



DEPARTMENT OF THE ARMY
CAMP STANLEY STORAGE ACTIVITY, MCAAP
25800 RALPH FAIR ROAD, BOERNE, TX 78015-4800

April 8, 2016

U-060-16

SUBJECT: RFR-10 Granular Activated Carbon Treatment System and Unscheduled
April 5, 2016 Sampling Results, Located at 25490 Old Fredericksburg Rd

[REDACTED]
[REDACTED]
Boerne, TX 78015

Dear [REDACTED]:

Analytical results from a scheduled sampling of your well on March 7, 2016 indicated the granular activated carbon (GAC) treatment system installed at your well was only partially treating extracted water at the time these samples were collected. Subsequent results of samples collected at your faucets indicate that the water in your house and trailer continues to be safe to drink. However, the GAC deficiency has prompted CSSA to take several measures to ensure its continued safety. This letter provides a summary of the analytical results, a description of the measures we have taken at your location, and a description of the changes we are making to our sampling protocol to ensure that your drinking water is always safe.

A schematic drawing of the GAC treatment system on your well is attached for your reference. Typically, a sample is collected before being treated (a pre-GAC sample) and two samples are collected after treatment (post-GAC samples) from each independent side of the treatment system (the GAC "A" and GAC "B" treatment units), and analyzed for volatile organic compounds (VOCs). Two parallel GAC treatment units receive water pumped directly from your well. Each of the two GAC treatment units contains two sequential carbon filters, one after the other, designated as A1 and A2 or B1 and B2 on the drawing. These filters provide redundant treatment for your water prior to it entering your storage tank, and ultimately your home. The March results indicated that the "B" units were working as designed, but the "A" units were not.

An abbreviated summary of results for your well from the scheduled March 2016 quarterly sampling event were compared to the USEPA Maximum Contaminant Levels (MCLs) allowed in drinking water by the Safe Drinking Water Act. Those results are provided in Table 1. Results shown in bold indicate concentrations that were above the MCL for the associated contaminant on March 7, 2016.

Table 1 - March 7, 2016 Sample Results

Sample ID and Location	Volatile Organic Compound	Result (ppb)	MCL (ppb)
RFR-10, <i>sample collected before water passed through GACs</i>	Tetrachloroethene (PCE)	13.85	5
	Trichloroethene (TCE)	7.40	5
	<i>cis</i> -1,2-Dichloroethene (DCE)	<0.07 (non-detect)	70
RFR-10-A2, <i>sample collected after water passed through "A1" GAC</i>	PCE	10.38	5
	TCE	6.41	5
	<i>cis</i> -1,2-DCE	<0.07 (non-detect)	70
RFR-10-B2, <i>sample collected after water passed through "B2" GAC</i>	PCE	<0.06 (non-detect)	5
	TCE	<0.05 (non-detect)	5
	<i>cis</i> -1,2-DCE	<0.07 (non-detect)	70

The VOCs tetrachloroethene (PCE) and trichloroethene (TCE) were detected above the MCLs in the March 7 sample collected between the well and the GAC filtration units. These exceedances were expected due to the known presence of these contaminants in groundwater. Post-GAC samples were also collected to monitor the effectiveness of the treatment system. Based on the analytical data, PCE and TCE were identified in the samples collected after the second carbon canister in the A treatment unit (A2). No VOCs were identified in the samples collected after the second carbon canister in the B treatment unit (B2). These results indicate that PCE and TCE were not completely treated through the "A" GAC, however the "B" GAC was functioning as intended. The water from both the "A" side and the "B" side mixes in your 3,000 gallon tank before it is pumped to your house and trailer.

Upon receipt of these results on April 1, 2016 we took the following measures:

1. The "A" side of the GAC filtration system was immediately shut off. The "B" side, which was operating properly, was left open to provide treated water to both residences.
2. Service was scheduled with the service provider Carbonair Environmental Systems on April 4, 2016.
3. A water sample was collected at the point of use (faucet tap) at each residence (one at the house and one at the trailer). A very low concentration of TCE (0.33 ppb, which is below the MCL of 5 ppb) was detected in water at the house tap (Table 2). No other VOCs were detected in the sample collected at the house tap, and no VOCs were detected in the sample collected from the tap at the trailer.

