCS (P5G0466-BS2)				Prepared: 07/25/15 Analyzed: 08/06/15						
Chlordane	9.41	0.50	ug/L	10.00		94	50-150			
Surrogate: Decachlorobiphenyl	0.735		ug/L	1.000		74	13-186			
Surrogate: Tetrachloro-m-xylene	0.685		ug/L	1.000		69	40-134			
LCS (P5G0466-BS3)				Prepared: 07/25/15 Analyzed: 08/06/15						
Toxaphene	9.88	0.50	ug/L	10.00		99	50-150			
Surrogate: Decachlorobiphenyl	0.773		ug/L	1.000		77	13-186			
Surrogate: Tetrachloro-m-xylene	0.790		ug/L	1.000		79	40-134			
LCS Dup (P5G0466-BSD1)				Prepared: 07/25/15 Analyzed: 08/06/15						
4,4'-DDD	0.958	0.050	ug/L	1.000		96	66-138	1	20	
4,4'-DDE	0.925	0.050	ug/L	1.000		92	67-127	1	20	
4,4'-DDT	0.916	0.050	ug/L	1.000		92	66-142	2	20	
Aldrin	0.835	0.050	ug/L	1.000		83	62-124	2	20	
alpha-BHC	0.875	0.050	ug/L	1.000		88	63-125	2	20	
cis-Chlordane	0.864	0.050	ug/L	1.000		86	68-126	2	20	
beta-BHC	0.882	0.050	ug/L	1.000		88	65-137	1	20	
delta-BHC	0.890	0.050	ug/L	1.000		89	65-132	0.9	20	
Dieldrin	0.904	0.050	ug/L	1.000		90	69-130	1	20	
Endosulfan I	0.822	0.050	ug/L	1.000		82	71-129	2	20	
Endosulfan II	0.885	0.050	ug/L	1.000		88	73-135	3	20	
Endosulfan Sulfate	0.872	0.050	ug/L	1.000		87	72-137	3	20	
Endrin	0.978	0.050	ug/L	1.000		98	69-144	3	20	
Endrin Aldehyde	0.738	0.050	ug/L	1.000		74	68-139	0.2	20	
Endrin Ketone	0.808	0.050	ug/L	1.000		81	68-150	3	20	
gamma-BHC	0.863	0.050	ug/L	1.000		86	66-129	1	20	
trans-Chlordane	0.882	0.050	ug/L	1.000		88	66-126	1	20	
Heptachlor	0.878	0.050	ug/L	1.000		88	61-136	3	20	
Heptachlor Epoxide	0.868	0.050	ug/L	1.000		87	69-131	1	20	
Methoxychlor	0.940	0.050	ug/L	1.000		94	70-157	2	20	
Surrogate: Decachlorobiphenyl	0.809		ug/L	1.000		81	13-186			
Surrogate: Tetrachloro-m-xylene	0.716		ug/L	1.000		72	40-134			

Falcon Engineering
 Attn: Jessica Hoglen
 1210 Trinity Road #110
 Raleigh, NC 27607

Project: 828 MLK - CHPD

Prism Work Order: 5070434
 Time Submitted: 7/22/2015 10:40:00AM

Polychlorinated Biphenyls (PCBs) by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P5G0467 - 3510C GC										
Blank (P5G0467-BLK1)										
Prepared: 07/25/15 Analyzed: 08/06/15										
Aroclor 1016	BRL	0.50	ug/L							
Aroclor 1221	BRL	1.0	ug/L							
Aroclor 1232	BRL	0.50	ug/L							
Aroclor 1242	BRL	0.50	ug/L							
Aroclor 1248	BRL	0.50	ug/L							
Aroclor 1254	BRL	0.50	ug/L							
Aroclor 1260	BRL	0.50	ug/L							
Surrogate: Tetrachloro-m-xylene	0.638		ug/L	1.000		64	30-161			
Surrogate: Decachlorobiphenyl	0.691		ug/L	1.000		69	32-178			
LCS (P5G0467-BS1)										
Prepared: 07/25/15 Analyzed: 08/06/15										
Aroclor 1016	8.28	0.50	ug/L	10.00		83	50-114			
Aroclor 1260	7.96	0.50	ug/L	10.00		80	10-127			
Surrogate: Tetrachloro-m-xylene	0.698		ug/L	1.000		70	30-161			
Surrogate: Decachlorobiphenyl	0.707		ug/L	1.000		71	32-178			
LCS Dup (P5G0467-BSD1)										
Prepared: 07/25/15 Analyzed: 08/06/15										
Aroclor 1016	8.59	0.50	ug/L	10.00		86	50-114	4	50	
Aroclor 1260	8.40	0.50	ug/L	10.00		84	10-127	5	50	
Surrogate: Tetrachloro-m-xylene	0.752		ug/L	1.000		75	30-161			
Surrogate: Decachlorobiphenyl	0.750		ug/L	1.000		75	32-178			



