F I N A L

PASSIVE DIFFUSION BAG REPORT

FORMER ATLAS “D” MISSILE SITE 4
F.E. WARREN AIR FORCE BASE, WYOMING
FUDS ID: B08WY0467

June 2022

United States Army Corps of Engineers
Omaha District

FINAL

PASSIVE DIFFUSION BAG REPORT

FORMER ATLAS "D" MISSILE SITE 4
F.E. WARREN AIR FORCE BASE, WYOMING
FUDS ID: B08WY0467

02 JUNE 2022

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List of Acronyms

%	percent
µg/L	micrograms per liter
LTM	Long-Term Monitoring
MAROS	Monitoring and Remediation Optimization System
MCL	maximum contaminant level
PDB	passive diffusion bag
RPD	relative percent difference
SCFS	Sample Collection Field Sheets
Site 4	F.E. Warren Air Force Base Former Atlas “D” Missile Site 4
TCE	trichloroethene
UFP-QAPP	Uniform Federal Policy-Quality Assurance Project Plan
URS	URS Group, Inc.
VOC	volatile organic compound

1.1 LOCATION

The F.E. Warren Air Force Base Former Atlas "D" Missile Site 4 (Site 4) is located in Laramie County, Wyoming, approximately 2 miles south of Interstate 80 and approximately 18 miles west of the City of Cheyenne (**Figure 1-1**). The missile site covers approximately 700 acres owned by the City of Cheyenne and a small portion of the Belvoir Ranch. Site 4 housed three Atlas "D" missiles in three Launch and Service Buildings. The one-square-mile area around the former missile site is the source area, also known as Area A, of the trichloroethene (TCE) contamination. Other areas down gradient of Area A have been investigated and identified as containing contamination. These areas include the Transition Area, a 12-square-mile area that extends eastward from Area A where the plume transitions from the White River Formation to the Ogallala Formation; Area B, a 30-sqaure-mile area east of the Cow Camp well and including the Borie Well Field; and the Expanded Study Area, an area east and southeast of Area B (**Figure 1-1**).

1.2 AUTHORITY

URS Group, Inc. (URS) has been contracted by the United States Corp of Engineers, Omaha District under Contract Number W912DY-16-D-0026, Task Order W9128F19F0192 to conduct a Feasibility Study, Data Gaps Investigation, and Long-Term Monitoring (LTM) at Site 4. These environmental restoration activities are conducted under the Comprehensive Environmental Response, Compensation, and Liability Act.

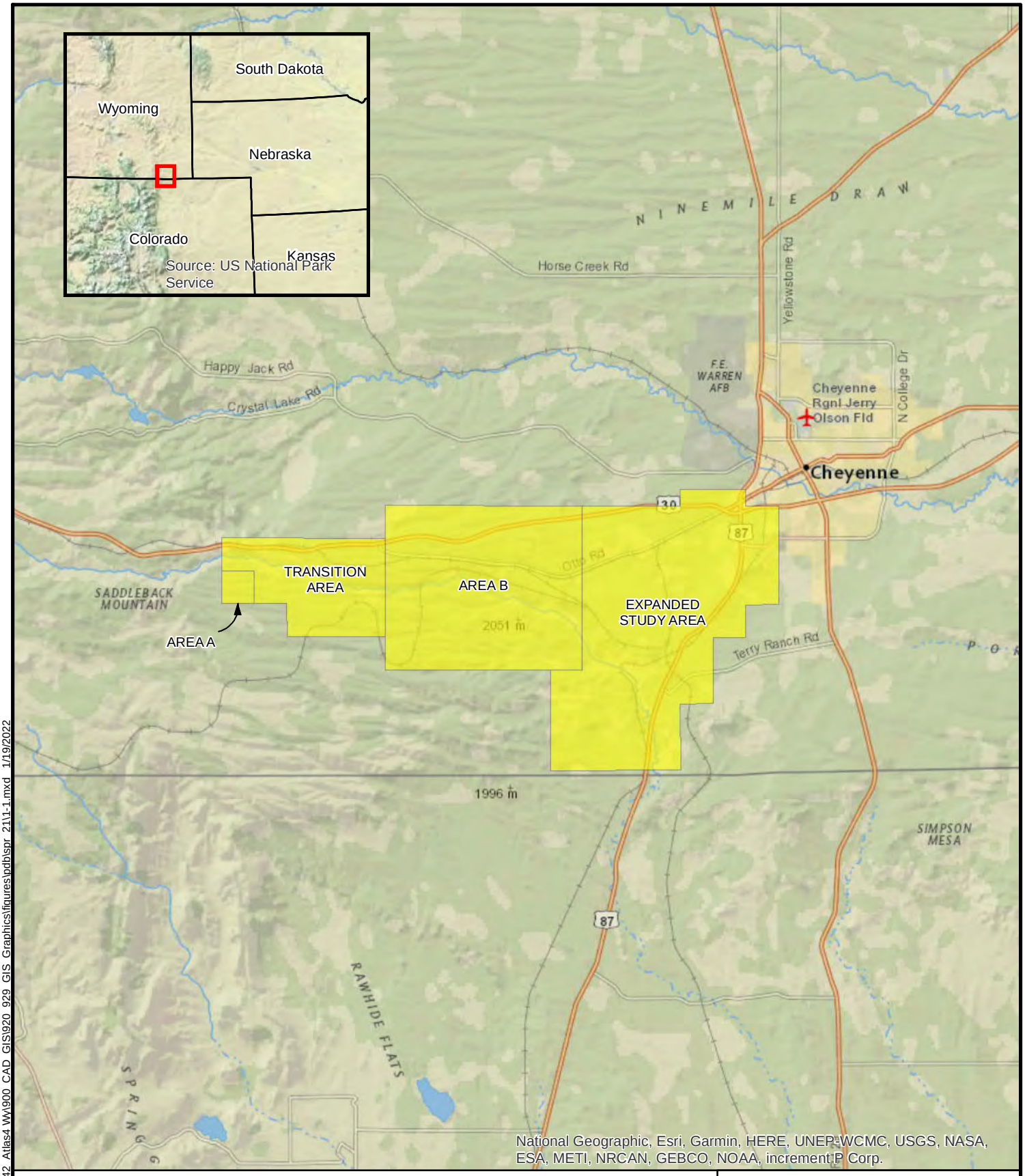
1.3 PURPOSE AND SCOPE

The purpose of this passive diffusion bag (PDB) report is to compare PDB sample results to the conventional sampling data and to determine if PDB samplers should be given consideration for use in the Site 4 LTM program as an alternative sample collection method. Particularly in very deep, low producing wells, or wells constructed with extended screen intervals. This PDB report presents the following:

1) PDB sampling activities completed at 26 monitoring wells during the Spring 2021 LTM Event 17 and a results comparison to conventional sampling data (i.e., TCE concentrations from groundwater samples collected using the purging methods described in Standard Operating Procedure 11 of the Final Site-Wide Uniform Federal Policy-Quality Assurance Project Plan (UFP-QAPP) (URS 2020a),

2) The approach used to collect a data set for direct comparison of PDB and conventional sampling methods. Both PDB and conventional samples were collected during the Spring 2021 LTM Event 17.

3) Data evaluation and acceptance criteria used to compare the PDB and conventional sample data.



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4 2 0 4 Miles

Site Location Map
Former Atlas "D" Missile Site 4
F.E. Warren Air Force Base, WY

Drawn By: DPG	Date: 1/19/2022	Project No: 60613342	Figure 1-1
Checked By: RRM	Revision: 0		

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2.1 PDB DEPLOYMENT

Twenty-six monitoring wells were selected from the Site 4 semiannual sampling list for the comparison study of PDB samples (See **Figure 2-1** and **Figure 2-2** for monitoring well locations). The monitoring wells were selected to represent low, mid-level, and high TCE concentrations from both the White River and Ogallala Formations. Ten monitoring wells with a low TCE concentration (less than 10 micrograms per liter [µg/L]) were selected, ten with a mid-level concentration (10 to 100 µg/L), and six monitoring wells with a high concentration (greater than 100 µg/L). **Table 2-1** lists the 26 monitoring wells, their TCE concentrations from the 2020 Fall LTM Event 16 using the conventional sampling method, location (i.e. Area A, Transition Area, etc.), the formation in which the well is screened, and rationale for including each well in this study.

The PDBs were obtained from ALS Global Laboratories. The PDBs are 24-inches long by 1.25-inch diameter, manufactured from 4 millimeters-thick, 2-inch wide, low density polyethylene that holds approximately 220 milliliters. The PDB samplers were shipped with American Society for Testing and Materials Type II certified, laboratory-grade, analyte-free, deionized water. The PDBs were deployed in a protective polyethylene mesh cover between 3 and 5 June 2021 and left in place for a minimum of two weeks prior to sample collection during the completion of the Spring 2021 LTM event. Photographs of the PDBs during sampling are included in **Appendix A**. The PDB samplers were deployed within one week of shipment as recommended by the manufacturer.

The following procedures were used during deployment:

- The PDB sampler was removed from its storage bag.
- A polyethylene rope was attached to the top of the PDB sampler, and another piece of polyethylene rope was used to secure a stainless steel weight approximately 5 feet below the bottom of the PDB sampler. This allowed the 2-foot long PDB sampler to be centered in the middle of the 10 or 15-foot screen interval of each monitoring well. (Note: The pump intake during conventional sampling is set just above each screen interval.)
- The polyethylene rope was attached to each monitoring well J-plug cap to keep the rope tight during the deployment period. The cap was then placed back on the well casing.

2.2 PDB SAMPLING

The PDB samplers were collected between 18 and 23 June 2021 after a 2-week deployment. Two weeks is the recommended minimum deployment period to allow for diffusion between the formation water and the PDB sampler. After the deployment period, the following procedures were used for sample retrieval and sampling:

- The PDB sampler was removed from the well using the attached polyethylene rope.

- The PDB sampler and protective polyethylene mesh cover was examined for biofilm or iron coating, and for tears in the membrane. The condition of the PDB was noted in the field logbook.
- The PDB sampler was detached from its line.
- The cap was opened on each PDB sampler and its water immediately transferred into the appropriate sample containers.
- Conventional sampling at each selected monitoring well occurred just after the PDB sample is retrieved.

An examination of each PDB sampler upon removal showed no signs of fouling, degradation, or tears. Sample collection field sheets are included in **Appendix B**.

After sample collection, all samples were submitted for off-site laboratory analysis. Groundwater samples were transported under chain-of-custody procedures to Agriculture & Priority Pollutants Laboratories, Inc. in Clovis, California, for volatile organic compounds (VOC) analysis by SW846 Method 8260C. Analytical results were reviewed and verified per the Final Site-Wide UFP-QAPP (URS 2020a) to ensure all sample results were valid and useable for the project objectives. The associated laboratory analytical reports are in **Appendix C**. The data validation reports are included in **Appendix D**. Daily quality control reports from the PDB field activities are included in **Appendix E**.

TABLE 2-1
PDB SAMPLE LOCATIONS AND RATIONALE
FORMER ATLAS "D" MISSILE SITE 4

Monitoring Well	Location	Formation	Conventional TCE Result (µg/L)	Rationale
Low TCE Concentration				
MW45R-299	Area B	Ogallala	6	Midpoint of TCE plume within core
MW50-250	Area B	Ogallala	4.8 J	Midpoint of TCE plume within core
MW56-290	Area B	Ogallala	5.7	Within Borie Well Field
MW59-183	Area A	White River	8.9	Vertically below source and potassium permanganate ($KMnO_4$) pilot study area
MW69-164	Transition Area	White River	8.1	Vertically below northern boundary plume core
MW73-218	Transition Area	White River	0.81 J	Trace TCE concentration below plume core
MW74-359	Area A	White River	0.57 J	Trace TCE concentration below plume core
MW97-266	Area B	White River	0.33 J	Located laterally outside the 5 µg/L TCE contour
MW101-238	Area A	White River	2	Vertically below plume core
TH5-205*	Area B	Ogallala	nondetect	Within long test hole well screen interval
Mid-Level TCE Concentration				
MW01	Area A	White River	96	Downgradient and lateral of source area
MW20	Transition Area	White River	15	Downgradient and lateral of source area
MW31	Area B	White River	27	Midpoint of TCE plume within core
MW48-225	Area B	Ogallala	54	Midpoint of TCE plume within core
MW55-250	Area B	Ogallala	25	Within Borie Well Field
MW56-203	Area B	Ogallala	21	Within Borie Well Field
MW83-88	Area A	Ogallala-White River	43	Vertically above plume core
MW88-133	Transition Area	White River	110	Downgradient of highest TCE concentrations
MW92B-288	Transition Area	Ogallala	58 J	Midpoint of TCE plume within core
MW95-288	Area B	Ogallala	19	Within Borie Well Field
High TCE Concentration				
MW66-205	Area A	Ogallala-	1,800	Downgradient of high concentration core
MW71-96	Transition Area	White River	630	Lateral of plume core
MW80-128	Area A	White River	35,000	Downgradient of the $KMnO_4$ pilot study
MW80-223	Area A	White River	8,000	Downgradient of the $KmnO_4$ pilot study
MW81-207	Area A	White River	1,900	Lateral to source area and upgradient of the zero valent
MW106-272	Transition Area	Ogallala	170 J	Midpoint of TCE plume within core

Notes:

*At TH5-205 a PDB was placed at the typical pump intake depth (target interval) for conventional sampling and additional PDBs were placed 10 feet above and 10 feet below the target interval. Data from the PDBs above and below the target interval will be used to determine if there is vertical variation in concentration in wells with long screen intervals.

J = estimated

PDB = passive diffusion bag

TCE= trichlororethene

µg/L = micrograms per liter

TABLE 2-2
PDB SAMPLE SUMMARY
FORMER ATLAS "D" MISSILE SITE 4

Well Identification	Sample Identification [1]	Sample Date	Well Type	VOCs (8260C)	Duplicate	MS/MSD	Duplicate Sample Identification
TH5-205	FEW4-TH5-205-17	6/19/21	Monitoring/Test	X			
	FEW4-TH5-205-PDB-17	6/19/21		X			
MW01	FEW4-MW01-17	6/20/21	Monitoring	X			
	FEW4-MW01-PDB-17	6/20/21		X			
MW20	FEW4-MW20-17	6/23/21	Monitoring	X			
	FEW-MW20-PDB-17	6/22/21		X			
MW31	FEW4-MW31-17	6/21/21	Monitoring	X			
	FEW4-MW31-PDB-17	6/21/21		X			
MW45R-299	FEW4-MW45R-299-17	6/23/21	Monitoring	X			
	FEW4-MW45R-299-PDB-17	6/23/21		X			
MW48-225	FEW4-MW48-225-17	5/11/21	Monitoring	X			
	FEW4-MW48-225-PDB-17	6/18/21		X			
MW50-250	FEW4-MW50-250-17	6/19/21	Monitoring	X		X	
	FEW4-MW50-250-PDB-17	6/19/21		X			
MW55-250	FEW4-MW55-250-17	6/20/21	Monitoring	X	X		FEW4-55-250-FD-17
	FEW4-MW55-250-PDB-17	6/20/21		X			
MW56-203	FEW4-MW56-203-17	6/19/21	Monitoring	X	X		FEW4-MW56-203-FD-17
	FEW4-MW56-203-PDB-17	6/19/21		X			
MW56-290	FEW4-MW56-290-17	5/19/21	Monitoring	X			
	FEW4-MW56-290-PDB-17	6/18/21		X			
MW59-183	FEW4-MW59-183-17	6/22/21	Monitoring	X		X	
	FEW4-MW59-183-PDB-17	6/22/21		X			
MW66-205	FEW4-MW66-205-17	6/22/21	Monitoring	X			
	FEW4-MW66-205-PDB-17	6/21/21		X			
MW69-164	FEW4-MW69-164-17	6/24/21	Monitoring	X			
	FEW4-MW69-164-PDB-17	6/21/21		X			

TABLE 2-2
PDB SAMPLE SUMMARY
FORMER ATLAS "D" MISSILE SITE 4

Well Identification	Sample Identification [1]	Sample Date	Well Type	VOCs (8260C)	Duplicate	MS/MSD	Duplicate Sample Identification
MW71-96	FEW4-MW71-96-17	6/21/21	Monitoring	X			
	FEW4-MW71-96-PDB-17	6/21/21		X			
MW73-218	FEW4-MW73-218-17	6/23/21	Monitoring	X			
	FEW4-MW73-218-PDB-17	6/23/21		X			
MW74-359	FEW4-MW74-359-17	6/22/21	Monitoring	X			
	FEW4-MW74-359-PDB-17	6/21/21		X			
MW80-128	FEW4-MW80-128-17	6/23/21	Monitoring	X			
	FEW4-MW80-128-PDB-17	6/23/21		X			
MW80-223	FEW4-MW80-223-17	6/23/21	Monitoring	X			
	FEW4-MW80-223-PDB-17	6/23/21		X			
MW81-207	FEW4-MW81-207-17	6/22/21	Monitoring	X			
	FEW4-MW81-207-PDB-17	6/22/21		X			
MW83-88	FEW4-MW83-88-17	6/20/21	Monitoring	X	X		FEW4-83-88-FD-17
	FEW4-MW83-88-PDB-17	6/20/21		X			
MW88-133	FEW4-MW88-133-17	6/20/21	Monitoring	X			
	FEW4-MW88-133-PDB-17	6/20/21		X			
MW92B-288	FEW4-MW92B-288-17	6/21/21	Monitoring	X	X		FEW4-MW92B-288-FD-17
	FEW4-MW92B-288-PDB-17	6/21/21		X			
MW95-288	FEW4-MW95-288-17	6/20/21	Monitoring	X	X		FEW4-MW95-288-FD-17
	FEW4-MW95-288-PDB-17	6/20/21		X			
MW97-266	FEW4-MW97-266-17	6/20/21	Monitoring	X			
	FEW4-MW97-266-PDB-17	6/20/21		X			
MW101-238	FEW4-MW101-238-17	6/23/21	Monitoring	X		X	
	FEW4-MW101-238-PDB-17	6/23/21		X			
MW106-272	FEW4-MW106-272-17	6/19/21	Monitoring	X			
	FEW4-MW106-272-PDB-17	6/19/21		X			

TABLE 2-2
PDB SAMPLE SUMMARY
FORMER ATLAS "D" MISSILE SITE 4

Well Identification	Sample Identification [1]	Sample Date	Well Type	VOCs (8260C)	Duplicate	MS/MSD	Duplicate Sample Identification

Notes:

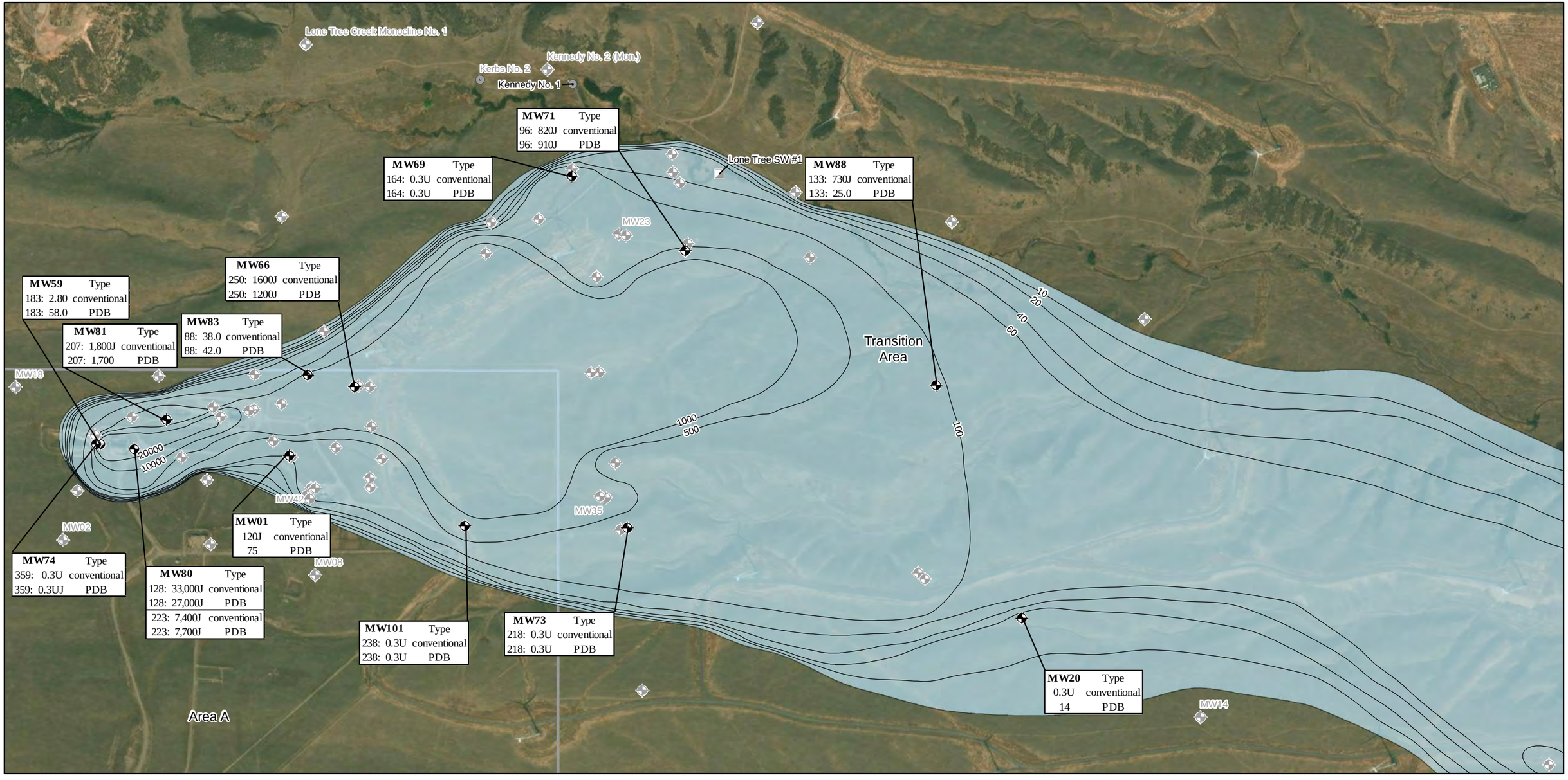
[1]Sample Identification uses the following naming scheme: site identification-well/location identification-sample event.

MS/MSD = matrix spike/matrix spike duplicate

Monitoring (P) = Performance of *in situ* injection study at monitoring well

PDB = Passive Diffusion Bag

VOC = volatile organic compound



Legend

- PDB Monitoring Well Included for Sampling
- Well not Sampled for Study
- Stock Well
- Surface Water/Sediment Location
- TCE >5 µg/L

µg/L = micrograms per liter
J = estimated
PDB = passive diffusion bag
TCE = trichloroethene
BTOC = below top of casing

Notes:
1) Results shown are TCE concentrations (µg/L) from the Spring 2021 event.
2) Hit boxes identify the well identification and mid-screen depth (if applicable) in feet BTOC and the Spring 2021 TCE result in µg/L.
3) Isoconcentrations are based on vertical and horizontal interpretations. Contours may show higher interpreted concentrations than well analytical results if higher concentrations are interpreted to pass over or below the screen interval.

N
800 400 0 800
Feet

PDB Sample Locations
Area A and Transition Area
Former Atlas "D" Missile Site 4
F.E. Warren Air Force Base, WY

Drawn By: DPG	Date: 2/4/2022	Project No: 60613342	Figure 2-1
Checked By: IBK	Revision: 0		

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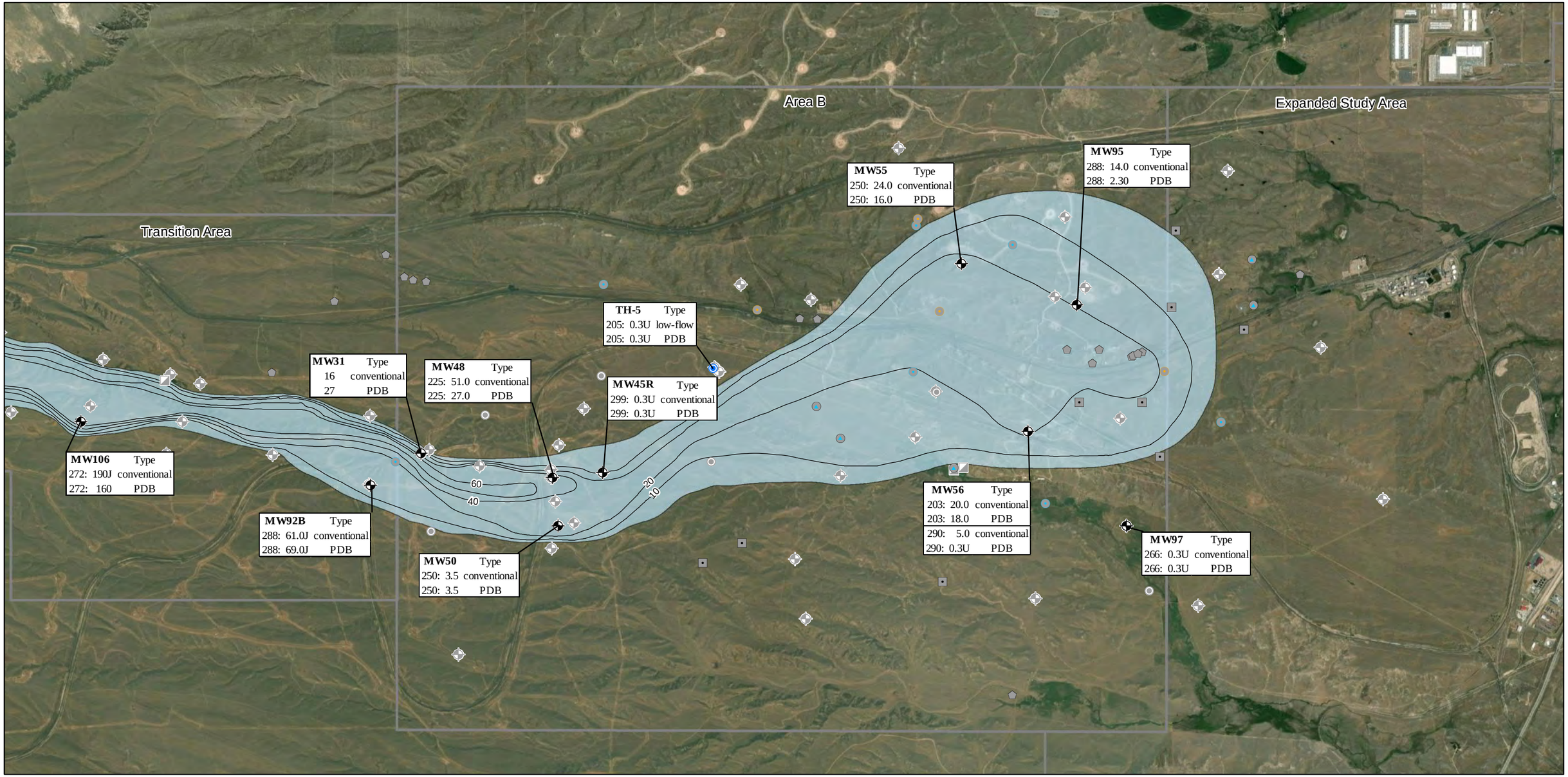

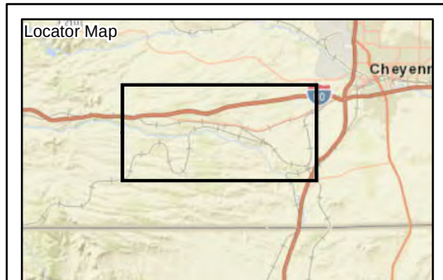

Legend

- PDB Monitoring Well Included for Sampling
- Well not Sampled for Study
- Industrial Well
- Irrigation Well
- Municipal Well
- Stock Well
- Test Hole
- Surface Water/Sediment Location
- Domestic Well
- TCE >5 µg/L

µg/L = micrograms per liter
J = estimated
PDB = Passive Diffusion Bag
TCE = trichloroethene
BTOC = Below top of casing

Notes:
1) Results shown are TCE concentrations (µg/L) from the Spring 2021 event.
2) Hit boxes identify the well identification and mid-screen depth (if applicable) in feet BTOC and the Spring 2021 TCE result in µg/L.
3) Isoconcentrations are based on vertical and horizontal interpretations. Contours may show higher interpreted concentrations than well analytical results if higher concentrations are interpreted to pass over or below the screen interval.

N
4,000 2,000 0 4,000
Feet

PDB Sample Locations
Area B and Expanded Study Area
Former Atlas "D" Missile Site 4
F.E. Warren Air Force Base, WY

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Checked By: IBK	Revision: 0		

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This section includes groundwater analytical results for the PDB and conventional sampling activities completed between 18 and 24 June 2021. A total of 26 PDB samples and 26 conventional samples were collected. Additionally, 5 field duplicates and two matrix spike/matrix spike duplicates were collected. **Table 2-2** presents a summary of samples collected during the PDB study, including the analyses and sample dates for each well. **Table 3-1** summarizes the analytical detections from the PDB and conventional samples. Sampling locations and results are shown on **Figure 2-1** and **Figure 2-2**. SCFSs are included in **Appendix A**.

TCE was used as the main constituent for comparison as it is the primary chemical of concern for the site. T-tests could not be performed on the data as recommended in the Final Passive Diffusion Bag Demonstration Study (URS 2021) as the data set collected did not form a normal distribution. Therefore, results were compared using relative percent difference between the conventional and PDB results and compared to historical trends.

3.1 LOW TCE CONCENTRATIONS

TCE results from the 10 low TCE concentration wells are shown in **Table 3-2**. Each sample pair is evaluated below with respect to TCE detections:

- **MW45R-299:** Conventional and PDB sample results were both non-detect at MW45R-299 resulting in a 0 percent (%) relative percent difference (RPD). Over the past four sampling events, conventional sample results have averaged 6.5 µg/L. MW45R is downgradient of the pilot study PTI system. However, both sample sets were collected before PTI system became operational, showing good correlation of TCE values. Comparison of PDB and conventional sampling at this location indicate PDB sampling methods are reliable. Transitioning to PDB sampling at this location is recommended.
- **MW50-250:** Conventional and PDB sample results were both 3.5 µg/L at MW50-250 resulting in a 0% RPD. Over the past four sampling events, conventional sample results have averaged 8 µg/L and have been trending downward. However, comparison of PDB and conventional sampling at this location indicate PDB sampling methods are reliable and PDB sampling is recommended to continue.
- **MW56-290:** Conventional and PDB sample results were 5 µg/L and non-detect, respectively, at MW56-290. The RPD between the conventional and PDB samples was 94%. When concentrations are very low it is difficult to use an RPD to indicate if PDB and conventional sample results are similar because changes in even 5 µg/L can indicate a large RPD. Over the past four sampling events, conventional sample results have averaged approximately 4 µg/L. The PDB sampler result for TCE showed a low bias to past conventional sampling results. It is recommended that deployment of future PDBs be placed in the upper portion of the screen closer to where the pump would be set to evaluate if these higher TCE concentrations could be captured by the PDBs by placing it in a different stratification.

- **MW59-183:** Conventional and PDB sample results were 2.8 µg/L and 58 µg/L, respectively, at MW59-183. The RPD between the conventional and PDB samples was 1,971%. A higher PDB result of 58 µg/L could indicate that concentrations in this area are higher than previously identified. MW59-183 is a deep well screened below higher intervals of contamination and in an area where pilot study potassium permanganate injections were completed in August 2020. PDB sampling should continue at MW59-183 to determine if the PDB sampling method is more accurate at detecting TCE concentrations for this well.
- **MW69-164:** Conventional and PDB sample results were non-detect and 4.7 µg/L, respectively, at MW69-164. Since concentrations are low, it is difficult to compare sample results using RPD. Over the past four sampling events, conventional sample results have averaged approximately 9 µg/L. The PDB results were higher than the conventional sample result and therefore are more conservative as well as closer to historical trends. PDB results from samples collected in January 2021 also indicate PDB samples are comparable to conventional with a 9% RPD compared to the Fall 2020 conventional sample data. Overall, the PDB sample result is comparable to the conventional sample result, and the continued use of PDBs is recommended for MW69-164.
- **MW73-218:** Conventional and PDB sample results were both non-detect at MW73-218 resulting in a 0% RPD. Over the past four sampling events, conventional sample results have ranged from 2.16 to 0.81J µg/L and have been trending downward. Overall, the PDB sample result is comparable to the conventional sample result, and the continued use of PDBs is recommended for MW73-218.
- **MW74-359:** Conventional and PDB sampling results were both non-detect at MW74-359 resulting in a 0% RPD. Over the past four sampling events, conventional sample results have ranged from 1.09 µg/L to non-detect. Overall, the PDB sample result is comparable to the conventional sample result, and the continued use of PDBs is recommended for MW74-359.
- **MW97-266:** Conventional and PDB sampling results were both non-detect at MW97-266 resulting in a 0% RPD. Over the past four sampling events, conventional sample results have ranged from 0.57J µg/L to non-detect. The PDB sample result is comparable to the conventional sample result, and the continued use of PDBs is recommended for MW97-266.
- **MW101-238:** Conventional and PDB sampling results were both non-detect at MW101-238 resulting in a 0% RPD. Over the past four sampling events, conventional sample results have ranged from 1.9 to 3.07 µg/L. A PDB sample was also collected at this location in January 2021 with a 10% RPD to the Fall 2020 sampling event. The PDB sample result is comparable to the conventional sample result, and the continued use of PDBs is recommended for MW101-238.
- **TH5-205:** Conventional and PDB sampling results were both non-detect at TH5-205 resulting in a 0% RPD. Over the past four sampling events conventional sample results have been all non-detect. The PDB sample result is comparable to the conventional sample result, and the continued use of PDBs is recommended for TH5-205.

3.2 MID-LEVEL TCE CONCENTRATIONS

TCE results from the 10 mid-level TCE concentration wells are shown in **Table 3-3**. Each sample pair is evaluated below with respect to TCE detections:

- **MW01:** Conventional and PDB results were 120 and 75 µg/L, respectively, resulting in an RPD of 38%. TCE results in the last four semiannual events have ranged from 96 to 110µg/L. The January 2021 PDB sample result was 80 µg/L. RPD between the January 2021 PDB and the Fall 2020 result was 17%, and the PDB sampler result was 16 µg/L below the minimum value from the last four results. Monitoring and Remediation Optimization System (MAROS) statistical analysis of MW01 sample data from December 2002 to October 2019 showed a clear downward trend in TCE concentrations at this location (RMC+SoundEarth 2020). Results from the PDB methods were consistent with this trend; however, the PDB results were somewhat outside the observed TCE concentration range. The PDB sampler results showed a low bias to past conventional sampling results. It is recommended that deployment of future PDBs be placed in the upper portion of the screen closer to where the pump would be set to evaluate if these higher TCE concentrations could be captured by the PDBs by placing it in a different stratification.
- **MW20:** Conventional and PDB results were non-detect and 14 µg/L, respectively, resulting in a large RPD (4,567%). However, the PDB result was more conservative than the conventional sample result. Over the past four sampling events, conventional sample results have ranged from 15 to 44 µg/L, with the PDB result of 15 µg/L nearly matching the PDB result of 14 µg/L. Overall, the PDB sample result is comparable to the conventional sample result, and the continued use of PDBs is recommended for MW20.
- **MW31:** Conventional and PDB results were 16 µg/L and 27 µg/L, respectively, resulting in an RPD of 69%. However, the PDB result was more conservative than the conventional sample result. Over the past four sampling events, conventional sample results have ranged from 19.2 µg/L to 27 µg/L. The conventional sample result of 16 µg/L is just below this range, and the PDB result is consistent with the Fall 2020 LTM result of 27 µg/L and appears to follow the increasing trend for this well. Overall, the PDB sample result is comparable to the conventional sample result, and the continued use of PDBs is recommended for MW31.
- **MW48-225:** Conventional and PDB results were 51 µg/L and 27 µg/L, respectively, resulting in an RPD of 47%. TCE results in the last four semiannual events have ranged from 51 µg/L to 69 µg/L. A higher PDB result of 51 µg/L could indicate that concentrations in this area are higher than previously identified. PDB sampling should continue at MW48-225 to determine if the PDB sampling method is more accurate at detecting TCE concentrations for this well.
- **MW55-250:** Conventional and PDB results were 24 µg/L and 16 µg/L, respectively, resulting in an RPD of 33%. TCE results in the last four semiannual events have ranged from 21 µg/L to 25 µg/L. The PDB sample result showed a low bias to past conventional sampling results. However, the PDB sample result is still in the same order of magnitude as

previous detections. The PDB sample result is comparable to the conventional sample result, and the continued use of PDBs is recommended for MW55-250.

- **MW56-203:** Conventional and PDB results were 20 µg/L and 18 µg/L, respectively, resulting in an RPD of 10%. TCE results in the last four semiannual events have ranged from 16.7 µg/L to 21 µg/L. Both the PDB and conventional sample results fall within the historical range. The PDB sample result is comparable to the conventional sample result, and the continued use of PDBs is recommended for MW56-203.
- **MW83-88:** Conventional and PDB results were 43 µg/L and 42 µg/L, respectively, resulting in an RPD of 2%. The field duplicate sample FEW4-MW83-88-FD-17 was reported and used for comparison since the duplicate TCE concentration was greater than for the parent sample. TCE results in the last four semiannual events have ranged from 31 µg/L to 43 µg/L. Both the PDB and the conventional sample result fall within the historical range. The January 2021 PDB sampler result was 48 µg/L. The RPD between the January 2021 PDB result and the Fall 2020 result was 12%. Overall, the PDB sample result is comparable to the conventional sample result, and the continued use of PDBs is recommended for MW83-88.
- **MW88-133:** Conventional and PDB results were 110J µg/L and 25 µg/L, respectively, resulting in an RPD of 77%. TCE results in the last four semiannual events have ranged from 98 µg/L to 120 µg/L. The PDB sampler results showed a low bias to past conventional sampling results. It is recommended that during future monitoring events of the PDBs are to be placed in the upper portion of the screen closer to where the pump would typically be set, to evaluate if these higher TCE concentrations could be captured by the PDBs by placing it in a different stratification. .
- **MW92B-288:** Conventional and PDB results were 61J µg/L and 69J µg/L, respectively, resulting in an RPD of 13%. The TCE result from the Fall 2020 LTM sampling event was 58 µg/L (the well was installed during the Data Gaps Investigation in summer 2020). The PDB sample result is comparable to the conventional sample result, and the continued use of PDBs is recommended for MW92B-288.
- **MW95-288:** Conventional and PDB results were 14 µg/L and 2.3 µg/L, respectively, resulting in an RPD of 84%. TCE results in the last four semiannual events have ranged from 15 µg/L to 22 µg/L. The PDB sampler results showed a low bias to past conventional sampling results. It is recommended that deployment of future PDBs be placed in the upper portion of the screen closer to where the pump would be set to evaluate if these higher TCE concentrations could be captured by the PDBs by placing it in a different stratification.

3.3 HIGH TCE CONCENTRATIONS

TCE results from the six high TCE concentration samples are shown in **Table 3-4**. Each sample pair is evaluated below with respect to TCE detections:

- **MW66-205:** Conventional and PDB results were 1,600 µg/L and 1,200 µg/L, respectively, resulting in an RPD of 25%. TCE results in the last four semiannual events have ranged

from 1,500 µg/L to 1,800 µg/L. The January 2021 PDB sampler result was 1,800 µg/L, matching the Fall 2020 result and within the minimum and maximum range of the last four results. The PDB sampler result for TCE showed a low bias to past conventional sampling results falling below the historical range in June 2021. It is recommended that deployment of future PDBs be placed in the upper portion of the screen closer to where the pump would be set to evaluate if these higher TCE concentrations could be captured by the PDBs by placing it in a different stratification.

- **MW71-96**: Conventional and PDB results were 820J µg/L and 910J µg/L, respectively, resulting in an RPD of 11%. TCE results in the last four semiannual events have ranged from 630 µg/L to 750 µg/L. Overall, the PDB sample result is comparable to the conventional sample result, and the continued use of PDBs is recommended for MW71-96.
- **MW80-128**: Conventional and PDB results were 33,000J µg/L and 27,000J µg/L, respectively, resulting in an RPD of 18%. TCE results in the last four semiannual events have ranged from 4,100 µg/L to 35,000 µg/L. Overall, the PDB sample result is comparable to the conventional sample result, and the continued use of PDBs is recommended for MW80-128.
- **MW80-223**: Conventional and PDB results were 7,400J µg/L and 7,700J µg/L, respectively, resulting in an RPD of 4%. TCE results in the last four semiannual events have ranged from 6,600 µg/L to 8,000 µg/L. Overall, the PDB sample result is comparable to the conventional sample result, and the continued use of PDBs is recommended for MW80-223.
- **MW81-207**: Conventional and PDB results were 1,800J µg/L and 1,700 µg/L, respectively, resulting in an RPD of 6%. TCE results in the last four semiannual events have ranged from 1,400 µg/L to 1,900 µg/L. Overall, the PDB sample result is comparable to the conventional sample result, and the continued use of PDBs is recommended for MW81-207.
- **MW106-272:** Conventional and PDB results were 190J µg/L and 160 µg/L, respectively, resulting in an RPD of 16%. The TCE result in the Fall 2020 LTM event was 170J µg/L. This monitoring well was installed as part of the Data Gaps Investigation in summer 2020 and there is no further historical data to compare to a trend. Overall, the PDB sample result is comparable to the conventional sample result, and the continued use of PDBs is recommended for MW106-272.