Table 2 – April 1, 2016 Point-of-Use Sample Results

Sample ID and Location	Volatile Organic Compound	Result (ppb)	MCL (ppb)
RFR-10-HKT, <i>sample collected from house faucet</i>	PCE	<0.06 (non-detect)	5
	TCE	0.33	5
	<i>cis</i> -1,2-DCE	<0.07 (non-detect)	70
RFR-10-TKT, <i>sample collected from trailer faucet</i>	PCE	<0.06 (non-detect)	5
	TCE	<0.05 (non-detect)	5
	<i>cis</i> -1,2-DCE	<0.07 (non-detect)	70

These results are representative of the water coming out of the faucet at the house and trailer. They indicate that chemical concentrations did not exceed MCLs and therefore the water is safe to drink.

Carbonair replaced both inefficient “A” carbon filters (A1 and A2) on April 4, 2016. Following GAC filter replacement, six additional water samples were collected; one at the well, one after each GAC filter (4 total), and one after the second pressure tank (prior to entering the residence distributions). Results from these additional sampling efforts are provided in Table 3 below, and sample locations and results are identified on the attached schematic diagram.

Table 3 - April 4, 2016 Sample Results

Sample ID and Location	Volatile Organic Compound	Result (ppb)	MCL (ppb)
RFR-10, <i>sample collected before water passed through GACs</i>	PCE	11.89	5
	TCE	6.73	5
	DCE	<0.07 (non-detect)	70
RFR-10-A1, <i>sample collected after water passed through “A1” GAC</i>	PCE	<0.06 (non-detect)	5
	TCE	<0.05 (non-detect)	5
	<i>cis</i> -1,2-DCE	<0.07 (non-detect)	70
RFR-10-A2, <i>sample collected after water passed through “A2” GAC</i>	PCE	<0.06 (non-detect)	5
	TCE	<0.05 (non-detect)	5
	<i>cis</i> -1,2-DCE	<0.07 (non-detect)	70
RFR-10-B1, <i>sample collected after water passed through “B1” GAC</i>	PCE	<0.06 (non-detect)	5
	TCE	<0.05 (non-detect)	5
	<i>cis</i> -1,2-DCE	<0.07 (non-detect)	70
RFR-10-B2, <i>sample collected after water passed through “B2” GAC</i>	PCE	<0.06 (non-detect)	5
	TCE	<0.05 (non-detect)	5
	<i>cis</i> -1,2-DCE	<0.07 (non-detect)	70
RFR-10-TANK, <i>sample collected post-treatment, prior to entering homes</i>	PCE	<0.06 (non-detect)	5
	TCE	<0.05 (non-detect)	5
	<i>cis</i> -1,2-DCE	<0.07 (non-detect)	70

Post-GAC sample results from April 4, 2016 show that both the "A" and "B" treatment units are working properly. No detectable levels of VOCs were present in any of the water samples collected following the GAC treatment units (Table 3).

CSSA is committed to ensuring your GAC treatment system operates efficiently in the future, and continues to treat your drinking water such that it is safe for your family's consumption. Historically, semi-annual replacement of carbon vessels has successfully ensured continued treatment of your water. Carbonair exchanged the GAC filtration canisters and performed other routine maintenance on your system on February 18, 2016. In over 15 years of use of GACs to treat groundwater at CSSA, there have been no other detections of VOCs in water that has passed through GAC treatment. However, we are making the following changes to our protocol to enhance the quality of our monitoring program:

1. Order expedited (3-day) turnaround times from the laboratory for all scheduled or unscheduled post-GAC (A2 and B2) sample analyses so that problems in GAC treatment are identified quickly.
2. Collect post-GAC samples (A2 and B2) following each carbon vessel replacement, in addition to the normal quarterly monitoring event, to identify any problems with replacement parts.
3. Maintain a carbon vessel at CSSA that can be transported to the well and installed by CSSA personnel if the service provider is unable to make a same-day service call.

In addition to these changes, CSSA will collect pre- and post-GAC samples on a monthly basis through June 2016 to monitor the GAC treatment effectiveness.