Falcon Engineering
Attn: Jessica Hoglen
1210 Trinity Road #110
Raleigh, NC 27607

Project: 828 MLK - CHPD

Prism Work Order: 5070434
Time Submitted: 7/22/2015 10:40:00AM

Total Metals - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch P5G0417 - 7470A

Blank (P5G0417-BLK1) Prepared & Analyzed: 07/23/15

Mercury	BRL	0.00020	mg/L							
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LCS (P5G0417-BS1) Prepared & Analyzed: 07/23/15

Mercury	0.00908	0.00020	mg/L	0.009375		97	80-120			
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Matrix Spike (P5G0417-MS1) Source: 5070434-01 Prepared & Analyzed: 07/23/15

Mercury	0.00910	0.00020	mg/L	0.009375	BRL	97	80-120			
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Matrix Spike Dup (P5G0417-MSD1) Source: 5070434-01 Prepared & Analyzed: 07/23/15

Mercury	0.00941	0.00020	mg/L	0.009375	BRL	100	80-120	3	20	
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Batch P5G0450 - 3010A

Blank (P5G0450-BLK1) Prepared: 07/24/15 Analyzed: 07/30/15

Arsenic	BRL	0.010	mg/L							
Barium	BRL	0.010	mg/L							
Boron	BRL	0.50	mg/L							
Cadmium	BRL	0.0010	mg/L							
Chromium	BRL	0.0050	mg/L							
Lead	BRL	0.0050	mg/L							
Selenium	BRL	0.020	mg/L							
Silver	BRL	0.0050	mg/L							

LCS (P5G0450-BS1) Prepared: 07/24/15 Analyzed: 07/30/15

Arsenic	0.252	0.010	mg/L	0.2500		101	80-120			
Barium	0.255	0.010	mg/L	0.2500		102	80-120			
Boron	5.05	0.50	mg/L	5.000		101	80-120			
Cadmium	0.259	0.0010	mg/L	0.2500		104	80-120			
Chromium	0.248	0.0050	mg/L	0.2500		99	80-120			
Lead	0.262	0.0050	mg/L	0.2500		105	80-120			
Selenium	0.251	0.020	mg/L	0.2500		101	80-120			
Silver	0.104	0.0050	mg/L	0.1000		104	80-120			



Falcon Engineering
Attn: Jessica Hoglen
1210 Trinity Road #110
Raleigh, NC 27607

Project: 828 MLK - CHPD

Prism Work Order: 5070434
Time Submitted: 7/22/2015 10:40:00AM

General Chemistry Parameters - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P5G0401 - NO PREP										
Blank (P5G0401-BLK1)				Prepared & Analyzed: 07/22/15						
Hexavalent Chromium	BRL	0.010	mg/L							
LCS (P5G0401-BS1)				Prepared & Analyzed: 07/22/15						
Hexavalent Chromium	0.395	0.010	mg/L	0.4000		99	90-110			
Matrix Spike (P5G0401-MS1)				Source: 5070434-03 Prepared & Analyzed: 07/22/15						
Hexavalent Chromium	0.392	0.010	mg/L	0.4000	BRL	98	85-115			
Matrix Spike Dup (P5G0401-MSD1)				Source: 5070434-03 Prepared & Analyzed: 07/22/15						
Hexavalent Chromium	0.389	0.010	mg/L	0.4000	BRL	97	85-115	0.9	20	

Sample Extraction Data

Prep Method: 3510C GC

Lab Number	Batch	Initial	Final	Date/Time
5070434-01	P5G0466	1000 mL	10 mL	07/25/15 8:00
5070434-02	P5G0466	1000 mL	10 mL	07/25/15 8:00
5070434-03	P5G0466	1000 mL	10 mL	07/25/15 8:00