TABLE 3-1
SUMMARY OF DETECTED VOC ANALYTES IN PDB AND CONVENTIONAL SAMPLES FROM MAY/JUNE 2021
FORMER ATLAS "D" MISSILE SITE 4

LOCATION IDENTIFICATION				TH5-205												MW01											
FIELD IDENTIFICATION[1]				FEW4-TH5-205-17						FEW4-TH5-205-PDB-17						FEW4-MW01-17						FEW4-MW01-PDB-17					
DATE COLLECTED				19-Jun-21						19-Jun-21						20-Jun-21						20-Jun-21					
	Maximum	Frequency	MCL[a]	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF
VOLATILE ORGANIC COMPOUNDS (µg/L)																											
1,1,2-Trichloroethane	12	4 / 52	5	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1
1,1-Dichloroethene	3.5	3 / 52	7	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1
Carbon tetrachloride	2.4	2 / 52	5	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1
Chloroform	15	4 / 52	80[b]	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1
cis-1,2-Dichloroethene	73	8 / 52	70	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1
trans-1,2-Dichloroethene	2.6	3 / 52	100	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1
Trichloroethene (TCE)	33000 J	37 / 52	5	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	120	J	3.00	6.00	20.0	20	75.0		0.150	0.300	1.00	1

Notes:

Shaded results exceed the MCL.

Bold analytes are site chemicals of concern.

The field duplicate sample FEW4-MW83-88-FD-17 was reported since the duplicate TCE concentration was greater than for the parent sample.

[1]Field Identification uses the following naming scheme: site identification-well identification-sample event-sample type.

[a] Based on USEPA Drinking Water Standards and Health Advisories (USEPA 2018)

[b] As total trihalomethanes

µg/L = micrograms per liter

DF = dilution factor

DL = detection limit

J = estimated

LOD = limit of detection

LOQ = limit of quantitation

MCL = maximum contaminant level

MDL = method detection limit

PDB = passive diffusion bag

U = nondetect

UJ = estimated nondetect

USEPA = United States Environmental Protection Agency

VOC = volatile organic compound

TABLE 3-1
SUMMARY OF DETECTED VOC ANALYTES IN PDB AND CONVENTIONAL SAMPLES FROM MAY/JUNE 2021
FORMER ATLAS "D" MISSILE SITE 4

LOCATION IDENTIFICATION				MW20												MW31											
FIELD IDENTIFICATION[1]				FEW4-MW20-17						FEW4-MW20-PDB-17						FEW4-MW31-17						FEW4-MW31-PDB-17					
DATE COLLECTED				23-Jun-21						22-Jun-21						21-Jun-21						21-Jun-21					
	Maximum	Frequency	MCL[a]	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF
VOLATILE ORGANIC COMPOUNDS (µg/L)																											
1,1,2-Trichloroethane	12	4 / 52	5	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1
1,1-Dichloroethene	3.5	3 / 52	7	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1
Carbon tetrachloride	2.4	2 / 52	5	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1
Chloroform	15	4 / 52	80[b]	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1
cis-1,2-Dichloroethene	73	8 / 52	70	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1
trans-1,2-Dichloroethene	2.6	3 / 52	100	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1
Trichloroethene (TCE)	33000 J	37 / 52	5	0.300	U	0.150	0.300	6.20	1	14.0		0.150	0.300	1.00	1	16.0		0.150	0.300	1.00	1	27.0		0.150	0.300	1.00	1

Notes:

Shaded results exceed the MCL.

Bold analytes are site chemicals of concern.

The field duplicate sample FEW4-MW83-88-FD-17 was reported since the duplicate TCE concentration was greater than for the parent sample.

[1]Field Identification uses the following naming scheme: site identification-well identification-sample event-sample type.

[a] Based on USEPA Drinking Water Standards and Health Advisories (USEPA 2018)

[b] As total trihalomethanes

µg/L = micrograms per liter

DF = dilution factor

DL = detection limit

J = estimated

LOD = limit of detection

LOQ = limit of quantitation

MCL = maximum contaminant level

MDL = method detection limit

PDB = passive diffusion bag

U = nondetect

UJ = estimated nondetect

USEPA = United States Environmental Protection Agency

VOC = volatile organic compound

TABLE 3-1
SUMMARY OF DETECTED VOC ANALYTES IN PDB AND CONVENTIONAL SAMPLES FROM MAY/JUNE 2021
FORMER ATLAS "D" MISSILE SITE 4

LOCATION IDENTIFICATION				MW45R-299												MW48-225											
FIELD IDENTIFICATION[1]				FEW4-MW45R-299-17						FEW4-MW45R-299-PDB-17						FEW4-MW48-225-17						FEW4-MW48-225-PDB-17					
DATE COLLECTED				23-Jun-21						23-Jun-21						11-May-21						18-Jun-21					
	Maximum	Frequency	MCL[a]	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF
VOLATILE ORGANIC COMPOUNDS (µg/L)																											
1,1,2-Trichloroethane	12	4 / 52	5	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1
1,1-Dichloroethene	3.5	3 / 52	7	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1
Carbon tetrachloride	2.4	2 / 52	5	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1
Chloroform	15	4 / 52	80[b]	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1
cis-1,2-Dichloroethene	73	8 / 52	70	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1
trans-1,2-Dichloroethene	2.6	3 / 52	100	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1
Trichloroethene (TCE)	33000 J	37 / 52	5	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	51.0		0.150	0.300	1.00	1	27.0		0.150	0.300	1.00	1

Notes:

Shaded results exceed the MCL.

Bold analytes are site chemicals of concern.

The field duplicate sample FEW4-MW83-88-FD-17 was reported since the duplicate TCE concentration was greater than for the parent sample.

[1]Field Identification uses the following naming scheme: site identification-well identification-sample event-sample type.

[a] Based on USEPA Drinking Water Standards and Health Advisories (USEPA 2018)

[b] As total trihalomethanes

µg/L = micrograms per liter

DF = dilution factor

DL = detection limit

J = estimated

LOD = limit of detection

LOQ = limit of quantitation

MCL = maximum contaminant level

MDL = method detection limit

PDB = passive diffusion bag

U = nondetect

UJ = estimated nondetect

USEPA = United States Environmental Protection Agency

VOC = volatile organic compound

TABLE 3-1
SUMMARY OF DETECTED VOC ANALYTES IN PDB AND CONVENTIONAL SAMPLES FROM MAY/JUNE 2021
FORMER ATLAS "D" MISSILE SITE 4

LOCATION IDENTIFICATION				FEW4-MW50-250												FEW4-MW55-250											
FIELD IDENTIFICATION[1]				FEW4-MW50-250-17						FEW4-MW50-250-PDB-17						FEW4-MW55-250-17						FEW4-MW55-250-PDB-17					
DATE COLLECTED				19-Jun-21						19-Jun-21						20-Jun-21						20-Jun-21					
	Maximum	Frequency	MCL[a]	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF
VOLATILE ORGANIC COMPOUNDS (µg/L)																											
1,1,2-Trichloroethane	12	4 / 52	5	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1
1,1-Dichloroethene	3.5	3 / 52	7	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1
Carbon tetrachloride	2.4	2 / 52	5	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1
Chloroform	15	4 / 52	80[b]	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1
cis-1,2-Dichloroethene	73	8 / 52	70	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1
trans-1,2-Dichloroethene	2.6	3 / 52	100	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1
Trichloroethene (TCE)	33000 J	37 / 52	5	3.50		0.150	0.300	1.00	1	3.50		0.150	0.300	1.00	1	24.0		0.150	0.300	1.00	1	16.0		0.150	0.300	1.00	1

Notes:

Shaded results exceed the MCL.

Bold analytes are site chemicals of concern.

The field duplicate sample FEW4-MW83-88-FD-17 was reported since the duplicate TCE concentration was greater than for the parent sample.

[1]Field Identification uses the following naming scheme: site identification-well identification-sample event-sample type.

[a] Based on USEPA Drinking Water Standards and Health Advisories (USEPA 2018)

[b] As total trihalomethanes

µg/L = micrograms per liter

DF = dilution factor

DL = detection limit

J = estimated

LOD = limit of detection

LOQ = limit of quantitation

MCL = maximum contaminant level

MDL = method detection limit

PDB = passive diffusion bag

U = nondetect

UJ = estimated nondetect

USEPA = United States Environmental Protection Agency

VOC = volatile organic compound

TABLE 3-1
SUMMARY OF DETECTED VOC ANALYTES IN PDB AND CONVENTIONAL SAMPLES FROM MAY/JUNE 2021
FORMER ATLAS "D" MISSILE SITE 4

LOCATION IDENTIFICATION				FEW4-MW56-203												FEW4-MW56-290											
FIELD IDENTIFICATION[1]				FEW4-MW56-203-17						FEW4-MW56-203-PDB-17						FEW4-MW56-290-17						FEW4-MW56-290-PDB-17					
DATE COLLECTED				19-Jun-21						19-Jun-21						19-May-21						18-Jun-21					
	Maximum	Frequency	MCL[a]	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF
VOLATILE ORGANIC COMPOUNDS (µg/L)																											
1,1,2-Trichloroethane	12	4 / 52	5	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1	0.500	UJ	0.200	0.500	1.00	1
1,1-Dichloroethene	3.5	3 / 52	7	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1	0.500	UJ	0.250	0.500	1.00	1
Carbon tetrachloride	2.4	2 / 52	5	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1	0.300	UJ	0.100	0.300	1.00	1
Chloroform	15	4 / 52	80[b]	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1	0.300	UJ	0.0700	0.300	1.00	1
cis-1,2-Dichloroethene	73	8 / 52	70	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	1.60		0.150	0.300	1.00	1	1.00	J	0.150	0.300	1.00	1
trans-1,2-Dichloroethene	2.6	3 / 52	100	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	UJ	0.150	0.300	1.00	1
Trichloroethene (TCE)	33000 J	37 / 52	5	20.0		0.150	0.300	1.00	1	18.0		0.150	0.300	1.00	1	5.00		0.150	0.300	1.00	1	0.300	UJ	0.150	0.300	1.00	1

Notes:

Shaded results exceed the MCL.

Bold analytes are site chemicals of concern.

The field duplicate sample FEW4-MW83-88-FD-17 was reported since the duplicate TCE concentration was greater than for the parent sample.

[1]Field Identification uses the following naming scheme: site identification-well identification-sample event-sample type.

[a] Based on USEPA Drinking Water Standards and Health Advisories (USEPA 2018)

[b] As total trihalomethanes

µg/L = micrograms per liter

DF = dilution factor

DL = detection limit

J = estimated

LOD = limit of detection

LOQ = limit of quantitation

MCL = maximum contaminant level

MDL = method detection limit

PDB = passive diffusion bag

U = nondetect

UJ = estimated nondetect

USEPA = United States Environmental Protection Agency

VOC = volatile organic compound

TABLE 3-1
SUMMARY OF DETECTED VOC ANALYTES IN PDB AND CONVENTIONAL SAMPLES FROM MAY/JUNE 2021
FORMER ATLAS "D" MISSILE SITE 4

LOCATION IDENTIFICATION				FEW4-MW59-183												FEW4-MW66-205											
FIELD IDENTIFICATION[1]				FEW4-MW59-183-17						FEW4-MW59-183-PDB-17						FEW4-MW66-205-17						FEW4-MW66-205-PDB-17					
DATE COLLECTED				22-Jun-21						22-Jun-21						22-Jun-21						21-Jun-21					
	Maximum	Frequency	MCL[a]	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF
VOLATILE ORGANIC COMPOUNDS (µg/L)																											
1,1,2-Trichloroethane	12	4 / 52	5	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1	2.50	UJ	1.00	2.50	5.00	5	2.50	UJ	1.00	2.50	5.00	5
1,1-Dichloroethene	3.5	3 / 52	7	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1	2.50	UJ	1.25	2.50	5.00	5	2.50	UJ	1.25	2.50	5.00	5
Carbon tetrachloride	2.4	2 / 52	5	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1	1.50	UJ	0.500	1.50	5.00	5	1.50	UJ	0.500	1.50	5.00	5
Chloroform	15	4 / 52	80[b]	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1	1.50	UJ	0.350	1.50	5.00	5	1.50	UJ	0.350	1.50	5.00	5
cis-1,2-Dichloroethene	73	8 / 52	70	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	1.50	UJ	0.750	1.50	5.00	5	1.50	UJ	0.750	1.50	5.00	5
trans-1,2-Dichloroethene	2.6	3 / 52	100	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	1.50	UJ	0.750	1.50	5.00	5	1.50	UJ	0.750	1.50	5.00	5
Trichloroethene (TCE)	33000 J	37 / 52	5	2.80		0.150	0.300	1.00	1	58.0		0.150	0.300	1.00	1	1600	J	7.50	15.0	50.0	50	1200	J	7.50	15.0	50.0	50

Notes:

Shaded results exceed the MCL.

Bold analytes are site chemicals of concern.

The field duplicate sample FEW4-MW83-88-FD-17 was reported since the duplicate TCE concentration was greater than for the parent sample.

[1]Field Identification uses the following naming scheme: site identification-well identification-sample event-sample type.

[a] Based on USEPA Drinking Water Standards and Health Advisories (USEPA 2018)

[b] As total trihalomethanes

µg/L = micrograms per liter

DF = dilution factor

DL = detection limit

J = estimated

LOD = limit of detection

LOQ = limit of quantitation

MCL = maximum contaminant level

MDL = method detection limit

PDB = passive diffusion bag

U = nondetect

UJ = estimated nondetect

USEPA = United States Environmental Protection Agency

VOC = volatile organic compound

TABLE 3-1
SUMMARY OF DETECTED VOC ANALYTES IN PDB AND CONVENTIONAL SAMPLES FROM MAY/JUNE 2021
FORMER ATLAS "D" MISSILE SITE 4

LOCATION IDENTIFICATION				FEW4-MW69-164												FEW4-MW71-96											
FIELD IDENTIFICATION[1]				FEW4-MW69-164-17						FEW4-MW69-164-PDB-17						FEW4-MW71-96-17						FEW4-MW71-96-PDB-17					
DATE COLLECTED				23-Jun-21						21-Jun-21						21-Jun-21						21-Jun-21					
	Maximum	Frequency	MCL[a]	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF
VOLATILE ORGANIC COMPOUNDS (µg/L)																											
1,1,2-Trichloroethane	12	4 / 52	5	0.500	U	0.200	0.500	1.00	1	0.500	UJ	0.200	0.500	1.00	1	1.00	UJ	0.400	1.00	2.00	2	1.00	UJ	0.400	1.00	2.00	2
1,1-Dichloroethene	3.5	3 / 52	7	0.500	U	0.250	0.500	1.00	1	0.500	UJ	0.250	0.500	1.00	1	1.00	UJ	0.500	1.00	2.00	2	1.00	UJ	0.500	1.00	2.00	2
Carbon tetrachloride	2.4	2 / 52	5	0.300	U	0.100	0.300	1.00	1	0.300	UJ	0.100	0.300	1.00	1	0.600	UJ	0.200	0.600	2.00	2	0.600	UJ	0.200	0.600	2.00	2
Chloroform	15	4 / 52	80[b]	0.300	U	0.0700	0.300	1.00	1	0.300	UJ	0.0700	0.300	1.00	1	0.600	UJ	0.140	0.600	2.00	2	0.600	UJ	0.140	0.600	2.00	2
cis-1,2-Dichloroethene	73	8 / 52	70	0.300	U	0.150	0.300	1.00	1	0.300	UJ	0.150	0.300	1.00	1	0.600	UJ	0.300	0.600	2.00	2	0.600	UJ	0.300	0.600	2.00	2
trans-1,2-Dichloroethene	2.6	3 / 52	100	0.300	U	0.150	0.300	1.00	1	0.300	UJ	0.150	0.300	1.00	1	0.600	UJ	0.300	0.600	2.00	2	0.600	UJ	0.300	0.600	2.00	2
Trichloroethene (TCE)	33000 J	37 / 52	5	0.300	U	0.150	0.300	10.0	1	4.70	J	0.150	0.300	1.00	1	820	J	3.00	6.00	20.0	20	910	J	3.00	6.00	20.0	20

Notes:

Shaded results exceed the MCL.

Bold analytes are site chemicals of concern.

The field duplicate sample FEW4-MW83-88-FD-17 was reported since the duplicate TCE concentration was greater than for the parent sample.

[1]Field Identification uses the following naming scheme: site identification-well identification-sample event-sample type.

[a] Based on USEPA Drinking Water Standards and Health Advisories (USEPA 2018)

[b] As total trihalomethanes

µg/L = micrograms per liter

DF = dilution factor

DL = detection limit

J = estimated

LOD = limit of detection

LOQ = limit of quantitation

MCL = maximum contaminant level

MDL = method detection limit

PDB = passive diffusion bag

U = nondetect

UJ = estimated nondetect

USEPA = United States Environmental Protection Agency

VOC = volatile organic compound

TABLE 3-1
SUMMARY OF DETECTED VOC ANALYTES IN PDB AND CONVENTIONAL SAMPLES FROM MAY/JUNE 2021
FORMER ATLAS "D" MISSILE SITE 4

LOCATION IDENTIFICATION				FEW4-MW73-218												FEW4-MW74-359											
FIELD IDENTIFICATION[1]				FEW4-MW73-218-17						FEW4-MW73-218-PDB-17						FEW4-MW74-359-17						FEW4-MW74-359-PDB-17					
DATE COLLECTED				23-Jun-21						23-Jun-21						22-Jun-21						21-Jun-21					
	Maximum	Frequency	MCL[a]	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF
VOLATILE ORGANIC COMPOUNDS (µg/L)																											
1,1,2-Trichloroethane	12	4 / 52	5	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1	0.500	UJ	0.200	0.500	1.00	1
1,1-Dichloroethene	3.5	3 / 52	7	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1	0.500	UJ	0.250	0.500	1.00	1
Carbon tetrachloride	2.4	2 / 52	5	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1	0.300	UJ	0.100	0.300	1.00	1
Chloroform	15	4 / 52	80[b]	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1	0.300	UJ	0.0700	0.300	1.00	1
cis-1,2-Dichloroethene	73	8 / 52	70	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	UJ	0.150	0.300	1.00	1
trans-1,2-Dichloroethene	2.6	3 / 52	100	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	UJ	0.150	0.300	1.00	1
Trichloroethene (TCE)	33000 J	37 / 52	5	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	UJ	0.150	0.300	1.00	1

Notes:

Shaded results exceed the MCL.

Bold analytes are site chemicals of concern.

The field duplicate sample FEW4-MW83-88-FD-17 was reported since the duplicate TCE concentration was greater than for the parent sample.

[1]Field Identification uses the following naming scheme: site identification-well identification-sample event-sample type.

[a] Based on USEPA Drinking Water Standards and Health Advisories (USEPA 2018)

[b] As total trihalomethanes

µg/L = micrograms per liter

DF = dilution factor

DL = detection limit

J = estimated

LOD = limit of detection

LOQ = limit of quantitation

MCL = maximum contaminant level

MDL = method detection limit

PDB = passive diffusion bag

U = nondetect

UJ = estimated nondetect

USEPA = United States Environmental Protection Agency

VOC = volatile organic compound

TABLE 3-1
SUMMARY OF DETECTED VOC ANALYTES IN PDB AND CONVENTIONAL SAMPLES FROM MAY/JUNE 2021
FORMER ATLAS "D" MISSILE SITE 4

LOCATION IDENTIFICATION				FEW4-MW80-128												FEW4-MW80-223											
FIELD IDENTIFICATION[1]				FEW4-MW80-128-17						FEW4-MW80-128-PDB-17						FEW4-MW80-223-17						FEW4-MW80-223-PDB-17					
DATE COLLECTED				23-Jun-21						23-Jun-21						23-Jun-21						23-Jun-21					
	Maximum	Frequency	MCL[a]	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF
VOLATILE ORGANIC COMPOUNDS (µg/L)																											
1,1,2-Trichloroethane	12	4 / 52	5	11.0		0.200	0.500	1.00	1	12.0		0.200	0.500	1.00	1	1.60		0.200	0.500	1.00	1	2.20		0.200	0.500	1.00	1
1,1-Dichloroethene	3.5	3 / 52	7	2.70		0.250	0.500	1.00	1	3.50		0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1	0.770		0.250	0.500	1.00	1
Carbon tetrachloride	2.4	2 / 52	5	2.40		0.100	0.300	1.00	1	1.90		0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1
Chloroform	15	4 / 52	80[b]	14.0		0.0700	0.300	1.00	1	15.0		0.0700	0.300	1.00	1	1.80		0.0700	0.300	1.00	1	1.80		0.0700	0.300	1.00	1
cis-1,2-Dichloroethene	73	8 / 52	70	68.0		0.150	0.300	1.00	1	73.0		0.150	0.300	1.00	1	23.0		0.150	0.300	1.00	1	21.0		0.150	0.300	1.00	1
trans-1,2-Dichloroethene	2.6	3 / 52	100	2.60		0.150	0.300	1.00	1	2.40		0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.540		0.150	0.300	1.00	1
Trichloroethene (TCE)	33000 J	37 / 52	5	33000	J	105	210	700	700	27000	J	105	210	700	700	7400	J	60.0	120	400	400	7700	J	60.0	120	400	400

Notes:

Shaded results exceed the MCL.

Bold analytes are site chemicals of concern.

The field duplicate sample FEW4-MW83-88-FD-17 was reported since the duplicate TCE concentration was greater than for the parent sample.

[1]Field Identification uses the following naming scheme: site identification-well identification-sample event-sample type.

[a] Based on USEPA Drinking Water Standards and Health Advisories (USEPA 2018)

[b] As total trihalomethanes

µg/L = micrograms per liter

DF = dilution factor

DL = detection limit

J = estimated

LOD = limit of detection

LOQ = limit of quantitation

MCL = maximum contaminant level

MDL = method detection limit

PDB = passive diffusion bag

U = nondetect

UJ = estimated nondetect

USEPA = United States Environmental Protection Agency

VOC = volatile organic compound

TABLE 3-1
SUMMARY OF DETECTED VOC ANALYTES IN PDB AND CONVENTIONAL SAMPLES FROM MAY/JUNE 2021
FORMER ATLAS "D" MISSILE SITE 4

LOCATION IDENTIFICATION				FEW4-MW81-207												FEW4-MW83-88											
FIELD IDENTIFICATION[1]				FEW4-MW81-207-17						FEW4-MW81-207-PDB-17						FEW4-MW83-88-FD-17						FEW4-MW83-88-PDB-17					
DATE COLLECTED				22-Jun-21						22-Jun-21						20-Jun-21						20-Jun-21					
	Maximum	Frequency	MCL[a]	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF
VOLATILE ORGANIC COMPOUNDS (µg/L)																											
1,1,2-Trichloroethane	12	4 / 52	5	2.50	UJ	1.00	2.50	5.00	5	2.50	UJ	1.00	2.50	5.00	5	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1
1,1-Dichloroethene	3.5	3 / 52	7	2.50	UJ	1.25	2.50	5.00	5	2.50	UJ	1.25	2.50	5.00	5	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1
Carbon tetrachloride	2.4	2 / 52	5	1.50	UJ	0.500	1.50	5.00	5	1.50	UJ	0.500	1.50	5.00	5	0.300	U	0.100	0.300	1	1	0.300	U	0.100	0.300	1.00	1
Chloroform	15	4 / 52	80[b]	1.50	UJ	0.350	1.50	5.00	5	1.50	UJ	0.350	1.50	5.00	5	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1
cis-1,2-Dichloroethene	73	8 / 52	70	1.50	UJ	0.750	1.50	5.00	5	1.50	UJ	0.750	1.50	5.00	5	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1
trans-1,2-Dichloroethene	2.6	3 / 52	100	1.50	UJ	0.750	1.50	5.00	5	1.50	UJ	0.750	1.50	5.00	5	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1
Trichloroethene (TCE)	33000 J	37 / 52	5	1800	J	7.50	15.0	50.0	50	1700		7.50	15.0	50.0	50	43.0		0.150	0.300	1.00	1	42.0		0.150	0.300	1.00	1

Notes:

Shaded results exceed the MCL.

Bold analytes are site chemicals of concern.

The field duplicate sample FEW4-MW83-88-FD-17 was reported since the duplicate TCE concentration was greater than for the parent sample.

[1]Field Identification uses the following naming scheme: site identification-well identification-sample event-sample type.

[a] Based on USEPA Drinking Water Standards and Health Advisories (USEPA 2018)

[b] As total trihalomethanes

µg/L = micrograms per liter

DF = dilution factor

DL = detection limit

J = estimated

LOD = limit of detection

LOQ = limit of quantitation

MCL = maximum contaminant level

MDL = method detection limit

PDB = passive diffusion bag

U = nondetect

UJ = estimated nondetect

USEPA = United States Environmental Protection Agency

VOC = volatile organic compound

TABLE 3-1
SUMMARY OF DETECTED VOC ANALYTES IN PDB AND CONVENTIONAL SAMPLES FROM MAY/JUNE 2021
FORMER ATLAS "D" MISSILE SITE 4

LOCATION IDENTIFICATION				FEW4-MW88-133												FEW4-MW92B-288											
FIELD IDENTIFICATION[1]				FEW4-MW88-133-17						FEW4-MW88-133-PDB-17						FEW4-MW92B-288-17						FEW4-MW92B-288-PDB-17					
DATE COLLECTED				20-Jun-21						20-Jun-21						21-Jun-21						21-Jun-21					
	Maximum	Frequency	MCL[a]	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF
VOLATILE ORGANIC COMPOUNDS (µg/L)																											
1,1,2-Trichloroethane	12	4 / 52	5	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1	0.500	UJ	0.200	0.500	1.00	1	0.500	UJ	0.200	0.500	1.00	1
1,1-Dichloroethene	3.5	3 / 52	7	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1	0.500	UJ	0.250	0.500	1.00	1	0.500	UJ	0.250	0.500	1.00	1
Carbon tetrachloride	2.4	2 / 52	5	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1	0.300	UJ	0.100	0.300	1.00	1	0.300	UJ	0.100	0.300	1.00	1
Chloroform	15	4 / 52	80[b]	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1	0.300	UJ	0.0700	0.300	1.00	1	0.300	UJ	0.0700	0.300	1.00	1
cis-1,2-Dichloroethene	73	8 / 52	70	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	UJ	0.150	0.300	1.00	1	0.300	UJ	0.150	0.300	1.00	1
trans-1,2-Dichloroethene	2.6	3 / 52	100	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	UJ	0.150	0.300	1.00	1	0.300	UJ	0.150	0.300	1.00	1
Trichloroethene (TCE)	33000 J	37 / 52	5	110	J	3.00	6.00	20.0	20	25.0		0.150	0.300	1.00	1	61.0	J	3.00	6.00	20.0	20	69.0	J	3.00	6.00	20.0	20

Notes:

Shaded results exceed the MCL.

Bold analytes are site chemicals of concern.

The field duplicate sample FEW4-MW83-88-FD-17 was reported since the duplicate TCE concentration was greater than for the parent sample.

[1]Field Identification uses the following naming scheme: site identification-well identification-sample event-sample type.

[a] Based on USEPA Drinking Water Standards and Health Advisories (USEPA 2018)

[b] As total trihalomethanes

µg/L = micrograms per liter

DF = dilution factor

DL = detection limit

J = estimated

LOD = limit of detection

LOQ = limit of quantitation

MCL = maximum contaminant level

MDL = method detection limit

PDB = passive diffusion bag

U = nondetect

UJ = estimated nondetect

USEPA = United States Environmental Protection Agency

VOC = volatile organic compound

TABLE 3-1
SUMMARY OF DETECTED VOC ANALYTES IN PDB AND CONVENTIONAL SAMPLES FROM MAY/JUNE 2021
FORMER ATLAS "D" MISSILE SITE 4

LOCATION IDENTIFICATION				FEW4-MW95-288												FEW4-MW97-266											
FIELD IDENTIFICATION[1]				FEW4-MW95-288-17						FEW4-MW95-288-PDB-17						FEW4-MW97-266-17						FEW4-MW97-266-PDB-17					
DATE COLLECTED				20-Jun-21						20-Jun-21						20-Jun-21						20-Jun-21					
	Maximum	Frequency	MCL[a]	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF
VOLATILE ORGANIC COMPOUNDS (µg/L)																											
1,1,2-Trichloroethane	12	4 / 52	5	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1
1,1-Dichloroethene	3.5	3 / 52	7	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1
Carbon tetrachloride	2.4	2 / 52	5	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1
Chloroform	15	4 / 52	80[b]	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1
cis-1,2-Dichloroethene	73	8 / 52	70	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1
trans-1,2-Dichloroethene	2.6	3 / 52	100	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1
Trichloroethene (TCE)	33000 J	37 / 52	5	14.0		0.150	0.300	1.00	1	2.30		0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1

Notes:

Shaded results exceed the MCL.

Bold analytes are site chemicals of concern.

The field duplicate sample FEW4-MW83-88-FD-17 was reported since the duplicate TCE concentration was greater than for the parent sample.

[1]Field Identification uses the following naming scheme: site identification-well identification-sample event-sample type.

[a] Based on USEPA Drinking Water Standards and Health Advisories (USEPA 2018)

[b] As total trihalomethanes

µg/L = micrograms per liter

DF = dilution factor

DL = detection limit

J = estimated

LOD = limit of detection

LOQ = limit of quantitation

MCL = maximum contaminant level

MDL = method detection limit

PDB = passive diffusion bag

U = nondetect

UJ = estimated nondetect

USEPA = United States Environmental Protection Agency

VOC = volatile organic compound

TABLE 3-1
SUMMARY OF DETECTED VOC ANALYTES IN PDB AND CONVENTIONAL SAMPLES FROM MAY/JUNE 2021
FORMER ATLAS "D" MISSILE SITE 4

LOCATION IDENTIFICATION				FEW4-MW101-238												FEW4-MW106-272											
FIELD IDENTIFICATION[1]				FEW4-MW101-238-17						FEW4-MW101-238-PDB-17						FEW4-MW106-272-17						FEW4-MW106-272-PDB-17					
DATE COLLECTED				23-Jun-21						23-Jun-21						19-Jun-21						19-Jun-21					
	Maximum	Frequency	MCL[a]	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF	Result	Flag	DL/MDL	LOD	LOQ	DF
VOLATILE ORGANIC COMPOUNDS (µg/L)																											
1,1,2-Trichloroethane	12	4 / 52	5	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1	0.500	U	0.200	0.500	1.00	1
1,1-Dichloroethene	3.5	3 / 52	7	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1	0.500	U	0.250	0.500	1.00	1
Carbon tetrachloride	2.4	2 / 52	5	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1	0.300	U	0.100	0.300	1.00	1
Chloroform	15	4 / 52	80[b]	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1	0.300	U	0.0700	0.300	1.00	1
cis-1,2-Dichloroethene	73	8 / 52	70	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	1.30		0.150	0.300	1.00	1	1.20		0.150	0.300	1.00	1
trans-1,2-Dichloroethene	2.6	3 / 52	100	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1
Trichloroethene (TCE)	33000 J	37 / 52	5	0.300	U	0.150	0.300	1.00	1	0.300	U	0.150	0.300	1.00	1	190	J	3.00	6.00	20.0	20	160		3.00	6.00	20.0	20

Notes:

Shaded results exceed the MCL.

Bold analytes are site chemicals of concern.

The field duplicate sample FEW4-MW83-88-FD-17 was reported since the duplicate TCE concentration was greater than for the parent sample.

[1]Field Identification uses the following naming scheme: site identification-well identification-sample event-sample type.

[a] Based on USEPA Drinking Water Standards and Health Advisories (USEPA 2018)

[b] As total trihalomethanes

µg/L = micrograms per liter

DF = dilution factor

DL = detection limit

J = estimated

LOD = limit of detection

LOQ = limit of quantitation

MCL = maximum contaminant level

MDL = method detection limit

PDB = passive diffusion bag

U = nondetect

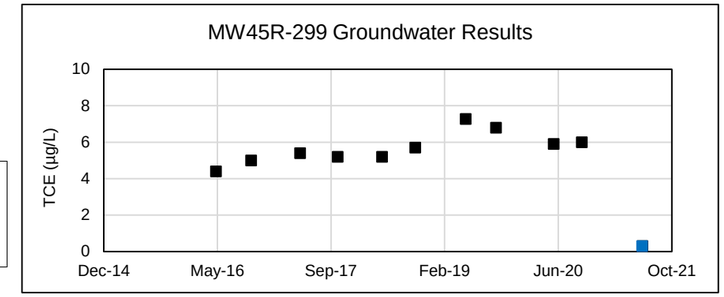
UJ = estimated nondetect

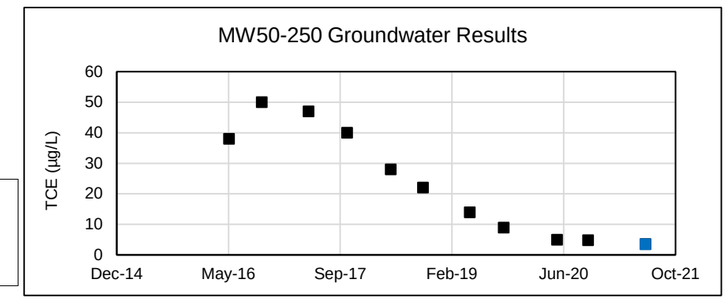
USEPA = United States Environmental Protection Agency

VOC = volatile organic compound

TABLE 3-2
LOW TCE CONCENTRATION PDB COMPARISON
FORMER ATLAS "D" MISSILE SITE 4

Sample Identification	Screen Formation	Sample Date	TCE Result (µg/L)	Relative Percent Difference of TCE Results (preceding event to following)	Average Relative Percent Difference Over Last 4 Events	Minimum TCE from Last 4 Events (µg/L)	Maximum TCE from Last 4 Events (µg/L)	TCE Range Over Last 4 Events (µg/L)
FEW4-MW45R-299-7	Ogallala	5/4/16	4.4					
FEW4-MW45R-299-8		10/5/16	5	14%				
FEW4-MW45R-299-9		5/9/17	5.4	8%				
FEW4-MW45R-299		10/21/17	5.2	4%				
FEW4-MW45R-299-11		5/4/18	5.2	0%				
FEW4-MW45R-299-12		9/28/18	5.7	10%				
FEW4-MW45R-299-13		5/8/19	7.28	28%				
FEW4-MW45R-299-14		9/18/19	6.8	7%	**12%**	5.9	7.28	1
FEW4-MW45R-252-15		5/29/20	5.9	13%				
FEW4-MW45R-299-16		9/30/20	6	2%				
FEW4-MW45R-299-17		6/23/21	0.3 U	95%				
FEW4-MW45R-299-PDB-17		6/23/21	0.3 U	**0%**				
FEW4-MW50-250-7	Ogallala	5/13/16	38					
FEW4-MW50-250-8		10/6/16	50	32%				
FEW4-MW50-250-9		5/4/17	47	6%				
FEW4-MW50-250		10/23/17	40 J	15%				
FEW4-MW50-250-11		5/6/18	28 J	30%				
FEW4-MW50-250-12		9/28/2018	22	21%				
FEW4-MW50-250-13		4/25/19	13.9	37%				
FEW4-MW50-250-14		9/24/19	8.9	36%	**30%**	4.8	13.9	9
FEW4-MW50-250-15		5/19/20	4.9	45%				
FEW4-MW50-250-16		10/5/20	4.8 J	2%				
FEW4-MW50-250-17		6/19/21	3.5	27%				
FEW4-MW50-250-PDB-17		6/19/21	3.5	**0%**				
FEW4-MW56-290-7	Ogallala	5/11/16	0.95 J					
FEW4-MW56-290-8		10/8/16	5.1	437%				
FEW4-MW56-290-9		5/5/17	3.5	31%				
FEW4-MW56-290		11/8/17	3	14%				
FEW4-MW56-290-11		5/17/18	3.6 J	20%				
FEW4-MW56-290-12		10/2/18	3.1	14%				
FEW4-MW56-290-13		4/28/19	1.49	52%				
FEW4-MW56-290-14		9/14/19	4.6	209%	**82%**	1.49	5.7	4
FEW4-MW56-290-15		5/18/20	3.8	17%				
FEW4-MW56-290-16		9/30/20	5.7	50%				
FEW4-MW56-290-17		5/19/21	5	12%				
FEW4-MW56-290-PDB-17		5/18/21	0.3 UJ	**94%**				





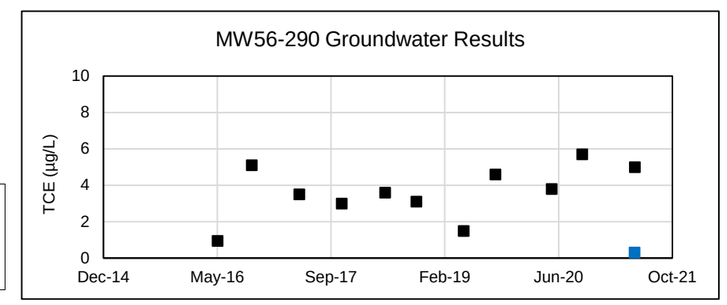
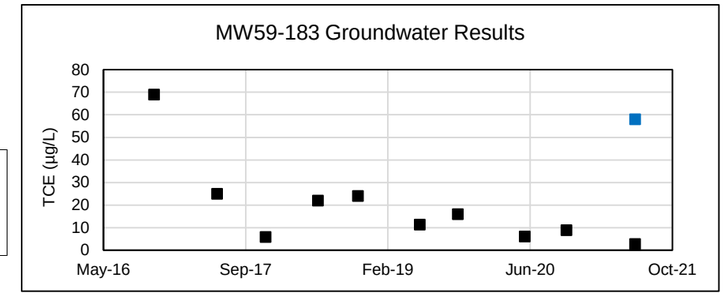
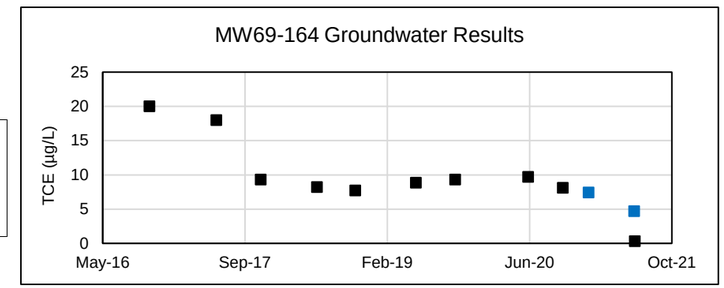


TABLE 3-2
LOW TCE CONCENTRATION PDB COMPARISON
FORMER ATLAS "D" MISSILE SITE 4

Sample Identification	Screen Formation	Sample Date	TCE Result (µg/L)	Relative Percent Difference of TCE Results (preceding event to following)	Average Relative Percent Difference Over Last 4 Events	Minimum TCE from Last 4 Events (µg/L)	Maximum TCE from Last 4 Events (µg/L)	TCE Range Over Last 4 Events (µg/L)
FEW4-MW59-183-8	White River	11/4/16	69 J		**51%**	6.1	16	10
FEW4-MW59-183-9		6/14/17	25	64%				
FEW4-MW59-183		12/1/17	5.9	76%				
FEW4-MW59-183-11		6/3/18	22	273%				
FEW4-MW59-183-12		10/22/18	24	9%				
FEW4-MW59-183-13		5/27/19	11.3	53%				
FEW4-MW59-183-14		10/8/19	16	42%				
FEW4-MW59-183-15		5/30/20	6.1	62%				
FEW4-MW59-183-16		10/24/20	8.9	46%				
FEW4-MW59-183-17		6/22/21	2.8	69%				
FEW4-MW59-183-PDB-17		6/22/21	58	**1971%**				
FEW4-MW69-164-8	White River	10/21/16	20		**10%**	8.1	9.7	2
FEW4-MW69-164-9		6/13/17	18	10%				
FEW4-MW69-164		11/16/17	9.3	48%				
FEW4-MW69-164-11		6/2/18	8.2	12%				
FEW4-MW69-164-12		10/14/18	7.7	6%				
FEW4-MW69-164-13		5/15/19	8.84	15%				
FEW4-MW69-164-14		9/30/19	9.3	5%				
FEW4-MW69-164-15		6/13/20	9.7	4%				
FEW4-MW69-164-16		10/13/20	8.1	16%				
FEW4-MW69-164-PDB		1/12/21	7.4	**9%**				
FEW4-MW69-164-17		6/23/21	0.3 U	96%				
FEW4-MW69-164-PDB-17		6/21/21	4.7	**1467%**				
FEW4-MW73-214-8	White River	10/17/16	160		**40%**	0.81	3.1	2
FEW4-MW73-218-9		6/3/17	34	79%				
FEW4-MW73-218		11/3/17	16	53%				
FEW4-MW73-218-11		5/15/18	8.3 J	48%				
FEW4-MW73-218-12		10/15/18	3.3 J	60%				
FEW4-MW73-218-13		5/9/19	2.16	35%				
FEW4-MW73-218-14		9/28/19	2.1	3%				
FEW4-MW73-218-15		6/10/20	3.1	48%				
FEW4-MW73-218-16		10/19/20	0.81 J	74%				
FEW4-MW73-218-17		6/23/21	0.3 U	63%				
FEW4-MW73-218-PDB-17		6/23/21	0.3 U	**0%**				