Again, we would like to thank you for your cooperation. We regret that your well has been impacted, but remain committed to making sure your water is safe to use and keeping you informed. If you have any questions concerning this letter, please contact Felicia Krantz, Environmental Program Manager, at (210) 295-7067.

Sincerely,

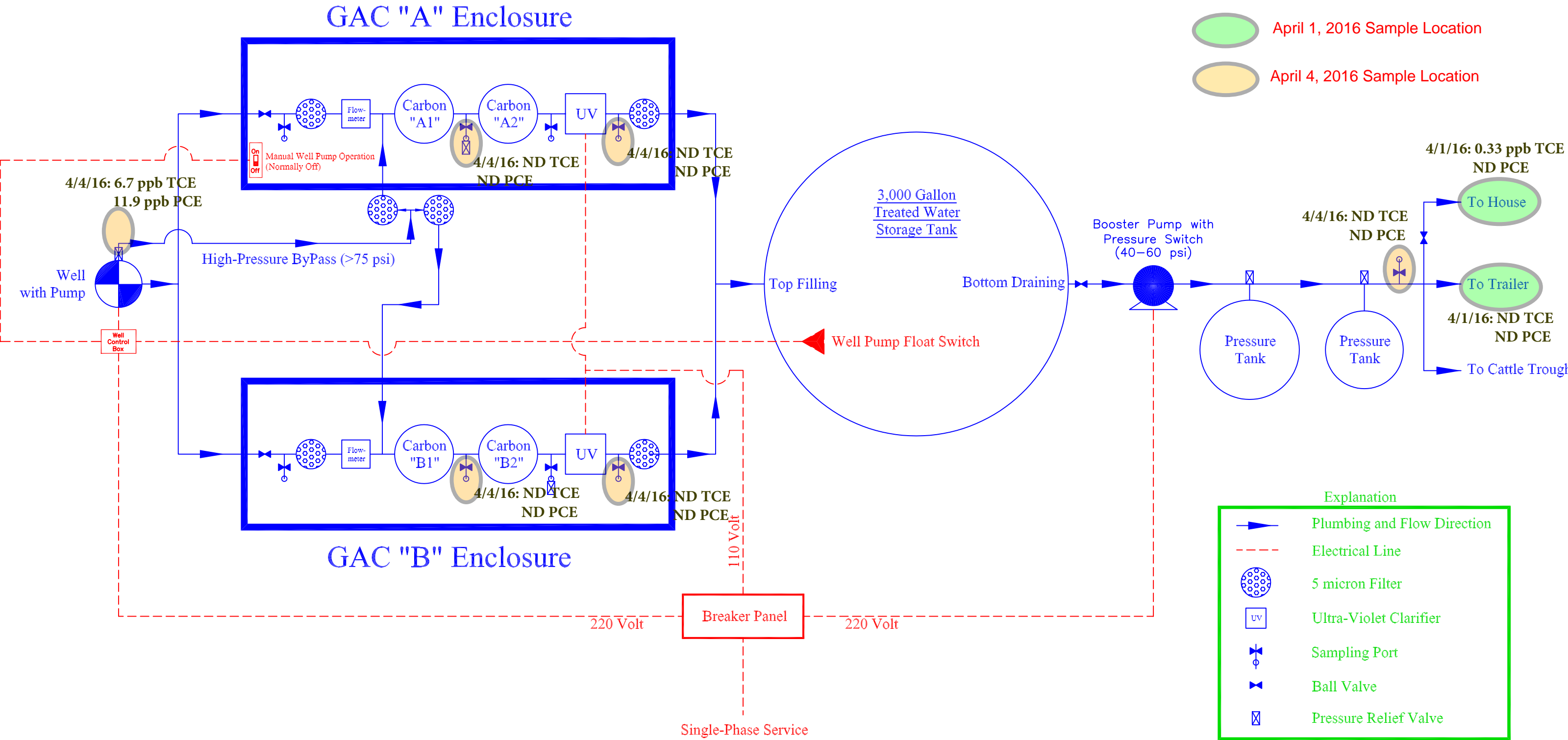

Jason D. Shirley
Installation Manager

Enclosure

cc: Mr. Greg Lyssy, EPA Region 6
Ms. Amanda Pirani, TCEQ Central Office
Mr. Jorge Salazar, TCEQ Region 13
Ms. Kyle Cunningham, San Antonio Metropolitan Health Dist.
Ms. Julie Burdey, Parsons