Prep Method: 3510C GC

Lab Number	Batch	Initial	Final	Date/Time
5070434-01	P5G0467	1000 mL	10 mL	07/25/15 8:00
5070434-02	P5G0467	1000 mL	10 mL	07/25/15 8:00
5070434-03	P5G0467	1000 mL	10 mL	07/25/15 8:00

Prep Method: 3510C MS

Lab Number	Batch	Initial	Final	Date/Time
5070434-01	P5G0413	1000 mL	1 mL	07/23/15 15:00
5070434-02	P5G0413	1000 mL	1 mL	07/23/15 15:00
5070434-03	P5G0413	1000 mL	1 mL	07/23/15 15:00

Prep Method: 3010A

Lab Number	Batch	Initial	Final	Date/Time
5070434-01	P5G0450	50 mL	50 mL	07/24/15 8:35
5070434-01	P5G0450	50 mL	50 mL	07/24/15 8:35
5070434-02	P5G0450	50 mL	50 mL	07/24/15 8:35
5070434-02	P5G0450	50 mL	50 mL	07/24/15 8:35
5070434-03	P5G0450	50 mL	50 mL	07/24/15 8:35
5070434-03	P5G0450	50 mL	50 mL	07/24/15 8:35

Prep Method: 7470A

Lab Number	Batch	Initial	Final	Date/Time
5070434-01	P5G0417	20 mL	30 mL	07/23/15 8:50
5070434-02	P5G0417	20 mL	30 mL	07/23/15 8:50
5070434-03	P5G0417	20 mL	30 mL	07/23/15 8:50

Prep Method: 5030B

Lab Number	Batch	Initial	Final	Date/Time
5070434-01	P5G0524	10 mL	10 mL	07/28/15 12:59
5070434-02	P5G0524	10 mL	10 mL	07/28/15 12:59
5070434-03	P5G0524	10 mL	10 mL	07/28/15 12:59

449 Springbrook Road • Charlotte, NC 28217
Phone 704/529-6364 • Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PAGE 1 OF 2 QUOTE # TO ENSURE PROPER BILLING:

Client Company Name: Falcom Engineering
Report To/Contact Name: Jessica Hoaglen
Reporting Address: 1210 Tenthredin Road
Raleigh NC 27607

Project Name: 828 MLK - CHPD sampling
Short Hold Analysis: (Yes) (No) (NC) (NO)
*Please ATTACH any project specific reporting (QC LEVEL I III IV)
provisions and/or QC Requirements
Invoice To: Jessica Hoaglen
Address: jhoaglen@falcomengineers.com

Phone: 919 714 0704 Fax (Yes) (No)

Email Address: _____
EDD Type: PDF X Excel Other _____
Site Location Name: 828 MLK - CHPD
Site Location Physical Address: 828 MLK Blvd
Chapel Hill NC

Purchase Order No./Billing Reference: 613047.1 D
Requested Due Date 1 Day 2 Days 3 Days 4 Days 5 Days
"Working Days" 6-9 Days Standard 10 days Rush Work Must Be Pre-Approved
Samples received after 14:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL
Certification: NELAC _____ DoD _____ FL _____ NC _____
SC _____ OTHER _____ N/A _____
Water Chlorinated: YES _____ NO _____
Sample Iced Upon Collection: YES _____ NO _____

LAB USE ONLY		
Samples INTACT upon arrival?	YES	NO
Received ON WET ICE?	✓	
PROPER PRESERVATIVES indicated?	✓	
Received WITHIN HOLDING TIMES?	✓	
CUSTODY SEALS INTACT?	✓	
VOLATILES rec'd W/OUT HEADSPACE?	✓	
PROPER CONTAINERS used?	✓	
TEMP: Therm ID: <u>117-11</u> Observed: <u>43</u> °C / Corr: <u>3.1</u> °C		

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER			PRESERVATIVES	ANALYSIS REQUESTED	REMARKS	PRISM LAB ID NO.
				*TYPE SEE BELOW	NO.	SIZE				
MW3A	7/21/15	15:33	W	Vanis	13	vanis	vanis	8280 82870 8288 8282	✓	01
MW4A	7/21/15	15:50	W	Vanis	13	vanis	vanis	8280 82870 8288 8282	✓	02