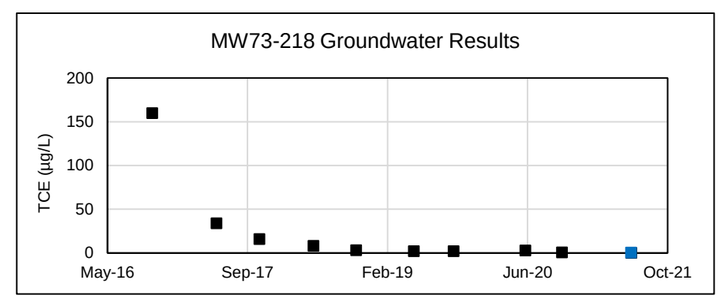
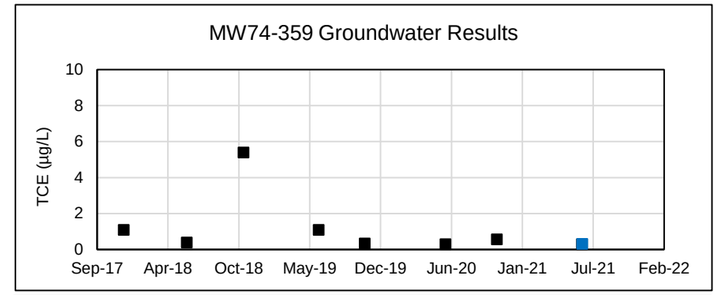
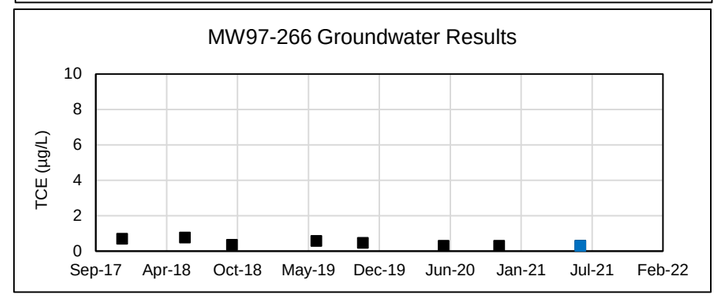


TABLE 3-2
LOW TCE CONCENTRATION PDB COMPARISON
FORMER ATLAS "D" MISSILE SITE 4

Sample Identification	Screen Formation	Sample Date	TCE Result (µg/L)	Relative Percent Difference of TCE Results (preceding event to following)	Average Relative Percent Difference Over Last 4 Events	Minimum TCE from Last 4 Events (µg/L)	Maximum TCE from Last 4 Events (µg/L)	TCE Range Over Last 4 Events (µg/L)
FEW4-MW74-359	White River	12/6/17	1.1 J		**63%**	0.3	1.09	1
FEW4-MW74-359-11		6/2/18	0.4 UJ	64%				
FEW4-MW74-359-12-1		11/9/18	5.4 J	1250%				
FEW4-MW74-359-13		6/9/19	1.09	80%				
FEW4-MW74-359-14		10/17/19	0.34 J	69%				
FEW4-MW74-359-15		6/1/20	0.3 U	12%				
FEW4-MW74-359-16		10/24/20	0.57 J	90%				
FEW4-MW74-359-17		6/22/21	0.3 U	47%				
FEW4-MW74-359-PDB-17		6/21/21	0.3 UJ	**0%**				
FEW4-MW97-266	White River	12/5/17	0.7 J		**30%**	0.3	0.57	0
FEW4-MW97-266-11		5/31/18	0.77 J	10%				
FEW4-MW97-266-12		10/11/18	0.35 J	55%				
FEW4-MW97-266-13		6/6/19	0.573 J	64%				
FEW4-MW97-266-14		10/15/19	0.46 J	20%				
FEW4-MW97-266-15		5/30/20	0.3 U	35%				
FEW4-MW97-266-16		11/3/20	0.3 U	0%				
FEW4-MW97-266-17		6/20/21	0.3 U	0%				
FEW4-MW97-266-PDB-17		6/20/21	0.3 U	**0%**				
FEW4-MW101-238	White River	11/18/17	26		**17%**	1.9	3.07	1
FEW4-MW101-238-11		6/1/18	9.3	64%				
FEW4-MW101-238-12		10/28/18	4	57%				
FEW4-MW101-238-13		5/22/19	3.07	23%				
FEW4-MW101-238-14		10/1/19	1.9	38%				
FEW4-MW101-238-15		6/23/20	2	5%				
FEW4-MW101-238-16		11/6/20	2	0%				
FEW4-MW101-238-PDB		1/12/21	2.2	**10%**				
FEW4-MW101-238-17		6/23/21	0.3 U	85%				
FEW4-MW101-238-PDB-17		6/23/21	0.3 U	0%				





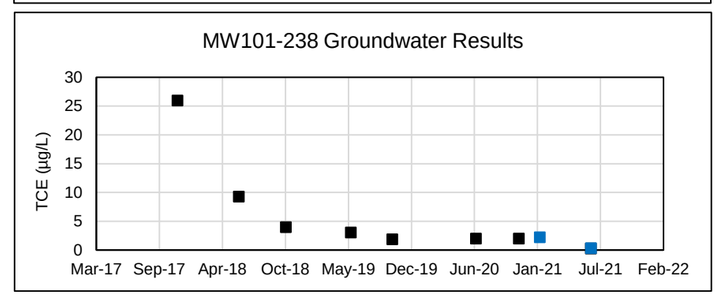


TABLE 3-2
LOW TCE CONCENTRATION PDB COMPARISON
FORMER ATLAS "D" MISSILE SITE 4

Sample Identification	Screen Formation	Sample Date	TCE Result (µg/L)	Relative Percent Difference of TCE Results (preceding event to following)	Average Relative Percent Difference Over Last 4 Events	Minimum TCE from Last 4 Events (µg/L)	Maximum TCE from Last 4 Events (µg/L)	TCE Range Over Last 4 Events (µg/L)
FEW4-TH5-205-7	Ogallala	5/13/16	0.4 U					
FEW4-TH5-205-8		10/8/16	0.4 U	0%				
FEW4-TH5-205-9		6/3/17	0.4 U	0%				
FEW4-TH5-205		11/4/17	0.4 U	0%				
FEW4-TH5-205-11		5/8/18	0.4 U	0%				
FEW4-TH5-205-12		10/13/18	0.4 U	0%				
FEW4-TH5-205-13		4/27/19	0.5 U	25%				
FEW4-TH5-205-14		9/25/19	0.5 U	0%	**16%**	0.3	0.5	0
FEW4-TH5-205-15		5/17/20	0.3 U	40%				
FEW4-TH5-205-16		10/13/2020	0.3 U	0%				
FEW4-TH5-205-17		6/19/21	0.3 U	0%				
FEW4-TH5-205-PDB-17		6/19/21	0.3 U	**0%**				

Notes:
Blue color shows PDB result
µg/L = microgram per liter
J = estimated
PDB = passive diffusion bag
TCE = trichloroethene

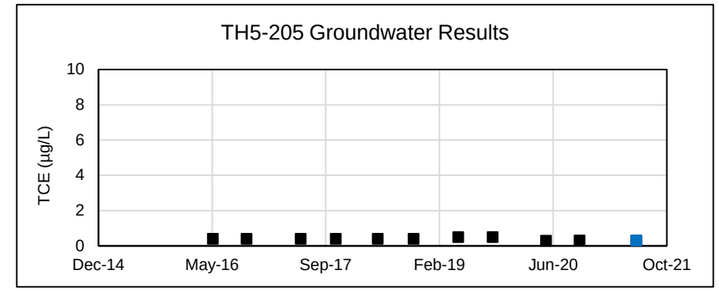
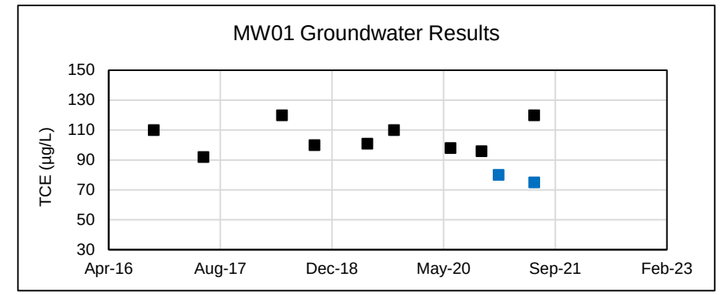
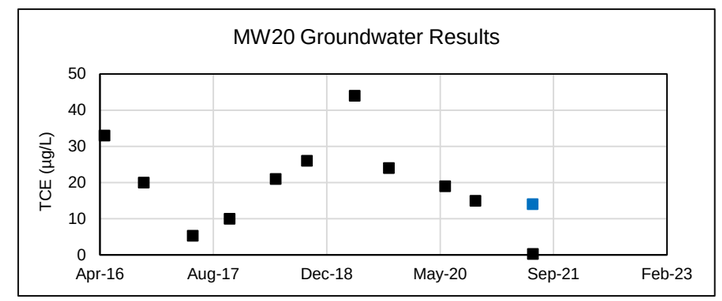


TABLE 3-3
MID-LEVEL TCE CONCENTRATION PDB COMPARISON
FORMER ATLAS "D" MISSILE SITE 4

Sample Identification	Screen Formation	Sample Date	TCE Result (µg/L)	Relative Percent Difference of TCE Results (preceding event to following)	Average Relative Percent Difference Over Last 4 Events	Minimum TCE from Last 4 Events (µg/L)	Maximum TCE from Last 4 Events (µg/L)	TCE Range Over Last 4 Events (µg/L)
FEW4-MW01-8	White River	10/20/16	110					
FEW4-MW01-9		5/31/17	92	16%				
FEW4-MW01-11		5/17/18	120	30%				
FEW4-MW01-12		10/10/18	100	17%				
FEW4-MW01-13		6/4/19	101	1%	**6%**	96	110	14
FEW4-MW01-14		10/1/19	110	9%				
FEW4-MW01-15		6/10/20	98	11%				
FEW4-MW01-16		10/27/20	96	2%				
FEW4-MW01-PDB		1/12/21	80	**17%**				
FEW4-MW01-17		6/20/21	120	25%				
FEW4-MW01-PDB-17		6/20/21	75	**38%**				
FEW4-MW20-7	White River	4/21/16	33 J					
FEW4-MW20-8		10/11/16	20	39%				
FEW4-MW20-9		5/15/17	5.3	74%				
FEW4-MW20		10/25/17	10 J	89%				
FEW4-MW20-11		5/16/18	21 J	110%				
FEW4-MW20-12		9/30/18	26	24%				
FEW4-MW20-13		4/29/19	44	69%				
FEW4-MW20-14		9/27/19	24	45%	**39%**	15	44	29
FEW4-MW20-15		6/1/20	19	21%				
FEW4-MW20-16		10/12/20	15	21%				
FEW4-MW20-17		6/23/21	0.3 U	98%				
FEW4-MW20-PDB-17		6/22/21	14	**4567%**				
FEW4-MW31-7	White River	5/3/16	15 J					
FEW4-MW31-8		10/6/16	15	0%				
FEW4-MW31-9		5/5/17	13	13%				
FEW4-MW31		10/23/17	12 J	8%				
FEW4-MW31-11		5/5/18	12 J	0%				
FEW4-MW31-12		9/29/18	17	42%				
FEW4-MW31-13		4/28/19	19.2	13%				
FEW4-MW31-14		9/18/19	23	20%	**13%**	19	27	8
FEW4-MW31-15		5/31/20	23 J	0%				
FEW4-MW31-16		10/6/20	27	17%				
FEW4-MW31-17		6/21/21	16	41%				
FEW4-MW31-PDB-17		6/21/21	27	**69%**				





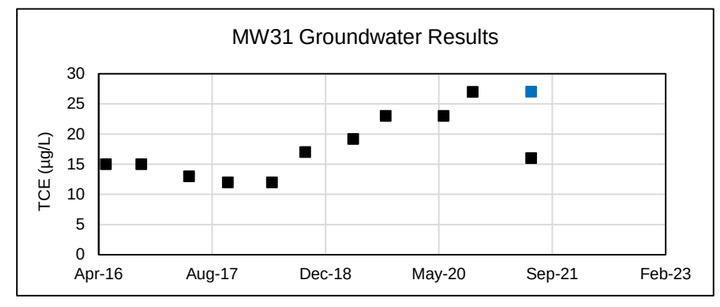
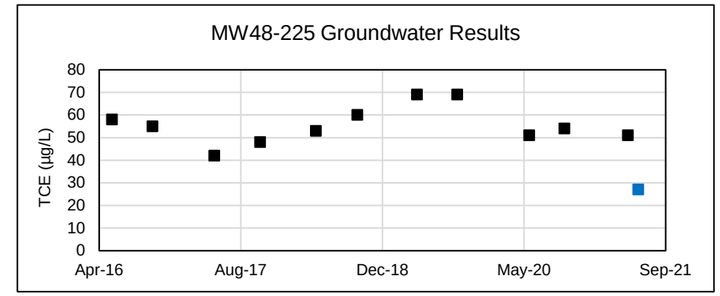
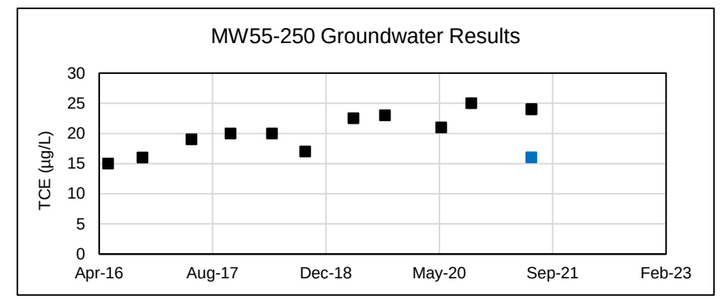


TABLE 3-3
MID-LEVEL TCE CONCENTRATION PDB COMPARISON
FORMER ATLAS "D" MISSILE SITE 4

Sample Identification	Screen Formation	Sample Date	TCE Result (µg/L)	Relative Percent Difference of TCE Results (preceding event to following)	Average Relative Percent Difference Over Last 4 Events	Minimum TCE from Last 4 Events (µg/L)	Maximum TCE from Last 4 Events (µg/L)	TCE Range Over Last 4 Events (µg/L)
FEW4-MW48-225-7	Ogallala	5/16/16	58					
FEW4-MW48-225-8		10/6/16	55	5%				
FEW4-MW48-225-9		5/12/17	42	24%				
FEW4-MW48-225		10/21/17	48	14%				
FEW4-MW48-225-11		5/6/18	53	10%				
FEW4-MW48-225-12		9/29/18	60	13%				
FEW4-MW48-225-13		4/28/19	69.1	15%				
FEW4-MW48-225-14		9/17/19	69	0%	**12%**	51	69	18
FEW4-MW48-225-15		5/28/20	51	26%				
FEW4-MW48-225-16		9/29/20	54	6%				
FEW4-MW48-225-17		5/11/21	51	6%				
FEW4-MW48-225-PDB-17		6/18/21	27	**47%**				
FEW4-MW55-250-7	Ogallala	5/10/16	15					
FEW4-MW55-250-8		10/9/16	16	7%				
FEW4-MW55-250-9		5/13/17	19	19%				
FEW4-MW55-250		11/1/17	20	5%				
FEW4-MW55-250-11		5/3/18	20 J	0%				
FEW4-MW55-250-12		9/26/18	17	15%				
FEW4-MW55-250-13		4/27/19	22.5	32%				
FEW4-MW55-250-14		9/13/19	23	2%	**16%**	21	25	4
FEW4-MW55-250-15		5/18/20	21	9%				
FEW4-MW55-250-16		9/28/20	25	19%				
FEW4-MW55-250-FD-17		6/20/21	24					
FEW4-MW55-250-17		6/20/21	24	4%				
FEW4-MW55-250-PDB-17		6/20/21	16	**33%**				
FEW4-MW56-203-7	Ogallala	5/11/16	14					
FEW4-MW56-203-8		10/7/16	16	14%				
FEW4-MW56-203-9		5/3/17	18	13%				
FEW4-MW56-203		10/26/17	17	6%				
FEW4-MW56-203-11		5/3/18	16 J	6%				
FEW4-MW56-203-12		9/27/18	14	13%				
FEW4-MW56-203-13		4/27/19	16.7	19%				
FEW4-MW56-203-14		9/14/19	19	14%	**14%**	16.7	21	4
FEW4-MW56-203-15		5/18/20	18	5%				
FEW4-MW56-203-16		9/29/20	21	17%				
FEW4-MW56-203-FD-17		6/19/21	20					
FEW4-MW56-203-17		6/19/21	20	5%				
FEW4-MW56-203-PDB-17		6/19/21	18	**10%**				





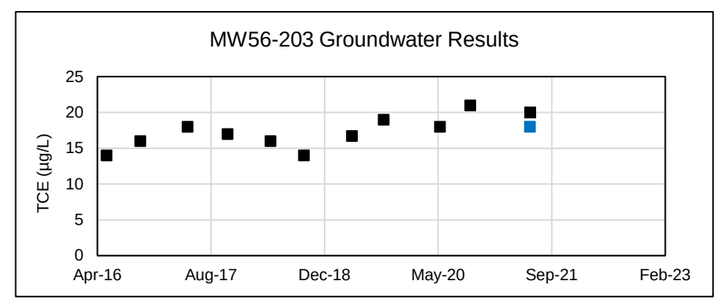
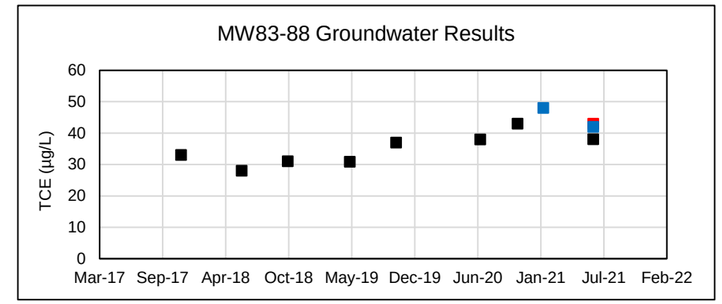
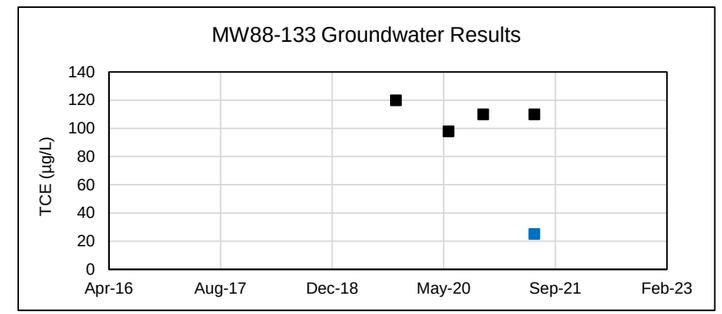


TABLE 3-3
MID-LEVEL TCE CONCENTRATION PDB COMPARISON
FORMER ATLAS "D" MISSILE SITE 4

Sample Identification	Screen Formation	Sample Date	TCE Result (µg/L)	Relative Percent Difference of TCE Results (preceding event to following)	Average Relative Percent Difference Over Last 4 Events	Minimum TCE from Last 4 Events (µg/L)	Maximum TCE from Last 4 Events (µg/L)	TCE Range Over Last 4 Events (µg/L)
FEW4-MW83-88	Ogallala - White River	11/19/17	33		**9%**	31	43	12
FEW4-MW83-88-11		5/30/18	28	15%				
FEW4-MW83-88-12		10/23/18	31	11%				
FEW4-MW83-88-13		5/8/19	31	0%				
FEW4-MW83-88-14		10/2/19	37	20%				
FEW4-MW83-88-15		6/26/20	38	3%				
FEW4-MW83-88-16		10/22/20	43	13%				
FEW4-MW83-88-PDB		1/12/21	48	**12%**				
FEW4-MW83-88-17		6/20/21	38					
FEW4-MW83-88-FD-17		6/20/21	43	12%				
FEW4-MW83-88-PDB-17		6/20/21	42	**2%**				
FEW4-MW88-133-14	White River	10/9/19	120		**15%**	98	120	22
FEW4-MW88-133-15		5/31/20	98	18%				
FEW4-MW88-133-16		11/3/20	110	12%				
FEW4-MW88-133-17		6/20/21	110 J	0%				
FEW4-MW88-133-PDB-17		6/20/21	25	**77%**				
FEW4-MW92B-288-16	Ogallala	12/2/20	58 J		**5%**	58	58	0
FEW4-MW92B-288-FD-17		6/21/21	58 J					
FEW4-MW92B-288-17		6/21/21	61 J	5%				
FEW4-MW92B-288-PDB-17		6/21/21	69 J	**13%**				

*The field duplicate sample FEW4-MW83-88-FD-17 was reported and used for comparison since the duplicate TCE concentration was greater than for the parent sample.





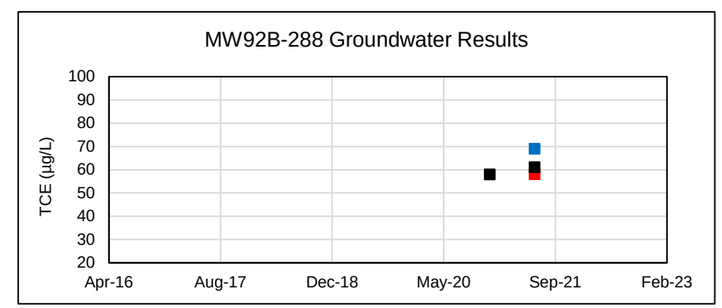


TABLE 3-3
MID-LEVEL TCE CONCENTRATION PDB COMPARISON
FORMER ATLAS "D" MISSILE SITE 4

Sample Identification	Screen Formation	Sample Date	TCE Result (µg/L)	Relative Percent Difference of TCE Results (preceding event to following)	Average Relative Percent Difference Over Last 4 Events	Minimum TCE from Last 4 Events (µg/L)	Maximum TCE from Last 4 Events (µg/L)	TCE Range Over Last 4 Events (µg/L)
FEW4-MW95-288	Ogallala	12/3/17	13					
FEW4-MW95-288-11		5/3/18	10 J	23%				
FEW4-MW95-288-12		9/26/18	16	60%				
FEW4-MW95-288-13		4/24/19	19.1	19%				
FEW4-MW95-288-14		9/12/19	22	15%	**23%**	15	22	7
FEW4-MW95-288-15		5/18/20	15	32%				
FEW4-MW95-288-16		9/28/20	19	27%				
FEW4-MW95-288-FD-17		6/20/21	14					
FEW4-MW95-288-17		6/20/21	14	26%				
FEW4-MW95-288-PDB-17		6/20/21	2.3	**84%**				

Notes:
Blue color shows PDB result
Red color shows duplicate result
µg/L = microgram per liter
J = estimated
PDB = passive diffusion bag
TCE = trichloroethene

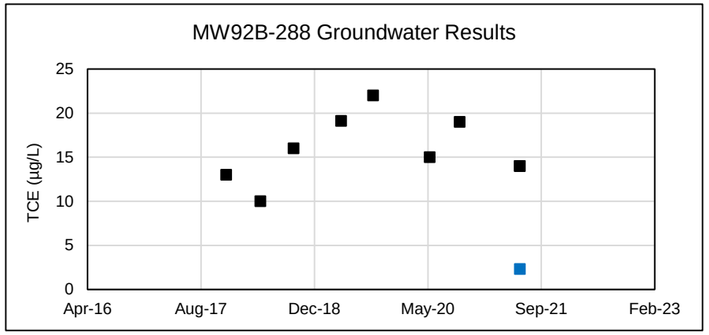
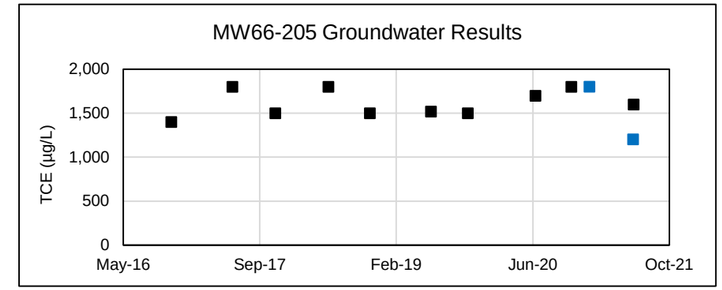
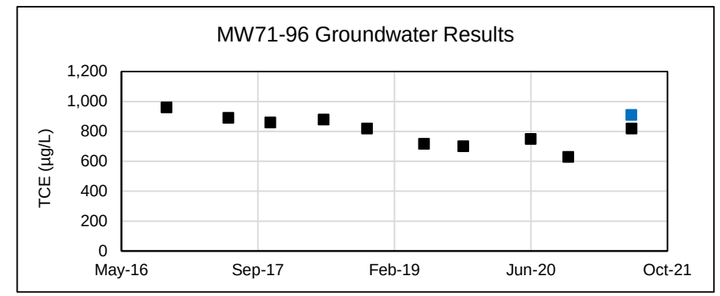


TABLE 3-4
HIGH TCE CONCENTRATION PDB COMPARISON
FORMER ATLAS "D" MISSILE SITE 4

Sample Identification	Screen Formation	Sample Date	TCE Result (µg/L)	Relative Percent Difference of TCE Results (preceding event to following)	Average Relative Percent Difference Over Last 4 Events	Minimum TCE from Last 4 Events (µg/L)	Maximum TCE from Last 4 Events (µg/L)	TCE Range Over Last 4 Events (µg/L)
FEW4-MW66-205-8	Ogallala/ White River	11/1/16	1400 J		**5%**	1500	1800	300
FEW4-MW66-205-9		6/13/17	1,800	29%				
FEW4-MW66-205		11/17/17	1,500	17%				
FEW4-MW66-205-11		5/30/18	1,800	20%				
FEW4-MW66-205-12		10/29/18	1,500	17%				
FEW4-MW66-205-13		6/10/19	1,520	1%				
FEW4-MW66-205-14		10/23/19	1,500	1%				
FEW4-MW66-205-15		6/27/20	1,700	13%				
FEW4-MW66-205-16		11/6/20	1,800	6%				
FEW4-MW66-205-PDB		1/12/21	1,800	**0%**				
FEW4-MW66-205-17		6/22/21	1600	11%				
FEW4-MW66-205-PDB-17		6/21/21	1200	**25%**				
FEW4-MW71-96-8	White River	10/22/16	960		**10%**	630	750	120
FEW4-MW71-96-9		6/6/17	890	7%				
FEW4-MW71-96		11/6/17	860	3%				
FEW4-MW71-96-11		5/21/18	880	2%				
FEW4-MW71-96-12		10/27/18	820	7%				
FEW4-MW71-96-13		5/23/19	717	13%				
FEW4-MW71-96-14		10/14/19	700	2%				
FEW4-MW71-96-15		6/17/20	750	7%				
FEW4-MW71-96-16		11/2/20	630	16%				
FEW4-MW71-96-17		6/21/21	820 J	30%				
FEW4-MW71-96-PDB-17		6/21/21	910 J	**11%**				
FEW4-MW80-128	White River	11/30/17	28000		**195%**	4100	35000	30900
FEW4-MW80-128-11		6/2/18	34000	21%				
FEW4-MW80-128-12		10/29/18	31000	9%				
FEW4-MW80-128-13		5/29/19	29800	4%				
FEW4-MW80-128-14		10/25/19	4100	86%				
FEW4-MW80-128-15		6/27/20	32000 J	680%				
FEW4-MW80-128-16		11/6/20	35000	9%				
FEW4-MW80-128-17		6/23/21	33000 J	6%				
FEW4-MW80-128-PDB-17		6/23/21	27000 J	**18%**				





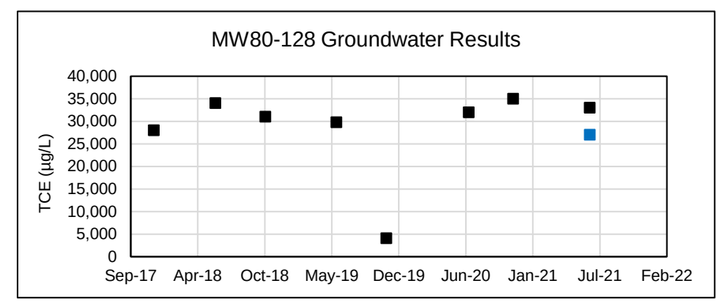
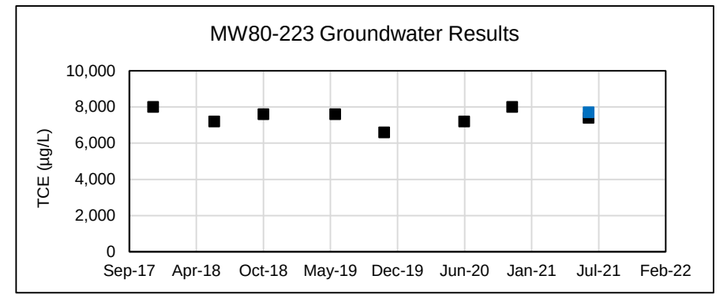
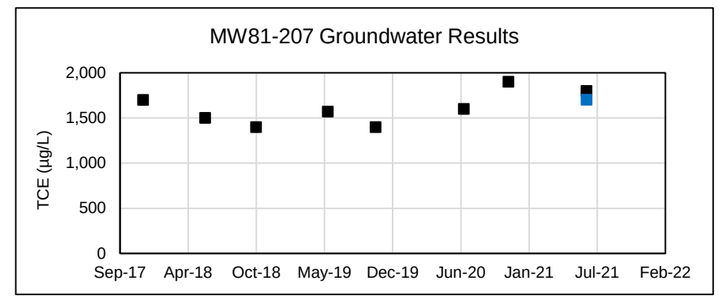


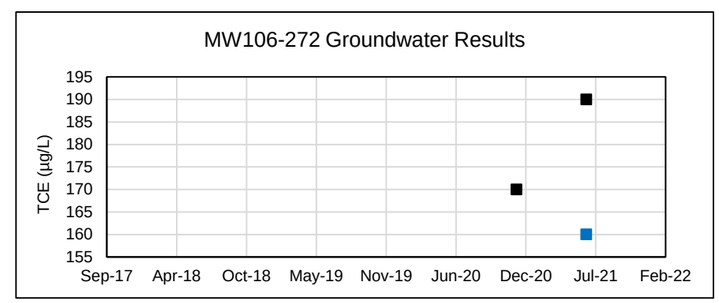
TABLE 3-4
HIGH TCE CONCENTRATION PDB COMPARISON
FORMER ATLAS "D" MISSILE SITE 4

Sample Identification	Screen Formation	Sample Date	TCE Result (µg/L)	Relative Percent Difference of TCE Results (preceding event to following)	Average Relative Percent Difference Over Last 4 Events	Minimum TCE from Last 4 Events (µg/L)	Maximum TCE from Last 4 Events (µg/L)	TCE Range Over Last 4 Events (µg/L)
FEW4-MW80-223	White River	12/2/17	8000		**8%**	6600	8000	1400
FEW4-MW80-223-11		6/2/18	7200	10%				
FEW4-MW80-223-12		10/27/18	7600	6%				
FEW4-MW80-223-13		5/29/19	7600	0%				
FEW4-MW80-223-14		10/22/19	6600	13%				
FEW4-MW80-223-15		6/17/20	7200	9%				
FEW4-MW80-223-16		11/7/20	8000	11%				
FEW4-MW80-223-17		6/23/21	7400 J	8%				
FEW4-MW80-223-PDB-17		6/23/21	7700 J	**4%**				
FEW4-MW81-207	White River	11/29/17	1700		**14%**	1400	1900	500
FEW4-MW81-207-11		5/30/18	1500	12%				
FEW4-MW81-207-12		10/26/18	1400	7%				
FEW4-MW81-207-13		5/25/19	1570	12%				
FEW4-MW81-207-14		10/12/19	1400	11%				
FEW4-MW81-207-15		6/27/20	1600	14%				
FEW4-MW81-207-16		11/5/20	1900	19%				
FEW4-MW81-207-17		6/22/21	1800 J	5%				
FEW4-MW81-207-PDB-17		6/22/21	1700	**6%**				
FEW4-MW106-272-16	Ogallala	12/1/20	170 J		**12%**	170	170	0
FEW4-MW106-272-17		6/19/21	190 J	12%				
FEW4-MW106-272-PDB-17		6/19/21	160	**16%**				

Notes:
Blue color shows PDB result
µg/L = microgram per liter
J = estimated
PDB = passive diffusion bag
TCE = trichloroethene







4.1 DATA REVIEW PROCESS

Analytical data from APPL of Clovis, California was reviewed and verified in accordance with the Final Site-Wide UFP-QAPP (URS 2020a), DoD Quality Systems Manual (United States Department of Defense 2019), and technical judgment.

4.2 ANALYTICAL RESULTS VERIFICATION

Data verification has been documented in Automated Data Review Detail Reports, and data validation has been documented in Data Validation Reports included in **Appendix D**.

4.3 OVERALL CHEMICAL DATA ASSESSMENT

The Data Validation Reports are included in **Appendix D**. There are no recommended limitations on use of the data collected. A complete data usability assessment for the Spring 2021 LTM Event 17 will be included in the Spring 2021 Long-Term Monitoring Event 17 Report.

5.1 CONCLUSIONS

5.1.1 Low TCE Concentrations

The RPD between each set of samples was 0 percent for all sample pairs except MW56-290, MW59-183, and MW69-164. PDB sample results were more conservative than conventional sampling results where they did not match exactly except at MW56-290. Sample results at MW56-290 were within 5 µg/L. Many of the wells used in this comparison are very deep and/or low producing wells that lead to challenges during purging for conventional sample methods. Use of PDB sampling suggests comparable results to conventional sampling methods and eliminates the sampling challenges faced during purging.

Overall, PDB sampling at low level TCE concentration wells is recommended to continue at all low TCE concentration wells. The data indicates PDB sampling to be acceptable for low level TCE wells at Site 4. Recommendations for additional PDB sample will be discussed in **Section 5.2**.

5.1.2 Mid-Level TCE Concentrations

PDB sample results were biased low compared to historical trends and the Spring 2021 conventional sample TCE result at MW01, MW55-250, MW88-133, and MW95-288. It is recommended that deployment of future PDBs at these three locations be placed in the upper portion of the screen closer to where the pump would be set to evaluate if these higher TCE concentrations could be captured by the PDBs by placing it at a different depth. Overall, PDB sampling at mid-level TCE concentration wells is recommended to continue.

5.1.3 High TCE Concentrations

The RPD between each set of PDB and conventional samples in the high TCE concentration data set was less than 25% for all sample pairs and generally matched historical trends. RPDs were 11% or less at three of the six wells. PDB and conventional sample results are similar at high concentrations, and PDB sampling is acceptable going forward.

5.2 RECOMMENDATIONS

Based on the result of the PDB study, it is recommended that sampling with PDBs proceed as follows for the Spring 2022 LTM sampling event:

- PDB sample will be limited to monitoring/test wells only. Any wells identified as industrial, stock, residential, or municipal will be sampled via conventional methods.
- Continue to sample approximately 10 percent of monitoring wells concurrently with both PDB and conventional sampling methods.

- Continued side by side evaluation of conventional and PDB results will be completed at monitoring wells MW01, MW56-290, MW66-205, MW88-133, and MW95-288 as discussed in **Section 3.1**, **Section 3.2**, and **Section 3.3**. It is recommended that during future monitoring events at these wells , the PDBs are to be placed in the upper portion of the screen closer to where the pump would typically be set, to evaluate if these higher TCE concentrations could be captured by the PDBs.

Table 5-1 includes the recommended long-term monitoring sampling plan for PDBs using the guidelines proposed above. Sampling at surface water/sediment locations, vapor ports, and residential wells will continue to be sampled in accordance with the Long-Term Monitoring and Performance Monitoring UFP-QAPP Addendum 1 (URS 2020b). The sampling frequency and quantity will remain the same as proposed in Long-Term Monitoring and Performance Monitoring UFP-QAPP (URS 2020b).

When concentrations are very low it is difficult to use an RPD to indicate if PDB and conventional sample results are similar because changes in even 5 µg/L can indicate a large RPD. During evaluations of the data, the PDB results will be compared to historical ranges for conventional sampling to determine if the sample methods continue to be comparable. If PDB sample results are compared to historical ranges and found to be outside of the historical range, additional side by side evaluation of conventional and PDB results will be completed. The PDBs may be recommended for placement in a different portion of the screen to evaluate if higher TCE concentrations could be captured by the PDBs.