RFR-10 Granular Activated Carbon Treatment System

Operational Schematic for Parallel Configuration



AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 160311AM-205494
 Lab Name: APPL, Inc Contract #: *G012
 Field Sample ID: RFR-10 Lab Sample ID: AZ29977 Matrix: Water
 % Solids: NA Initial Calibration ID: M160301
 Date Received: 08-Mar-16 Date Prepared: 11-Mar-16 Date Analyzed: 11-Mar-16
 Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1-DCE	0.12	1.2	0.12	1		U
CIS-1,2-DCE	0.07	1.2	0.18	1		F
TCE	0.05	1.0	7.40	1		
TETRACHLOROETHENE	0.06	1.4	13.85	1		
TRANS-1,2-DCE	0.08	0.6	0.08	1		U
VINYL CHLORIDE	0.08	1.1	0.08	1		U

Surrogate	Recovery	Control Limits	Qualifier
SURROGATE: 1,2-DICHLOROETHANE-	104	69-139	
SURROGATE: 4-BROMOFLUOROBENZ	103	75-125	
SURROGATE: DIBROMOFLUOROMETH	103	75-125	
SURROGATE: TOLUENE-D8 (S)	103	75-125	

Internal Std	Qualifier
1,4-DICHLOROBENZENE-D4 (IS)	
CHLOROBENZENE-D5 (IS)	
FLUOROBENZENE (IS)	

Comments:

ARF: 78870

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 160311AM-205494
 Lab Name: APPL, Inc Contract #: *G012
 Field Sample ID: RFR-10 FD Lab Sample ID: AZ29978 Matrix: Water
 % Solids: NA Initial Calibration ID: M160301
 Date Received: 08-Mar-16 Date Prepared: 11-Mar-16 Date Analyzed: 11-Mar-16
 Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1-DCE	0.12	1.2	0.12	1		U
CIS-1,2-DCE	0.07	1.2	0.07	1		U
TCE	0.05	1.0	6.76	1		
TETRACHLOROETHENE	0.06	1.4	13.33	1		
TRANS-1,2-DCE	0.08	0.6	0.08	1		U
VINYL CHLORIDE	0.08	1.1	0.08	1		U

Surrogate	Recovery	Control Limits	Qualifier
SURROGATE: 1,2-DICHLOROETHANE-	103	69-139	
SURROGATE: 4-BROMOFLUOROBENZ	100	75-125	
SURROGATE: DIBROMOFLUOROMETH	102	75-125	
SURROGATE: TOLUENE-D8 (S)	102	75-125	

Internal Std	Qualifier
1,4-DICHLOROBENZENE-D4 (IS)	
CHLOROBENZENE-D5 (IS)	
FLUOROBENZENE (IS)	

Comments:

ARF: 78870

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 160309AL-205443
 Lab Name: APPL, Inc Contract #: *G012
 Field Sample ID: RFR-10-A2 Lab Sample ID: AZ29979 Matrix: Water
 % Solids: NA Initial Calibration ID: 160303
 Date Received: 08-Mar-16 Date Prepared: 09-Mar-16 Date Analyzed: 09-Mar-16
 Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1-DCE	0.12	1.2	0.12	1		U
CIS-1,2-DCE	0.07	1.2	0.17	1		F
TCE	0.05	1.0	6.41	1		
TETRACHLOROETHENE	0.06	1.4	10.38	1		
TRANS-1,2-DCE	0.08	0.6	0.08	1		U
VINYL CHLORIDE	0.08	1.1	0.08	1		U

Surrogate	Recovery	Control Limits	Qualifier
SURROGATE: 1,2-DICHLOROETHANE-	115	69-139	
SURROGATE: 4-BROMOFLUOROBENZ	103	75-125	
SURROGATE: DIBROMOFLUOROMETH	117	75-125	
SURROGATE: TOLUENE-D8 (S)	107	75-125	

Internal Std	Qualifier
1,4-DICHLOROBENZENE-D4 (IS)	
CHLOROBENZENE-D5 (IS)	
FLUOROBENZENE (IS)	

Comments:

ARF: 78870

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 160311AM-205494
 Lab Name: APPL, Inc Contract #: *G012
 Field Sample ID: RFR-10-B2 Lab Sample ID: AZ29980 Matrix: Water
 % Solids: NA Initial Calibration ID: M160301
 Date Received: 08-Mar-16 Date Prepared: 11-Mar-16 Date Analyzed: 11-Mar-16
 Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1-DCE	0.12	1.2	0.12	1		U
CIS-1,2-DCE	0.07	1.2	0.07	1		U
TCE	0.05	1.0	0.05	1		U
TETRACHLOROETHENE	0.06	1.4	0.06	1		U
TRANS-1,2-DCE	0.08	0.6	0.08	1		U
VINYL CHLORIDE	0.08	1.1	0.08	1		U

Surrogate	Recovery	Control Limits	Qualifier
SURROGATE: 1,2-DICHLOROETHANE-	105	69-139	
SURROGATE: 4-BROMOFLUOROBENZ	101	75-125	
SURROGATE: DIBROMOFLUOROMETH	102	75-125	
SURROGATE: TOLUENE-D8 (S)	102	75-125	

Internal Std	Qualifier
1,4-DICHLOROBENZENE-D4 (IS)	
CHLOROBENZENE-D5 (IS)	
FLUOROBENZENE (IS)	

Comments:

ARF: 78870

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 160405AT-206250
 Lab Name: APPL, Inc Contract #: *G012
 Field Sample ID: RFR-10-HKT Lab Sample ID: AZ32015 Matrix: Water
 % Solids: NA Initial Calibration ID: T160402
 Date Received: 05-Apr-16 Date Prepared: 05-Apr-16 Date Analyzed: 05-Apr-16
 Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1-DCE	0.12	1.2	0.12	1		U
CIS-1,2-DCE	0.07	1.2	0.07	1		U
TCE	0.05	1.0	0.33	1		F
TETRACHLOROETHENE	0.06	1.4	0.06	1		U
TRANS-1,2-DCE	0.08	0.6	0.08	1		U
VINYL CHLORIDE	0.08	1.1	0.08	1		U

Surrogate	Recovery	Control Limits	Qualifier
SURROGATE: 1,2-DICHLOROETHANE-	96.8	69-139	
SURROGATE: 4-BROMOFLUOROBENZ	96.0	75-125	
SURROGATE: DIBROMOFLUOROMETH	104	75-125	
SURROGATE: TOLUENE-D8 (S)	101	75-125	

Internal Std	Qualifier
1,4-DICHLOROBENZENE-D4 (IS)	
CHLOROBENZENE-D5 (IS)	
FLUOROBENZENE (IS)	

Comments:

ARF: 79220 These results are preliminary and represent information available on 4/6/16 at 9:15am

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 160405AT-206250
 Lab Name: APPL, Inc Contract #: *G012
 Field Sample ID: RFR-10-TKT Lab Sample ID: AZ32016 Matrix: Water
 % Solids: NA Initial Calibration ID: T160402
 Date Received: 05-Apr-16 Date Prepared: 05-Apr-16 Date Analyzed: 05-Apr-16
 Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1-DCE	0.12	1.2	0.12	1		U
CIS-1,2-DCE	0.07	1.2	0.07	1		U
TCE	0.05	1.0	0.05	1		U
TETRACHLOROETHENE	0.06	1.4	0.06	1		U
TRANS-1,2-DCE	0.08	0.6	0.08	1		U
VINYL CHLORIDE	0.08	1.1	0.08	1		U

Surrogate	Recovery	Control Limits	Qualifier
SURROGATE: 1,2-DICHLOROETHANE-	98.7	69-139	
SURROGATE: 4-BROMOFLUOROBENZ	96.3	75-125	
SURROGATE: DIBROMOFLUOROMETH	105	75-125	
SURROGATE: TOLUENE-D8 (S)	101	75-125	

Internal Std	Qualifier
1,4-DICHLOROBENZENE-D4 (IS)	
CHLOROBENZENE-D5 (IS)	
FLUOROBENZENE (IS)	

Comments:

ARF: 79220 These results are preliminary and represent information available on 4/6/16 at 9:15am