Sampler's Signature: [Signature] Sampled By (Print Name) Jessica Hoaglen Affiliation Falcom

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

Relinquished By (Signature): [Signature] Received By (Signature): [Signature] Date: 7/21/15 Military/Hours: 1900

Relinquished By (Signature): [Signature] Received By (Signature): [Signature] Date: 7/21/15 Military/Hours: 2:50

Relinquished By (Signature): [Signature] Received For Prism Laboratories By: [Signature] Date: 7/21/15 Military/Hours: 10:40

Method of Shipment: Fed Ex UPS Hand-delivered Prism Field Service Other Boat

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.

NPDES: NC SC Other Boat 2 coolers

GROUNDWATER: NC SC

DRINKING WATER: NC SC

SOLID WASTE: NC SC

RCRA: NC SC

CERCLA: NC SC

LANDFILL: NC SC

OTHER: NC SC

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

Additional Comments: ALTERED FOR BOTH SENS

PRESS DOWN FIRMLY - 3 COPIES

PRISM USE ONLY

Site Arrival Time: _____
Site Departure Time: _____
Field Tech Fee: _____
Mileage: _____

SEE REVERSE FOR TERMS & CONDITIONS

449 Springbrook Road • Charlotte, NC 28217
Phone: 704/525-6364 • Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

LAB USE ONLY

YES NO N/A

Client Company Name: Falcon Engineering
 Report To/Contact Name: Jessica Hogan
 Reporting Address: 1210 1st St NE, Atlanta, GA 30309
 Phone: 919 740 1200 Fax: (919) 740 1201
 Email Address: info@falconengineering.com
 EDD Type: PDF Excel Other
 Site Location Name: Site Walk - CRPD
 Site Location Physical Address: 928 WVA Blvd, Chapel Hill, NC

PAGE 2 OF 2 QUOTE # TO ENSURE PROPER BILLING:
 Project Name: 928 WVA - CRPD sampling
 Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)
 *Please ATTACH any project specific reporting (QC LEVEL I, III, IV) provisions and/or QC Requirements
 Invoice To: Jessica Hogan
 Address: falconengineering.com
 Purchase Order No./Billing Reference: 13077.10
 Requested Due Date 1 Day 2 Days 3 Days 4 Days 5 Days
 "Working Days" 6-9 Days Standard 10 days Rush Work Must Be Pre-Approved
 Samples received after 14:00 will be processed next business day.
 Turnaround time is based on business days, excluding weekends and holidays.
 (SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL

Certification: NELAC DOD FL NC

Water Chlorinated: YES NO

Sample Iced Upon Collection: YES NO

SC OTHER N/A

Temp: Therm ID: 12710 Observed: 49 °C / Corr: 3.1 °C

Samples Intact upon arrival? YES NO N/A

Received ON WET ICE? YES NO N/A

PROPER PRESERVATIVES indicated? YES NO N/A

Received WITHIN HOLDING TIMES? YES NO N/A

CUSTODY SEALS INTACT? YES NO N/A

VOLATILES rec'd W/OUT HEADSPACE? YES NO N/A

PROPER CONTAINERS used? YES NO N/A

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER			PRESERVATIVES	ANALYSIS REQUESTED	REMARKS	PRISM LAB ID NO.
				*TYPE SEE BELOW	NO.	SIZE				
MWVA* 7/21/15 16:15			W	vanes	9	vanes		ANALYSIS REQUESTED: <input checked="" type="checkbox"/> CRPD <input checked="" type="checkbox"/> CRPD <input checked="" type="checkbox"/> CRPD <input checked="" type="checkbox"/> CRPD <input checked="" type="checkbox"/> CRPD <input checked="" type="checkbox"/> CRPD <input checked="" type="checkbox"/> CRPD <input checked="" type="checkbox"/> CRPD	All samples pure filtered!	03
*indicates All Filtered samples										
Sampler's Signature: <u>[Signature]</u> Sampled By (Print Name): <u>Jessica Hogan</u> Affiliation: <u>Falcon</u> Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized. Requisitioned By (Signature): <u>[Signature]</u> Received By (Signature): <u>[Signature]</u> Date: <u>7/21/15</u> 18:00 Military/Hours Requisitioned By (Signature): <u>[Signature]</u> Received By (Signature): <u>[Signature]</u> Date: <u>7/21/15</u> 9:50 Requisitioned By (Signature): <u>[Signature]</u> Received For Prism Laboratories By: <u>[Signature]</u> Date: <u>7/21/15</u> 10:40 Method of Shipment: <u>NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY.</u> SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY. Method of Shipment: <u>NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY.</u> SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.										
ADDITIONAL COMMENTS: <u>5070434</u> PRESS DOWN FIRMLY - 3 COPIES PRISM USE ONLY Site Arrival Time: _____ Site Departure Time: _____ Field Tech Fee: _____ Mileage: _____										