TABLE 5-1
RECOMMENDED LONG-TERM MONITORING SAMPLING PLAN WITH PDBs
FORMER ATLAS "D" MISSILE SITE 4

Location Identification	Wells that De-water during Purging	Wells that did not Stabalize	Really Deep Wells that Cause Pump Issues	Conventional Purging Equipment	Well Type	PDB VOCs (8260C)	Conventional VOCs (8260C)	VOCs (TO-15)	MEE (RSK-175)	Chloride/Sulfate (9056A)	Alkalinity (2320B)	TAL Metals (6020B)	Mercury (7470A)	$KMnO_4$ Present	Comments
Groundwater Samples															
Belvoir No. 1	-	-	-	DSP	Stock		X								
Belvoir No. 2	-	-	-	DSP	Stock		X								
Belvoir No. 3	-	-	-	DSP	Stock		X								
Belvoir-Borie No. 1	-	-	-	Artisian	Stock/Pond		X								
Borie No. 1	-	-	-	DSP	Municipal		X								
Cow Camp No. 1	-	-	-	DSP	Stock		X								
Duck Creek	-	-	-	DSP	Stock		X								
Dyno-Nobel No. 8	-	-	-	DSP	Industrial		X								
Dyno-Nobel No. 16	-	-	-	DSP	Industrial		X								
Dyno-Nobel No. 22	-	-	-	DSP	Industrial		X								
Dyno-Nobel No. 23	-	-	-	DSP	Industrial		X								
Dyno-Nobel No. 24	-	-	-	DSP	Industrial		X								
Dyno-Nobel No. 25	-	-	-	DSP	Industrial		X								
Dyno-Nobel No. 26	-	-	-	DSP	Industrial		X								
Dyno-Nobel No. 27	-	-	-	DSP	Industrial		X								
East Strip	-	-	-	DSP	Stock		X								
Elkar No. 7	-	-	-	DSP	Municipal		X								
Finnerty No. 2	-	-	-	DSP	Municipal		X								
Johnson No. 1	-	-	-	DSP	Stock		X								
Kennedy No. 1	-	-	-	Artisian	Municipal		X								
King No. 3	-	-	-	DSP	Stock		X								
King No. 20	-	-	-	DSP	Stock		X								
Rees Bros. No. 5	-	-	-	DSP	Stock		X								
Saler No. 4	-	-	-	NS	Stock		X								
TH-2	-	-	X	Bladder Pump	Monitoring/Test	X									
TH5-97	-			Bladder Pump	Monitoring/Test	X									
TH5-205	-	-	-	Bladder Pump	Monitoring/Test	X									
TH6-197	-	-	-	Bladder Pump	Monitoring/Test	X									
TH6-234	-	-	-	Bladder Pump	Monitoring/Test	X									
TH6-287	-	-	X	Bladder Pump	Monitoring/Test	X									
TH9-125	-	-	-	Bladder Pump	Monitoring/Test	X									
Weber No. 1	-	-	-	DSP	Municipal		X								

TABLE 5-1
RECOMMENDED LONG-TERM MONITORING SAMPLING PLAN WITH PDBs
FORMER ATLAS "D" MISSILE SITE 4

Location Identification	Wells that De-water during Purging	Wells that did not Stabalize	Really Deep Wells that Cause Pump Issues	Conventional Purging Equipment	Well Type	PDB VOCs (8260C)	Conventional VOCs (8260C)	VOCs (TO-15)	MEE (RSK-175)	Chloride/Sulfate (9056A)	Alkalinity (2320B)	TAL Metals (6020B)	Mercury (7470A)	$KMnO_4$ Present	Comments
West Triangle	-	-	-	DSP	Stock		X								
MW01	-	-	-	Redi-Flo II	Monitoring	X	X								Set PDB in upper half of screen during deployment.
MW03	-	-	-	Redi-Flo II	Monitoring		X								KMnO4 Pilot Study Area
MW04	-	-	-	Redi-Flo II	Monitoring		X								ZVI Pilot Study Area
MW05	-	-	X	Redi-Flo II	Monitoring	X									
MW06	-	-	-	Redi-Flo II	Monitoring	X									
MW07	-	-	-	Redi-Flo II	Monitoring	X									
MW10	-	-	-	Redi-Flo II	Monitoring	X									
MW12R	-	-	-	NS	Monitoring	X									
MW13	-	-	-	Redi-Flo II	Monitoring	X									
MW15	-	-	-	Redi-Flo II	Monitoring	X									
MW19	X	-	-	Redi-Flo II	Monitoring	X									
MW20	-	X	X	Redi-Flo II	Monitoring	X									
MW21	-	-	-	Redi-Flo II	Monitoring	X									
MW22	-	X	-	Disposible Bailer	Monitoring	X									
MW24	X	-	-	Redi-Flo II	Monitoring	X									
MW25		-	-	Redi-Flo II	Monitoring	X									
MW26	X	-	-	Redi-Flo II	Monitoring	X									
MW27	-	-	-	Redi-Flo II	Monitoring	X									
MW28	-	-	-	Redi-Flo II	Monitoring	X									
MW29	-	-	-	Redi-Flo II	Monitoring	X									
MW30	X	-	-	Redi-Flo II	Monitoring	X									
MW31	-	-	-	Redi-Flo II	Monitoring	X									
MW32	-	-	-	Redi-Flo II	Monitoring	X									
MW33	-	-	-	Redi-Flo II	Monitoring	X									
MW34	-	X	-	Disposible Bailer	Monitoring	X									
MW36	-	-	-	Redi-Flo II	Monitoring	X									
MW37	-	-	-	Redi-Flo II	Monitoring	X									
MW38	-	-	X	Bladder Pump	Monitoring	X	X								
MW39	-	-	-	Redi-Flo II	Monitoring	X									
MW40	X	-	-	Redi-Flo II	Monitoring	X									
MW43R-242	-	-	-	Redi-Flo II	Monitoring	X									
MW43R-262	-	-	X	Redi-Flo II	Monitoring	X									

TABLE 5-1
RECOMMENDED LONG-TERM MONITORING SAMPLING PLAN WITH PDBs
FORMER ATLAS "D" MISSILE SITE 4

Location Identification	Wells that De-water during Purging	Wells that did not Stabalize	Really Deep Wells that Cause Pump Issues	Conventional Purging Equipment	Well Type	PDB VOCs (8260C)	Conventional VOCs (8260C)	VOCs (TO-15)	MEE (RSK-175)	Chloride/Sulfate (9056A)	Alkalinity (2320B)	TAL Metals (6020B)	Mercury (7470A)	$KMnO_4$ Present	Comments
MW44R-207	-	-	-	Redi-Flo II	Monitoring		X								pilot study area
MW44R-242	-	-	-	Redi-Flo II	Monitoring		X								pilot study area
MW44R-308	-	-	X	Redi-Flo II	Monitoring		X								pilot study area
MW45R-252	-	-	X	Redi-Flo II	Monitoring		X								PTI pilot study PM
MW45R-299	-	-	X	Redi-Flo II	Monitoring	X	X								PTI pilot study PM
MW45R-331	-	X	X	Redi-Flo II	Monitoring		X								PTI pilot study PM
MW46-300	-	-	X	Redi-Flo II	Monitoring		X								pilot study area
MW46-334	-	-	X	Redi-Flo II	Monitoring		X								pilot study area
MW46-389	-	X	X	Bladder Pump	Monitoring		X								pilot study area
MW47-239	-	-	-	Redi-Flo II	Monitoring		X								PTI pilot study PM
MW47-259	-	-	X	Redi-Flo II	Monitoring		X								PTI pilot study PM
MW47-290	-	-	X	Redi-Flo II	Monitoring		X								PTI pilot study PM
MW48-225	-	-	-	Redi-Flo II	Monitoring		X								PTI pilot study PM
MW48-254	-	-	X	Redi-Flo II	Monitoring		X								PTI pilot study PM
MW48-284	-	-	X	Redi-Flo II	Monitoring		X								PTI pilot study PM
MW49-286	-	-	X	Redi-Flo II	Monitoring		X								pilot study area
MW49-311	-	-	X	Redi-Flo II	Monitoring		X								pilot study area
MW49-333	-	-	X	Redi-Flo II	Monitoring		X								pilot study area
MW50-250	-	-	X	Redi-Flo II	Monitoring	X									
MW50-290	-	-	X	Redi-Flo II	Monitoring	X									
MW50-318	X	X	X	Bladder Pump	Monitoring	X									
MW51-80	X	X	-	Redi-Flo II	Monitoring	X									
MW51-110	X	X	-	Redi-Flo II	Monitoring	X									
MW51-210	X	X	-	Redi-Flo II	Monitoring	X	X								
MW52-25	-	-	-	Redi-Flo II	Monitoring	X									
MW52-59	-	-	-	Redi-Flo II	Monitoring	X									
MW52-140	X	X	-	Redi-Flo II	Monitoring	X									
MW53-95	X	X	-	Redi-Flo II	Monitoring	X									
MW53-145	X	X	-	Redi-Flo II	Monitoring	X									
MW53-177	X	X	-	Redi-Flo II	Monitoring	X									
MW54-222	-	-	-	Redi-Flo II	Monitoring	X									
MW54-245	-	-	-	Redi-Flo II	Monitoring	X									
MW54-284	X	X	X	Redi-Flo II	Monitoring	X									

TABLE 5-1
RECOMMENDED LONG-TERM MONITORING SAMPLING PLAN WITH PDBs
FORMER ATLAS "D" MISSILE SITE 4

Location Identification	Wells that De-water during Purging	Wells that did not Stabalize	Really Deep Wells that Cause Pump Issues	Conventional Purging Equipment	Well Type	PDB VOCs (8260C)	Conventional VOCs (8260C)	VOCs (TO-15)	MEE (RSK-175)	Chloride/Sulfate (9056A)	Alkalinity (2320B)	TAL Metals (6020B)	Mercury (7470A)	$KMnO_4$ Present	Comments
MW54B-164				NS	Monitoring		X								DGI well
MW54B-199				NS	Monitoring		X								DGI well
MW55-250	-	-	-	Redi-Flo II	Monitoring	X	X								
MW55-280	-	-	X	Redi-Flo II	Monitoring	X									
MW55-320	X	X	X	Redi-Flo II	Monitoring	X									
MW56-203	-	-	-	Redi-Flo II	Monitoring	X									
MW56-250	-	-	X	Redi-Flo II	Monitoring	X									
MW56-290	X	X	X	Redi-Flo II	Monitoring	X	X								Set PDB in upper half of screen during deployment.
MW57-211	-	-	-	Redi-Flo II	Monitoring	X									
MW57-240	-	-	-	Redi-Flo II	Monitoring	X									
MW57-276	-	-	-	Bladder Pump	Monitoring	X									
MW58-124	-	-	-	Redi-Flo II	Monitoring	X									
MW58-169	X	X	-	Redi-Flo II, disposible bailer	Monitoring	X									
MW58-213	X	X	-	Redi-Flo II, disposible bailer	Monitoring	X									
MW59-74	-	X	-	Disposible Bailer	Monitoring (P)		X					X	X		ISCO/ISCR Pilot Study PM
MW59-125	-	X	-	Redi-Flo II	Monitoring (P)		X					X	X		ISCO/ISCR Pilot Study PM
MW59-183	-	X	-	Redi-Flo II	Monitoring	X	X								ISCO/ISCR Pilot Study area
MW60-90	-	X	-	Disposible Bailer	Monitoring (P)		X		X	X	X				ISCO/ISCR Pilot Study PM
MW60-146	-	X	-	Disposible Bailer	Monitoring (P)		X		X	X	X				ISCO/ISCR Pilot Study PM
MW60-233	-	-	-	Redi-Flo II	Monitoring		X								ISCO/ISCR Pilot Study area
MW61-80	-	X	-	Disposible Bailer	Monitoring (P)		X		X	X	X				ISCO/ISCR Pilot Study PM
MW61-107	-	-	-	Bladder Pump	Monitoring (P)		X		X	X	X				ISCO/ISCR Pilot Study PM
MW61-221	-	-	-	Redi-Flo II	Monitoring		X								ISCO/ISCR Pilot Study area
MW62-84	-	X	-	Disposible Bailer	Monitoring	X									
MW62-158	-	-	-	Redi-Flo II	Monitoring	X									
MW62-252	X	X	X	Redi-Flo II	Monitoring	X									
MW63-79	-	-	-	Redi-Flo II	Monitoring	X									
MW63-143	-	-	-	Redi-Flo II	Monitoring	X									
MW63-223	-	-	-	Redi-Flo II	Monitoring	X									
MW64-68	-	X	-	Disposible Bailer	Monitoring	X									
MW64-122	X	X	-	Redi-Flo II	Monitoring	X									
MW65-88	-	X	-	Disposible Bailer	Monitoring	X									
MW65-142	-	-	-	Redi-Flo II	Monitoring	X									

TABLE 5-1
RECOMMENDED LONG-TERM MONITORING SAMPLING PLAN WITH PDBs
FORMER ATLAS "D" MISSILE SITE 4

Location Identification	Wells that De-water during Purging	Wells that did not Stabalize	Really Deep Wells that Cause Pump Issues	Conventional Purging Equipment	Well Type	PDB VOCs (8260C)	Conventional VOCs (8260C)	VOCs (TO-15)	MEE (RSK-175)	Chloride/Sulfate (9056A)	Alkalinity (2320B)	TAL Metals (6020B)	Mercury (7470A)	$KMnO_4$ Present	Comments
MW65-208	X	X	-	Redi-Flo II, disposible bailer	Monitoring	X									
MW66-94	X	X	-	Redi-Flo II	Monitoring	X									
MW66-158	X	X	-	Redi-Flo II	Monitoring	X									
MW66-205	X	X	-	Redi-Flo II	Monitoring	X									Set PDB in upper half of screen during deployment.
MW67-64	-	-	-	Redi-Flo II	Monitoring	X									
MW67-97	X	X	-	Redi-Flo II	Monitoring	X									
MW67-233	-	-	-	Redi-Flo II	Monitoring	X									
MW68-80	-	X	-	Disposible Bailer	Monitoring	X									
MW68-140	X	X	-	Redi-Flo II	Monitoring	X									
MW68-185	X	X	-	Redi-Flo II	Monitoring	X									
MW69-64	X	X	-	Redi-Flo II	Monitoring	X									
MW69-99	X	X	-	Redi-Flo II	Monitoring	X									
MW69-164	X	X	-	Redi-Flo II	Monitoring	X									
MW70-100	-	X	-	Disposible Bailer	Monitoring	X									
MW70-142	X	X	-	Redi-Flo II	Monitoring	X									
MW70-244	X	X	-	Redi-Flo II	Monitoring	X									
MW71-96	-	-	-	Redi-Flo II	Monitoring	X									
MW71-128	X	X	-	Redi-Flo II	Monitoring	X									
MW71-205	X	X	-	Redi-Flo II	Monitoring	X	X								
MW72-130	-	X	-	Disposible Bailer	Monitoring	X									
MW72-158	-	X	-	Disposible Bailer	Monitoring	X									
MW72-205	X	X	-	Redi-Flo II, disposible bailer	Monitoring	X									
MW73-137	-	-	-	Redi-Flo II	Monitoring	X									
MW73-218	-	-	-	Redi-Flo II	Monitoring	X									
MW73-243	X	X	-	Redi-Flo II	Monitoring	X									
MW74-104	-	X	-	Redi-Flo II, disposible bailer	Monitoring (P)		X					X	X		ISCO/ISCR Pilot Study PM
MW74-263	X	X	X	Redi-Flo II	Monitoring		X								ISCO/ISCR Pilot Study area
MW74-359	X	X	X	Redi-Flo II, disposible bailer	Monitoring	X	X								ISCO/ISCR Pilot Study area
MW75-93	-	-	-	Bladder Pump	Monitoring (P)		X		X	X	X				ISCO/ISCR Pilot Study PM
MW75-308	-	-	X	Redi-Flo II	Monitoring		X								ISCO/ISCR Pilot Study area
MW75-377	-	-	X	Bladder Pump	Monitoring		X								ISCO/ISCR Pilot Study area
MW76-87	-	X	-	Disposible Bailer	Monitoring	X									
MW76-123	X	X	-	Redi-Flo II, disposible bailer	Monitoring	X									

TABLE 5-1
RECOMMENDED LONG-TERM MONITORING SAMPLING PLAN WITH PDBs
FORMER ATLAS "D" MISSILE SITE 4

Location Identification	Wells that De-water during Purging	Wells that did not Stabalize	Really Deep Wells that Cause Pump Issues	Conventional Purging Equipment	Well Type	PDB VOCs (8260C)	Conventional VOCs (8260C)	VOCs (TO-15)	MEE (RSK-175)	Chloride/Sulfate (9056A)	Alkalinity (2320B)	TAL Metals (6020B)	Mercury (7470A)	$KMnO_4$ Present	Comments
MW76-255	-	X	X	Disposible Bailer	Monitoring	X									
MW77-40	X	X	-	Redi-Flo II	Monitoring	X									
MW77-129	X	X	-	Redi-Flo II	Monitoring	X									
MW77-255	-	-	X	Redi-Flo II	Monitoring	X									
MW78-112	-	X	-	Disposible Bailer	Monitoring	X	X								
MW78-159	X	X	-	Redi-Flo II	Monitoring	X									
MW78-265	-	X	X	Redi-Flo II	Monitoring	X									
MW79-127	-	-	-	Redi-Flo II	Monitoring	X									
MW79-193	X	X	-	Redi-Flo II	Monitoring	X	X								
MW79-326	-	X	X	Redi-Flo II, disposible bailer	Monitoring	X									
MW80-128	X	X	-	Redi-Flo II	Monitoring	X									KMnO4 Pilot Study Area
MW80-223	-	-	-	Redi-Flo II	Monitoring	X									KMnO4 Pilot Study Area
MW80-284	-	-	X	Redi-Flo II	Monitoring		X								KMnO4 Pilot Study Area
MW81-100	X	X	-	Redi-Flo II	Monitoring		X								ZVI Pilot Study Area
MW81-207	-	-	-	Redi-Flo II	Monitoring	X									ZVI Pilot Study Area
MW81-279	-	-	X	Redi-Flo II	Monitoring		X								ZVI Pilot Study Area
MW82-83	-	-	-	Redi-Flo II	Monitoring	X									
MW82-132	-	-	-	Redi-Flo II	Monitoring	X									
MW82-161	-	-	-	Redi-Flo II	Monitoring	X									
MW83-88	X	X	-	Redi-Flo II	Monitoring	X									
MW83-129	-	-	-	Redi-Flo II	Monitoring	X									
MW83-271	-	-	X	Redi-Flo II	Monitoring	X									
MW84-99	-	X	-	Disposible Bailer	Monitoring	X									
MW84-258	-	X	X	Redi-Flo II	Monitoring	X									
MW84-298	-	-	X	Redi-Flo II	Monitoring	X									
MW84B-143	X	X	-	Redi-Flo II	Monitoring	X									
MW84B-193	X	X	-	Redi-Flo II	Monitoring	X									
MW84B-356	-	X	X	Redi-Flo II	Monitoring	X									
MW85-92	X	X	-	Redi-Flo II	Monitoring	X									
MW85-151	X	X	-	Redi-Flo II	Monitoring	X									
MW85-205	X	X	-	Redi-Flo II	Monitoring	X									
MW86-53	-	-	-	Redi-Flo II	Monitoring	X									
MW86-199	X	X	-	Redi-Flo II	Monitoring	X									

TABLE 5-1
RECOMMENDED LONG-TERM MONITORING SAMPLING PLAN WITH PDBs
FORMER ATLAS "D" MISSILE SITE 4

Location Identification	Wells that De-water during Purging	Wells that did not Stabalize	Really Deep Wells that Cause Pump Issues	Conventional Purging Equipment	Well Type	PDB VOCs (8260C)	Conventional VOCs (8260C)	VOCs (TO-15)	MEE (RSK-175)	Chloride/Sulfate (9056A)	Alkalinity (2320B)	TAL Metals (6020B)	Mercury (7470A)	$KMnO_4$ Present	Comments
MW86-353	-	-	X	Bladder Pump	Monitoring	X	X								
MW87-82	-	-		Redi-Flo II	Monitoring	X									
MW87-123	X	X	-	Redi-Flo II, disposible bailer	Monitoring	X									
MW87-205	X	X	-	Redi-Flo II	Monitoring	X									
MW88-133	-	-	-	Redi-Flo II	Monitoring	X	X								Set PDB in upper half of screen during deployment.
MW88-183	X	X	-	Redi-Flo II	Monitoring	X									
MW88-253	X	X	X	Redi-Flo II	Monitoring	X									
MW89-178	-	X	-	Disposible Bailer	Monitoring	X	X								
MW89-207	X	X	-	Redi-Flo II	Monitoring	X									
MW89-250	-	X	X	Redi-Flo II	Monitoring	X									
MW90-198	-	-	-	NS	Monitoring	X									
MW90-243	-	X	-	Disposible Bailer	Monitoring	X									
MW90-292	-	X	X	Redi-Flo II, disposible bailer	Monitoring	X									
MW91-195	-	-	-	Redi-Flo II	Monitoring	X									
MW91-248	X	X	-	Redi-Flo II	Monitoring	X									
MW91-313	-	X	X	Bladder Pump	Monitoring	X									
MW92-310				NS	Monitoring	X									
MW92-365	-	X	X	Bladder Pump	Monitoring	X									
MW92-427	-	-	X	Bladder Pump	Monitoring	X									
MW92B-288	-	X	X	Disposible Bailer	Monitoring	X	X								New DGI Well
MW92B-322	-	X	X	Disposible Bailer	Monitoring		X								New DGI Well
MW93-71	-	-	-	Redi-Flo II	Monitoring	X									
MW93-146	-	-	-	Redi-Flo II	Monitoring	X									
MW93-268	-	-	X	Redi-Flo II	Monitoring	X									
MW94-175	-	-	-	Redi-Flo II	Monitoring	X									
MW94-229	-	-	-	Redi-Flo II	Monitoring	X									
MW94-297	-	X	X	Redi-Flo II	Monitoring	X									
MW95-165	-	-	-	Redi-Flo II	Monitoring	X									
MW95-200	-	-	-	Redi-Flo II	Monitoring	X									
MW95-288	-	-	X	Redi-Flo II	Monitoring	X	X								Set PDB in upper half of screen during deployment.
MW96-194	-	-	-	Redi-Flo II	Monitoring	X									
MW96-260	-	-	X	Redi-Flo II	Monitoring	X									
MW96-292	-	X	X	Bladder Pump	Monitoring	X									

TABLE 5-1
RECOMMENDED LONG-TERM MONITORING SAMPLING PLAN WITH PDBs
FORMER ATLAS "D" MISSILE SITE 4

Location Identification	Wells that De-water during Purging	Wells that did not Stabalize	Really Deep Wells that Cause Pump Issues	Conventional Purging Equipment	Well Type	PDB VOCs (8260C)	Conventional VOCs (8260C)	VOCs (TO-15)	MEE (RSK-175)	Chloride/Sulfate (9056A)	Alkalinity (2320B)	TAL Metals (6020B)	Mercury (7470A)	$KMnO_4$ Present	Comments
MW97-107	-	-	-	Redi-Flo	Monitoring		X								Leading Edge of Plume
MW97-266	-	X	X	Bladder Pump	Monitoring	X	X								Leading Edge of Plume
MW97-329	-	-	-	NS	Monitoring		X								Leading Edge of Plume
MW98-180	-	-	-	Artisian	Monitoring		X								Leading Edge of Plume
MW98-217	-	-	-	Artisian	Monitoring		X								Leading Edge of Plume
MW98-263	-	-	-	Artisian	Monitoring		X								Leading Edge of Plume
MW99-110	-	-	-	Redi-Flo II	Monitoring		X								Leading Edge of Plume
MW99-161	-	-	-	Redi-Flo II	Monitoring		X								Leading Edge of Plume
MW99-253	-	-	-	NS	Monitoring		X								Leading Edge of Plume
MW100-153	X	X	-	Redi-Flo II	Monitoring		X								Leading Edge of Plume
MW100-270	-	-	X	Redi-Flo II	Monitoring		X								Leading Edge of Plume
MW100-305	-	-	X	Redi-Flo II	Monitoring		X								Leading Edge of Plume
MW101-106	X	X	-	Redi-Flo II	Monitoring	X									
MW101-138	X	X	-	Redi-Flo II	Monitoring	X									
MW101-238	X	X	-	Redi-Flo II	Monitoring	X									
MW102-93	-	-	-	Redi-Flo II	Monitoring	X									
MW102-127	-	-	-	Redi-Flo II	Monitoring	X									

TABLE 5-1
RECOMMENDED LONG-TERM MONITORING SAMPLING PLAN WITH PDBs
FORMER ATLAS "D" MISSILE SITE 4

Location Identification	Wells that De-water during Purging	Wells that did not Stabalize	Really Deep Wells that Cause Pump Issues	Conventional Purging Equipment	Well Type	PDB VOCs (8260C)	Conventional VOCs (8260C)	VOCs (TO-15)	MEE (RSK-175)	Chloride/Sulfate (9056A)	Alkalinity (2320B)	TAL Metals (6020B)	Mercury (7470A)	$KMnO_4$ Present	Comments
MW102-171	-	X	-	Disposible Bailer	Monitoring	X									
MW103-193	-	-	-	Redi-Flo II	Monitoring		X								Leading Edge of Plume
MW103-242	-	-	-	Redi-Flo II	Monitoring		X								Leading Edge of Plume
MW103-308	-	-	X	Redi-Flo II	Monitoring		X								Leading Edge of Plume
MW104-99	X	X	-	Redi-Flo II	Monitoring		X								New DGI Well
MW104-135	X	X	-	Redi-Flo II	Monitoring		X								New DGI Well
MW104-178	X	X	-	Redi-Flo II	Monitoring		X								New DGI Well
MW105-93	-	-	-	NS	Monitoring		X								New DGI Well
MW105-143	-	-	-	NS	Monitoring		X								New DGI Well
MW105-188	-	-	-	NS	Monitoring		X								New DGI Well
MW106-230	-	-	-	Redi-Flo II	Monitoring		X								New DGI Well
MW106-272	-	-	X	Redi-Flo II	Monitoring		X								New DGI Well
MW106-316	-	-	-	Redi-Flo II	Monitoring		X								New DGI Well
MW107-249	-	-	-	NS	Monitoring		X								New DGI Well
MW107-310	-	-	-	NS	Monitoring		X								New DGI Well
MW107-355	-	-	-	NS	Monitoring		X								New DGI Well

Notes:

[1]Sample Identification uses the following naming scheme: site identification-well/location identification-sample event.

DSP = dedicated submersible pump

$KMnO_4$ = potassium permanganate

MEE = methane, ethane, and ethene

MS/MSD = matrix spike/matrix spike duplicate

Monitoring (P) = Performance of *in situ* injection study at monitoring well

NS = not sampled

TAL = Target Analyte List

VOC = volatile organic compound

RMC Consultants, Inc. (RMC) +SoundEarth Joint Venture LLC (RMC+SoundEarth). 2020. Final Area-Wide Remedial Investigation Report. Former Atlas "D" Missile Site 4, Laramie County, Wyoming. USACE-Omaha District. August.

URS Group, Inc. (URS). 2020a. Site-Wide Uniform Federal Policy – Quality Assurance Project Plan. Former Atlas "D" Missile Site 4, Wyoming. August.

URS. 2020b. Long-Term Monitoring and Performance monitoring Uniform Federal Policy – Quality Assurance Project Plan, Addendum. . Former Atlas "D" Missile Site 4, Wyoming. June.

URS. 2021. Passive Diffusion Bag Demonstration Study. Former Atlas "D" Missile Site 4, Wyoming. July.

United States Department of Defense. 2019. Department of Defense Quality Systems Manual for Environmental Laboratories (QSM), Version 5.3. May.

SITE ACTIVITIES PHOTOGRAPHIC LOG

Atlas "D" Missile Site 4 PDB Report	USACE – Omaha District	Contract No W912DY-16-D-0026 Project No. 60613342

Photograph No. 1

Description:

6/29/2021

9:33 AM

Retrieving passive diffusion bag from monitoring well, TH5-205, shown with mesh covering.

Photograph No. 2

Description:

6/29/2021

9:33 AM

PDB without mesh covering.

SITE ACTIVITIES PHOTOGRAPHIC LOG

Atlas "D" Missile Site 4 PDB Report	USACE – Omaha District	Contract No W912DY-16-D-0026 Project No. 60613342

Photograph No. 3

Description:

6/21/2021

3:51 PM

Taking water sample from PDB.

Photograph No. 4

Description:

6/22/2021

11:58 AM

Taking water sample from PDB.

✓

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 06/19/2021
Analytical Instrument: Horiba 98494

Project No.: 60613342
Field Crew: HH
Weather: overcast 70s, breezy
Turbidity: Geotech Turbidity

Well ID: TH-5-205
Type of Well: Test hole
Casing Stickup (ft)
Static Water Level (ft BTOC):
Screen Length (ft):
Well Depth (ft BTOC)/Diameter (in): /2

Purging Equipment: Bladder pump + packers
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)

11 x 0.65 = 7.15 gal = 1 casing

Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate GPM
6/3/2021 1600	Deploy Passive Diffusion Bag; Set at 205' TOC									
6/19/2021 0935	Collect sample FEW4-TH-5-205-PDB-17 for VOC analysis									
1155	Bladder pump controller on									
1206	water to surface									
1218	0.21	1.5	6.14	111.4	12.89	7.50	375	3.88	NM	0.13
1228	0.42	7.0	9.10	108.3	12.43	7.58	375	3.95	NM	0.14
1238	0.63	4.5	9.26	109.6	11.67	7.62	376	2.15	NM	0.15
1249	0.84	6.0	9.20	110.9	11.52	7.63	375	2.00	NM	0.15
1259	1.0	7.5	9.19	112.3	11.34	7.63	375	1.58	NM	0.15
1412	1.3	9.0	8.95	119.4	11.10	7.61	374	2.75	NM	NA
1422	1.5	10.5	9.09	118.8	11.01	7.63	374	3.47	NM	0.15
1432	~~1.8~~	12	8.91	118.1	11.49	7.60	373	NM	NM	0.15
1442	1.9	13.5	9.02	118.1	10.90	7.62	374	2.87	NM	0.15
1458	2.1	15	8.94	117.8	11.02	7.58	374	2.13	NM	NA
1500	Collect sample FEW4-TH-5-205-17 for VOC analysis									
1545	Refill PDB w/ VOC free water + redeploy into well									

Depth to water after purging/before sampling NM ft BTOC
Analysis to be performed and Number of Containers:
6 40 mL VOAs

Sample ID: **FEW4-TH-5-205-17**
FEW4-TH-5-205-PDB-17

COMMENTS: PDB in good condition after on 06/19/2021
At 1306 on 6/19: stop work due to lightning, resume
purging at 1408; ~~stop work at 1418 b/c lightning~~ Mr. Hackel on weather app
Pressure: 100 psi
Fill: 26 sec
Discharge: 40 sec
Packer pressure: 120 psi
Purged > 2 casings

Sampler Signature(s) [signature]

✓

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 6/20/21
Analytical Instrument: Hanna HI 98494

Project No.: 60613342
Field Crew: ME, DA
Weather: 75° sunny, breezy
Turbidity: Lamotte 2020T

Well ID: MW01
Type of Well: Monitoring
Casing Stickup (ft) 1.47
Static Water Level (ft BTOC) 61.42'
Screen Length (ft): 10
Well Depth (ft BTOC)/Diameter (in): 83.47/2

Purging Equipment: Redi-Flo2
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)
(83.47-61.42)(.17) = 3.75 gal

Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate gpm
6/18/2021 1600	Deploy passive diffusion bag, set at ~~28~~ ft TOC									
6/20/2021 1406	retrieve PDB									
1421	collect sample FEW4-MW01-PDB-17									
1440	Begin purging									
1444	0.67	2.5	8.83	35.4	11.42	7.71	296	12	70.13	0.63
1446	1.33	5	8.91	38.9	10.97	7.68	295	28.6	72.66	1.25
1450	2	7.5	9.19	43.2	10.74	7.65	291	21.5	73.34	0.63
1452	2.67	10	9.22	53.5	10.93	7.53	290	12.5	73.32	1.25
DA ~~1440~~ 1456	3.33	12.5	9.26	64.6	10.71	7.53	290	6.32	73.57	0.63
1458	4	15	9.29	56.7	10.62	7.53	290	6.28	73.75	1.25
1502	4.67	17.5	9.28	51.4	10.60	7.51	290	5.14	73.72	0.63
1505	5.33	20	9.26	43.1	10.79	7.51	290	3.68	73.72	0.83
1508	6	22.5	9.27	48.1	10.75	7.53	290	3.61	73.45	0.83
1512	collect sample FEW4-MW01-17									
1531	redeployed PDB after refilling w/ fresh VOC-free H_2O									

Mike Easterday

Depth to water after purging/before sampling 73.45 ft BTOC ____
Analysis to be performed and Number of Containers:
VOCs (8260C) 3 40-mL VOA Preservative HCl, 4°C

COMMENTS: Used two weights for PDB
PDB appeared in good condition on 6/20/21

Field Duplicate ID: ____
Sample ID: **FEW4-MW01-17**
FEW4-MW01-PDB-17

Sampler Signature(s): [signature]

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 6/23/21
Analytical Instrument: Hanna HI98494

Project No.: 60613342
Field Crew: Daniel Arenabia, Michael Easterday
Weather: 80F, Sunny
Turbidity: LaMotte 2020we

Well ID: MW20
Type of Well: Monitoring
Casing Stickup (ft) 2.70
Static Water Level (ft BTOC) 151.41'
Screen Length (ft): 10
Well Depth (ft BTOC)/Diameter (in): 266.60/2

Purging Equipment: Geo-Flo II pump
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)
(266.60 - 151.41) · 0.17 = 19.6 gal · 2 = 39.2 gal (2 casing vols)

	Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate gpm
06/04/2021	1550	Begin Pressure differential log set ~ 261' TOC									
6/22/21	1142	Begin retrieval of PDB									
	1156	collect sample FEW4-MW20-PDB-17									
	1217	Begin purging 0.03	1.5 DT								
	1226	Controller overload Troubleshooting									
		0.13	2.5								
	~1415	0.18	3.5								
6/23	1329	static H_2O Level at 151.43' BTOC									
	1409	Begin purging									
	1413	0.43	13.5	5.76	75.0	11.91	8.00	200	695 AU	192.95	1.25
	1417	0.69	13.5	6.68	58.2	13.07	8.11	201	646 AU	203.81	1.25
	1427	0.94	18.5	7.18	19.2	13.99	7.58	209	12	207.80	0.5
	1434	1.20	23.5	7.04	13.5	14.36	7.65	253	-13	NM*	0.7
	1441	1.45	28.5	7.05	18.1	14.10	7.67	253	-43	NM	0.7
	1449	1.71	33.5	7.06	-8.0	14.47	7.63	243	-25	NM	0.63
	1456	1.96	38.5	7.04	9.5	14.08	7.67	252	-33	NM	0.7
	1503	2.27	43.5	7.09	14.4	14.38	7.53	284	-38	NM	0.7
	1510	2.47	48.5	7.06	-0.8	14.53	7.55	264	-86	NM	0.7
	1517	2.73	53.5	7.02	7.4	14.44	7.56	272	-40	NM	0.7
	1525	2.98	58.5	6.95	6.1	15.38	7.50	286	-41	NM	0.63
	1532	3.24	63.5	6.99	19.3	14.88	7.53	275	41.1	NM	0.7
	1540	3.49	68.5	6.98	19.2	14.89	7.48	286	-46	NM	0.63

Depth to water after purging/before sampling NM* ft BTOC ____
Analysis to be performed and Number of Containers:
VOCs (8260C) 3 40-mL VOA Preservative HCl, 4°C

COMMENTS: PDB would not descend w/ only one weight - used two
- unable to achieve stable flow rate <5 Amps → pulled pump @ 1255 to switch pumps
- *unable to measure water level due to probe getting stuck down well

Field Duplicate ID: ____
Sample ID: **FEW4-MW20-17**
FEW4-MW20-PDB-17

Sampler Signature(s) ____

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 6/23/21
Analytical Instrument: Horiba A198494

Project No.: 60613342
Field Crew: MF, DA
Weather: 80, cloudy
Turbidity: Lamotte 2020

Well ID: MW20
Type of Well: monitoring
Casing Stickup (ft) 2.70'
Static Water Level (ft BTOC) 151.41
Screen Length (ft):
Well Depth (ft BTOC)/Diameter (in):

Purging Equipment: Redi-Flo2
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)

Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate
1547	3.75	73.5	6.95	15.2	15.13	7.46	286	~~[illegible]~~ -32	0.7	0.71
1554	4.01	78.5	6.99	19.1	14.84	7.58	285	-20	0.7	0.71
1603	4.26	83.5	6.99	13.6	14.06	7.50	284	-34	0.83	0.63
1610	4.52	88.5	6.98	17.0	14.77	7.50	284	-26	0.63	0.63
1612	collect sample FEW4-MW20-17									
1620	POB refilled w/ fresh VOC free water & redeployed									

Mike Easterday

Depth to water after purging/before sampling NM ft BTOC
Analysis to be performed and Number of Containers:
VOCs (8260C) 3 40-mL VOA Preservative HCl, 4°C

COMMENTS:

Field Duplicate ID:
Sample ID: FEW4-MW20-17
FEW4-MW20-POB-17

Sampler Signature(s) Mike Easterday

✓

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 6/21/21
Analytical Instrument: Hanna H198494

Project No.: 60613342
Field Crew: Daniel Amenchie Michael Easterday
Weather: 70° Sunny
Turbidity: LaMotte 2020 wc

Well ID: MW31
Type of Well: Monitoring
Casing Stickup (ft) 2.66
Static Water Level (ft BTOC) 176.21
Screen Length (ft): 10
Well Depth (ft BTOC)/Diameter (in): 213.36/2

Purging Equipment: Redi-Flo II pump
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)
(213.36 - 176.21) · 0.17 = 6.3 gal · 2 = 12.6

Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate
06/04/2021 1245	Passive diffusion bag deployed: set at ~207' TOC									
6/21/21 1539	Begin retrieval of PDB									
1549	collect sample FEW4-MW31-PDB-17									
1608	Begin purging									
1610	0.83	4	9.82	114.1	11.37	7.76	471	3.94	176.59	2
1612	1.3	8	9.74	103.7	11.51	7.72	473	1.65	176.52	2
1616	1.9	12	9.70	97.9	11.64	7.74	472	1.21	176.53	1
1619	2.5	16	9.69	97.1	11.65	7.77	471	1.33	176.53	1.3
1622	Collect sample FEW4-MW31-17									
1626	refilled PDB w/ VOC free water & redeployed									

Mike Easterday

Depth to water after purging/before sampling 176.53 ft BTOC
Analysis to be performed and Number of Containers:
VOCs (8260C) 3 40-mL VOA Preservative HCl, 4°C

COMMENTS: PDB appeared to be in good condition on 6/21/21

Field Duplicate ID:
Sample ID: **FEW4-MW31-17**

Sampler Signature(s) Mike Easterday

✓

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 6/23/21
Analytical Instrument: Hanna HI98494

Project No.: 60613342
Field Crew: HG, JK
Weather: 88°, Sunny
Turbidity: LaMotte 2020 WE

Well ID: MW45R-299
Type of Well: Monitoring
Casing Stickup (ft) 2.51
Static Water Level (ft BTOC) 137.30
Screen Length (ft): 10
Well Depth (ft BTOC)/Diameter (in): 308.21

Purging Equipment: RediFlo 2
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)
(308.21 - 137.30) x 0.17 = 29.05 gal/casing volume

Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate
06/04/2021 1200	Deploy passive diffusion bag. Set at ~ 303' TOC									
1340	Sample FEW4-MW45R-299-PDB-17 COLLECTED									
1403	BEGIN PURGING									
1410	0.34	10.0	6.24	51.4	12.33	8.09	247	3.37	138.71	1.43
1417	0.69	20.0	6.91	52.4	12.44	8.07	247	2.36	138.72	1.43
1423	1.03	30.0	7.17	54.2	12.52	8.13	246	1.79	138.75	1.67
1430	1.38	40.0	7.28	53.6	12.52	8.11	258	1.73	138.76	1.43
1437	1.72	50.0	7.31	53.1	12.54	8.08	257	1.52	138.76	1.43
1443	2.07	60.0	7.27	53.4	12.49	8.04	259	1.2	138.76	1.67
1445	SAMPLE FEW4-MW45R-299-17									
1507	PDB REFILLED W/ VOC-FREE WATER + REDEPLOYED									

Depth to water after purging/before sampling 138.76 ft BTOC
Analysis to be performed and Number of Containers:
VOCs (8260C) 3 40-mL VOA Preservative HCl, 4°C

COMMENTS: Used two weights to get PDB to descend
- PDB in good condition, like new

Field Duplicate ID:
Sample ID: **FEW4-MW45R-299-17**
FEW4-MW45R-299-PDB-17

Sampler Signature(s)

V

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 5/11/2021
Analytical Instrument: HANNA 48494

Project No.: 60613342
Field Crew: JH, JK
Weather: It snow, foggy - very low visability, 32°F, sleeting
Turbidity: La Mo the zone

Well ID:
Type of Well: MW48-225
Casing Stickup (ft)
Static Water Level (ft BTOC) 187.60
Screen Length (ft): 10
Well Depth (ft BTOC)/Diameter (in): 239.5 /2

Purging Equipment: Grundfos Rodi-Flo II pump
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)
41.9 x .17 = 7.123

Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate gpm
1249	Begin pursing		6.84	171.7	9.45	7.21	254	OR	189.16	1
1251		2	7.38	90.1	11.19	7.11	307	OR	189.31	1
1254		4	7.36	108.1	12.41	7.12	304	39.14	189.42	0.7
1256	0.84	6	7.31	128.7	12.61	7.10	311	14.3	189.47	1
1258		8	7.29	130.8	12.56	7.10	309	8.96	189.47	1
1300	1.4	10	7.28	132.8	12.61	7.10	311	5.93	187.70	1
1302		12	7.27	134.5	12.61	7.11	310	4.80	187.72	1
1304	2.0	14	7.27	135.1	12.57	7.11	311	3.66	187.70	1
1306		16	7.28	137.5	12.54	7.11	309	2.89	187.73	1
1308	2.5	18	7.27	140.1	12.54	7.11	309	NM	187.76	1
1312	Collect	sample	FEW4-MW48-225-17							

Depth to water after purging/before sampling 187.74 ft BTOC ____
Analysis to be performed and Number of Containers:

COMMENTS: OR = over range

Sample ID: FEW4-MW48-225-17

Sampler Signature(s)

✓

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 06/18/2021
Analytical Instrument: NA

Project No.: 60613342
Field Crew: HS
Weather: overcast, breezy, 70s
Turbidity: NA

Well ID: MW48-225
Type of Well: Monitoring
Casing Stickup (ft) 2.21
Static Water Level (ft BTOC) ——:
Screen Length (ft): 10
Well Depth (ft BTOC)/Diameter (in): 229.51/2

Purging Equipment: NA - PDB
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)

	Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate
6/3/21	1635	Deploy ~~pdb-17~~ Passive diffusion bag; set at ~ 225' TOC									
6/18/21	1005	Collect sample FEW4-MW48-225-~~PDB~~-17 for VOC analysis									
	1010	Fill PDB w/ fresh VOC free water & redeploy in well									

Depth to water after purging/before sampling NA ft BTOC ____
Analysis to be performed and Number of Containers:
VOCs (8260C) 3 40-mL VOA Preservative HCl, 4°C

COMMENTS: PDB appeared in good condition on 6/18/2021

Field Duplicate ID: ____
Sample ID: ~~FEW4-MW48-225-17~~
FEW4-MW48-225-PDB-17

Sampler Signature(s) Holly Young

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 6/19/21
Analytical Instrument: Hanna HI98494

Project No.: 60613342
Field Crew: HG, JK
Weather: 70°, cloudy
Turbidity: LaMotte 2020 WE