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 160405AT-206250
 Lab Name: APPL, Inc Contract #: *G012
 Field Sample ID: RFR-10-A2 Lab Sample ID: AZ32017 Matrix: Water
 % Solids: NA Initial Calibration ID: T160402
 Date Received: 05-Apr-16 Date Prepared: 05-Apr-16 Date Analyzed: 05-Apr-16
 Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1-DCE	0.12	1.2	0.12	1		U
CIS-1,2-DCE	0.07	1.2	0.07	1		U
TCE	0.05	1.0	0.05	1		U
TETRACHLOROETHENE	0.06	1.4	0.06	1		U
TRANS-1,2-DCE	0.08	0.6	0.08	1		U
VINYL CHLORIDE	0.08	1.1	0.08	1		U

Surrogate	Recovery	Control Limits	Qualifier
SURROGATE: 1,2-DICHLOROETHANE-	97.6	69-139	
SURROGATE: 4-BROMOFLUOROBENZ	97.7	75-125	
SURROGATE: DIBROMOFLUOROMETH	104	75-125	
SURROGATE: TOLUENE-D8 (S)	102	75-125	

Internal Std	Qualifier
1,4-DICHLOROBENZENE-D4 (IS)	
CHLOROBENZENE-D5 (IS)	
FLUOROBENZENE (IS)	

Comments:

ARF: 79220 These results are preliminary and represent information available on 4/6/16 at 9:15am

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 160405AT-206250
 Lab Name: APPL, Inc Contract #: *G012
 Field Sample ID: RFR-10-A1 Lab Sample ID: AZ32018 Matrix: Water
 % Solids: NA Initial Calibration ID: T160402
 Date Received: 05-Apr-16 Date Prepared: 05-Apr-16 Date Analyzed: 05-Apr-16
 Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1-DCE	0.12	1.2	0.12	1		U
CIS-1,2-DCE	0.07	1.2	0.07	1		U
TCE	0.05	1.0	0.05	1		U
TETRACHLOROETHENE	0.06	1.4	0.06	1		U
TRANS-1,2-DCE	0.08	0.6	0.08	1		U
VINYL CHLORIDE	0.08	1.1	0.08	1		U

Surrogate	Recovery	Control Limits	Qualifier
SURROGATE: 1,2-DICHLOROETHANE-	96.2	69-139	
SURROGATE: 4-BROMOFLUOROBENZ	97.9	75-125	
SURROGATE: DIBROMOFLUOROMETH	103	75-125	
SURROGATE: TOLUENE-D8 (S)	102	75-125	

Internal Std	Qualifier
1,4-DICHLOROBENZENE-D4 (IS)	
CHLOROBENZENE-D5 (IS)	
FLUOROBENZENE (IS)	

Comments:

ARF: 79220 These results are preliminary and represent information available on 4/6/16 at 9:15am

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 160405AT-206250
 Lab Name: APPL, Inc Contract #: *G012
 Field Sample ID: RFR-10-B2 Lab Sample ID: AZ32019 Matrix: Water
 % Solids: NA Initial Calibration ID: T160402
 Date Received: 05-Apr-16 Date Prepared: 05-Apr-16 Date Analyzed: 05-Apr-16
 Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1-DCE	0.12	1.2	0.12	1		U
CIS-1,2-DCE	0.07	1.2	0.07	1		U
TCE	0.05	1.0	0.05	1		U
TETRACHLOROETHENE	0.06	1.4	0.06	1		U
TRANS-1,2-DCE	0.08	0.6	0.08	1		U
VINYL CHLORIDE	0.08	1.1	0.08	1		U

Surrogate	Recovery	Control Limits	Qualifier
SURROGATE: 1,2-DICHLOROETHANE-	99.3	69-139	
SURROGATE: 4-BROMOFLUOROBENZ	94.4	75-125	
SURROGATE: DIBROMOFLUOROMETH	106	75-125	
SURROGATE: TOLUENE-D8 (S)	98.9	75-125	

Internal Std	Qualifier
1,4-DICHLOROBENZENE-D4 (IS)	
CHLOROBENZENE-D5 (IS)	
FLUOROBENZENE (IS)	

Comments:

ARF: 79220 These results are preliminary and represent information available on 4/6/16 at 9:15am