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

APPENDIX E
FIELD NOTES



Table 4 | MW3A Field Data

Purge	Date	Time Collected	Specific Conductivity (ms/cm ^c)	Turbidity (NTU)	Temperature (°C)	pH
1	7/20/2015	10:58	1.486	717	16.06	6.58
2	7/20/2015	15:22	2.014	182	16.52	6.39
3	7/20/2015	15:54	2.020	166	15.62	6.67
4	7/20/2015	16:26	1.959	75.9	16.27	6.53
5	7/21/2015	9:43	2.272	268	15.61	6.59
6	7/21/2015	10:35	2.347	12.5	16.03	6.57
7	7/21/2015	11:26	1.533	11.5	15.37	6.50
8	7/21/2015	13:30	2.326	14.42	16.79	6.51
9	7/21/2015	15:04	2.321	5.7	15.80	6.50

Table 5 | MW4A Field Data

Purge	Date	Time Collected	Specific Conductivity (ms/cm ^c)	Turbidity (NTU)	Temperature (°C)	pH
1	7/20/2015	11:50	0.190	324	15.43	6.41
2	7/20/2015	12:19	0.002	211	22.75	5.76
3	7/20/2015	12:55	0.964	141	13.73	6.09
4	7/20/2015	14:20	0.369	203	15.61	5.80
5	7/20/2015	16:12	0.367	79.1	16.13	6.96
6	7/21/2015	10:15	0.933	503	15.38	6.52
7	7/21/2015	11:12	0.748	46.3	15.47	6.08
8	7/21/2015	13:20	0.800	19.4	15.86	5.94
9	7/21/2015	14:49	0.831	24.7	15.64	6.25



Table 6 | MW1 Field Data

Purge	Date	Time Collected	Specific Conductivity (ms/cm ²)	Turbidity (NTU)	Temperature (°C)	pH
1-5	5/20/2015	*	*	*	*	*
1-7	7/21/2015	*	*	*	*	*
8	7/21/2015	14:35	*	403	*	*
10	7/22/2015	11:30	*	95.8	*	*
12	7/22/2015	12:01	*	92.2	*	*
13	7/22/2015	12:21	0.007	66.4	20.48	6.35
14	7/22/2015	14:18	1.808	558	18.85	6.46
16	7/22/2015	15:57	0.985	126	20.63	6.28
17	7/22/2015	16:40	1.887	156	22.05	6.44
1	8/5/2015	9:31	0.999	HIGH	18.2	6.52
2	8/5/2015	10:20	1.003	HIGH	19.42	6.81
3	8/5/2015	11:50	1.008	204	20.69	6.81
4	8/5/2015	14:46	1.012	172	19.54	6.93
5	8/5/2015	16:27	1.013	HIGH	19.18	7.11
6	8/6/2015	14:23	1.012	212	20.03	6.81
7	8/6/2015	14:56	N/A	503	N/A	N/A

*No data



7/20/15 513047.10

MW3A - 15'9" deep
6'9" below ground water level.