Well ID: MW50-250
Type of Well: Monitoring
Casing Stickup (ft) 2.62
Static Water Level (ft BTOC) 210.23
Screen Length (ft): 10
Well Depth (ft BTOC)/Diameter (in): 260.32/2

Purging Equipment: Rediflo 2
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)
((260.32) - (210.23)) x 0.17 = 8.52 gal/casing volume

Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate
~~06/04/2021~~ 06/19/2021 1115	Depth passive diffusion bags set at ~ 255' TOC									
0950	Sample FEW4-MW50-250-~~PDB-17~~ collected									
1024	Began purging ~~MW50-250~~									
1028	0.47	4.0	9.42	87.6	12.27	7.48	257	6.69	210.64	1.0
1030	0.94	8.0	9.38	77.2	12.44	7.46	252	4.79	210.66	2.0
1034	1.41	12.0	9.32	78.5	12.56	7.45	274	6.09	210.49	1.0
1038	1.88	16.0	9.35	78.6	13.04	7.47	276	3.81	210.51	1.0
1043	2.35	20.0	9.31	78.9	13.09	7.50	273	2.46	210.52	0.8
1047	2.82	24.0	9.35	78.0	13.05	7.54	276	1.97	210.54	1.0
1049	SAMPLE FEW4-MW50-250-17 +MS+MSD COLLECTED									
1056	PDB REFILLED W/VOC-FREE WATER + REDEPLOYED									

Depth to water after purging/before sampling 210.54 ft BTOC
Analysis to be performed and Number of Containers:
VOCs (8260C) 3 40-mL VOA Preservative HCl, 4°C

COMMENTS: Used two weights to get PDB to descend
* PDB looked like new

Field Duplicate ID: ~~FEW4-MW50-250-FD-17~~
Sample ID: **FEW4-MW50-250-17**
FEW4-MW50-250-PDB-17

Sampler Signature(s)

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 6/20/2021
Analytical Instrument: Hanna HI 98494

Project No.: 60613342
Field Crew: HG, JK
Weather: 65°, overcast
Turbidity: La Motte 2020 WE

Well ID: MW55-250
Type of Well: Monitoring
Casing Stickup (ft) 2.74
Static Water Level (ft BTOC) 128.53
Screen Length (ft): 10
Well Depth (ft BTOC)/Diameter (in): 258.94/2

Purging Equipment: Rediflo 2
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)

(258.94 - 128.53) x 0.17 = 22.17 gal/casing volume

	Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate
6/4/2021	0845	Deploy passive diffusion bag; set at ~ 254' TOC									
6/20/2021	1249	Sample FEW4-MW55-250-PDB-17 collected									
	1312	BEGIN PURGING									
	1320	0.45	10.0	8.14	11.1	11.95	7.84	266	26.6	NM*	1.25
	1327	0.90	20.0	8.15	20.6	12.05	7.84	267	13.0	NM	1.43
	1336	1.35	30.0	8.20	26.6	12.19	7.84	268	9.03	132.96	1.11
	1345	1.80	40.0	8.23	29.9	12.24	7.82	268	7.80	132.96	1.11
	1354	2.26	50.0	8.23	32.0	12.21	7.76	268	6.72	132.94	1.11
	1358	SAMPLES FEW4-MW55-250-17 + FD COLLECTED									
	1438	PDB REFILLED W/VOC-FREE WATER + REDEPLOYED									

Depth to water after purging/before sampling 132.96 ft BTOC
Analysis to be performed and Number of Containers:
VOCs (8260C) 3 40-mL VOA Preservative HCl, 4°C

Field Duplicate ID: FEW4-MW55-250-FD-17
Sample ID: **FEW4-MW55-250-17**
FEW4-MW55-250-PDB-17

COMMENTS: Used two weights to get PDB to descend
* WLM tape got tangled, took ≈20 min to untangle
- PDB appeared in good condition, like new

Sampler Signature(s)

✓

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 6/19/21
Analytical Instrument: Hanna HI98494

Project No.: 60613342
Field Crew: HG, JK
Weather: 73, overcast
Turbidity: LaMotte 2020 WE

Well ID: MW56-203
Type of Well: Monitoring
Casing Stickup (ft) 2.83
Static Water Level (ft BTOC) 87.17
Screen Length (ft): 10
Well Depth (ft BTOC)/Diameter (in): 210.83/2

Purging Equipment: RediFlo 2
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)

(210.83 - 87.17) x 0.17 = 21.02 gal/casing volume

Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate
6/3/2021 1310	Deploy Passive Diffusion Bag set at ~206' TOC									
6/19/2021 1215	Sample FEW4-MW56-203-PDB-17									
1236	BEGIN PURGING									
1243	0.48	10.0	8.91	31.9	12.00	7.76	242	57.4	109.03	1.43
1251	0.95	20.0	8.94	46.0	11.94	7.72	249	62.3	109.98	1.25
1259	1.43	30.0	8.96	44.0	11.93	7.70	250	36.9	110.41	1.25
LIGHTNING CAUSED A 2.5 HOUR DELAY. RESTARTING PURGE										
1537	BEGIN PURGING									
1544	~~0.48~~ 1.9	40.0	8.91	48.7	11.88	7.59	255	43.4	112.04	1.43
1550	2.38	50.0	8.91	46.3	11.94	7.64	247	34.8	113.04	1.67
1557	2.85	60.0	8.90	45.2	11.95	7.68	250	29.8	113.51	1.43
1605	3.33	70.0	8.88	48.5	11.95	7.72	246	27.6	113.71	1.25
1612	3.81	80.0	8.87	49.6	11.94	7.78	246	29.7	114.01	1.43
1619	4.28	90.0	8.87	51.9	11.95	7.82	245	27.8	114.18	1.43
1624	SAMPLES FEW4-MW56-203-17 + FD collected.									
1631	PDB REFILLED w/ VOC FREE WATER + REDEPLOYED									

Depth to water after purging/before sampling 114.18 ft BTOC
Analysis to be performed and Number of Containers:
VOCs (8260C) 6 40-mL VOA Preservative HCl, 4°C

COMMENTS: *PDB was in good condition, like new

Field Duplicate ID: **FEW4-MW56-203-FD-17**
Sample ID: **FEW4-MW56-203-17**
FEW4-MW56-203-PDB-17

Sampler Signature(s)

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: ~~5/13/21~~ IK 5/18/21 - 5/19/21
Analytical Instrument: Hanna 98494

Project No.: 60613342
Field Crew: IK, ME
Weather: 46° cloudy
Turbidity: lamotte

Well ID: MW 56-290
Type of Well: nested monitoring
Casing Stickup (ft)
Static Water Level (ft BTOC) 82.15 TOC
Screen Length (ft): 10
Well Depth (ft BTOC)/Diameter (in): 299.3 /2 inch

Purging Equipment: rediflo
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)
(299.3 - 82.15) x 0.17 = 37 gal x 2 = 74 gal
pump ~ 289' TOC . 80% = 125.6' TOC

Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate gpm
1153			begin	purge						
1155	0.14	5	0	-108.0	11.39	7.37	407	3.80	120.70	2.5
1158	0.28	10	0	-136.6	11.81	7.34	415	3.75	153.52	1.67
1203		15	0	-154.9	12.62	7.35	413	1.98	182.30	1
1209	0.56	20	0	-178.2	13.75	7.35	413	1.84	213.06	0.83
1210		IK 25	controller fault amp overload.							
1227		30	resume purge							
1232		35 21	controller fault - amps							
1245	~~1.08~~ IK	40	resume purge							
1246		24	controller fault - amp overload., pull pump and try stronger pump.							
1326			resume purge							
1330	0.78	29	0	-133.9	13.31	7.22	414	2.83	274.72	1.25
1333		31	well dewatered to pump.							
5/19/21 1554		WL = 241.0	recharge < 80% in ~24 hrs.							
1603	0.84	31	resume purge			7 IK		~~4.42~~ IK		+ IK
1608		36	0	96.1	12.50	7.40	412	4.42	276.02	1
1612	1	37	collect sample FEW4-MW56-290-17							

Depth to water after purging/before sampling 276.02 ft BTOC
COMMENTS: none

Analysis to be performed and Number of Containers:
3 VOCs 8260C via 3 40 ml VOAs w/HCl

Sample ID: FEW4-MW56-290-17

Sampler Signature(s)

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 06/18/2021
Analytical Instrument: NA

Project No.: 60613342
Field Crew: HM
Weather: overcast, breezy, 70s
Turbidity: NA

Well ID: MW56-290
Type of Well: Monitoring
Casing Stickup (ft) 2.90
Static Water Level (ft BTOC) NM
Screen Length (ft): 10
Well Depth (ft BTOC)/Diameter (in): 299.60/2

Purging Equipment: NA - PDB
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)

	Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate
6/18/2021	1540	Deploy passive diffusion bag; set at ~234' TOC									
6/18/2021	0910	Collect sample FEW4-MW56-290-PDB-17 for VOC analysis									
	0915	Fill PDB w/ fresh water (VOC free) & redeploy into well									

Depth to water after purging/before sampling NA ft BTOC ____
Analysis to be performed and Number of Containers:
VOCs (8260C) 3 40-mL VOA Preservative HCl, 4°C

COMMENTS: PDB appeared in good condition on 6/18/21

Field Duplicate ID: ____
Sample ID: ~~FEW4-MW56-290-17~~ HM
FEW4-MW56-290-PDB-17

Sampler Signature(s) [illegible]

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 6/22/21
Analytical Instrument: Hanna HI98494

Project No.: 60613342
Field Crew: HG, JK
Weather: 77, sunny
Turbidity: LaMotte 2020 WE

Well ID: MW59-183
Type of Well: Monitoring
Casing Stickup (ft) 2.15
Static Water Level (ft BTOC) 48.65
Screen Length (ft): 10
Well Depth (ft BTOC)/Diameter (in): 188.75/2

Purging Equipment: Redi flo 2
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)
188.75 - 48.65 = 140.10 x .17 = 23.8 x 2 = 47.6

06/05/2021
06/22/2021

Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate
1030	Deploy passive diffusion bag set at ~ 183 TOC									
1134	SAMPLE FEW4-MW59-183-PDB-17 collected									
1206	BEGIN PURGING									
1212	0.42	10.0	0.00	-138.2	9.47	9.41	342	64.6	83.50	1.67
1219	0.84	20.0	0.00	-146.4	9.65	8.90	306	23.5	82.60	1.43
1228	1.26	30.0	0.00	-158.3	9.80	8.78	292	31.1	77.82	1.11
1237	1.68	40.0	0.00	-158.2	9.86	8.94	304	42.3	77.73	1.11
1247	2.10	50.0	0.00	-165.9	9.86	9.10	304	19.3	77.77	1.0
1256	2.52	60.0	0.85	-154.3	9.86	9.10	301	11.03	77.89	1.11
1306	2.94	70.0	1.78	-138.4	9.93	9.07	299	7.51	77.94	1.0
1315	3.36	80.0	2.38	-124.9	9.85	9.02	297	6.08	78.02	1.11
1325	3.78	90.0	2.83	-112.9	9.84	9.00	296	5.04	78.09	1.0
1334	4.20	100.0	3.25	-102.4	9.97	8.96	295	4.68	78.12	1.11
1344	4.62	110.0	3.52	-92.4	9.99	8.90	295	4.12	78.13	1.0
1353	5.04	120.0	3.74	-84.0	9.80	8.91	295	4.06	78.24	1.11
1403	5.46	130.0	3.96	-75.6	9.97	8.85	294	3.49	78.27	1.0
1427	PDB REFILLED w/ VOC-FREE WATER, REDEPLOYED									
1407	SAMPLE FEW4-MW59-183-17 + MS + MSD COLLECTED									

Depth to water after purging/before sampling 78.27 ft BTOC
Analysis to be performed and Number of Containers:
VOCs (8260C) 3 40-mL VOA Preservative HCl, 4°C

COMMENTS: Use two weights for PDB
- PDB like new, good condition

Field Duplicate ID:
Sample ID: **FEW4-MW59-183-17** + MS + MSD
FEW4 - MW59 - 183 - PDB - 17

Sampler Signature(s)

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 6/22/21
Analytical Instrument: HANNA 98424

Project No.: 60613342
Field Crew: TM/AB
Weather: PARTLY CLOUDY 60°
Turbidity: LAMOTE 2020

Well ID: MW66-205
Type of Well: Monitoring
Casing Stickup (ft) 2.34
Static Water Level (ft BTOC) 90.50'
Screen Length (ft): 15
Well Depth (ft BTOC)/Diameter (in): 213.34/2

Purging Equipment: REDI FLO II W/CHECK VALVE
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)
213.34 - 90.50 = 122.84 x 0.17 = 20.9 (1 CASING) x 2 = 41.8 (2 CASING)
213.34 - 90.50 = 122.84 x 0.8 = 98.27 / 213.34 - 98.27 = 115.07 (80%)

Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate gpm
06/25/2021 15:40	Dropped pellets [illegible] bottom set at ~206' TOC									
6/21/21 0910	COLLECT FEW4-MW66-205-PDB-17 FOR VOCS									
~~0920~~ TM 1000	BEGIN PURGING		2.02	193.5	10.28	7.58	347	9.65	94.9	NA
1007	0.24	5	0.50	-2.9	10.23	7.20	348	5.03	120.98	0.7
1013	0.48	10	6.37	16.0	10.85	7.14	348	5.99	144.51	0.83
1019	0.72	15	0.54	14.6	11.33	7.17	349	7.05	163.98	0.83
1025	0.96	20	0.83	-3.1	11.90	7.16	350	9.94	182.35	0.83
1030	1.20	25	0.94	-15.8	12.39	7.13	350	9.79	195.45	1.0
	STOP PURGING - WELL DEWATERED TO PUMP - ALLOW RECHARGE									
1354	WL = 91.97' TOC >80% RECOVERY IN ~3.5 HR.									
1414	RESUME PURGING									
1419	1.44	30	3.26	124.4	10.53	7.42	345	7.58	126.35	1.0
1426	1.67	35	3.08	95.9	11.21	7.39	343	7.92	145.19	0.7
1432	1.91	40	3.13	64.1	12.08	7.33	346	8.05	164.70	0.83
1438	2.15	45	3.28	45.7	12.22	7.37	344	8.05	179.90	0.83
1443	2.39	50	3.34	32.1	12.84	7.35	349	8.04	195.65	1.0
1446	2.48	52	STOP PURGING - WELL DEWATERED TO PUMP - ALLOW RECHARGE							
6/22/21 0814	WL = 89.50 >80% IN ~17.5 HR									
0825	RESUME PURGING									
0826	2.54	53	4.72	197.8	9.46	7.13	350	11.1	108.2	1.0
0830	COLLECT FEW4-MW66-205-17 FOR VOCS									
0910	REDEPLOY PDB/FILLED W/ ORGANIC FREE WATER									

Depth to water after purging/before sampling 108.2 ft BTOC
Analysis to be performed and Number of Containers:

PDB	VOCs (8260C)	3 40-mL VOA	Preservative	HCl, 4°C
REGULAR X	VOCs (8260)	3 40-mL VOA	"	HCl, 4°C

COMMENTS: Used length of stainless steel chain ≈ weight of two lab-provided weights for PDB. 6/21/21 CONDITION OF PDB IS GOOD.

Field Duplicate ID:
Sample ID: FEW4-MW66-205-17

Sampler Signature(s)

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 6/21/21
Analytical Instrument: HANNA 98194

Project No.: 60613342
Field Crew: TM/AB
Weather: PARTLY CLOUDY, 70°
Turbidity: LAMOTTE 2020

Well ID: MW71-96
Type of Well: Monitoring
Casing Stickup (ft) 2.38
Static Water Level (ft BTOC) 86.45
Screen Length (ft): 15
Well Depth (ft BTOC)/Diameter (in): 102.58/2

Purging Equipment: REDI FLO II
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)
102.58-86.45 = 16.13 x 0.17 = 2.7 (1 CASING) x 2 = 5.4 (2 CASINGS)

Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate 9pm
06/08/2021 1540	Deploy passive diffusion bags set at ~95' for									
6/21/21 1150	COLLECT FEW4-MW71-96-PDB-17 FOR VOCs									
1239	BEGIN PURGING		9.20	126.5	9.79	7.66	317	26.2	NA *	NA
1242	0.93	2.5	8.81	120.6	10.74	7.43	318	16.3	NA	0.67
1245	1.85	5	8.75	109.1	10.79	7.35	318	6.87	NA	0.67
1248	2.78	7.5	8.75	99.5	10.63	7.33	318	5.87	NA	0.67
1251	3.70	10	8.76	96.8	10.57	7.35	318	4.52	NA	0.67
1253	~~5.56~~ 4.63	~~15~~ 12.5	8.78	93.1	10.57	7.35	318	3.88	NA	1.25
1255	5.56	~~20~~ 15	8.80	90.5	10.57	7.36	316	3.85	NA	1.25
	STOP PURGING									
1300	COLLECT FEW4-MW71-96-17 FOR VOCs									
* 1340	REDEPLOY PDB (FILLED W/ORGANIC FREE WATER)									

Depth to water after purging/before sampling NA SEE NOTE IN COMMENTS ft BTOC ____
Analysis to be performed and Number of Containers:

PDB	VOCs (8260C)	3 40-mL VOA	Preservative	HCl, 4°C
Purge	VOCs (8260C)	3 40-mL VOA	"	HCl, 4°C

COMMENTS: 6/21/21 CONDITION OF PDB IS GOOD. PREVIOUS SAMPLING EVENTS PUMP SET IN SCREENED INTERVAL - SOMEWHERE. SWL ≈ TOP OF SCREEN. * UNABLE TO GET PWL DUE TO SPLICE IN TUBING AT ≈ WL. HISTORICALLY WL REMAINS CONSTANT W/O DROPPING DURING PURGING.

Field Duplicate ID: ____
Sample ID: FEW4-MW71-96-17

Sampler Signature(s) [signature]

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: ~~6/3/21~~ & 6/4/21
Analytical Instrument: Hanna HI 98494

Project No.: 60613342
Field Crew: HG, TM
Weather: 74°, sunny
Turbidity: LaMotte 2020WE

Well ID: MW71-205
Type of Well: Monitoring
Casing Stickup (ft) 2.55
Static Water Level (ft BTOC) 85.12
Screen Length (ft): 10
Well Depth (ft BTOC)/Diameter (in): 209.95/2

Purging Equipment: Rediflo 2
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)
(209.95 - 85.12) x 0.17 = 21.2 gal/casing volume

	Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate gpm
	1311	BEGIN PURGING									
6/3	1319	0.24	5.0	0.21	-57.9	12.02	7.51	228	8.81	117.18	0.63
	1327	0.47	10.0	0.36	-62.3	12.37	7.48	269	9.77	141.88	0.63
	1336	0.71	15.0	0.14	-74.2	13.09	7.42	268	11.22	164.51	0.56
	1343	0.94	20.0	0.57	-73.5	13.87	7.46	277	8.46	184.32	0.71
	1349	1.08	23.0	WELL DEWATERED. ALLOWING FOR IT TO RECHARGE							
	1024	SWL: 84.67. Recovered 101% in 20.5 hrs.									
	1035	BEGAN PURGING AGAIN									
6/4	1042	1.32	28.0	1.29	83.2	11.27	7.55	267	1.99	114.60	0.71
	1051	1.56	33.0	1.21	50.7	11.95	7.54	268	1.55	137.75	0.56
	1101	1.79	38.0	0.97	28.7	13.31	7.52	268	1.44	159.24	0.50
	1108	2.03	43.0 gb	1.10	23.9	13.46	7.55	268	1.80	179.10	
	1110	~~STOPPED PURGING~~, PREPARING TO SAMPLE									
	1112	SAMPLE COLLECTED									

Depth to water after purging/before sampling 179.10 ft BTOC
Analysis to be performed and Number of Containers:
VOCs (8260C) 3 40-mL VOA Preservative HCl, 4°C

COMMENTS: None

Field Duplicate ID:
Sample ID: **FEW4-MW71-205-17**

Sampler Signature(s)

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 6/23/21
Analytical Instrument: Hanna HI98494

Project No.: 60613342
Field Crew: HG, JK, AB
Weather: 86°, sunny
Turbidity: LaMotte 2020 WE

Well ID: MW73-218
Type of Well: Monitoring
Casing Stickup (ft) 2.34
Static Water Level (ft BTOC) 126.86
Screen Length (ft): 15
Well Depth (ft BTOC)/Diameter (in): 221.84/2

Purging Equipment: Redi-flo 2
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)

(221.84 - 126.86) x 0.17 = 16.15 gal/casing volume

Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate
DLD 5/20/21 0855	Deploy passive diffusion bag; set at ~214' TOC									
6/23/2021 1022	Sample FEW4-MW73-218-PDB-17 collected									
1107	BEGIN PURGING									
1112	0.31	5.0	0.00	-28.5	12.37	7.79	280	41.5	152.88	1.0
1117	0.62	10.0	0.29	-33.1	13.42	7.74	287	~~188.3~~ 88.3	165.22	1.0
1122	0.93	15.0	1.40	-20.0	13.42	7.75	286	41.8	176.10	1.0
1127	1.24	20.0	1.56	-8.3	13.73	7.76	286	26.6	180.53	1.0
1133	1.55	25.0	1.56	1.8	13.32	7.78	287	13.3	185.23	0.83
1139	1.86	30.0	2.31	1.4	13.98	7.81	287	13.0	187.80	0.83
1145	2.17	35.0	2.71	8.2	13.47	7.84	287	10.37	190.64	0.83
1152	2.48	40.0	3.30	8.0	14.18	7.83	286	11.0	188.09	0.71
1159	2.79	45.0	3.68	10.7	13.71	7.84	286	6.47	188.04	0.71
1205	3.10	50.0	3.81	13.3	13.94	7.86	285	5.71	187.76	0.83
1212	3.41	55.0	4.02	14.1	13.79	7.89	285	4.79	187.76	0.83
1214	Sample FEW4-MW73-218-17									
1228	PDB REFILLED ~~& R~~ w/ VOC-FREE WATER + REDEPLOYED									

Depth to water after purging/before sampling 187.76 ft BTOC
Analysis to be performed and Number of Containers:
VOCs (8260C) 3 40-mL VOA Preservative HCl, 4°C

COMMENTS: Used length of stainless steel chain & weight of two lbs - provided weights ~~forth~~ for PDB
- PDB in good condition, like new

Field Duplicate ID:
Sample ID: **FEW4-MW73-218-17**
FEW4-MW73-218-PDB-17

Sampler Signature(s)

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 6/22/21
Analytical Instrument: Hanna HI 98494

Project No.: 60613342
Field Crew: HG, JK
Weather: 55, Sunny
Turbidity: LaMotte 2020 WE

Well ID: MW74-359
Type of Well: Monitoring
Casing Stickup (ft) 2.27
Static Water Level (ft BTOC) 84.00
Screen Length (ft): 10
Well Depth (ft BTOC)/Diameter (in): 364.27 /2

Purging Equipment: Redi-flo 2 + bailer
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)

(364.27 - 84.00) x 0.17 = 47.65 gal/casing volume

Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate
06/05/2021 0950	Deploy Passive diffusion bag - set at ~ 359' TOC									
6/21/2021 0917	Sample FEW4-MW74-359-PDB-17 collected									
1026	BEGIN PURGING									
1033	0.21	10.0	0.00	-175.9	9.64	7.16	1782	6.19	167.49	1.43
1047	0.42	20.0	0.00	-204.3	11.38	7.28	1885	4.79	225.02	0.71
1101	0.61	29.0	1.76	-214.2	13.80	7.26	1824	NM	NM	0.64
1102	DEWATERED TO TOP OF PUMP; PULLING PUMP + BAILING ONE CASING VOLUME									
1232	BEGAN BAILING									
1237	BAILER LOST DOWN WELL, RETRIEVING									
1413	Able to ~~[illegible]~~ fish bailer out of well, continued bailing									
1609	0.82	39.0	2.98	-121.6	12.09	7.46	1985	22.9	NM	NA
1614	BAILER LOST DOWN WELL, RETRIEVING TOMORROW									
6/22/2021 0921	BAILER RETRIEVED CONT'D BAILING									
1011	0.92	47.0	0.60	-113.1	14.41	7.55	1852	8.67	NM	NA
1041	1.00	47.75	3.04	-117.1	12.10	7.71	1869	25.3	NM	NA
1050	1.01	48.0	SAMPLE FEW4-MW74-359-17 collected							
1104	PDB REFILLED W/VOC-FREE WATER + REDEPLOYED									

Depth to water after purging/before sampling WL deeper than 300' ft BTOC
Analysis to be performed and Number of Containers:
VOCs (8260C) 3 40-mL VOA Preservative ~~HCl~~, 4°C

Field Duplicate ID:
Sample ID: **FEW4-MW74-359-17**
FEW4-MW74-359-PDB-17

COMMENTS: Used length of stainless steel chain ≈ to weight of two lbs provided weights for PDB
- pump doesn't historically recover to 80%, bailed after dewatering once.
- Initial purge water black/dark gray w/slight odor
- VOAs effervescing, rinsed out bottles + took samples

Sampler Signature(s)
- PDB in good condition, like new

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 6/23/21
Analytical Instrument: Hanna H198494

Project No.: 60613342
Field Crew: MF DA
Weather: 80° Sunny
Turbidity: Lamotte 2020t

Well ID: MW80-128
Type of Well: Monitoring
Casing Stickup (ft) 2.91
Static Water Level (ft BTOC) 74.38
Screen Length (ft): 10
Well Depth (ft BTOC)/Diameter (in): 133.61/2

Purging Equipment: Redi-Flo2 w/ check valve
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)
(133.61 - 74.38)(.17) = 10.07
(133.61-74.38)(.8) = 47.384 → 133.61-47.384=86.23.80

Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate
06/06/2021 0955	Deploy passive diffusion bag; set at ~ 128' TOC									
0831	Begin retrieval of PDB									
0842	Collect sample FEW4-MW80-128-PDB-17									
0903	Begin Purging									
0906	0.5	5	6.20	198.0	9.89	7.18	317	194	110.75	1.67
911	1.0	10	6.78	126.1	11.31	7.26	344	20	114.72	1.00
1113	well recharged to 76.41' BTOC									
1141	begun purging									
1150	1.5	15	6.68	61.1	11.87	7.31	352	12.3	96.07	0.56
1159	2.0	20	6.49	46.7	11.76	7.28	357	8.28	108.63	0.56
1204	2.30	23	6.41	43.1	11.71	7.26	355	7.35	113.87	0.6
1207	2.3	23	6.58	43.8	11.55	7.26	355	9.45	119.00	0.67
1208	dewatered to pump. let well recharge 80%									
1649	well recharged to 74.44									
1652	begun purging									
1654	collect sample FEW4-MW80-128-17									
1706	refilled PDB w/ fresh VOC free H_2O & ~~repla~~ DA redeployed at ~128' TOC									

Depth to water after purging/before sampling 74.98 ft BTOC
Analysis to be performed and Number of Containers:
VOCs (8260C) 3 40-mL VOA Preservative HCl, 4°C

COMMENTS: Used two weights for PDB
PDB appeared in good condition on 6/23/21
1st dewater @ 911 am. - well dewatered to pump. let well recharge 80%.

Field Duplicate ID:
Sample ID: **FEW4-MW80-128-17**
FEW4-MW80-128-PDB-17

Sampler Signature(s)

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 6/23/21
Analytical Instrument: Hanna HI 98494

Project No.: 60613342
Field Crew: ME DA
Weather: 80 Sunny
Turbidity: Lamotte 2020T

Well ID: MW80-223
Type of Well: Monitoring
Casing Stickup (ft) 2.92
Static Water Level (ft BTOC) 75.24
Screen Length (ft): 10
Well Depth (ft BTOC)/Diameter (in): 227.52/2

Purging Equipment: Redi-Flo2 pump
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)
(227.52 – 75.24)(.17) = 25.9 x 2 = 51.8

Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate
DL 06/06/2021 6/23/21 0830	Deploy passive diffusion bag; set at ~ 222' TOC									
0914	Begin retrieval of PDB									
0928	Collect sample FEW4-MW80-223-PDB-17									
0956	begin purging									
0959	0.193	5	7.57	187.2	9.58	7.23	332	-56	82.38	2.5
1003	0.386	10	8.39	166.0	ME 9.65	7.27	327	5.38	82.51	1.25
1007	0.579 ME	15	8.67	152.6	9.66	7.29	326	2.33	82.65	1.25
1011	0.772	20	8.67	144.8	9.65	7.27	338	2.13	82.76	1.25
1015	0.965	25	8.62	135.8	9.67	7.25	361	1.44	82.89	1.25
1019	1.158	30	8.67	129.8	9.65	7.25	354	1.42	82.93	1.25
1023	1.351	35	8.69	124.5	9.69	7.29	360	1.33	82.99	1.25
1027	1.544	40	8.72	119.3	9.74	7.24	357	1.60	83.06	1.25
1031	1.737	45	8.75	116.0	9.65	7.24	355	1.81	83.15	1.25
1035	1.93	50	8.79	112.6	9.65	7.27	352	1.21	83.21	1.25
1039	2.12	55	8.81	110.3	9.64	7.27	352	1.38	83.28	1.25
1041	collected	sample	FEW4-MW80-223-17							
1116	PDB refilled w/ fresh VOC free water & redeployed									
	Mike Easterday									

Depth to water after purging/before sampling 83.28 ft BTOC
Analysis to be performed and Number of Containers:
VOCs (8260C) 3 40-mL VOA Preservative HCl, 4°C

COMMENTS: Used two weights for PDB
PDB appeared in good condition on 6/23/21

Field Duplicate ID:
Sample ID: **FEW4-MW80-223-17**
FEW4-MW80-223-PDB-17

Sampler Signature(s) Mike Easterday

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 6/22/21
Analytical Instrument: Hanna 98494

Project No.: 60613342
Field Crew: TM/AB
Weather: Sunny 80° Windy
Turbidity: LaMotte 2020

Well ID: MW81-207
Type of Well: Monitoring
Casing Stickup (ft) 2.45
Static Water Level (ft BTOC) 66.21'
Screen Length (ft): 15
Well Depth (ft BTOC)/Diameter (in): 214.65/2

Purging Equipment: Redi Flo II
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)
214.65-66.21 = 148.44 x 0.17 = 25.2 (1 casing) x 2 = 50.4 (2 casings)

Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate gpm
DL 6/21/21 0838	Deploy passive diffusion bags set at ~ 201' TOC									
6/22/21 1100	Collect FEW4-MW81-207-PDB-17 for VOCs									
1139	Begin Purging		8.22	148.5	9.74	7.46	312	5.23	74.71	NA
1144	0.2	5	8.75	108.0	10.61	7.34	318	60.0	78.01	1.0
1150	0.4	10	9.11	30.8	10.33	7.35	316	55.1	83.31	0.83
1154	0.6	15	9.05	33.3	10.04	7.35	316	12.0	86.94	1.25
1158	0.8	20	9.20	39.7	10.30	7.34	322	17.6	86.24	~~1.0~~ 1.25
1202	1.0	25	9.18	44.4	10.31	7.37	319	6.15	85.17	1.25
1207	1.19	30	9.17	52.4	10.30	7.39	319	4.45	85.15	1.0
1212	1.39	35	9.14	58.0	10.43	7.39	318	2.44	85.19	1.0
1217	1.59	40	9.13	63.9	10.55	7.39	322	2.36	85.29	1.0
1221	1.79	45	9.13	68.4	10.53	7.38	319	2.23	85.32	1.25
1225	1.98	50	9.12	71.1	10.49	7.38	318	2.11	85.43	1.25
1226	2.02	51	9.12	AB ~~74.9~~ 71.4	10.31	7.38	321	1.56	85.42	1.0
	Stop Purging									
1230	Collect FEW4-MW81-207-17 for VOCs									
1330	Redeploy PDB w/ organic-free water									

Depth to water after purging/before sampling 85.42 ft BTOC ____

Analysis to be performed and Number of Containers:

PDB	VOCs (8260C)	3 40-mL VOA	Preservative	HCl, 4°C
Regular	VOCs (8260C)	3 40-mL VOA	"	HCl, 4°C

Field Duplicate ID: ____
Sample ID: **FEW4-MW81-207-17**

COMMENTS: Used length of stainless steel chain ≈ weight of two lab-provided weights for PDB. PDB Bag in good condition

Sampler Signature(s) [signature]

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 6/20/21
Analytical Instrument: Hanna #198494

Project No.: 60613342
Field Crew: Daniel Arenchrich Michael Easterday
Weather: 70° sunny
Turbidity: 6 LaMotte 2020 we turbidimeter

Well ID: MW83-88
Type of Well: Monitoring
Casing Stickup (ft) 2.21
Static Water Level (ft BTOC) 80.92
Screen Length (ft): 10
Well Depth (ft BTOC)/Diameter (in): 93.31/2

Purging Equipment: RediFlo II pump
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)
(93.31 - 80.92) · 0.17 = 2.11 gall
(93.31 - 80.92)(1.8) = 9.9 → 93.31 - 9.9 = 83.41 = 80%

Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate gpm
84405/2024 6/20/21 1120	Deploy passive diffusion bag; set at ~88' TOC									
0932	begin retrieving PDB									
0937	collect sample / FEW4-MW83-88-PDB-17									
1000	begin purging									
1001	0.47	1	8.89	169.8	10.08	7.59	294	21.5	NM*	1
1003	well dewatered 0.5		pause pumping to let recharge							
	let recharge to									
1320	well recharged to 81.62'									
1329	resume purging									
1330	1.18	2.5	8.45	190.8	10.48	7.88	296	4.89	83.45	1
1331	1.66	3.5	8.82	171.8	11.46	7.77	295	2.33	NM*	1
1332	well dewatered; pause pumping to let recharge									
1634	well recharged to 81.83									
1639	collect samples		FEW4-MW83-88-17							
			FEW4-MW83-88-FD-17							
							Mike Easterday			

Depth to water after purging/before sampling 81.83 ft BTOC
Analysis to be performed and Number of Containers:
VOCs (8260C) 6 40-mL VOA Preservative HCl, 4°C

Field Duplicate ID: **FEW4-MW83-88-FD-17**
Sample ID: **FEW4-MW83-88-17**
FEW4-MW83-88-PDB-17

COMMENTS: * Not measured because water level could not pass check valve down well
PDB in good condition on 6/20/21
PDB redeployed @ 1652
" refilled @ 1650

Sampler Signature(s) Mike Easterday

✓

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 6/20/21
Analytical Instrument: Hanna HI98494

Project No.: 60613342
Field Crew: Daniel Heneghan, Michael Easterday
Weather: 70° Sunny
Turbidity: E La Motte 2020 WE

Well ID: MW88-133
Type of Well: Monitoring
Casing Stickup (ft) 1.90
Static Water Level (ft BTOC) 114.16
Screen Length (ft): 10
Well Depth (ft BTOC)/Diameter (in): 137.90/2

Purging Equipment: Redi-Flo II pump
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)
(137.90 – 114.16) · 0.17 = 4.04 gal

Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate (gpm)
06/05/2021 1255	Deploy passive diffusion bag, set at ~133' TOC									
6/20/21 1039	Begin retrieval of PDB									
1046	Sample FEW4-MW88-133-PDB-17 collected									
1127	Begin purging									
~~1130~~ DA	~~0.50~~ DA	~~2~~ DA								
1130	~~1.0~~ DA 0.50	~~4~~ DA 2	6.73	34.8	10.80	7.54	205	13.7	116.35	0.67
1133	1.0	4	7.95	46.8	12.35	7.55	201	6.48	116.41	0.67
1137	1.50	6	8.10	64.4	12.24	7.55	201	3.01	116.56	0.50
1140	2.0	8	8.19	76.1	12.12	7.56	201	2.69	116.58	0.67
1144	2.50	10	8.21	86.4	12.08	7.56	201	2.23	116.71	0.50
1147	3.0	12	8.26	89.6	11.98	7.58	201	2.43	116.74	0.67
1150	3.5	14	8.28	91.1	11.98	7.59	202	2.72	116.80	0.67
1152	Sample FEW4-MW88-133-17 collected									
1207	redeployed PDB to ~133' after refilling w/ fresh VOC free H_2O									

Mike Easterday

Depth to water after purging/before sampling 116.80 ft BTOC
Analysis to be performed and Number of Containers:
VOCs (8260C) 3 40-mL VOA Preservative HCl, 4°C

COMMENTS: PDB appeared in good condition on 6/20/21

Field Duplicate ID:
Sample ID: **FEW4-MW88-133-17**
Field-Blank-133-PDB-17

Sampler Signature(s)

✓

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 6/21/21
Analytical Instrument: Hanna H198494

Project No.: 60613342
Field Crew: ME DA
Weather: 62° cloudy
Turbidity: Lamotte 2020T

Well ID: MW92B-288
Type of Well: Monitoring
Casing Stickup (ft) 2.29
Static Water Level (ft BTOC) 273.75
Screen Length (ft): 10
Well Depth (ft BTOC)/Diameter (in): 293.12/2

Purging Equipment: bailer
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)
(293.12 - 273.75)(.17) = 3.29

Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate
06/04/2021 1350	Deploy passive diffusion bag, set at ~ 288' TOC									
6/21/21 → 1236	Begin removal of PDB									
1249	Collect sample FEW4-MW92B-288-PDB-17									
1320	Begin bailing									
1344	0.3	1	9.41	157.9	10.92	8.05	512	27.9	—	0.042
1356	0.6	2	9.46	143.2	10.71	7.88	508	42.4	—	0.083
1414	0.9	3	9.37	154.2	10.45	7.74	481	48	—	0.05
1427	1.2	4	9.38	129.6	10.43	7.60	507	36	—	0.08
1439	1.5	5	9.17	122.8	10.27	7.69	497	-4	—	0.083
1451	1.9	6	12.95	158.1	10.60	8.21	514	-28	—	0.083
1459	2.05	6.75								
1503	Collect sample FEW4-MW92B-288-17									
1503	Collect sample FEW4-MW92B-288-FD-17									
1510	refilled PDB w/ fresh VOC-free H_2O & redeployed @ ~288' TOC									

Mike Eastereday

Depth to water after purging/before sampling NM ft BTOC ____
Analysis to be performed and Number of Containers:
VOCs (8260C) 6 40-mL VOA Preservative HCl, 4°C

COMMENTS: PDB in good condition on 6/21/21

Field Duplicate ID: **FEW4-MW92B-288-FD-17**
Sample ID: **FEW4-MW92B-288-17**

Sampler Signature(s)

✓

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 6/20/21
Analytical Instrument: Hanna HI 98494

Project No.: 60613342
Field Crew: HG, JK
Weather: 62°, windy
Turbidity: LaMotte 2020 WE

Well ID: MW95-288
Type of Well: Monitoring
Casing Stickup (ft) 2.72
Static Water Level (ft BTOC) 92.75
Screen Length (ft): 10
Well Depth (ft BTOC)/Diameter (in): 292.52/2

Purging Equipment: Redi Flo 2
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)
292.52 - 92.75 = 199.77 x .17 = 34 x 2 = 68

Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate
10/3/2021 1150	Deploy Passive Diffusion Bag; set at ~287.5' TOC									
6/20/2021 0848	Sample FEW4-MW95-288-PDB-17 collected									
1018	BEGIN PURGING									
1024	0.29	10.0	8.04	54.2	12.12	7.65	244	6.13	94.11	1.67
1030	0.59	20.0	8.04	59.8	12.14	7.60	251	2.55	93.98	1.67
1037	0.88	30.0	8.15	57.5	12.28	7.75	258	2.55	93.74	1.43
1047	1.18	40.0	8.24	58.4	12.38	7.65	256	2.16	93.53	1.0
1056	1.47	50.0	8.34	59.4	12.49	7.82	263	2.23	93.50	1.11
1106	1.76	60.0	8.35	60.5	12.60	7.78	266	2.10	93.51	1.0
1116	2.06	70.0	8.39	62.5	12.60	7.82	266	2.27	93.55	1.0
1121	SAMPLES FEW4-MW95-288-17 + FD COLLECTED									
1151	PDB REFILLED W/ VOC FREE WATER + REDEPLOYED									

Depth to water after purging/before sampling 93.55 ft BTOC

COMMENTS: PDB in good condition, like new

Analysis to be performed and Number of Containers:
VOCs (8260C) 6 40-mL VOA Preservative HCl, 4°C

Field Duplicate ID: **FEW4-MW95-288-FD-17**
Sample ID: **FEW4-MW95-288-17**
FEW4-MW95-288-PDB-17

Sampler Signature(s)

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 06/28/2021
Analytical Instrument: Horiba 88484

Project No.: 60613342
Field Crew: HH
Weather: sunny, windy, 60s
Turbidity: Geotech Turbidity

Well ID: MW97-266
Type of Well: Monitoring
Casing Stickup (ft) 2.55
Static Water Level (ft BTOC) 235.12
Screen Length (ft): 10
Well Depth (ft BTOC)/Diameter (in): 271.05/2

Purging Equipment: 1.5" bladder pump - no packer + bailer
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)

271.05 - 235.12 = 35.93 x 0.17 = 6.1 gal = 1 casing

Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate
06/30/2021 1450	Deploy passive ~~diffusion~~ HH diffusion bags set at ~266' TOC									
06/28/21 0845	Collect sample FEW4-MW97-266-PDB-12 for VOC analysis									
0927	Begin conventional purge w/ bladder pump. Controller on.									
0946	Water to surface									
1022	0.2	1.25	Stop purge - water & air blasting out of discharge line w/ pressure lowered to 80 psi from 130 psi (was at 130 psi when water initially came to surface) let pressure dissipate							
1104	Controller back on w/ psi at 60									
1106	Controller off - water & air still blasting out of discharge line, tried lowering to 40 psi but did not solve problem. Likely that pump bags have been compromised - do not throw replacement bags → will hand bail well this event. 2 gal purged so far									
1303	Begin bailing									
1322		3	~~2.55~~	-66.9	14.51	7.85	549	13.9	NA	NA
1332		4	4.47	-100.8	12.13	7.38	592	11.2	NA	NA
1342		5	4.90	-108.6	12.58	7.29	724	10.3	NA	NA
1355	0.98	6	5.80	-112.0	12.29	7.33	786	14.2	NA	NA
1405		7	4.36	-104.9	12.35	7.27	827	46.2	NA	NA
1416	1.3	8	~~4.0~~ 5.54	-100.7	12.47	7.28	740	95.7	~~253.75~~ HH 253.75	NA
1418	Collect sample FEW4-MW97-266-17 for VOC analysis									
1430	Refill PDB w/ VOC free water & redeploy into well									

Depth to water after purging/before sampling 253.75 ft BTOC
Analysis to be performed and Number of Containers:
VOCs (8260C) 3 40-mL VOA Preservative HCl, 4°C

Field Duplicate ID:
Sample ID: **FEW4-MW97-266-17**
FEW4-MW97-266-PDB-17

COMMENTS: ~~very large water column in this well~~ HH ~~suspect~~ HH was stated bottom of pdb during deployment - suspect between or multiple weights but used in the future when wells have large water columns. On 6/3/21, ended up adding a second weight to pdb.
On 6/28/21 PDB appeared in good condition.