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 160405AT-206250
 Lab Name: APPL, Inc Contract #: *G012
 Field Sample ID: RFR-10-B1 Lab Sample ID: AZ32020 Matrix: Water
 % Solids: NA Initial Calibration ID: T160402
 Date Received: 05-Apr-16 Date Prepared: 05-Apr-16 Date Analyzed: 05-Apr-16
 Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1-DCE	0.12	1.2	0.12	1		U
CIS-1,2-DCE	0.07	1.2	0.07	1		U
TCE	0.05	1.0	0.05	1		U
TETRACHLOROETHENE	0.06	1.4	0.06	1		U
TRANS-1,2-DCE	0.08	0.6	0.08	1		U
VINYL CHLORIDE	0.08	1.1	0.08	1		U

Surrogate	Recovery	Control Limits	Qualifier
SURROGATE: 1,2-DICHLOROETHANE-	96.7	69-139	
SURROGATE: 4-BROMOFLUOROBENZ	98.7	75-125	
SURROGATE: DIBROMOFLUOROMETH	101	75-125	
SURROGATE: TOLUENE-D8 (S)	103	75-125	

Internal Std	Qualifier
1,4-DICHLOROBENZENE-D4 (IS)	
CHLOROBENZENE-D5 (IS)	
FLUOROBENZENE (IS)	

Comments:

ARF: 79220 These results are preliminary and represent information available on 4/6/16 at 9:15am

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 160405AT-206250
 Lab Name: APPL, Inc Contract #: *G012
 Field Sample ID: RFR-10 Lab Sample ID: AZ32021 Matrix: Water
 % Solids: NA Initial Calibration ID: T160402
 Date Received: 05-Apr-16 Date Prepared: 05-Apr-16 Date Analyzed: 05-Apr-16
 Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1-DCE	0.12	1.2	0.12	1		U
CIS-1,2-DCE	0.07	1.2	0.17	1		F
TCE	0.05	1.0	6.73	1		
TETRACHLOROETHENE	0.06	1.4	11.89	1		
TRANS-1,2-DCE	0.08	0.6	0.08	1		U
VINYL CHLORIDE	0.08	1.1	0.08	1		U

Surrogate	Recovery	Control Limits	Qualifier
SURROGATE: 1,2-DICHLOROETHANE-	98.0	69-139	
SURROGATE: 4-BROMOFLUOROBENZ	96.8	75-125	
SURROGATE: DIBROMOFLUOROMETH	103	75-125	
SURROGATE: TOLUENE-D8 (S)	102	75-125	

Internal Std	Qualifier
1,4-DICHLOROBENZENE-D4 (IS)	
CHLOROBENZENE-D5 (IS)	
FLUOROBENZENE (IS)	

Comments:

ARF: 79220 These results are preliminary and represent information available on 4/6/16 at 9:15am

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 160405AT-206250
 Lab Name: APPL, Inc Contract #: *G012
 Field Sample ID: RFR-10-TANK Lab Sample ID: AZ32022 Matrix: Water
 % Solids: NA Initial Calibration ID: T160402
 Date Received: 05-Apr-16 Date Prepared: 05-Apr-16 Date Analyzed: 05-Apr-16
 Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1-DCE	0.12	1.2	0.12	1		U
CIS-1,2-DCE	0.07	1.2	0.07	1		U
TCE	0.05	1.0	0.05	1		U
TETRACHLOROETHENE	0.06	1.4	0.06	1		U
TRANS-1,2-DCE	0.08	0.6	0.08	1		U
VINYL CHLORIDE	0.08	1.1	0.08	1		U

Surrogate	Recovery	Control Limits	Qualifier
SURROGATE: 1,2-DICHLOROETHANE-	96.7	69-139	
SURROGATE: 4-BROMOFLUOROBENZ	95.8	75-125	
SURROGATE: DIBROMOFLUOROMETH	103	75-125	
SURROGATE: TOLUENE-D8 (S)	102	75-125	

Internal Std	Qualifier
1,4-DICHLOROBENZENE-D4 (IS)	
CHLOROBENZENE-D5 (IS)	
FLUOROBENZENE (IS)	

Comments:

ARF: 79220 These results are preliminary and represent information available on 4/6/16 at 9:15am