$9ft \times 0.48 = 4.32 \text{ gallons}$
(3 well's volumes)

(1) = 1 well volume

(Before/while purging) 1.44 gallons

Turbidity = 130 NTU

Specific Conductivity = 0.021 ms/cm^c

Temperature = 17.94 c (9)

pH = 6.35

(After 1 volume purge) MW3A

Turbidity = 117 NTU

SC = 6.486 ms/cm^c 1.76 NTU
pH = 6.58

Temp = 16.06 c

7/20/15 MW4A

7'3" below ground
- water level

19' 6.5" to bottom 3 volumes

12.3' water $\times 0.48 = 5.9$
gallons

1 volume purge = 1.97
gallons

(Before purge)
Temp = 15.43°C
SC = 0.190 ms/cm
pH = 6.41

Turbidity = 324 NTU

(After purge)

Turbidity = 211 NTU
SC = 0.002 ms/cm
Temp = 22.75°C
pH = 5.76

7/20/15 Well 1

35'5" water level

40'4" bottom

$40'4" - 35'5" = 4'9" = 5 \times 0.48 = 2.4$ (3 well volumes)

0.80 gallons
(1 well volume)

* Couldn't get rediflow to
work, replacement
going to office

7/20/15

MW3A

7' 1" water level
2nd purge - 1.44 gallons

Turbidity = 182 NTU

SC = 2.014 ms/cm^c

Temp = 16.52°C

pH = 6.39

(on to purge 2 more)

MW4A

purged (4) total
volumes of 1.97 gals

Note → specific conductivity
needs to be w/in 5% of
first reading

7/20/15 MW3A

3rd purge -

Turbidity = 166 NTU

SC = 2.020 ms/cm^c

pH = 6.67

Temperature = 15.62°C

MW4A

After 4th purge

Turbidity = 79.1 NTU

SC = 0.367 ms/cm^c

Temp = 16.13°C

pH = 6.96

* More DI
water

MW3A 7/20/15

4th purge —

Turbidity = 75.9 NTU

SC = 1.95⁴⁹ ms/cm^c

Temp = 16.27°C

pH = 6.53

0.09795

7/21/15 on site 8:30a

MW3A

Distilled H₂O
New sub pump

Water level @ 7'

— replaced blue tip on TSI machine

NA5

Turbidity = 313 NTU / 268 NTU

SC = 2.272 ms/cm^c

Temp = 15.61°C

pH = 6.59

Start purging (5)

MW4A

Water level 7'4"

NA5

Turbidity = 520 NTU / 503 NTU

SC = 0.933 ms/cm^c

Temp = 15.38°C

pH = 6.52

7/21/15 *dumped 5th purge

MW3A 10th purge

Turbidity = 12.5 NTU

SC = 2.34 $\mu\text{mS/cm}^\circ\text{C}$ x

Temp = 16.03 $^\circ\text{C}$

pH = 6.57

Well 1

35.5' water level

40'4" bottom

5 x 0.48 = 2.4 (3 volumes)

*0.8 gallons to
purge each time

geosub pump -

Turbidity = 549 NTU

~~Specific conductivity = 0.00 $\mu\text{mS/cm}$~~

~~Temp = 25.98 $^\circ\text{C}$~~

~~pH = 5.12~~

1.5 gallons
purged

*lunch

7/21/15 *turbidity pictures
document
time

Well 1 (total 2.5 gallons)

(3) 1 gallon purged

*Specific conductivity meter

(ISI Env) 55le, cord (10m)

too short for sample

4th purge - turbidity too
high to detect on
turbidity meter

2:15p
*Curtis came by to ask about
hex chromium / total chromium
standard for 2L guidelines.
(Which standard is 10?)

0.80 - 1 gallon 5th purge

10th purge -

Turbidity = 403 NTU
(8 purges)

Sampled wells, MW3A &
MW4A

7/22/15 Well 1

10:45a 35.6' water level
40.7' bottom

$$5.1' \times 0.48 = 2.44 / 3 = 0.82 \text{ gallons to purge}$$

* Didn't sample (SC), temp, pH due to cord length.

Not long enough (20m cord on its way)
(After 10th purge) Turbidity = 95.8 NTU

11:45a - new 20m cord to YSI came.