Sampler Signature(s) Holly

✓

GROUNDWATER SAMPLING LOG

Project Name: F.E. Warren Atlas Site 4
Site Name: Former Atlas D Missile Site 4
Sampling Date: 6/19/21
Analytical Instrument: Hanna H198494

Project No.: 60613342
Field Crew: Daniel Arancibia, Michael Eastenday
Weather: 75° overcast & windy
Turbidity: E La Motte 2020 me

Well ID: MW106-272
Type of Well: Monitoring
Casing Stickup (ft) 1.99
Static Water Level (ft BTOC) 198.40
Screen Length (ft): 10
Well Depth (ft BTOC)/Diameter (in): 276.31/2

Purging Equipment: Redi-Flo II
CASING VOLUME CALCULATION
(TD(ft) – DTW(ft)) x ____ gal/ft = 1 casing volume (gals)
(276.31 – 198.40) · 0.17 = 13.2 gal · 2 = 26.4 gal

	Time	Casing Volumes	Gallons Removed	D.O. (±0.5 mg/l)	ORP (±10 mV)	Temp (±1°C)	pH (±0.1)	Sp. Cond. (±3 µS)	Turbidity (± 10% NTUs)	PWL (ft TOC)	Purge Rate spm
06/04/2021	1445	Deploy passive diffusion bag; set at ~ 271' TOC									
6/19/2021	1129	collect PDB sample FEW4-MW106-272-PDB-17									
	1155	Start purging									
	1156	controller overload; paused purging to let controller recover									
	1208	resume purging									
	1211	controller overload									
	1218	~~resume purging with backup controller~~ DA Troubleshooting									
	1230	resume purging									
	1232	0.38	5	9.81	121.2	11.69	8.03	261	-18	199.89	2.5
	1235	0.76	10	9.77	146.6	11.72	8.01	261	23.1	199.85	1.7
	1238	1.14	15	9.74	162.3	11.76	7.91	261	11.2	199.61	1.7
	1242	1.52	20	9.69	166.0	11.82	7.79	261	6.66	199.52	1.25
	1246	1.89	25	9.63	172.3	12.10	7.72	261	2.76	199.28	1.25
	1251	2.27	30	9.57	172.0	12.27	7.64	261	2.07	199.28	1
	1256	2.65	35	9.53	171.0	12.22	7.62	261	1.81	199.31	1
	1258	Sample FEW4-MW106-272-17 collected									
	1423	passive diffusion bag filled w/ fresh VOC free H_2O redeployed @ ~271'									

Mike Eastenday

Depth to water after purging/before sampling 199.31 ft BTOC ____
Analysis to be performed and Number of Containers:
VOCs (8260C) 3 40-mL VOA Preservative HCl, 4°C

COMMENTS: PDB would not ~~descend~~ descend fully w/ only one weight - used two weights
- PDB appeared to be in good condition on 6/19/21

Field Duplicate ID: ____
Sample ID: **FEW4-MW106-272-17**

Sampler Signature(s) [signature]

US Army Corps of Engineers

Facility:	B08WY0467-02, F.E. Warren AFB, Site 4, Feasibility Study
Event:	FE Warren Site 4 FS Spring 2021
SDG:	96643
Guidance Document:	F.E. Warren Atlas Site 4 - Draft Final LT & PM UFP-QAPP Addendum 1
Prime Contractor:	URS Group, Inc.
Project Manager:	Robert Mallisee
Contract Laboratory(ies):	Agriculture & Priority Pollutants Laboratories, Inc., Clovis, CA
Data Review Contractor:	URS Group, Inc.
Data Review Level:	S2BVEM
Primary Data Reviewer:	Gary Torf, Project Chemist
Date Submitted:	October 29, 2021

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	SW8260C
FEW4-MW01-17	BA35029	Water	Field Sample/N	X
FEW4-MW01-PDB-17	BA35030	Water	Field Sample/N	X
FEW4-MW106-272-17	BA35031	Water	Field Sample/N	X
FEW4-MW106-272-PDB-17	BA35032	Water	Field Sample/N	X
FEW4-MW50-250-17	BA35033	Water	Field Sample/N	X
FEW4-MW50-250-PDB-17	BA35034	Water	Field Sample/N	X
FEW4-MW55-250-17	BA35035	Water	Field Sample/N	X
FEW4-MW55-250-FD-17	BA35036	Water	Field Duplicate/FD	X
FEW4-MW55-250-PDB-17	BA35037	Water	Field Sample/N	X
FEW4-MW56-203-17	BA35038	Water	Field Sample/N	X
FEW4-MW56-203-FD-17	BA35039	Water	Field Duplicate/FD	X
FEW4-MW56-203-PDB-17	BA35040	Water	Field Sample/N	X
FEW4-MW83-88-17	BA35041	Water	Field Sample/N	X
FEW4-MW83-88-FD-17	BA35042	Water	Field Duplicate/FD	X
FEW4-MW83-88-PDB-17	BA35043	Water	Field Sample/N	X
FEW4-MW88-133-17	BA35044	Water	Field Sample/N	X
FEW4-MW88-133-PDB-17	BA35045	Water	Field Sample/N	X
FEW4-MW95-288-17	BA35046	Water	Field Sample/N	X
FEW4-MW95-288-FD-17	BA35047	Water	Field Duplicate/FD	X
FEW4-MW95-288-PDB-17	BA35048	Water	Field Sample/N	X
FEW4-MW97-266-17	BA35049	Water	Field Sample/N	X

Data Validation Report for 96643

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	SW8260C
FEW4-MW97-266-PDB-17	BA35050	Water	Field Sample/N	X
FEW4-TB20-17	BA35053	Water	Trip Blank/TB	X
FEW4-TH5-205-17	BA35051	Water	Field Sample/N	X
FEW4-TH5-205-PDB-17	BA35052	Water	Field Sample/N	X

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page at S2BVEM data validation level. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the F.E. Warren Atlas Site 4 - Draft Final LT & PM UFP-QAPP Addendum 1 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by URS Group, Inc.; analyses were performed by Agriculture & Priority Pollutants Laboratories, Inc., Clovis, CA and were reported under sample delivery group (SDG) 96643. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Field Duplicate RPD
- Lab Blank
- LCS Recovery
- LCS RPD
- MS Recovery
- MS RPD
- Prep Hold Time
- Surrogate
- Test Hold Time
- Trip Blank

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 3 results (0.24%) out of the 1275 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected or deemed a serious deficiency (X qualifier). Trace values, defined as results that are qualified as estimated because they fall between the detection limit and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Analytical Method	Data Reviewer Comment
SW8260C	No additional comments; see Checklist for detail.

Gary Torf

October 29, 2021

Reviewed by Gary Torf, Project Chemist, URS Group, Inc.

As the Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of the reported sample results and method quality control data between the two deliverables.

Quality Control Outliers for test method SW8260C, LCS RPD

The objective of laboratory control sample/laboratory control sample duplicate (LCS/LCSD) RPD analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. LCS/LCSD analyses are also performed to generate data that determines the long-term precision of the analytical method on various matrices. Non-homogenous samples can impact the apparent method precision. Summary forms were evaluated and compared to electronic data deliverables. Laboratory control sample/laboratory control sample duplicate RPD results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
BD-M210701AW-266366 (BD)	1,2-Dichloropropane	21.34	< 20	< 20	rpd	J/None	Z	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8260C, Surrogate

Method performance for individual samples is demonstrated through spiking activities. All samples are spiked with surrogate compounds prior to sample preparation. The sample itself may produce effects due to such factors as interferences and high concentrations of analytes. Summary forms were evaluated and compared to electronic data deliverables. Surrogate results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
FEW4-MW01-17 (N)	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	83.20	85 - 114	10 - 114	percent	J/UJ	I	
FEW4-MW106-272-17 (N)	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	83.60	85 - 114	10 - 114	percent	J/UJ	I	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW01-17 BA35029	N	Trichloroethene (TCE)	20.0	120	120 J	-	ug/l	I
FEW4-MW106-272-17 BA35031	N	Trichloroethene (TCE)	20.0	190	190 J	-	ug/l	I

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW8260C, Test Hold Time

Hold times are ascertained based on project requirements. Holding times were determined by comparing the chain of custody records with the dates of analysis found in the electronic data deliverable and laboratory summary forms. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
FEW4-MW88-133-17 (N)		18.64	< 14	< 28	days	J/UJ	H1	Test Exceeds UWL

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Test Hold Time for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW88-133-17 BA35044	N	Trichloroethene (TCE)	20.0	730	110 J	-	ug/l	H1/V2/R

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.

Table of All Qualified Results

Test Method: SW8260C		**Extraction Method: SW5030**						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW01-17 BA35029	N	Trichloroethene (TCE)	20.0	120	120 J	-	ug/l	I
FEW4-MW106-272-17 BA35031	N	Trichloroethene (TCE)	20.0	190	190 J	-	ug/l	I
FEW4-MW88-133-17 BA35044	N	Trichloroethene (TCE)	20.0	730	110 J	-	ug/l	H1/V2/R

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Table of All Trace Results

Test Method: SW8260C Extraction Method: SW5030

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW50-250-MS-17	MS	Cyclohexane	10.0	8.17	8.17 J		ug/L	TR
FEW4-MW50-250-MS-17	MS	Methylcyclohexane	10.0	9.09	9.09 J		ug/L	TR
FEW4-MW50-250-MSD-17	SD	Cyclohexane	10.0	8.60	8.60 J		ug/L	TR
FEW4-MW50-250-MSD-17	SD	Methyl acetate	10.0	9.12	9.12 J		ug/L	TR
FEW4-MW50-250-MSD-17	SD	Methylcyclohexane	10.0	9.04	9.04 J		ug/L	TR

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-MW88-133-17 BA35044	N	Trichloroethene (TCE)	20.0	730	730 J	110 J	H1/V2/R

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Reason Code Definitions

Code	Definition
H1	Test Hold Time
I	Surrogate recovery outside project limits.
R	Exceeds LinearCalibration Range
TR	Trace Level Detect
V2	CCV
Z	LCS RPD

Flag Code and Definitions

Flag	Definition
J	Estimated: The analyte was positively identified, the quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.

Bias

-	The result may be biased low
+	The result may be biased high

Note - The bias field is a separate field; however, it is an integral part of the final flag (qualifier) on the sample result

Review Questions

Method: SW8260C (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Were all samples documented correctly on the chain-of-custody (COC)?	•			
Did samples listed on COCs match the sample labels?	•			
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservattion, pH, and temperature) are documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified laboratory PQLs achieved?	•			
Were holding times met?		•		Trichloroethene dilution analysis for FEW4-MW88-133-17 missed the holding time by less than two times.
Were trip blanks analyzed at the proper frequency and in control?	•			
Were field blanks analyzed at the proper frequency and in control?			•	A field blank was not collected with this SDG.
Were equipment blanks analyzed at the proper frequency and in control?			•	An equipment blank was not collected with this SDG.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?		•		210701W-35163 LCS - 266366: 1,2-Dichloropropane 21.3% RPD.
Was a MS/MSD pair prepared with each batch?	•			Matrix spike duplicate samples were collected for FEW4-MW50-250-17.
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were surrogate recoveries within project acceptance limits?		•		4-Bromofluorobenzene (85-114%): FEW4-MW01-17 83.1%, FEW4-MW106-272-17 83.8%.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			Field duplicate samples were collected for FEW4-MW55-250-17, FEW4-MW56-203-17, FEW4-MW83-88-17,FEW4-MW95-288-17.
Were reported sample concentrations within calibration range?		•		The TCE result for sample FEW4-MW88-133-17 has been revised to be reported from an undiluted run that exceed the calibration range due to an anomalous result for the 20X dilution result.
Was the GC/MS system properly tuned based on method criteria?	•			

Review Questions

Method: SW8260C (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Was instrument tuning completed every 12 hours during sample analysis?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?		•		Max 0701M12: Dichlorodifluoromethane 32%, Vinyl chloride 23%, bromomethane 55% were outside the 20% control limit. Loki 0701L35: Vinyl chloride 22%, 1,2-dibromo-3-chloropropane 24% was outside the 20% control limit.
Were CCVs run at the required frequency and within project acceptance criteria?		•		Loki CCV 0702L08: Vinyl chloride 30%, carbon disulfide 22% were outside the 20% control limit. Loki ECCV 0702L32: Vinyl chloride 200%, dichlorofluoromethane 166%, acetone 185%, carbon disulfide 167%, 2-butanone 248% were outside the 50-150% control limit. Loki ECCV 0708L38: Trichloroethene 309% was outside the 50-150% control limit.
Were internal standard retention times and area criteria within project acceptance criteria?	•			
Were internal standards spiked for every sample, standard, and QC sample?	•			
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?			•	
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			No quality control issues were noted in the lab report narrative.
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		

US Army Corps of Engineers

Facility:	B08WY0467-02, F.E. Warren AFB, Site 4, Feasibility Study
Event:	FE Warren Site 4 FS Passive Diffusion Bags
SDG:	94726
Guidance Document:	F.E. Warren Atlas Site 4 - Draft Final LT & PM UFP-QAPP Addendum 1
Prime Contractor:	URS Group, Inc.
Project Manager:	Robert Mallisee
Contract Laboratory(ies):	Agriculture & Priority Pollutants Laboratories, Inc., Clovis, CA
Data Review Contractor:	URS Group, Inc.
Data Review Level:	S2BVEM
Primary Data Reviewer:	Gary Torf, Project Chemist
Date Submitted:	January 25, 2021

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	SW8260C
FEW4-MW01-PDB	BA24923	Water	Field Sample/N	X
FEW4-MW101-238-PDB	BA24924	Water	Field Sample/N	X
FEW4-MW66-205-PDB	BA24922	Water	Field Sample/N	X
FEW4-MW69-164-PDB	BA24920	Water	Field Sample/N	X
FEW4-MW83-88-PDB	BA24921	Water	Field Sample/N	X
FEW4-TB-PDB	BA24925	Water	Trip Blank/TB	X

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page at S2BVEM data validation level. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the F.E. Warren Atlas Site 4 - Draft Final LT & PM UFP-QAPP Addendum 1 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by URS Group, Inc.; analyses were performed by Agriculture & Priority Pollutants Laboratories, Inc., Clovis, CA and were reported under sample delivery group (SDG) 94726. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Blank - Negative
- Extracted Internal Standard
- Lab Blank
- LCS Recovery
- LCS RPD
- Prep Hold Time
- Surrogate
- Test Hold Time
- Trip Blank

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 1 results (0.33%) out of the 306 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected or deemed a serious deficiency. Trace values, defined as results that are qualified as estimated because they fall between the detection limit and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Analytical Method	Data Reviewer Comment
SW8260C	No additional comments; see Checklist for detail.

Gary Torf

January 25, 2021

Reviewed by Gary Torf, Project Chemist, URS Group, Inc.

As the Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of a minimum of 10% of the reported sample results and method quality control data between the two deliverables.

Quality Control Outliers for test method SW8260C, LCS Recovery

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
BS-Z210114AW-260366 (BS)/ BS-Z210114AW-260366	1,1,2,2-Tetrachloroethane	127.0	71 - 121	71 - 121	percent	J/None	C	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8260C, Trip Blank

The purpose of trip blanks is to determine the existence and magnitude of cross-contamination problems resulting from the shipping of samples. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in trip blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
FEW4-TB-PDB (TB)/ BA24925	Acetone	12.00	< 0.95	< 10	ug/l	U/None	T	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Trip Blank for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW66-205-PDB	N	Acetone	40.0	21.0 J	40.0 U		ug/l	T

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.

Table of All Qualified Results

Test Method: SW8260C	**Extraction Method: SW5030**							
FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW66-205-PDB	N	Acetone	40.0	21.0 J	40.0 U		ug/l	T

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Table of All Trace Results

Test Method: SW8260C Extraction Method: SW5030

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW66-205-PDB	N	2-Butanone (MEK)	40.0	33.0 J	33.0 J		ug/L	TR
FEW4-MW66-205-PDB	N	2-Hexanone	40.0	16.0 J	16.0 J		ug/L	TR
FEW4-MW69-164-PDB	N	Chloromethane	1.00	0.970 J	0.970 J		ug/L	TR

Results with Modified Qualifiers

No qualifiers associated with this sample delivery group were modified manually.

Reason Code Definitions

Code	Definition
C	LCS Recovery
T	Trip Blank
TR	Trace Level Detect

Flag Code and Definitions

Flag	Definition
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
J	Estimated: The analyte was positively identified, the quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
B	Blank contamination: The analyte was found in an associated blank above one half the RL, as well as in the sample.
UB	The analyte was also detected in an associated laboratory or field blank at a concentration comparable to the concentration in the sample. The reported result has been requalified as not detected.
X	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

Review Questions

Method: SW8260C (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Did Chain-of-Custody information agree with laboratory report and EDD for requested field samples and tests?	•			
Were samples preserved properly and received in good condition?	•			Cooler at receipt was 3.0º C
Were holding times met?	•			
Were all requested target analytes reported?	•			
Was the GC/MS system properly tuned based on method criteria?	•			
Was instrument tuning completed every 12 hours during sample analysis?	•			
Was the Calibration within acceptance criteria?	•			
Was either analysis of an ICV performed after each ICAL or a second source standard prior to sample analysis?	•			
Were all reported analytes for the ICV within the required criteria?	•			
Were CCVs run at the required frequency and within acceptance criteria?	•			
Were internal standard retention times and area criteria within method requirements?	•			
Were internal standards spiked for every sample, standard, and QC sample?	•			
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Were target analytes in the field blank less than DL?		•		FEW4-TB-PDB: Acetone 12 ug/L.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?		•		210114W-24920 LCS - 260366: 1,1,2,2-Tetrachloroethane 127% recovery was greater than the 121% upper control limit.
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?		•		Matrix spike duplicate samples were not collected with this SDG.
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Was the laboratory duplicate RPD within project acceptance limits?			•	A laboratory duplicate sample were not analyzed with this SDG.
Were surrogate recoveries within project acceptance limits?	•			
Were all reported analytes within established retention time windows?	•			
If a field duplicate was analyzed, were the RPDs within QAPP acceptance limits?			•	Field duplicate samples were not collected with this SDG.
Were QAPP specified laboratory PQLs achieved?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for rejection (exclusion) in the data validation process?		•		

Automated Data Review Detail Report for 94726
B08WY0467-02, F.E. Warren AFB, Site 4, Feasibility Study
F.E. Warren Atlas Site 4 - Draft Final LT & PM UFP-QAPP Addendum 1

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Sample Summary

Location	Field Sample ID	Date	Time	Sample Type	Matrix	SBD	SED	SW8260C
FEW4-MW69-164	FEW4-MW69-164-PDB	01-12-2021	1035	N	WG	156.70	166.70	X
FEW4-MW83-88	FEW4-MW83-88-PDB	01-12-2021	1100	N	WG	81.10	91.10	X
FEW4-MW66-205	FEW4-MW66-205-PDB	01-12-2021	1115	N	WG	196.00	211.00	X
FEW4-MW01	FEW4-MW01-PDB	01-12-2021	1140	N	WG	72.00	82.00	X
FEW4-MW101-238	FEW4-MW101-238-PDB	01-12-2021	1155	N	WG	230.20	240.20	X
FIELDQC	FEW4-TB-PDB	01-12-2021	0800	TB	WQ	0.00	0.00	X
							Total	**6**

Batch Report

Test Method: SW8260C Analysis Batch: 260366

Location	Matrix	Field Sample ID	Lab Sample ID	Calibration Ref	Run#/ Dil'n	Collection Date/Time	Extraction Date/Time	Analysis Date/Time	Prep/Leach Batch	Sample Type
LABQC	WQ	BS-Z210114AW-260366	BS-Z210114AW-260366		1/1	1/14/2021 10:54	1/14/2021 10:54	1/14/2021 10:54	260366/	BS
LABQC	WQ	BD-Z210114AW-260366	BD-Z210114AW-260366		1/1	1/14/2021 11:17	1/14/2021 11:17	1/14/2021 11:17	260366/	BD
LABQC	WQ	LB-Z210114AW-260366	LB-Z210114AW-260366		1/1	1/14/2021 11:41	1/14/2021 11:41	1/14/2021 11:41	260366/	LB
FIELDQC	WQ	FEW4-TB-PDB	BA24925		1/1	1/12/2021 08:00	1/14/2021 12:04	1/14/2021 12:04	260366/	TB
FEW4-MW69-164	WG	FEW4-MW69-164-PDB	BA24920		1/1	1/12/2021 10:35	1/14/2021 12:27	1/14/2021 12:27	260366/	N
FEW4-MW83-88	WG	FEW4-MW83-88-PDB	BA24921		1/1	1/12/2021 11:00	1/14/2021 12:50	1/14/2021 12:50	260366/	N
FEW4-MW01	WG	FEW4-MW01-PDB	BA24923		1/1	1/12/2021 11:40	1/14/2021 13:13	1/14/2021 13:13	260366/	N
FEW4-MW101-238	WG	FEW4-MW101-238-PDB	BA24924		1/1	1/12/2021 11:55	1/14/2021 13:37	1/14/2021 13:37	260366/	N
FEW4-MW66-205	WG	FEW4-MW66-205-PDB	BA24922		1/4	1/12/2021 11:15	1/14/2021 14:46	1/14/2021 14:46	260366/	N

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Batch Report

Test Method: SW8260C Analysis Batch: 260367

Location	Matrix	Field Sample ID	Lab Sample ID	Calibration Ref	Run#/ Dil'n	Collection Date/Time	Extraction Date/Time	Analysis Date/Time	Prep/Leach Batch	Sample Type
LABQC	WQ	BS-Z2101141AW-260367	BS-Z2101141AW-260367		2/1	1/14/2021 10:54	1/14/2021 10:54	1/14/2021 10:54	260367/	BS
LABQC	WQ	BD-Z2101141AW-260367	BD-Z2101141AW-260367		2/1	1/14/2021 11:17	1/14/2021 11:17	1/14/2021 11:17	260367/	BD
LABQC	WQ	LB-Z2101141AW-260367	LB-Z2101141AW-260367		2/1	1/14/2021 11:41	1/14/2021 11:41	1/14/2021 11:41	260367/	LB
FEW4-MW66-205	WG	FEW4-MW66-205-PDB	BA24922		2/20	1/12/2021 11:15	1/14/2021 15:09	1/14/2021 15:09	260367/	N

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Field Batch Report

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

EBLOT	TBLOT	ABLOT	LOCID	Matrix	FLDSAMPID	LABSAMPID	LOGDATE	SACODE
	12012101		FEW4-MW01	WG	FEW4-MW01-PDB	BA24923	1/12/2021 11:40	N
	12012101		FEW4-MW101-238	WG	FEW4-MW101-238-PDB	BA24924	1/12/2021 11:55	N
	12012101		FEW4-MW66-205	WG	FEW4-MW66-205-PDB	BA24922	1/12/2021 11:15	N
	12012101		FEW4-MW69-164	WG	FEW4-MW69-164-PDB	BA24920	1/12/2021 10:35	N
	12012101		FEW4-MW83-88	WG	FEW4-MW83-88-PDB	BA24921	1/12/2021 11:00	N
	12012101		FIELDQC	WQ	FEW4-TB-PDB	BA24925	1/12/2021 08:00	TB

MS Mismatch Report

--No Records Found--

Section to identify Matrix Spike mismatches where parent sample differs from MS by dilution.

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QC Outlier Report

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

QC Element	Sample ID/ Lab Sample ID	Run#/ Dil'n	Analyte	Result (Units)	Qualifier	Warning Limits	Control Limits	Reason	Comment	Rule	Action Level
LCS Recovery	BS-Z210114AW-260366 (BS) / BS-Z210114AW-260366	1 / 1.00	1,1,2,2-Tetrachloroethane	127.0 (percent)	J/None	71 - 121	71 - 121	C			
Trip Blank	FEW4-TB-PDB (TB) / BA24925	1 / 1.00	Acetone	12.00 (ug/l)	*U/None	< 0.95	< 10	T		2	24.0

Rule is the multiplier used when blank contamination occurs to determine action level.

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Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW66-205-PDB	BA24922	W	N	2-Butanone (MEK)	40.0	33.0 J	33.0 J		ug/l	TR
FEW4-MW66-205-PDB	BA24922	W	N	2-Hexanone	40.0	16.0 J	16.0 J		ug/l	TR
FEW4-MW66-205-PDB	BA24922	W	N	Acetone	40.0	21.0 J	40.0 U		ug/l	T
FEW4-MW69-164-PDB	BA24920	W	N	Chloromethane	1.00	0.970 J	0.970 J		ug/l	TR

Qualified analytes in samples are reported as estimated, not detected (UJ) at the Limit of Detection (LOD).

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Detected Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Dilution	Analyte	LOQ	Lab Result	Qualified Result	Units	Reason
FEW4-MW01-PDB	BA24923	W	N	1	Chloromethane	1.00	1.10	1.10	ug/l	
FEW4-MW01-PDB	BA24923	W	N	1	Trichloroethene (TCE)	1.00	80.0	80.0	ug/l	
FEW4-MW101-238-PDB	BA24924	W	N	1	Chloromethane	1.00	1.00	1.00	ug/l	
FEW4-MW101-238-PDB	BA24924	W	N	1	Trichloroethene (TCE)	1.00	2.20	2.20	ug/l	
FEW4-MW66-205-PDB	BA24922	W	N	4	2-Butanone (MEK)	40.0	33.0 J	33.0 J	ug/l	TR
FEW4-MW66-205-PDB	BA24922	W	N	4	2-Hexanone	40.0	16.0 J	16.0 J	ug/l	TR
FEW4-MW66-205-PDB	BA24922	W	N	4	Chloromethane	4.00	4.30	4.30	ug/l	
FEW4-MW66-205-PDB	BA24922	W	N	4	cis-1,2-Dichloroethene	4.00	7.00	7.00	ug/l	
FEW4-MW66-205-PDB	BA24922	W	N	20	Trichloroethene (TCE)	20.0	1800	1800	ug/l	
FEW4-MW69-164-PDB	BA24920	W	N	1	Chloromethane	1.00	0.970 J	0.970 J	ug/l	TR
FEW4-MW69-164-PDB	BA24920	W	N	1	Trichloroethene (TCE)	1.00	7.40	7.40	ug/l	
FEW4-MW83-88-PDB	BA24921	W	N	1	Chloromethane	1.00	1.10	1.10	ug/l	
FEW4-MW83-88-PDB	BA24921	W	N	1	Trichloroethene (TCE)	1.00	48.0	48.0	ug/l	
FEW4-TB-PDB	BA24925	W	TB	1	Acetone	10.0	12.0	12.0	ug/l	

Rejected Results

--No Records Found--

Facility:	B08WY0467-02, F.E. Warren AFB, Site 4, Feasibility Study
Event:	FE Warren Site 4 FS Spring 2021
SDG:	96634
Guidance Document:	F.E. Warren Atlas Site 4 - Draft Final LT & PM UFP-QAPP Addendum 1
Prime Contractor:	URS Group, Inc.
Project Manager:	Robert Mallisee
Contract Laboratory(ies):	Agriculture & Priority Pollutants Laboratories, Inc., Clovis, CA
Data Review Contractor:	URS Group, Inc.
Data Review Level:	S2BVEM
Primary Data Reviewer:	Gary Torf, Project Chemist
Date Submitted:	November 10, 2021

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	SW8260C
FEW4-MW48-225-PDB-17	BA34979	Water	Field Sample/N	X
FEW4-MW56-290-PDB-17	BA34980	Water	Field Sample/N	X

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page at S2BVEM data validation level. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the F.E. Warren Atlas Site 4 - Draft Final LT & PM UFP-QAPP Addendum 1 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by URS Group, Inc.; analyses were performed by Agriculture & Priority Pollutants Laboratories, Inc., Clovis, CA and were reported under sample delivery group (SDG) 96634. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

Lab Blank

LCS Recovery

LCS RPD

Prep Hold Time

Surrogate

Test Hold Time

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 52 results (50.98%) out of the 102 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected or deemed a serious deficiency (X qualifier). Trace values, defined as results that are qualified as estimated because they fall between the detection limit and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Analytical Method	Data Reviewer Comment
SW8260C	No additional comments; see Checklist for detail.

Gary Torf

November 10, 2021

Reviewed by Gary Torf, Project Chemist, URS Group, Inc.

As the Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of the reported sample results and method quality control data between the two deliverables.

Quality Control Outliers for test method SW8260C, LCS Recovery

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
BD-Z210628AW-266163 (BD)/ BD-Z210628AW-266163	Isopropylbenzene (Cumene)	64.00	72 - 131	72 - 131	percent	J/UJ	C	
BS-Z210628AW-266163 (BS)/ BS-Z210628AW-266163	1,1,2,2-Tetrachloroethane	135.0	71 - 121	71 - 121	percent	J/None	C	
BS-Z210628AW-266163 (BS)/ BS-Z210628AW-266163	Ethylbenzene	167.0	79 - 121	79 - 121	percent	J/None	C	
BS-Z210628AW-266163 (BS)/ BS-Z210628AW-266163	m,p-Xylene	169.0	80 - 121	80 - 121	percent	J/None	C	
BS-Z210628AW-266163 (BS)/ BS-Z210628AW-266163	o-Xylene	154.0	78 - 122	78 - 122	percent	J/None	C	
BS-Z210628AW-266163 (BS)/ BS-Z210628AW-266163	Styrene	144.0	78 - 123	78 - 123	percent	J/None	C	
BS-Z210628AW-266163 (BS)/ BS-Z210628AW-266163	Vinyl chloride	160.0	58 - 137	58 - 137	percent	J/None	C	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the LCS Recovery for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW48-225-PDB-17 BA34979	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	C
FEW4-MW56-290-PDB-17 BA34980	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	C/I

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW8260C, LCS RPD

The objective of laboratory control sample/laboratory control sample duplicate (LCS/LCSD) RPD analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. LCS/LCSD analyses are also performed to generate data that determines the long-term precision of the analytical method on various matrices. Non-homogenous samples can impact the apparent method precision. Summary forms were evaluated and compared to electronic data deliverables. Laboratory control sample/laboratory control sample duplicate RPD results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
BD-Z210628AW-266163 (BD)/ BD-Z210628AW-266163	1,1,2,2-Tetrachloroethane	58.74	< 20	< 20	rpd	J/None	Z	
BD-Z210628AW-266163 (BD)/ BD-Z210628AW-266163	1,2,3-Trichlorobenzene	25.48	< 20	< 20	rpd	J/None	Z	
BD-Z210628AW-266163 (BD)/ BD-Z210628AW-266163	1,2,4-Trichlorobenzene	22.53	< 20	< 20	rpd	J/None	Z	
BD-Z210628AW-266163 (BD)/ BD-Z210628AW-266163	Bromoform	23.50	< 20	< 20	rpd	J/None	Z	
BD-Z210628AW-266163 (BD)/ BD-Z210628AW-266163	Ethylbenzene	44.69	< 20	< 20	rpd	J/None	Z	
BD-Z210628AW-266163 (BD)/ BD-Z210628AW-266163	Isopropylbenzene (Cumene)	50.00	< 20	< 20	rpd	J/None	Z	
BD-Z210628AW-266163 (BD)/ BD-Z210628AW-266163	m,p-Xylene	46.89	< 20	< 20	rpd	J/None	Z	
BD-Z210628AW-266163 (BD)/ BD-Z210628AW-266163	o-Xylene	43.00	< 20	< 20	rpd	J/None	Z	
BD-Z210628AW-266163 (BD)/ BD-Z210628AW-266163	Styrene	37.13	< 20	< 20	rpd	J/None	Z	
BD-Z210628AW-266163 (BD)/ BD-Z210628AW-266163	Vinyl chloride	24.56	< 20	< 20	rpd	J/None	Z	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8260C, Surrogate

Method performance for individual samples is demonstrated through spiking activities. All samples are spiked with surrogate compounds prior to sample preparation. The sample itself may produce effects due to such factors as interferences and high concentrations of analytes. Summary forms were evaluated and compared to electronic data deliverables. Surrogate results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
FEW4-MW56-290-PDB-17 (N)/ BA34980	1,2-Dichloroethane-d4	74.00	81 - 118	10 - 118	percent	J/UJ	I	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW56-290-PDB-17 BA34980	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Acetone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW56-290-PDB-17 BA34980	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	cis-1,2-Dichloroethene	1.00	1.00	1.00 J	-	ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	C/I
FEW4-MW56-290-PDB-17 BA34980	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW56-290-PDB-17 BA34980	N	Trichloroethene (TCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	I

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW8260C, Test Hold Time

Hold times are ascertained based on project requirements. Holding times were determined by comparing the chain of custody records with the dates of analysis found in the electronic data deliverable and laboratory summary forms. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
FEW4-MW48-225-PDB-17 (N)/ BA34979		31.30	< 14	< 28	days	J/X	H1	Test Exceeds UCL
FEW4-MW56-290-PDB-17 (N)/ BA34980		31.35	< 14	< 28	days	J/X	H1	Test Exceeds UCL

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW48-225-PDB-17 BA34979	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	C
FEW4-MW56-290-PDB-17 BA34980	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Acetone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW56-290-PDB-17 BA34980	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	cis-1,2-Dichloroethene	1.00	1.00	1.00 J	-	ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	C/I
FEW4-MW56-290-PDB-17 BA34980	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Trichloroethene (TCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17 BA34980	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW56-290-PDB-17 BA34980	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	I

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Trace Results

No results associated with this sample delivery group are considered trace.

Results with Modified Qualifiers

No qualifiers associated with this sample delivery group were modified manually.

Reason Code Definitions

Code	Definition
C	LCS Recovery
H1	Test Hold Time
I	Surrogate recovery outside project limits.
TR	Trace Level Detect
Z	LCS RPD

Flag Code and Definitions

Flag	Definition
J	Estimated: The analyte was positively identified, the quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.

Bias

-	The result may be biased low
+	The result may be biased high

Note - The bias field is a separate field; however, it is an integral part of the final flag (qualifier) on the sample result

Review Questions

Method: SW8260C (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Were all samples documented correctly on the chain-of-custody (COC)?	•			Trip Blank FEW4-TB18-17 was analyzed in SDG.
Did samples listed on COCs match the sample labels?	•			
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservattion, pH, and temperature) are documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified laboratory PQLs achieved?	•			
Were holding times met?		•		Reanalysis of samples due to QC issues occured at 30 days, which was more than 2 times past the holding time (>28). The results were similar to the initial analysis performed within holding times.
Were trip blanks analyzed at the proper frequency and in control?	•			FEW4-TB18-17
Were field blanks analyzed at the proper frequency and in control?			•	A field blank was not collected with this SDG.
Were equipment blanks analyzed at the proper frequency and in control?			•	An equipment blank was not collected with this SDG.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?		•		210628W-34979 LCS - 266163: several analytes were outside the control limits. All samples were re-analyzed beyond holding times with acceptable LCS/LCSD recoveries.
Was the LCS/LCSD RPD within project acceptance limits?		•		210628W-34979 LCS - 266163: several analytes were outside the control limit. All samples were re-analyzed beyond holding times with acceptable LCS/LCSD precision.
Was a MS/MSD pair prepared with each batch?		•		Matrix spike duplicate samples were not collected with this SDG.
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were surrogate recoveries within project acceptance limits?		•		The initial analysis of FEW4-MW56-290-PDB-17 had 1,2-dichloroethane-d4 74% recovery less than the 85% lower control limit; the surrogate was within the control limit for the reanalysis.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	Field duplicate samples were not collected with this SDG.
Were reported sample concentrations within calibration range?	•			

Review Questions

Method: SW8260C (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Was the GC/MS system properly tuned based on method criteria?	•			
Was instrument tuning completed every 12 hours during sample analysis?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?		•		Zeus 0628Z17: Several analytes had % drift outside the cocontrol limits. The associated samples were reanalyzed outside of holding times with an acceptable ICV. Thor 0719T12: All analytes were within the control limit.
Were CCVs run at the required frequency and within project acceptance criteria?		•		Zeus Ending 0628Z41: Several analytes had % drift outside the cocontrol limits. The associated samples were reanalyzed outside of holding times with an acceptable Ending CCV. Thor Ending 0719T36: All analytes were within the control limit.
Were internal standard retention times and area criteria within project acceptance criteria?	•			
Were internal standards spiked for every sample, standard, and QC sample?	•			
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?			•	
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		

Automated Data Review Detail Report for 96634
B08WY0467-02, F.E. Warren AFB, Site 4, Feasibility Study
F.E. Warren Atlas Site 4 - Draft Final LT & PM UFP-QAPP Addendum 1

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Sample Summary

Location	Field Sample ID	Date	Time	Sample Type	Matrix	SBD	SED	SW8260C
FEW4-MW48-225	FEW4-MW48-225-PDB-17	06-18-2021	1005	N	WG	217.30	227.30	X
FEW4-MW56-290	FEW4-MW56-290-PDB-17	06-18-2021	0910	N	WG	286.70	296.70	X
							Total	**2**

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Batch Report

Test Method: SW8260C Analysis Batch: 266105

Location	Matrix	Field Sample ID	Lab Sample ID	Calibration Ref	Run#/ Dil'n	Collection Date/Time	Extraction Date/Time	Analysis Date/Time	Prep/Leach Batch	Sample Type
LABQC	WQ	BS-T210719AW-266105	BS-T210719AW-266105		3/1	7/19/2021 15:10	7/19/2021 15:10	7/19/2021 15:10	266105/	BS
LABQC	WQ	BD-T210719AW-266105	BD-T210719AW-266105		3/1	7/19/2021 15:34	7/19/2021 15:34	7/19/2021 15:34	266105/	BD
LABQC	WQ	LB-T210719AW-266105	LB-T210719AW-266105		3/1	7/19/2021 15:59	7/19/2021 15:59	7/19/2021 15:59	266105/	LB
FEW4-MW48-225	WG	FEW4-MW48-225-PDB-17	BA34979		3/1	6/18/2021 10:05	7/19/2021 17:14	7/19/2021 17:14	266105/	N
FEW4-MW56-290	WG	FEW4-MW56-290-PDB-17	BA34980		3/1	6/18/2021 09:10	7/19/2021 17:38	7/19/2021 17:38	266105/	N

Test Method: SW8260C Analysis Batch: 266163

Location	Matrix	Field Sample ID	Lab Sample ID	Calibration Ref	Run#/ Dil'n	Collection Date/Time	Extraction Date/Time	Analysis Date/Time	Prep/Leach Batch	Sample Type
LABQC	WQ	BS-Z210628AW-266163	BS-Z210628AW-266163		1/1	6/28/2021 18:17	6/28/2021 18:17	6/28/2021 18:17	266163/	BS
LABQC	WQ	BD-Z210628AW-266163	BD-Z210628AW-266163		1/1	6/28/2021 18:40	6/28/2021 18:40	6/28/2021 18:40	266163/	BD
LABQC	WQ	LB-Z210628AW-266163	LB-Z210628AW-266163		1/1	6/28/2021 19:03	6/28/2021 19:03	6/28/2021 19:03	266163/	LB
FEW4-MW48-225	WG	FEW4-MW48-225-PDB-17	BA34979		1/1	6/18/2021 10:05	6/29/2021 00:52	6/29/2021 00:52	266163/	N
FEW4-MW56-290	WG	FEW4-MW56-290-PDB-17	BA34980		1/1	6/18/2021 09:10	6/29/2021 01:15	6/29/2021 01:15	266163/	N

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Field Batch Report

--No Records Found--

MS Mismatch Report

--No Records Found--

Section to identify Matrix Spike mismatches where parent sample differs from MS by dilution.