(11 purges total) [3 so far] (call Chris after 5 more)

4 purges (12 total since yesterday)

Turbidity = 92.2 NTU

1st 5 purges
* Turbidity = 66.4 NTU

SC = 0.007 mg/cm³
Temp = 20.48°C pH = 6.35

12:40p - lunch

Started purging - 1:15p

6th purge (14) water @ 35' 6" (taken after purging for couple minutes)

Turbidity = 558 NTU ← sampled during 7th purge @ 2:18p
SC = 1.809 mg/cm³
Temp = 18.85°C
pH = 6.46

@ 2:30p - Generator ran out of gas

Chris said to leave pump off for an hour (break)

2:45p - filled generator w/ gas

9th purge

@ 3:35p (before purge) Turbidity = 201 NTU ✓

SC = 0.985 mg/cm³

temp = 20.63°C

pH = 6.28

Turbidity = 126 NTU (after purge)



9th purge (17th)

4:15p - last purge for today

Turbidity = 156 NTU

SC = 1.887 mg/lum

temp = 22.05°C

pH = 6.44

(Before packing up)

7-20-15

E13-047-10

TOCHPd GW Sample

9:15A on site of JH

High 80's low 90's clear

12:55 p.m. MW4A - 2 more gallons / well volume
Purged

SC 0.964

PH 6.09

Temp 13.73 °C

Turbidity 141 NTU

2:20 p.m. MW4A - 2 gallons purged

SC 0.369

PH 5.8

Temp 15.61 °C

Turbid 203 NTU

Site @ ~1" in 3A
~6" in 4A

7/21/15 11A on site

MW4A 5th single well volume purge (SWVP)

Sampled 11:12	SC	7.003	748	AZ
	PH	6.23	6.08	
	Temp	19.91	15.47	
	Turb	46.3	46.3	

MW3A 6th SWVP

Sampled 11:26	SC	1.533	AZ
	PH	6.5	
	Temp	15.37	
	Turb	11.5	

MW4A 6 th	SC	.8
1:20p	PH	5.94
	Temp	15.86
	Turb	19.4

MW3A 7th

1:30

SC	2.326
PH	6.51
Temp	16.79
Turb	14.42

MW4A 7th

2:49

SC	.831
PH	6.25
Temp	15.64
Turb	24.7

Time 3:01 PA 8

SC	2.321
PH	6.5
Temp	15.8
Turb	5.7

4A 8

11.4	11.4
APUM	APUM
AP:2	AP:1
150.	200.
20.2	12.0
12.21	10.21
11.2	11.1

8.11	8.11
120.0	20
2.2	19
12.21	10.21
11.2	11.1

7-22-15

MW1 9:04 AM onsite

hot/clear high 90s / some rain last night

WL 35.6'

well depth @ 40.5' ~ 34" silt

8/5/15 CHPD Sampling

Onsite @ 9am

Well 1 - purge 3 times then call Chris.

*Take TSI reading before initial ^{1st time} purge.

Water level @ 36'

Bottom @ 40' 3"

Silt to 40' 9"

6" silt
@ 9:19am

$4.9 \times 0.48 = 2.352$ gallons
as 3 volumes

As 1 volume = 0.784 gallons

@ 9:42a

Turbidity = 100 HgH to purge each time.

SC = 0.999 ms/cm²

temp = 18.26°C

pH = 6.40

collected @ 9:30am

First purge complete @ 10:20 am

Turbidity = still too high for meter

SC = 1.003
temp = 19.42°C
pH = 6.81

2nd purge @ 11:02 am

Turbidity = 397 NTU

End of second purge - 11:49 am

12:40 3rd purge readings
Turbidity = 204 NTU
SC = 1.004 msl/cm²
temp = 20.69°C
pH = 6.81

4th purge - 1:00 p

1:55 p - ran out of gas

2:39 p

Turbidity = 172 NTU
SC = 1.012 msl/cm²
temp = 19.64°C
pH = 6.93

5th purge start @ 2:47 p

last one before calling Chris

@ 3:02 p took another turbidity reading & its too high for meter.

Turbidity = TOO HIGH

@ 4:20 p

* Water level @ 36.2'

SC = 1.013 msl/cm²
temp = 19.18°C
pH = 7.11

parked up, left site @ 4:45 p
- dropped off @ office

~~8/15~~ 8/15 | Well 1

purge water level @ 35' 9"

Turbidity too high at initial purging

2:20p - Turbidity = 212 NTU

2:23p SC = 1.012 mg/cm³
temp = 20.03°C
pH = 6.81

urged
th
urged

2:25p

2:25lp - Turbidity = 503 NTU

urged SC =
temp =
pH =

Started
sampling

RAIN!

4:10p - started sample

HAD TO ABORT!!

4:00p