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QC Outlier Report

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

QC Element	Sample ID/ Lab Sample ID	Run#/ Dil'n	Analyte	Result (Units)	Qualifier	Warning Limits	Control Limits	Reason	Comment	Rule	Action Level
LCS Recovery	BD-Z210628AW-266163 (BD) / BD-Z210628AW-266163	1 / 1.00	Isopropylbenzene (Cumene)	64.00 (percent)	J/UJ	72 - 131	72 - 131	C			
LCS Recovery	BS-Z210628AW-266163 (BS) / BS-Z210628AW-266163	1 / 1.00	1,1,2,2-Tetrachloroethane	135.0 (percent)	J/None	71 - 121	71 - 121	C			
LCS Recovery	BS-Z210628AW-266163 (BS) / BS-Z210628AW-266163	1 / 1.00	Ethylbenzene	167.0 (percent)	J/None	79 - 121	79 - 121	C			
LCS Recovery	BS-Z210628AW-266163 (BS) / BS-Z210628AW-266163	1 / 1.00	m,p-Xylene	169.0 (percent)	J/None	80 - 121	80 - 121	C			
LCS Recovery	BS-Z210628AW-266163 (BS) / BS-Z210628AW-266163	1 / 1.00	o-Xylene	154.0 (percent)	J/None	78 - 122	78 - 122	C			
LCS Recovery	BS-Z210628AW-266163 (BS) / BS-Z210628AW-266163	1 / 1.00	Styrene	144.0 (percent)	J/None	78 - 123	78 - 123	C			
LCS Recovery	BS-Z210628AW-266163 (BS) / BS-Z210628AW-266163	1 / 1.00	Vinyl chloride	160.0 (percent)	J/None	58 - 137	58 - 137	C			
LCS RPD	BD-Z210628AW-266163 (BD) / BD-Z210628AW-266163	1 / 1.00	1,1,2,2-Tetrachloroethane	58.74 (rpd)	J/None	< 20	< 20	Z			
LCS RPD	BD-Z210628AW-266163 (BD) / BD-Z210628AW-266163	1 / 1.00	1,2,3-Trichlorobenzene	25.48 (rpd)	J/None	< 20	< 20	Z			
LCS RPD	BD-Z210628AW-266163 (BD) / BD-Z210628AW-266163	1 / 1.00	1,2,4-Trichlorobenzene	22.53 (rpd)	J/None	< 20	< 20	Z			
LCS RPD	BD-Z210628AW-266163 (BD) / BD-Z210628AW-266163	1 / 1.00	Bromoform	23.50 (rpd)	J/None	< 20	< 20	Z			
LCS RPD	BD-Z210628AW-266163 (BD) / BD-Z210628AW-266163	1 / 1.00	Ethylbenzene	44.69 (rpd)	J/None	< 20	< 20	Z			
LCS RPD	BD-Z210628AW-266163 (BD) / BD-Z210628AW-266163	1 / 1.00	Isopropylbenzene (Cumene)	50.00 (rpd)	J/None	< 20	< 20	Z			
LCS RPD	BD-Z210628AW-266163 (BD) / BD-Z210628AW-266163	1 / 1.00	m,p-Xylene	46.89 (rpd)	J/None	< 20	< 20	Z			
LCS RPD	BD-Z210628AW-266163 (BD) / BD-Z210628AW-266163	1 / 1.00	o-Xylene	43.00 (rpd)	J/None	< 20	< 20	Z			
LCS RPD	BD-Z210628AW-266163 (BD) / BD-Z210628AW-266163	1 / 1.00	Styrene	37.13 (rpd)	J/None	< 20	< 20	Z			
LCS RPD	BD-Z210628AW-266163 (BD) / BD-Z210628AW-266163	1 / 1.00	Vinyl chloride	24.56 (rpd)	J/None	< 20	< 20	Z			
Surrogate	FEW4-MW56-290-PDB-17 (N) / BA34980	1 / 1.00	1,2-Dichloroethane-d4	74.00 (percent)	J/UJ	81 - 118	10 - 118	I			

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QC Outlier Report

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

QC Element	Sample ID/ Lab Sample ID	Run#/ Dil'n	Analyte	Result (Units)	Qualifier	Warning Limits	Control Limits	Reason	Comment	Rule	Action Level
Test Hold Time	FEW4-MW48-225-PDB-17 (N) / BA34979	3 / 1.00	All in Run	31.30 (days)	J/X	< 14	< 28	H1	Test Exceeds UCL		
Test Hold Time	FEW4-MW56-290-PDB-17 (N) / BA34980	3 / 1.00	All in Run	31.35 (days)	J/X	< 14	< 28	H1	Test Exceeds UCL		

Rule is the multiplier used when blank contamination occurs to determine action level.

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW48-225-PDB-17	BA34979	W	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	C
FEW4-MW56-290-PDB-17	BA34980	W	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Acetone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	I

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Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW56-290-PDB-17	BA34980	W	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	cis-1,2-Dichloroethene	1.00	1.00	1.00 J	-	ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	C/I
FEW4-MW56-290-PDB-17	BA34980	W	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Trichloroethene (TCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW56-290-PDB-17	BA34980	W	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	I

Qualified Results

Qualified analytes in samples are reported as estimated, not detected (UJ) at the Limit of Detection (LOD).

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Detected Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Dilution	Analyte	LOQ	Lab Result	Qualified Result	Units	Reason
FEW4-MW48-225-PDB-17	BA34979	W	N	1	Trichloroethene (TCE)	1.00	27.0	27.0	ug/l	
FEW4-MW56-290-PDB-17	BA34980	W	N	1	cis-1,2-Dichloroethene	1.00	1.00	1.00 J	ug/l	I

Rejected Results

--No Records Found--

Facility:	B08WY0467-02, F.E. Warren AFB, Site 4, Feasibility Study
Event:	FE Warren Site 4 FS Spring 2021
SDG:	96669
Guidance Document:	F.E. Warren Atlas Site 4 - Draft Final LT & PM UFP-QAPP Addendum 1
Prime Contractor:	URS Group, Inc.
Project Manager:	Robert Mallisee
Contract Laboratory(ies):	Agriculture & Priority Pollutants Laboratories, Inc., Clovis, CA
Data Review Contractor:	URS Group, Inc.
Data Review Level:	S2BVEM
Primary Data Reviewer:	Gary Torf, Project Chemist
Date Submitted:	January 04, 2022

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	SW8260C
FEW4-MW20-PDB-17	BA35160	Water	Field Sample/N	X
FEW4-MW31-17	BA35161	Water	Field Sample/N	X
FEW4-MW31-PDB-17	BA35162	Water	Field Sample/N	X
FEW4-MW59-183-17	BA35163	Water	Field Sample/N	X
FEW4-MW59-183-PDB-17	BA35164	Water	Field Sample/N	X
FEW4-MW66-205-17	BA35165	Water	Field Sample/N	X
FEW4-MW66-205-PDB-17	BA35166	Water	Field Sample/N	X
FEW4-MW69-164-PDB-17	BA35167	Water	Field Sample/N	X
FEW4-MW71-96-17	BA35168	Water	Field Sample/N	X
FEW4-MW71-96-PDB-17	BA35169	Water	Field Sample/N	X
FEW4-MW74-359-17	BA35170	Water	Field Sample/N	X
FEW4-MW74-359-PDB-17	BA35171	Water	Field Sample/N	X
FEW4-MW81-207-17	BA35172	Water	Field Sample/N	X
FEW4-MW81-207-PDB-17	BA35173	Water	Field Sample/N	X
FEW4-MW92B-288-17	BA35174	Water	Field Sample/N	X
FEW4-MW92B-288-FD-17	BA35175	Water	Field Duplicate/FD	X
FEW4-MW92B-288-PDB-17	BA35176	Water	Field Sample/N	X
FEW4-TB21-17	BA35177	Water	Trip Blank/TB	X

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page at S2BVEM data validation level. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the F.E. Warren Atlas Site 4 - Draft Final LT & PM UFP-QAPP Addendum 1 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by URS Group, Inc.; analyses were performed by Agriculture & Priority Pollutants Laboratories, Inc., Clovis, CA and were reported under sample delivery group (SDG) 96669. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

Field Duplicate RPD

Lab Blank

LCS Recovery

LCS RPD

MS Recovery

MS RPD

Prep Hold Time

Surrogate

Test Hold Time

Trip Blank

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 611 results (66.56%) out of the 918 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected or deemed a serious deficiency (X qualifier). Trace values, defined as results that are qualified as estimated because they fall between the detection limit and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Analytical Method	Data Reviewer Comment
SW8260C	No additional comments; see Checklist for detail.

Gary Torf

January 04, 2022

Reviewed by Gary Torf, Project Chemist, URS Group, Inc.

As the Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of the reported sample results and method quality control data between the two deliverables.

Quality Control Outliers for test method SW8260C, LCS Recovery

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
BD-L210702BW-266313 (BD)	1,1,2,2-Tetrachloroethane	135.0	71 - 121	71 - 121	percent	J/None	C	
BD-L210702BW-266313 (BD)	1,1,2-Trichloro-1,2,2-trifluoroethane	140.0	70 - 136	70 - 136	percent	J/None	C	
BD-L210702BW-266313 (BD)	1,1-Dichloroethene	137.0	71 - 131	71 - 131	percent	J/None	C	
BD-L210702BW-266313 (BD)	1,2-Dichloropropane	132.0	78 - 122	78 - 122	percent	J/None	C	
BD-L210702BW-266313 (BD)	2-Butanone (MEK)	238.0	56 - 143	56 - 143	percent	J/None	C	
BD-L210702BW-266313 (BD)	2-Hexanone	254.0	57 - 139	57 - 139	percent	J/None	C	
BD-L210702BW-266313 (BD)	4-Methyl-2-pentanone (MIBK)	264.0	67 - 130	67 - 130	percent	J/None	C	
BD-L210702BW-266313 (BD)	Acetone	288.0	39 - 160	39 - 160	percent	J/None	C	
BD-L210702BW-266313 (BD)	Carbon disulfide	159.0	64 - 133	64 - 133	percent	J/None	C	
BD-L210702BW-266313 (BD)	Chloroethane	195.0	60 - 138	60 - 138	percent	J/None	C	
BD-L210702BW-266313 (BD)	Chloromethane	144.0	50 - 139	50 - 139	percent	J/None	C	
BD-L210702BW-266313 (BD)	Vinyl chloride	183.0	58 - 137	58 - 137	percent	J/None	C	
BS-L210702BW-266313 (BS)	1,1,2,2-Tetrachloroethane	148.0	71 - 121	71 - 121	percent	J/None	C	
BS-L210702BW-266313 (BS)	1,1-Dichloroethene	143.0	71 - 131	71 - 131	percent	J/None	C	
BS-L210702BW-266313 (BS)	1,2-Dichloropropane	139.0	78 - 122	78 - 122	percent	J/None	C	
BS-L210702BW-266313 (BS)	2-Butanone (MEK)	258.0	56 - 143	56 - 143	percent	J/None	C	
BS-L210702BW-266313 (BS)	2-Hexanone	268.0	57 - 139	57 - 139	percent	J/None	C	
BS-L210702BW-266313 (BS)	4-Methyl-2-pentanone (MIBK)	254.0	67 - 130	67 - 130	percent	J/None	C	
BS-L210702BW-266313 (BS)	Acetone	298.0	39 - 160	39 - 160	percent	J/None	C	
BS-L210702BW-266313 (BS)	Carbon disulfide	178.0	64 - 133	64 - 133	percent	J/None	C	
BS-L210702BW-266313 (BS)	Chloroethane	197.0	60 - 138	60 - 138	percent	J/None	C	
BS-L210702BW-266313 (BS)	Chloromethane	156.0	50 - 139	50 - 139	percent	J/None	C	
BS-L210702BW-266313 (BS)	Methyl acetate	145.0	56 - 136	56 - 136	percent	J/None	C	
BS-L210702BW-266313 (BS)	Vinyl chloride	196.0	58 - 137	58 - 137	percent	J/None	C	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8260C, LCS RPD

The objective of laboratory control sample/laboratory control sample duplicate (LCS/LCSD) RPD analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. LCS/LCSD analyses are also performed to generate data that determines the long-term precision of the analytical method on various matrices. Non-homogenous samples can impact the apparent method precision. Summary forms were evaluated and compared to electronic data deliverables. Laboratory control sample/laboratory control sample duplicate RPD results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
BD-L210701MW-266366 (BD)	1,2-Dichloropropane	21.34	< 20	< 20	rpd	J/None	Z	
BD-L2107021AW-266314 (BD)	Chloromethane	20.33	< 20	< 20	rpd	J/None	Z	
BD-L2107061AW-266323 (BD)	Methyl acetate	25.48	< 20	< 20	rpd	J/None	Z	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8260C, Surrogate

Method performance for individual samples is demonstrated through spiking activities. All samples are spiked with surrogate compounds prior to sample preparation. The sample itself may produce effects due to such factors as interferences and high concentrations of analytes. Summary forms were evaluated and compared to electronic data deliverables. Surrogate results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
FEW4-MW66-205-17 (N)	1,2-Dichloroethane-d4	80.00	81 - 118	10 - 118	percent	J/UJ	I	
FEW4-MW66-205-17 (N)	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	66.00	85 - 114	10 - 114	percent	J/UJ	I	
FEW4-MW66-205-17 (N)	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	74.00	85 - 114	10 - 114	percent	J/UJ	I	
FEW4-MW66-205-PDB-17 (N)	1,2-Dichloroethane-d4	80.00	81 - 118	10 - 118	percent	J/UJ	I	
FEW4-MW66-205-PDB-17 (N)	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	64.00	85 - 114	10 - 114	percent	J/UJ	I	
FEW4-MW66-205-PDB-17 (N)	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	74.00	85 - 114	10 - 114	percent	J/UJ	I	
FEW4-MW69-164-PDB-17 (N)	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	81.00	85 - 114	10 - 114	percent	J/UJ	I	
FEW4-MW71-96-17 (N)	1,2-Dichloroethane-d4	80.00	81 - 118	10 - 118	percent	J/UJ	I	
FEW4-MW71-96-17 (N)	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	63.00	85 - 114	10 - 114	percent	J/UJ	I	
FEW4-MW71-96-17 (N)	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	73.00	85 - 114	10 - 114	percent	J/UJ	I	
FEW4-MW71-96-17 (N)	Toluene-d8	123.0	89 - 112	10 - 112	percent	J/None	I	
FEW4-MW71-96-PDB-17 (N)	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	64.00	85 - 114	10 - 114	percent	J/UJ	I	
FEW4-MW71-96-PDB-17 (N)	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	78.00	85 - 114	10 - 114	percent	J/UJ	I	
FEW4-MW74-359-PDB-17 (N)	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	72.00	85 - 114	10 - 114	percent	J/UJ	I	
FEW4-MW81-207-17 (N)	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	66.00	85 - 114	10 - 114	percent	J/UJ	I	
FEW4-MW81-207-17 (N)	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	76.00	85 - 114	10 - 114	percent	J/UJ	I	

Quality Control Outliers for test method SW8260C, Surrogate

Method performance for individual samples is demonstrated through spiking activities. All samples are spiked with surrogate compounds prior to sample preparation. The sample itself may produce effects due to such factors as interferences and high concentrations of analytes. Summary forms were evaluated and compared to electronic data deliverables. Surrogate results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
FEW4-MW81-207-PDB-17 (N)	1,2-Dichloroethane-d4	79.00	81 - 118	10 - 118	percent	J/UJ	I	
FEW4-MW81-207-PDB-17 (N)	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	70.00	85 - 114	10 - 114	percent	J/UJ	I	
FEW4-MW92B-288-17 (N)	1,2-Dichloroethane-d4	80.00	81 - 118	10 - 118	percent	J/UJ	I	
FEW4-MW92B-288-17 (N)	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	68.00	85 - 114	10 - 114	percent	J/UJ	I	
FEW4-MW92B-288-17 (N)	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	79.00	85 - 114	10 - 114	percent	J/UJ	I	
FEW4-MW92B-288-FD-17 (FD)	1,2-Dichloroethane-d4	80.00	81 - 118	10 - 118	percent	J/UJ	I	
FEW4-MW92B-288-FD-17 (FD)	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	68.00	85 - 114	10 - 114	percent	J/UJ	I	
FEW4-MW92B-288-FD-17 (FD)	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	84.00	85 - 114	10 - 114	percent	J/UJ	I	
FEW4-MW92B-288-PDB-17 (N)	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	72.00	85 - 114	10 - 114	percent	J/UJ	I	
FEW4-TB21-17 (TB)	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	70.00	85 - 114	10 - 114	percent	J/UJ	I	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW66-205-17 BA35165	N	1,1,1-Trichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,1,2,2-Tetrachloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,1,2-Trichloro-1,2,2-trifluoroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,1,2-Trichloroethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,1-Dichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW66-205-17 BA35165	N	1,1-Dichloroethene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,2,3-Trichlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,2,4-Trichlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,2-Dibromo-3-chloropropane	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,2-Dibromoethane (EDB)	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,2-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,2-Dichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,2-Dichloropropane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,3-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,4-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	2-Butanone (MEK)	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	2-Hexanone	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	4-Methyl-2-pentanone (MIBK)	50.0	25.0 U	25.0 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Acetone	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Benzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Bromochloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Bromodichloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Bromoform	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Bromomethane	10.0	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Carbon disulfide	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Carbon tetrachloride	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Chlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Chloroethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Chloroform	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Chloromethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	cis-1,2-Dichloroethene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	cis-1,3-Dichloropropene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Cyclohexane	50.0	1.50 U	1.50 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW66-205-17 BA35165	N	Dibromochloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Dichlorodifluoromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Ethylbenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Isopropylbenzene (Cumene)	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	m,p-Xylene	10.0	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Methyl acetate	50.0	25.0 U	25.0 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Methyl tert-butyl ether (MTBE)	5.00	2.60 U	2.60 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Methylcyclohexane	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Methylene chloride	25.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	o-Xylene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Styrene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Tetrachloroethene (PCE)	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Toluene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	trans-1,2-Dichloroethene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	trans-1,3-Dichloropropene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Trichloroethene (TCE)	50.0	1600	1600 J	-	ug/l	I
FEW4-MW66-205-17 BA35165	N	Trichlorofluoromethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Vinyl chloride	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,1,1-Trichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,1,2,2-Tetrachloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,1,2-Trichloro-1,2,2-trifluoroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,1,2-Trichloroethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,1-Dichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,1-Dichloroethene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,2,3-Trichlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,2,4-Trichlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,2-Dibromo-3-chloropropane	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,2-Dibromoethane (EDB)	5.00	2.50 U	2.50 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW66-205-PDB-17 BA35166	N	1,2-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,2-Dichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,2-Dichloropropane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,3-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,4-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	2-Butanone (MEK)	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	2-Hexanone	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	4-Methyl-2-pentanone (MIBK)	50.0	25.0 U	25.0 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Acetone	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Benzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Bromochloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Bromodichloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Bromoform	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Bromomethane	10.0	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Carbon disulfide	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Carbon tetrachloride	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Chlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Chloroethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Chloroform	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Chloromethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	cis-1,2-Dichloroethene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	cis-1,3-Dichloropropene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Cyclohexane	50.0	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Dibromochloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Dichlorodifluoromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Ethylbenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Isopropylbenzene (Cumene)	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	m,p-Xylene	10.0	1.50 U	1.50 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW66-205-PDB-17 BA35166	N	Methyl acetate	50.0	25.0 U	25.0 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Methyl tert-butyl ether (MTBE)	5.00	2.60 U	2.60 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Methylcyclohexane	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Methylene chloride	25.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	o-Xylene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Styrene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Tetrachloroethene (PCE)	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Toluene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	trans-1,2-Dichloroethene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	trans-1,3-Dichloropropene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Trichloroethene (TCE)	50.0	1200	1200 J	-	ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Trichlorofluoromethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Vinyl chloride	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW69-164-PDB-17 BA35167	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Acetone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW69-164-PDB-17 BA35167	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Trichloroethene (TCE)	1.00	4.70	4.70 J	-	ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,1,1-Trichloroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,1,2,2-Tetrachloroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,1,2-Trichloro-1,2,2-trifluoroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,1,2-Trichloroethane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,1-Dichloroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,1-Dichloroethene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,2,3-Trichlorobenzene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,2,4-Trichlorobenzene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,2-Dibromo-3-chloropropane	4.00	2.00 U	2.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,2-Dibromoethane (EDB)	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,2-Dichlorobenzene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,2-Dichloroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,2-Dichloropropane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,3-Dichlorobenzene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,4-Dichlorobenzene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	2-Butanone (MEK)	20.0	4.00 U	4.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	2-Hexanone	20.0	4.00 U	4.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	4-Methyl-2-pentanone (MIBK)	20.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Acetone	20.0	4.00 U	4.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Benzene	2.00	0.600 U	0.600 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW71-96-17 BA35168	N	Bromochloromethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Bromodichloromethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Bromoform	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Bromomethane	4.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Carbon disulfide	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Carbon tetrachloride	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Chlorobenzene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Chloroethane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Chloroform	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Chloromethane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	cis-1,2-Dichloroethene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	cis-1,3-Dichloropropene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Cyclohexane	20.0	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Dibromochloromethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Dichlorodifluoromethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Ethylbenzene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Isopropylbenzene (Cumene)	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	m,p-Xylene	4.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Methyl acetate	20.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Methyl tert-butyl ether (MTBE)	2.00	1.04 U	1.04 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Methylcyclohexane	20.0	4.00 U	4.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Methylene chloride	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	o-Xylene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Styrene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Tetrachloroethene (PCE)	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Toluene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	trans-1,2-Dichloroethene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	trans-1,3-Dichloropropene	2.00	0.600 U	0.600 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW71-96-17 BA35168	N	Trichloroethene (TCE)	20.0	820	820 J		ug/l	H1/I
FEW4-MW71-96-17 BA35168	N	Trichlorofluoromethane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Vinyl chloride	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,1,1-Trichloroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,1,2,2-Tetrachloroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,1,2-Trichloro-1,2,2-trifluoroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,1,2-Trichloroethane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,1-Dichloroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,1-Dichloroethene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,2,3-Trichlorobenzene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,2,4-Trichlorobenzene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,2-Dibromo-3-chloropropane	4.00	2.00 U	2.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,2-Dibromoethane (EDB)	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,2-Dichlorobenzene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,2-Dichloroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,2-Dichloropropane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,3-Dichlorobenzene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,4-Dichlorobenzene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	2-Butanone (MEK)	20.0	4.00 U	4.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	2-Hexanone	20.0	4.00 U	4.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	4-Methyl-2-pentanone (MIBK)	20.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Acetone	20.0	4.00 U	4.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Benzene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Bromochloromethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Bromodichloromethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Bromoform	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Bromomethane	4.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Carbon disulfide	2.00	1.00 U	1.00 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW71-96-PDB-17 BA35169	N	Carbon tetrachloride	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Chlorobenzene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Chloroethane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Chloroform	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Chloromethane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	cis-1,2-Dichloroethene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	cis-1,3-Dichloropropene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Cyclohexane	20.0	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Dibromochloromethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Dichlorodifluoromethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Ethylbenzene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Isopropylbenzene (Cumene)	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	m,p-Xylene	4.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Methyl acetate	20.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Methyl tert-butyl ether (MTBE)	2.00	1.04 U	1.04 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Methylcyclohexane	20.0	4.00 U	4.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Methylene chloride	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	o-Xylene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Styrene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Tetrachloroethene (PCE)	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Toluene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	trans-1,2-Dichloroethene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	trans-1,3-Dichloropropene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Trichloroethene (TCE)	20.0	910	910 J	-	ug/l	H1/I
FEW4-MW71-96-PDB-17 BA35169	N	Trichlorofluoromethane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Vinyl chloride	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW74-359-PDB-17 BA35171	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Acetone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW74-359-PDB-17 BA35171	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Trichloroethene (TCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,1,1-Trichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,1,2,2-Tetrachloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,1,2-Trichloro-1,2,2-trifluoroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,1,2-Trichloroethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,1-Dichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,1-Dichloroethene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,2,3-Trichlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW81-207-17 BA35172	N	1,2,4-Trichlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,2-Dibromo-3-chloropropane	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,2-Dibromoethane (EDB)	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,2-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,2-Dichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,2-Dichloropropane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,3-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,4-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	2-Butanone (MEK)	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	2-Hexanone	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	4-Methyl-2-pentanone (MIBK)	50.0	25.0 U	25.0 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Acetone	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Benzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Bromochloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Bromodichloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Bromoform	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Bromomethane	10.0	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Carbon disulfide	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Carbon tetrachloride	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Chlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Chloroethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Chloroform	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Chloromethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	cis-1,2-Dichloroethene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	cis-1,3-Dichloropropene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Cyclohexane	50.0	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Dibromochloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Dichlorodifluoromethane	5.00	1.50 U	1.50 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW81-207-17 BA35172	N	Ethylbenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Isopropylbenzene (Cumene)	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	m,p-Xylene	10.0	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Methyl acetate	50.0	25.0 U	25.0 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Methyl tert-butyl ether (MTBE)	5.00	2.60 U	2.60 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Methylcyclohexane	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Methylene chloride	25.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	o-Xylene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Styrene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Tetrachloroethene (PCE)	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Toluene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	trans-1,2-Dichloroethene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	trans-1,3-Dichloropropene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Trichloroethene (TCE)	50.0	1800	1800 J	-	ug/l	I
FEW4-MW81-207-17 BA35172	N	Trichlorofluoromethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Vinyl chloride	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,1,1-Trichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,1,2,2-Tetrachloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,1,2-Trichloro-1,2,2-trifluoroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,1,2-Trichloroethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,1-Dichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,1-Dichloroethene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,2,3-Trichlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,2,4-Trichlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,2-Dibromo-3-chloropropane	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,2-Dibromoethane (EDB)	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,2-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,2-Dichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW81-207-PDB-17 BA35173	N	1,2-Dichloropropane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,3-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,4-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	2-Butanone (MEK)	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	2-Hexanone	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	4-Methyl-2-pentanone (MIBK)	50.0	25.0 U	25.0 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Acetone	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Benzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Bromochloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Bromodichloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Bromoform	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Bromomethane	10.0	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Carbon disulfide	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Carbon tetrachloride	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Chlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Chloroethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Chloroform	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Chloromethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	cis-1,2-Dichloroethene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	cis-1,3-Dichloropropene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Cyclohexane	50.0	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Dibromochloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Dichlorodifluoromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Ethylbenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Isopropylbenzene (Cumene)	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	m,p-Xylene	10.0	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Methyl acetate	50.0	25.0 U	25.0 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Methyl tert-butyl ether (MTBE)	5.00	2.60 U	2.60 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW81-207-PDB-17 BA35173	N	Methylcyclohexane	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Methylene chloride	25.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	o-Xylene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Styrene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Tetrachloroethene (PCE)	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Toluene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	trans-1,2-Dichloroethene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	trans-1,3-Dichloropropene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Trichlorofluoromethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Vinyl chloride	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW92B-288-17 BA35174	N	Acetone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW92B-288-17 BA35174	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Trichloroethene (TCE)	20.0	61.0	61.0 J	-	ug/l	H1/I
FEW4-MW92B-288-17 BA35174	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Acetone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Benzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW92B-288-FD-17 BA35175	FD	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Styrene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Toluene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Trichloroethene (TCE)	20.0	58.0	58.0 J	-	ug/l	H1/I
FEW4-MW92B-288-FD-17 BA35175	FD	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW92B-288-PDB-17 BA35176	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Acetone	10.0	2.00 U	2.00 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW92B-288-PDB-17 BA35176	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW92B-288-PDB-17 BA35176	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-TB21-17 BA35177	TB	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Acetone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Benzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	I

Qualified Results associated with the Surrogate for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-TB21-17 BA35177	TB	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Styrene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Toluene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Trichloroethene (TCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	I

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW8260C, Test Hold Time

Hold times are ascertained based on project requirements. Holding times were determined by comparing the chain of custody records with the dates of analysis found in the electronic data deliverable and laboratory summary forms. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
FEW4-MW71-96-17 (N)		15.50	< 14	< 28	days	J/UJ	H1	Test Exceeds UWL
FEW4-MW71-96-PDB-17 (N)		15.57	< 14	< 28	days	J/UJ	H1	Test Exceeds UWL
FEW4-MW92B-288-17 (N)		15.40	< 14	< 28	days	J/UJ	H1	Test Exceeds UWL
FEW4-MW92B-288-FD-17 (FD)		15.38	< 14	< 28	days	J/UJ	H1	Test Exceeds UWL
FEW4-MW92B-288-PDB-17 (N)		15.45	< 14	< 28	days	J/UJ	H1	Test Exceeds UWL
FEW4-TB21-17 (TB)		15.60	< 14	< 28	days	J/UJ	H1	Test Exceeds UWL

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Test Hold Time for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW71-96-17 BA35168	N	Trichloroethene (TCE)	20.0	820	820 J		ug/l	H1/I
FEW4-MW71-96-PDB-17 BA35169	N	Trichloroethene (TCE)	20.0	910	910 J	-	ug/l	H1/I
FEW4-MW92B-288-17 BA35174	N	Trichloroethene (TCE)	20.0	61.0	61.0 J	-	ug/l	H1/I
FEW4-MW92B-288-FD-17 BA35175	FD	Trichloroethene (TCE)	20.0	58.0	58.0 J	-	ug/l	H1/I
FEW4-MW92B-288-PDB-17 BA35176	N	Trichloroethene (TCE)	20.0	69.0	69.0 J	-	ug/l	H1

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW66-205-17 BA35165	N	1,1,1-Trichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,1,2,2-Tetrachloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,1,2-Trichloro-1,2,2-trifluoroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,1,2-Trichloroethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,1-Dichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,1-Dichloroethene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,2,3-Trichlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,2,4-Trichlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,2-Dibromo-3-chloropropane	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,2-Dibromoethane (EDB)	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,2-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,2-Dichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,2-Dichloropropane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,3-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	1,4-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	2-Butanone (MEK)	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	2-Hexanone	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	4-Methyl-2-pentanone (MIBK)	50.0	25.0 U	25.0 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Acetone	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Benzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Bromochloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Bromodichloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Bromoform	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Bromomethane	10.0	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Carbon disulfide	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Carbon tetrachloride	5.00	1.50 U	1.50 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW66-205-17 BA35165	N	Chlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Chloroethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Chloroform	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Chloromethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	cis-1,2-Dichloroethene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	cis-1,3-Dichloropropene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Cyclohexane	50.0	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Dibromochloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Dichlorodifluoromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Ethylbenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Isopropylbenzene (Cumene)	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	m,p-Xylene	10.0	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Methyl acetate	50.0	25.0 U	25.0 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Methyl tert-butyl ether (MTBE)	5.00	2.60 U	2.60 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Methylcyclohexane	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Methylene chloride	25.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	o-Xylene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Styrene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Tetrachloroethene (PCE)	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Toluene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	trans-1,2-Dichloroethene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	trans-1,3-Dichloropropene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Trichloroethene (TCE)	50.0	1600	1600 J	-	ug/l	I
FEW4-MW66-205-17 BA35165	N	Trichlorofluoromethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17 BA35165	N	Vinyl chloride	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,1,1-Trichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,1,2,2-Tetrachloroethane	5.00	1.50 U	1.50 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW66-205-PDB-17 BA35166	N	1,1,2-Trichloro-1,2,2-trifluoroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,1,2-Trichloroethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,1-Dichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,1-Dichloroethene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,2,3-Trichlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,2,4-Trichlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,2-Dibromo-3-chloropropane	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,2-Dibromoethane (EDB)	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,2-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,2-Dichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,2-Dichloropropane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,3-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	1,4-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	2-Butanone (MEK)	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	2-Hexanone	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	4-Methyl-2-pentanone (MIBK)	50.0	25.0 U	25.0 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Acetone	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Benzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Bromochloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Bromodichloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Bromoform	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Bromomethane	10.0	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Carbon disulfide	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Carbon tetrachloride	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Chlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Chloroethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Chloroform	5.00	1.50 U	1.50 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW66-205-PDB-17 BA35166	N	Chloromethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	cis-1,2-Dichloroethene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	cis-1,3-Dichloropropene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Cyclohexane	50.0	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Dibromochloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Dichlorodifluoromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Ethylbenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Isopropylbenzene (Cumene)	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	m,p-Xylene	10.0	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Methyl acetate	50.0	25.0 U	25.0 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Methyl tert-butyl ether (MTBE)	5.00	2.60 U	2.60 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Methylcyclohexane	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Methylene chloride	25.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	o-Xylene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Styrene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Tetrachloroethene (PCE)	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Toluene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	trans-1,2-Dichloroethene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	trans-1,3-Dichloropropene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Trichloroethene (TCE)	50.0	1200	1200 J	-	ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Trichlorofluoromethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17 BA35166	N	Vinyl chloride	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW69-164-PDB-17 BA35167	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Acetone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		**Extraction Method: SW5030**						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW69-164-PDB-17 BA35167	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Trichloroethene (TCE)	1.00	4.70	4.70 J	-	ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17 BA35167	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,1,1-Trichloroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,1,2,2-Tetrachloroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,1,2-Trichloro-1,2,2-trifluoroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,1,2-Trichloroethane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,1-Dichloroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,1-Dichloroethene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,2,3-Trichlorobenzene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,2,4-Trichlorobenzene	2.00	1.00 U	1.00 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW71-96-17 BA35168	N	1,2-Dibromo-3-chloropropane	4.00	2.00 U	2.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,2-Dibromoethane (EDB)	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,2-Dichlorobenzene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,2-Dichloroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,2-Dichloropropane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,3-Dichlorobenzene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	1,4-Dichlorobenzene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	2-Butanone (MEK)	20.0	4.00 U	4.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	2-Hexanone	20.0	4.00 U	4.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	4-Methyl-2-pentanone (MIBK)	20.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Acetone	20.0	4.00 U	4.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Benzene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Bromochloromethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Bromodichloromethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Bromoform	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Bromomethane	4.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Carbon disulfide	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Carbon tetrachloride	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Chlorobenzene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Chloroethane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Chloroform	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Chloromethane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	cis-1,2-Dichloroethene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	cis-1,3-Dichloropropene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Cyclohexane	20.0	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Dibromochloromethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Dichlorodifluoromethane	2.00	0.600 U	0.600 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW71-96-17 BA35168	N	Ethylbenzene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Isopropylbenzene (Cumene)	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	m,p-Xylene	4.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Methyl acetate	20.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Methyl tert-butyl ether (MTBE)	2.00	1.04 U	1.04 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Methylcyclohexane	20.0	4.00 U	4.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Methylene chloride	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	o-Xylene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Styrene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Tetrachloroethene (PCE)	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Toluene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	trans-1,2-Dichloroethene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	trans-1,3-Dichloropropene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Trichloroethene (TCE)	20.0	820	820 J		ug/l	H1/I
FEW4-MW71-96-17 BA35168	N	Trichlorofluoromethane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17 BA35168	N	Vinyl chloride	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,1,1-Trichloroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,1,2,2-Tetrachloroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,1,2-Trichloro-1,2,2-trifluoroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,1,2-Trichloroethane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,1-Dichloroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,1-Dichloroethene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,2,3-Trichlorobenzene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,2,4-Trichlorobenzene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,2-Dibromo-3-chloropropane	4.00	2.00 U	2.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,2-Dibromoethane (EDB)	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,2-Dichlorobenzene	2.00	0.600 U	0.600 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW71-96-PDB-17 BA35169	N	1,2-Dichloroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,2-Dichloropropane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,3-Dichlorobenzene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	1,4-Dichlorobenzene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	2-Butanone (MEK)	20.0	4.00 U	4.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	2-Hexanone	20.0	4.00 U	4.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	4-Methyl-2-pentanone (MIBK)	20.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Acetone	20.0	4.00 U	4.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Benzene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Bromochloromethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Bromodichloromethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Bromoform	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Bromomethane	4.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Carbon disulfide	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Carbon tetrachloride	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Chlorobenzene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Chloroethane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Chloroform	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Chloromethane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	cis-1,2-Dichloroethene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	cis-1,3-Dichloropropene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Cyclohexane	20.0	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Dibromochloromethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Dichlorodifluoromethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Ethylbenzene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Isopropylbenzene (Cumene)	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	m,p-Xylene	4.00	0.600 U	0.600 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW71-96-PDB-17 BA35169	N	Methyl acetate	20.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Methyl tert-butyl ether (MTBE)	2.00	1.04 U	1.04 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Methylcyclohexane	20.0	4.00 U	4.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Methylene chloride	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	o-Xylene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Styrene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Tetrachloroethene (PCE)	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Toluene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	trans-1,2-Dichloroethene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	trans-1,3-Dichloropropene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Trichloroethene (TCE)	20.0	910	910 J	-	ug/l	H1/I
FEW4-MW71-96-PDB-17 BA35169	N	Trichlorofluoromethane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17 BA35169	N	Vinyl chloride	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW74-359-PDB-17 BA35171	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Acetone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW74-359-PDB-17 BA35171	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Trichloroethene (TCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17 BA35171	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,1,1-Trichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,1,2,2-Tetrachloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,1,2-Trichloro-1,2,2-trifluoroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,1,2-Trichloroethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,1-Dichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,1-Dichloroethene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,2,3-Trichlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,2,4-Trichlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,2-Dibromo-3-chloropropane	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,2-Dibromoethane (EDB)	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,2-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,2-Dichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,2-Dichloropropane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,3-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	1,4-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	2-Butanone (MEK)	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	2-Hexanone	50.0	10.0 U	10.0 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW81-207-17 BA35172	N	4-Methyl-2-pentanone (MIBK)	50.0	25.0 U	25.0 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Acetone	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Benzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Bromochloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Bromodichloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Bromoform	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Bromomethane	10.0	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Carbon disulfide	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Carbon tetrachloride	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Chlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Chloroethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Chloroform	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Chloromethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	cis-1,2-Dichloroethene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	cis-1,3-Dichloropropene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Cyclohexane	50.0	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Dibromochloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Dichlorodifluoromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Ethylbenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Isopropylbenzene (Cumene)	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	m,p-Xylene	10.0	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Methyl acetate	50.0	25.0 U	25.0 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Methyl tert-butyl ether (MTBE)	5.00	2.60 U	2.60 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Methylcyclohexane	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Methylene chloride	25.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	o-Xylene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Styrene	5.00	2.50 U	2.50 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW81-207-17 BA35172	N	Tetrachloroethene (PCE)	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Toluene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	trans-1,2-Dichloroethene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	trans-1,3-Dichloropropene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Trichloroethene (TCE)	50.0	1800	1800 J	-	ug/l	I
FEW4-MW81-207-17 BA35172	N	Trichlorofluoromethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17 BA35172	N	Vinyl chloride	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,1,1-Trichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,1,2,2-Tetrachloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,1,2-Trichloro-1,2,2-trifluoroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,1,2-Trichloroethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,1-Dichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,1-Dichloroethene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,2,3-Trichlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,2,4-Trichlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,2-Dibromo-3-chloropropane	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,2-Dibromoethane (EDB)	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,2-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,2-Dichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,2-Dichloropropane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,3-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	1,4-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	2-Butanone (MEK)	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	2-Hexanone	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	4-Methyl-2-pentanone (MIBK)	50.0	25.0 U	25.0 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Acetone	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Benzene	5.00	1.50 U	1.50 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW81-207-PDB-17 BA35173	N	Bromochloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Bromodichloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Bromoform	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Bromomethane	10.0	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Carbon disulfide	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Carbon tetrachloride	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Chlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Chloroethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Chloroform	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Chloromethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	cis-1,2-Dichloroethene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	cis-1,3-Dichloropropene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Cyclohexane	50.0	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Dibromochloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Dichlorodifluoromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Ethylbenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Isopropylbenzene (Cumene)	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	m,p-Xylene	10.0	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Methyl acetate	50.0	25.0 U	25.0 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Methyl tert-butyl ether (MTBE)	5.00	2.60 U	2.60 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Methylcyclohexane	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Methylene chloride	25.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	o-Xylene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Styrene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Tetrachloroethene (PCE)	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Toluene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	trans-1,2-Dichloroethene	5.00	1.50 U	1.50 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW81-207-PDB-17 BA35173	N	trans-1,3-Dichloropropene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Trichlorofluoromethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17 BA35173	N	Vinyl chloride	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Acetone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW92B-288-17 BA35174	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Trichloroethene (TCE)	20.0	61.0	61.0 J	-	ug/l	H1/I
FEW4-MW92B-288-17 BA35174	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17 BA35174	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW92B-288-FD-17 BA35175	FD	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Acetone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Benzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW92B-288-FD-17 BA35175	FD	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Styrene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Toluene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Trichloroethene (TCE)	20.0	58.0	58.0 J	-	ug/l	H1/I
FEW4-MW92B-288-FD-17 BA35175	FD	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17 BA35175	FD	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW92B-288-PDB-17 BA35176	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Acetone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW92B-288-PDB-17 BA35176	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW92B-288-PDB-17 BA35176	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Trichloroethene (TCE)	20.0	69.0	69.0 J	-	ug/l	H1
FEW4-MW92B-288-PDB-17 BA35176	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17 BA35176	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-TB21-17 BA35177	TB	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Acetone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Benzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	I

Table of All Qualified Results

Test Method: SW8260C		**Extraction Method: SW5030**						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-TB21-17 BA35177	TB	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Styrene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Toluene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Trichloroethene (TCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17 BA35177	TB	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	I

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Table of All Trace Results

Test Method: SW8260C Extraction Method: SW5030

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW59-183-MS-17	MS	Cyclohexane	10.0	8.43	8.43 J		ug/L	TR
FEW4-MW59-183-MS-17	MS	Methylcyclohexane	10.0	8.49	8.49 J		ug/L	TR
FEW4-MW59-183-MSD-17	SD	Cyclohexane	10.0	8.39	8.39 J		ug/L	TR
FEW4-MW59-183-MSD-17	SD	Methyl acetate	10.0	9.40	9.40 J		ug/L	TR
FEW4-MW59-183-MSD-17	SD	Methylcyclohexane	10.0	9.11	9.11 J		ug/L	TR

Results with Modified Qualifiers

No qualifiers associated with this sample delivery group were modified manually.

Reason Code Definitions

Code	Definition
C	LCS Recovery
H1	Test Hold Time
I	Surrogate recovery outside project limits.
TR	Trace Level Detect
Z	LCS RPD

Flag Code and Definitions

Flag	Definition
J	Estimated: The analyte was positively identified, the quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.

Bias

-	The result may be biased low
+	The result may be biased high

Note - The bias field is a separate field; however, it is an integral part of the final flag (qualifier) on the sample result

Review Questions

Method: SW8260C (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Were all samples documented correctly on the chain-of-custody (COC)?	•			
Did samples listed on COCs match the sample labels?	•			
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?		•		FEW4-MW74-359-17 did not have HCl added, as noted on the COC and in instructions to the lab.
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservattion, pH, and temperature) are documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified laboratory PQLs achieved?	•			
Were holding times met?		•		FEW4-MW92B-288-17, FEW4-MW92B-288-FD-17, and FEW4-MW92B-288-PDB-17 were reanalyzed for chloroethane 15 and 17 days past the hold time expiration. FEW4-MW71-96-17, FEW4-MW71-96-PDB-17, FEW4-MW92B-288-17, FEW4-MW92B-288-FD-17, FEW4-MW92B-288-PDB-17, were reanalyzed for trichloroethene past the holding time.
Were trip blanks analyzed at the proper frequency and in control?		•		The first analysis of FEW4-TB21-17 had no analyte detections though had one low surrogate standard recovery. The sample reanalysis had detections of 1,2,3-trichlorobenzene and 1,2,4-trichlorobenzene of 1.6 ug/L and 1.7 ug/L.
Were field blanks analyzed at the proper frequency and in control?			•	A field blank was not collected with this SDG.
Were equipment blanks analyzed at the proper frequency and in control?			•	An equipment blank was not collected with this SDG.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?		•		BD-L210702BW-266313: Several analytes had recoveries greater than the associated upper control limit.
Was the LCS/LCSD RPD within project acceptance limits?		•		BD-L210701MW-266366: 1,2-Dichloropropane 21.3% RPD BD-L2107021AW-266314: Chloromethane 20.3% RPD; BD-L2107061AW-266323: Methyl acetate 25.5% RPD
Was a MS/MSD pair prepared with each batch?	•			Matrix spike duplicate samples were collected for FEW4-MW59-183-17.
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			

Review Questions

Method: SW8260C (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were surrogate recoveries within project acceptance limits?		•		Several samples had surrogate recoveries less than the associated lower control limit.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			Field duplicate samples were collected for FEW4 -MW92B-288-17.
Were reported sample concentrations within calibration range?	•			
Was the GC/MS system properly tuned based on method criteria?	•			
Was instrument tuning completed every 12 hours during sample analysis?	•			
Was the Calibration within project acceptance criteria?		•		Loki 07/01/21: failed the criteria for chloroethane. FEW4-MW92B-288-17, FEW4-MW92B-288-FD-17, and FEW4-MW92B-288-PDB-17 were reanalyzed 15 and 17 days past the hold time expiration. Samples FEW4-MW92B-288-17,FEW4-MW92B-288-FD-17, and FEW4-MW92B-288-PDB-17 could not be reanalyzed dueto limited sample volume.
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?		•		Max 0701M12: Dichlorodifluoromethane 36%, Vinyl Chloride 23%, and Bromomethane 55% were outside the 20% control limit high. Max 0702M22: 1,2,3-Trichloropropane 24% was outside the 20% control limit high. Loki 0701L35: Vinyl Chloride 22% and 1,2-Dibromo-3-Chloropropane 24% were outside the 20% control limit high.
Were CCVs run at the required frequency and within project acceptance criteria?		•		Loki CCV 0702L08: Vinyl chloride 30% and carbon disulfide 22% were outside the 20% control limit. Loki Ending CCV 0702L32: Vinyl chloride 100%, dichlorofluoromethane 66%, acetone 85%, carbon disulfide 86%, 2-butanone 147%, were outside the 50% control limit. Loki CCV 0702L34: Many analytes outside the 20% control limit high. Loki Ending CCV 0702L50: Many analytes outside the 50% control limit high.
Were internal standard retention times and area criteria within project acceptance criteria?	•			
Were internal standards spiked for every sample, standard, and QC sample?	•			
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		

Automated Data Review Detail Report for 96669
B08WY0467-02, F.E. Warren AFB, Site 4, Feasibility Study
F.E. Warren Atlas Site 4 - Draft Final LT & PM UFP-QAPP Addendum 1

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Sample Summary

Location	Field Sample ID	Date	Time	Sample Type	Matrix	SBD	SED	SW8260C
FEW4-MW20	FEW4-MW20-PDB-17	06-22-2021	1156	N	WG	253.90	263.90	X
FEW4-MW31	FEW4-MW31-17	06-21-2021	1622	N	WG	200.70	210.70	X
FEW4-MW31	FEW4-MW31-PDB-17	06-21-2021	1549	N	WG	200.70	210.70	X
FEW4-MW59-183	FEW4-MW59-183-17	06-22-2021	1407	N	WG	175.60	185.60	X
FEW4-MW59-183	FEW4-MW59-183-MS-17	06-22-2021	1407	MS	WG	175.60	185.60	X
FEW4-MW59-183	FEW4-MW59-183-MSD-17	06-22-2021	1407	SD	WG	175.60	185.60	X
FEW4-MW59-183	FEW4-MW59-183-PDB-17	06-22-2021	1134	N	WG	175.60	185.60	X
FEW4-MW66-205	FEW4-MW66-205-17	06-22-2021	0830	N	WG	196.00	211.00	X
FEW4-MW66-205	FEW4-MW66-205-PDB-17	06-21-2021	0910	N	WG	196.00	211.00	X
FEW4-MW69-164	FEW4-MW69-164-PDB-17	06-21-2021	0930	N	WG	156.70	166.70	X
FEW4-MW71-96	FEW4-MW71-96-17	06-21-2021	1300	N	WG	85.20	100.20	X
FEW4-MW71-96	FEW4-MW71-96-PDB-17	06-21-2021	1150	N	WG	85.20	100.20	X
FEW4-MW74-359	FEW4-MW74-359-17	06-22-2021	1050	N	WG	352.00	362.00	X
FEW4-MW74-359	FEW4-MW74-359-PDB-17	06-21-2021	0917	N	WG	352.00	362.00	X
FEW4-MW81-207	FEW4-MW81-207-17	06-22-2021	1230	N	WG	197.20	212.20	X
FEW4-MW81-207	FEW4-MW81-207-PDB-17	06-22-2021	1100	N	WG	197.20	212.20	X
FEW4-MW92B-288	FEW4-MW92B-288-17	06-21-2021	1503	N	WG	0.00	0.00	X
FEW4-MW92B-288	FEW4-MW92B-288-FD-17	06-21-2021	1503	FD	WG	0.00	0.00	X
FEW4-MW92B-288	FEW4-MW92B-288-PDB-17	06-21-2021	1249	N	WG	0.00	0.00	X
FIELDQC	FEW4-TB21-17	06-21-2021	0800	TB	WQ	0.00	0.00	X
							Total	**20**

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Batch Report

Test Method: SW8260C Analysis Batch: 266240

Location	Matrix	Field Sample ID	Lab Sample ID	Calibration Ref	Run#/ Dil'n	Collection Date/Time	Extraction Date/Time	Analysis Date/Time	Prep/Leach Batch	Sample Type
LABQC	WQ	BS-L210702AW-266240	BS-L210702AW-266240		2/1	7/2/2021 10:58	7/2/2021 10:58	7/2/2021 10:58	266240/	BS
LABQC	WQ	BD-L210702AW-266240	BD-L210702AW-266240		2/1	7/2/2021 11:26	7/2/2021 11:26	7/2/2021 11:26	266240/	BD
LABQC	WQ	LB-L210702AW-266240	LB-L210702AW-266240		2/1	7/2/2021 11:53	7/2/2021 11:53	7/2/2021 11:53	266240/	LB
FEW4-MW81-207	WG	FEW4-MW81-207-17	BA35172		2/50	6/22/2021 12:30	7/2/2021 19:42	7/2/2021 19:42	266240/	N
FEW4-MW81-207	WG	FEW4-MW81-207-PDB-17	BA35173		2/50	6/22/2021 11:00	7/2/2021 20:09	7/2/2021 20:09	266240/	N
FEW4-MW66-205	WG	FEW4-MW66-205-17	BA35165		2/50	6/22/2021 08:30	7/2/2021 20:37	7/2/2021 20:37	266240/	N
FEW4-MW66-205	WG	FEW4-MW66-205-PDB-17	BA35166		2/50	6/21/2021 09:10	7/2/2021 21:05	7/2/2021 21:05	266240/	N

Test Method: SW8260C Analysis Batch: 266313

Location	Matrix	Field Sample ID	Lab Sample ID	Calibration Ref	Run#/ Dil'n	Collection Date/Time	Extraction Date/Time	Analysis Date/Time	Prep/Leach Batch	Sample Type
LABQC	WQ	BS-L210702BW-266313	BS-L210702BW-266313		1/1	7/2/2021 22:55	7/2/2021 22:55	7/2/2021 22:55	266313/	BS
LABQC	WQ	BD-L210702BW-266313	BD-L210702BW-266313		1/1	7/2/2021 23:22	7/2/2021 23:22	7/2/2021 23:22	266313/	BD
LABQC	WQ	LB-L210702BW-266313	LB-L210702BW-266313		1/1	7/2/2021 23:50	7/2/2021 23:50	7/2/2021 23:50	266313/	LB
FIELDQC	WQ	FEW4-TB21-17	BA35177		1/1	6/21/2021 08:00	7/3/2021 00:17	7/3/2021 00:17	266313/	TB
FEW4-MW92B-288	WG	FEW4-MW92B-288-PDB-17	BA35176		1/1	6/21/2021 12:49	7/3/2021 01:40	7/3/2021 01:40	266313/	N
FEW4-MW92B-288	WG	FEW4-MW92B-288-FD-17	BA35175		1/1	6/21/2021 15:03	7/3/2021 02:07	7/3/2021 02:07	266313/	FD
FEW4-MW92B-288	WG	FEW4-MW92B-288-17	BA35174		1/1	6/21/2021 15:03	7/3/2021 02:35	7/3/2021 02:35	266313/	N
FEW4-MW81-207	WG	FEW4-MW81-207-17	BA35172		1/5	6/22/2021 12:30	7/3/2021 03:02	7/3/2021 03:02	266313/	N
FEW4-MW81-207	WG	FEW4-MW81-207-PDB-17	BA35173		1/5	6/22/2021 11:00	7/3/2021 03:30	7/3/2021 03:30	266313/	N

Test Method: SW8260C Analysis Batch: 266313

Location	Matrix	Field Sample ID	Lab Sample ID	Calibration Ref	Run#/ Dil'n	Collection Date/Time	Extraction Date/Time	Analysis Date/Time	Prep/Leach Batch	Sample Type
FEW4-MW66-205	WG	FEW4-MW66-205-17	BA35165		1/5	6/22/2021 08:30	7/3/2021 03:57	7/3/2021 03:57	266313/	N
FEW4-MW66-205	WG	FEW4-MW66-205-PDB-17	BA35166		1/5	6/21/2021 09:10	7/3/2021 04:25	7/3/2021 04:25	266313/	N
FEW4-MW71-96	WG	FEW4-MW71-96-17	BA35168		1/2	6/21/2021 13:00	7/3/2021 04:52	7/3/2021 04:52	266313/	N
FEW4-MW71-96	WG	FEW4-MW71-96-PDB-17	BA35169		1/2	6/21/2021 11:50	7/3/2021 05:20	7/3/2021 05:20	266313/	N

Test Method: SW8260C Analysis Batch: 266314

Location	Matrix	Field Sample ID	Lab Sample ID	Calibration Ref	Run#/ Dil'n	Collection Date/Time	Extraction Date/Time	Analysis Date/Time	Prep/Leach Batch	Sample Type
LABQC	WQ	BS-L2107021AW-266314	BS-L2107021AW-266314		1/1	7/2/2021 10:58	7/2/2021 10:58	7/2/2021 10:58	266314/	BS
LABQC	WQ	BD-L2107021AW-266314	BD-L2107021AW-266314		1/1	7/2/2021 11:26	7/2/2021 11:26	7/2/2021 11:26	266314/	BD
LABQC	WQ	LB-L2107021AW-266314	LB-L2107021AW-266314		1/1	7/2/2021 11:53	7/2/2021 11:53	7/2/2021 11:53	266314/	LB
FEW4-MW69-164	WG	FEW4-MW69-164-PDB-17	BA35167		1/1	6/21/2021 09:30	7/2/2021 18:19	7/2/2021 18:19	266314/	N
FEW4-MW74-359	WG	FEW4-MW74-359-17	BA35170		1/1	6/22/2021 10:50	7/2/2021 18:46	7/2/2021 18:46	266314/	N
FEW4-MW74-359	WG	FEW4-MW74-359-PDB-17	BA35171		1/1	6/21/2021 09:17	7/2/2021 19:14	7/2/2021 19:14	266314/	N

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Batch Report

Test Method: SW8260C Analysis Batch: 266318

Location	Matrix	Field Sample ID	Lab Sample ID	Calibration Ref	Run#/ Dil'n	Collection Date/Time	Extraction Date/Time	Analysis Date/Time	Prep/Leach Batch	Sample Type
LABQC	WQ	BS-L210706AW-266318	BS-L210706AW-266318		2/1	7/6/2021 20:58	7/6/2021 20:58	7/6/2021 20:58	266318/	BS
LABQC	WQ	BD-L210706AW-266318	BD-L210706AW-266318		2/1	7/6/2021 21:26	7/6/2021 21:26	7/6/2021 21:26	266318/	BD
LABQC	WQ	LB-L210706AW-266318	LB-L210706AW-266318		2/1	7/6/2021 21:53	7/6/2021 21:53	7/6/2021 21:53	266318/	LB
FEW4-MW92B-288	WG	FEW4-MW92B-288-PDB-17	BA35176		2/20	6/21/2021 12:49	7/6/2021 23:43	7/6/2021 23:43	266318/	N
FEW4-MW92B-288	WG	FEW4-MW92B-288-FD-17	BA35175		2/20	6/21/2021 15:03	7/7/2021 00:11	7/7/2021 00:11	266318/	FD
FEW4-MW92B-288	WG	FEW4-MW92B-288-17	BA35174		2/20	6/21/2021 15:03	7/7/2021 00:38	7/7/2021 00:38	266318/	N
FEW4-MW71-96	WG	FEW4-MW71-96-17	BA35168		2/20	6/21/2021 13:00	7/7/2021 01:06	7/7/2021 01:06	266318/	N
FEW4-MW71-96	WG	FEW4-MW71-96-PDB-17	BA35169		2/20	6/21/2021 11:50	7/7/2021 01:33	7/7/2021 01:33	266318/	N

Test Method: SW8260C Analysis Batch: 266323

Location	Matrix	Field Sample ID	Lab Sample ID	Calibration Ref	Run#/ Dil'n	Collection Date/Time	Extraction Date/Time	Analysis Date/Time	Prep/Leach Batch	Sample Type
LABQC	WQ	BS-L2107061AW-266323	BS-L2107061AW-266323		3/1	7/6/2021 20:58	7/6/2021 20:58	7/6/2021 20:58	266323/	BS
LABQC	WQ	BD-L2107061AW-266323	BD-L2107061AW-266323		3/1	7/6/2021 21:26	7/6/2021 21:26	7/6/2021 21:26	266323/	BD
LABQC	WQ	LB-L2107061AW-266323	LB-L2107061AW-266323		3/1	7/6/2021 21:53	7/6/2021 21:53	7/6/2021 21:53	266323/	LB
FIELDQC	WQ	FEW4-TB21-17	BA35177		3/1	6/21/2021 08:00	7/6/2021 22:20	7/6/2021 22:20	266323/	TB

Test Method: SW8260C Analysis Batch: 266366

Test Method: SW8260C Analysis Batch: 266366

Location	Matrix	Field Sample ID	Lab Sample ID	Calibration Ref	Run#/ Dil'n	Collection Date/Time	Extraction Date/Time	Analysis Date/Time	Prep/Leach Batch	Sample Type
LABQC	WQ	BS-L210701MW-266366	BS-L210701MW-266366		1/1	7/1/2021 20:29	7/1/2021 20:29	7/1/2021 20:29	266366/	BS
LABQC	WQ	BD-L210701MW-266366	BD-L210701MW-266366		1/1	7/1/2021 20:57	7/1/2021 20:57	7/1/2021 20:57	266366/	BD
LABQC	WQ	LB-L210701MW-266366	LB-L210701MW-266366		1/1	7/1/2021 21:25	7/1/2021 21:25	7/1/2021 21:25	266366/	LB
FEW4-MW20	WG	FEW4-MW20-PDB-17	BA35160		1/1	6/22/2021 11:56	7/2/2021 04:50	7/2/2021 04:50	266366/	N
FEW4-MW31	WG	FEW4-MW31-17	BA35161		1/1	6/21/2021 16:22	7/2/2021 05:18	7/2/2021 05:18	266366/	N
FEW4-MW31	WG	FEW4-MW31-PDB-17	BA35162		1/1	6/21/2021 15:49	7/2/2021 05:46	7/2/2021 05:46	266366/	N
FEW4-MW59-183	WG	FEW4-MW59-183-17	BA35163		1/1	6/22/2021 14:07	7/2/2021 06:14	7/2/2021 06:14	266366/	N
FEW4-MW59-183	WG	FEW4-MW59-183-PDB-17	BA35164		1/1	6/22/2021 11:34	7/2/2021 06:42	7/2/2021 06:42	266366/	N
FEW4-MW59-183	WG	FEW4-MW59-183-MS-17	BA35163MS		1/1	6/22/2021 14:07	7/14/2021 20:44	7/14/2021 20:44	266366/	MS
FEW4-MW59-183	WG	FEW4-MW59-183-MSD-17	BA35163MSD		1/1	6/22/2021 14:07	7/14/2021 21:11	7/14/2021 21:11	266366/	SD

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Batch Report

Test Method: SW8260C Analysis Batch: 266370

Location	Matrix	Field Sample ID	Lab Sample ID	Calibration Ref	Run#/ Dil'n	Collection Date/Time	Extraction Date/Time	Analysis Date/Time	Prep/Leach Batch	Sample Type
LABQC	WQ	BS-M210702AW-266370	BS-M210702AW-266370		3/1	7/2/2021 17:46	7/2/2021 17:46	7/2/2021 17:46	266370/	BS
LABQC	WQ	BD-M210702AW-266370	BD-M210702AW-266370		3/1	7/2/2021 18:14	7/2/2021 18:14	7/2/2021 18:14	266370/	BD
LABQC	WQ	LB-M210702AW-266370	LB-M210702AW-266370		3/1	7/2/2021 18:42	7/2/2021 18:42	7/2/2021 18:42	266370/	LB
FEW4-MW20	WG	FEW4-MW20-PDB-17	BA35160		3/1	6/22/2021 11:56	7/3/2021 02:09	7/3/2021 02:09	266370/	N
FEW4-MW31	WG	FEW4-MW31-17	BA35161		3/1	6/21/2021 16:22	7/3/2021 02:37	7/3/2021 02:37	266370/	N
FEW4-MW31	WG	FEW4-MW31-PDB-17	BA35162		3/1	6/21/2021 15:49	7/3/2021 03:05	7/3/2021 03:05	266370/	N
FEW4-MW59-183	WG	FEW4-MW59-183-17	BA35163		3/1	6/22/2021 14:07	7/3/2021 03:32	7/3/2021 03:32	266370/	N
FEW4-MW59-183	WG	FEW4-MW59-183-PDB-17	BA35164		3/1	6/22/2021 11:34	7/3/2021 04:00	7/3/2021 04:00	266370/	N

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Field Batch Report

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

EBLOT	TBLOT	ABLOT	LOCID	Matrix	FLDSAMPID	LABSAMPID	LOGDATE	SACODE
	21062101		FEW4-MW20	WG	FEW4-MW20-PDB-17	BA35160	6/22/2021 11:56	N
	21062101		FEW4-MW31	WG	FEW4-MW31-17	BA35161	6/21/2021 16:22	N
	21062101		FEW4-MW31	WG	FEW4-MW31-PDB-17	BA35162	6/21/2021 15:49	N
	21062101		FEW4-MW59-183	WG	FEW4-MW59-183-17	BA35163	6/22/2021 14:07	N
	21062101		FEW4-MW59-183	WG	FEW4-MW59-183-MS-17	BA35163MS	6/22/2021 14:07	MS
	21062101		FEW4-MW59-183	WG	FEW4-MW59-183-MSD-17	BA35163MSD	6/22/2021 14:07	SD
	21062101		FEW4-MW59-183	WG	FEW4-MW59-183-PDB-17	BA35164	6/22/2021 11:34	N
	21062101		FEW4-MW66-205	WG	FEW4-MW66-205-17	BA35165	6/22/2021 08:30	N
	21062101		FEW4-MW66-205	WG	FEW4-MW66-205-PDB-17	BA35166	6/21/2021 09:10	N
	21062101		FEW4-MW69-164	WG	FEW4-MW69-164-PDB-17	BA35167	6/21/2021 09:30	N
	21062101		FEW4-MW71-96	WG	FEW4-MW71-96-17	BA35168	6/21/2021 13:00	N
	21062101		FEW4-MW71-96	WG	FEW4-MW71-96-PDB-17	BA35169	6/21/2021 11:50	N
	21062101		FEW4-MW74-359	WG	FEW4-MW74-359-17	BA35170	6/22/2021 10:50	N
	21062101		FEW4-MW74-359	WG	FEW4-MW74-359-PDB-17	BA35171	6/21/2021 09:17	N
	21062101		FEW4-MW81-207	WG	FEW4-MW81-207-17	BA35172	6/22/2021 12:30	N
	21062101		FEW4-MW81-207	WG	FEW4-MW81-207-PDB-17	BA35173	6/22/2021 11:00	N
	21062101		FEW4-MW92B-288	WG	FEW4-MW92B-288-17	BA35174	6/21/2021 15:03	N
	21062101		FEW4-MW92B-288	WG	FEW4-MW92B-288-FD-17	BA35175	6/21/2021 15:03	FD
	21062101		FEW4-MW92B-288	WG	FEW4-MW92B-288-PDB-17	BA35176	6/21/2021 12:49	N
	21062101		FIELDQC	WQ	FEW4-TB21-17	BA35177	6/21/2021 08:00	TB

MS Mismatch Report

--No Records Found--

Section to identify Matrix Spike mismatches where parent sample differs from MS by dilution.

QC Outlier Report

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

QC Element	Sample ID/ Lab Sample ID	Run#/ Dil'n	Analyte	Result (Units)	Qualifier	Warning Limits	Control Limits	Reason	Comment	Rule	Action Level
LCS Recovery	BD-L210702BW-266313 (BD) / BD-L210702BW-266313	1 / 1.00	1,1,2,2-Tetrachloroethane	135.0 (percent)	J/None	71 - 121	71 - 121	C			
LCS Recovery	BD-L210702BW-266313 (BD) / BD-L210702BW-266313	1 / 1.00	1,1,2-Trichloro-1,2,2-trifluoroethane	140.0 (percent)	J/None	70 - 136	70 - 136	C			
LCS Recovery	BD-L210702BW-266313 (BD) / BD-L210702BW-266313	1 / 1.00	1,1-Dichloroethene	137.0 (percent)	J/None	71 - 131	71 - 131	C			
LCS Recovery	BD-L210702BW-266313 (BD) / BD-L210702BW-266313	1 / 1.00	1,2-Dichloropropane	132.0 (percent)	J/None	78 - 122	78 - 122	C			
LCS Recovery	BD-L210702BW-266313 (BD) / BD-L210702BW-266313	1 / 1.00	2-Butanone (MEK)	238.0 (percent)	J/None	56 - 143	56 - 143	C			
LCS Recovery	BD-L210702BW-266313 (BD) / BD-L210702BW-266313	1 / 1.00	2-Hexanone	254.0 (percent)	J/None	57 - 139	57 - 139	C			
LCS Recovery	BD-L210702BW-266313 (BD) / BD-L210702BW-266313	1 / 1.00	4-Methyl-2-pentanone (MIBK)	264.0 (percent)	J/None	67 - 130	67 - 130	C			
LCS Recovery	BD-L210702BW-266313 (BD) / BD-L210702BW-266313	1 / 1.00	Acetone	288.0 (percent)	J/None	39 - 160	39 - 160	C			
LCS Recovery	BD-L210702BW-266313 (BD) / BD-L210702BW-266313	1 / 1.00	Carbon disulfide	159.0 (percent)	J/None	64 - 133	64 - 133	C			
LCS Recovery	BD-L210702BW-266313 (BD) / BD-L210702BW-266313	1 / 1.00	Chloroethane	195.0 (percent)	J/None	60 - 138	60 - 138	C			
LCS Recovery	BD-L210702BW-266313 (BD) / BD-L210702BW-266313	1 / 1.00	Chloromethane	144.0 (percent)	J/None	50 - 139	50 - 139	C			
LCS Recovery	BD-L210702BW-266313 (BD) / BD-L210702BW-266313	1 / 1.00	Vinyl chloride	183.0 (percent)	J/None	58 - 137	58 - 137	C			
LCS Recovery	BS-L210702BW-266313 (BS) / BS-L210702BW-266313	1 / 1.00	1,1,2,2-Tetrachloroethane	148.0 (percent)	J/None	71 - 121	71 - 121	C			
LCS Recovery	BS-L210702BW-266313 (BS) / BS-L210702BW-266313	1 / 1.00	1,1-Dichloroethene	143.0 (percent)	J/None	71 - 131	71 - 131	C			
LCS Recovery	BS-L210702BW-266313 (BS) / BS-L210702BW-266313	1 / 1.00	1,2-Dichloropropane	139.0 (percent)	J/None	78 - 122	78 - 122	C			
LCS Recovery	BS-L210702BW-266313 (BS) / BS-L210702BW-266313	1 / 1.00	2-Butanone (MEK)	258.0 (percent)	J/None	56 - 143	56 - 143	C			
LCS Recovery	BS-L210702BW-266313 (BS) / BS-L210702BW-266313	1 / 1.00	2-Hexanone	268.0 (percent)	J/None	57 - 139	57 - 139	C			
LCS Recovery	BS-L210702BW-266313 (BS) / BS-L210702BW-266313	1 / 1.00	4-Methyl-2-pentanone (MIBK)	254.0 (percent)	J/None	67 - 130	67 - 130	C			

US Army Corps of Engineers

QC Outlier Report

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

QC Element	Sample ID/ Lab Sample ID	Run#/ Dil'n	Analyte	Result (Units)	Qualifier	Warning Limits	Control Limits	Reason	Comment	Rule	Action Level
LCS Recovery	BS-L210702BW-266313 (BS) / BS-L210702BW-266313	1 / 1.00	Acetone	298.0 (percent)	J/None	39 - 160	39 - 160	C			
LCS Recovery	BS-L210702BW-266313 (BS) / BS-L210702BW-266313	1 / 1.00	Carbon disulfide	178.0 (percent)	J/None	64 - 133	64 - 133	C			
LCS Recovery	BS-L210702BW-266313 (BS) / BS-L210702BW-266313	1 / 1.00	Chloroethane	197.0 (percent)	J/None	60 - 138	60 - 138	C			
LCS Recovery	BS-L210702BW-266313 (BS) / BS-L210702BW-266313	1 / 1.00	Chloromethane	156.0 (percent)	J/None	50 - 139	50 - 139	C			
LCS Recovery	BS-L210702BW-266313 (BS) / BS-L210702BW-266313	1 / 1.00	Methyl acetate	145.0 (percent)	J/None	56 - 136	56 - 136	C			
LCS Recovery	BS-L210702BW-266313 (BS) / BS-L210702BW-266313	1 / 1.00	Vinyl chloride	196.0 (percent)	J/None	58 - 137	58 - 137	C			
LCS RPD	BD-L210701MW-266366 (BD) / BD-L210701MW-266366	1 / 1.00	1,2-Dichloropropane	21.34 (rpd)	J/None	< 20	< 20	Z			
LCS RPD	BD-L2107021AW-266314 (BD) / BD-L2107021AW-266314	1 / 1.00	Chloromethane	20.33 (rpd)	J/None	< 20	< 20	Z			
LCS RPD	BD-L2107061AW-266323 (BD) / BD-L2107061AW-266323	3 / 1.00	Methyl acetate	25.48 (rpd)	J/None	< 20	< 20	Z			
Surrogate	FEW4-MW66-205-17 (N) / BA35165	1 / 5.00	1,2-Dichloroethane-d4	80.00 (percent)	J/UJ	81 - 118	10 - 118	I			
Surrogate	FEW4-MW66-205-17 (N) / BA35165	1 / 5.00	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	66.00 (percent)	J/UJ	85 - 114	10 - 114	I			
Surrogate	FEW4-MW66-205-17 (N) / BA35165	2 / 50.00	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	74.00 (percent)	J/UJ	85 - 114	10 - 114	I			
Surrogate	FEW4-MW66-205-PDB-17 (N) / BA35166	1 / 5.00	1,2-Dichloroethane-d4	80.00 (percent)	J/UJ	81 - 118	10 - 118	I			
Surrogate	FEW4-MW66-205-PDB-17 (N) / BA35166	1 / 5.00	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	64.00 (percent)	J/UJ	85 - 114	10 - 114	I			
Surrogate	FEW4-MW66-205-PDB-17 (N) / BA35166	2 / 50.00	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	74.00 (percent)	J/UJ	85 - 114	10 - 114	I			
Surrogate	FEW4-MW69-164-PDB-17 (N) / BA35167	1 / 1.00	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	81.00 (percent)	J/UJ	85 - 114	10 - 114	I			
Surrogate	FEW4-MW71-96-17 (N) / BA35168	1 / 2.00	1,2-Dichloroethane-d4	80.00 (percent)	J/UJ	81 - 118	10 - 118	I			
Surrogate	FEW4-MW71-96-17 (N) / BA35168	1 / 2.00	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	63.00 (percent)	J/UJ	85 - 114	10 - 114	I			

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QC Outlier Report

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

QC Element	Sample ID/ Lab Sample ID	Run#/ Dil'n	Analyte	Result (Units)	Qualifier	Warning Limits	Control Limits	Reason	Comment	Rule	Action Level
Surrogate	FEW4-MW71-96-17 (N) / BA35168	2 / 20.00	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	73.00 (percent)	J/UJ	85 - 114	10 - 114	I			
Surrogate	FEW4-MW71-96-17 (N) / BA35168	2 / 20.00	Toluene-d8	123.0 (percent)	J/None	89 - 112	10 - 112	I			
Surrogate	FEW4-MW71-96-PDB-17 (N) / BA35169	1 / 2.00	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	64.00 (percent)	J/UJ	85 - 114	10 - 114	I			
Surrogate	FEW4-MW71-96-PDB-17 (N) / BA35169	2 / 20.00	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	78.00 (percent)	J/UJ	85 - 114	10 - 114	I			
Surrogate	FEW4-MW74-359-PDB-17 (N) / BA35171	1 / 1.00	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	72.00 (percent)	J/UJ	85 - 114	10 - 114	I			
Surrogate	FEW4-MW81-207-17 (N) / BA35172	1 / 5.00	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	66.00 (percent)	J/UJ	85 - 114	10 - 114	I			
Surrogate	FEW4-MW81-207-17 (N) / BA35172	2 / 50.00	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	76.00 (percent)	J/UJ	85 - 114	10 - 114	I			
Surrogate	FEW4-MW81-207-PDB-17 (N) / BA35173	1 / 5.00	1,2-Dichloroethane-d4	79.00 (percent)	J/UJ	81 - 118	10 - 118	I			
Surrogate	FEW4-MW81-207-PDB-17 (N) / BA35173	1 / 5.00	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	70.00 (percent)	J/UJ	85 - 114	10 - 114	I			
Surrogate	FEW4-MW92B-288-17 (N) / BA35174	1 / 1.00	1,2-Dichloroethane-d4	80.00 (percent)	J/UJ	81 - 118	10 - 118	I			
Surrogate	FEW4-MW92B-288-17 (N) / BA35174	1 / 1.00	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	68.00 (percent)	J/UJ	85 - 114	10 - 114	I			
Surrogate	FEW4-MW92B-288-17 (N) / BA35174	2 / 20.00	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	79.00 (percent)	J/UJ	85 - 114	10 - 114	I			
Surrogate	FEW4-MW92B-288-FD-17 (FD) / BA35175	1 / 1.00	1,2-Dichloroethane-d4	80.00 (percent)	J/UJ	81 - 118	10 - 118	I			
Surrogate	FEW4-MW92B-288-FD-17 (FD) / BA35175	1 / 1.00	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	68.00 (percent)	J/UJ	85 - 114	10 - 114	I			
Surrogate	FEW4-MW92B-288-FD-17 (FD) / BA35175	2 / 20.00	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	84.00 (percent)	J/UJ	85 - 114	10 - 114	I			
Surrogate	FEW4-MW92B-288-PDB-17 (N) / BA35176	1 / 1.00	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	72.00 (percent)	J/UJ	85 - 114	10 - 114	I			

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QC Outlier Report

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

QC Element	Sample ID/ Lab Sample ID	Run#/ Dil'n	Analyte	Result (Units)	Qualifier	Warning Limits	Control Limits	Reason	Comment	Rule	Action Level
Surrogate	FEW4-TB21-17 (TB) / BA35177	1 / 1.00	1-Bromo-4-fluorobenzene (4-Bromofluorobenzene)	70.00 (percent)	J/UJ	85 - 114	10 - 114	I			
Test Hold Time	FEW4-MW71-96-17 (N) / BA35168	2 / 20.00	All in Run	15.50 (days)	J/UJ	< 14	< 28	H1	Test Exceeds UWL		
Test Hold Time	FEW4-MW71-96-PDB-17 (N) / BA35169	2 / 20.00	All in Run	15.57 (days)	J/UJ	< 14	< 28	H1	Test Exceeds UWL		
Test Hold Time	FEW4-MW92B-288-17 (N) / BA35174	2 / 20.00	All in Run	15.40 (days)	J/UJ	< 14	< 28	H1	Test Exceeds UWL		
Test Hold Time	FEW4-MW92B-288-FD-17 (FD) / BA35175	2 / 20.00	All in Run	15.38 (days)	J/UJ	< 14	< 28	H1	Test Exceeds UWL		
Test Hold Time	FEW4-MW92B-288-PDB-17 (N) / BA35176	2 / 20.00	All in Run	15.45 (days)	J/UJ	< 14	< 28	H1	Test Exceeds UWL		
Test Hold Time	FEW4-TB21-17 (TB) / BA35177	3 / 1.00	All in Run	15.60 (days)	J/UJ	< 14	< 28	H1	Test Exceeds UWL		

Rule is the multiplier used when blank contamination occurs to determine action level.

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW66-205-17	BA35165	W	N	1,1,1-Trichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	1,1,2,2-Tetrachloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	1,1,2-Trichloro-1,2,2-trifluoroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	1,1,2-Trichloroethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	1,1-Dichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	1,1-Dichloroethene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	1,2,3-Trichlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	1,2,4-Trichlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	1,2-Dibromo-3-chloropropane	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	1,2-Dibromoethane (EDB)	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	1,2-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	1,2-Dichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	1,2-Dichloropropane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	1,3-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	1,4-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	2-Butanone (MEK)	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	2-Hexanone	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	4-Methyl-2-pentanone (MIBK)	50.0	25.0 U	25.0 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Acetone	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Benzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Bromochloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Bromodichloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Bromoform	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Bromomethane	10.0	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Carbon disulfide	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Carbon tetrachloride	5.00	1.50 U	1.50 UJ		ug/l	I

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW66-205-17	BA35165	W	N	Chlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Chloroethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Chloroform	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Chloromethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	cis-1,2-Dichloroethene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	cis-1,3-Dichloropropene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Cyclohexane	50.0	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Dibromochloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Dichlorodifluoromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Ethylbenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Isopropylbenzene (Cumene)	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	m,p-Xylene	10.0	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Methyl acetate	50.0	25.0 U	25.0 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Methyl tert-butyl ether (MTBE)	5.00	2.60 U	2.60 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Methylcyclohexane	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Methylene chloride	25.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	o-Xylene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Styrene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Tetrachloroethene (PCE)	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Toluene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	trans-1,2-Dichloroethene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	trans-1,3-Dichloropropene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Trichloroethene (TCE)	50.0	1600	1600 J	-	ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Trichlorofluoromethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-17	BA35165	W	N	Vinyl chloride	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	1,1,1-Trichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	1,1,2,2-Tetrachloroethane	5.00	1.50 U	1.50 UJ		ug/l	I

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW66-205-PDB-17	BA35166	W	N	1,1,2-Trichloro-1,2,2-trifluoroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	1,1,2-Trichloroethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	1,1-Dichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	1,1-Dichloroethene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	1,2,3-Trichlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	1,2,4-Trichlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	1,2-Dibromo-3-chloropropane	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	1,2-Dibromoethane (EDB)	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	1,2-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	1,2-Dichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	1,2-Dichloropropane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	1,3-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	1,4-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	2-Butanone (MEK)	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	2-Hexanone	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	4-Methyl-2-pentanone (MIBK)	50.0	25.0 U	25.0 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Acetone	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Benzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Bromochloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Bromodichloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Bromoform	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Bromomethane	10.0	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Carbon disulfide	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Carbon tetrachloride	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Chlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Chloroethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Chloroform	5.00	1.50 U	1.50 UJ		ug/l	I

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW66-205-PDB-17	BA35166	W	N	Chloromethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	cis-1,2-Dichloroethene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	cis-1,3-Dichloropropene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Cyclohexane	50.0	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Dibromochloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Dichlorodifluoromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Ethylbenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Isopropylbenzene (Cumene)	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	m,p-Xylene	10.0	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Methyl acetate	50.0	25.0 U	25.0 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Methyl tert-butyl ether (MTBE)	5.00	2.60 U	2.60 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Methylcyclohexane	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Methylene chloride	25.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	o-Xylene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Styrene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Tetrachloroethene (PCE)	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Toluene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	trans-1,2-Dichloroethene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	trans-1,3-Dichloropropene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Trichloroethene (TCE)	50.0	1200	1200 J	-	ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Trichlorofluoromethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	Vinyl chloride	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW69-164-PDB-17	BA35167	W	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Acetone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	I

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW69-164-PDB-17	BA35167	W	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Trichloroethene (TCE)	1.00	4.70	4.70 J	-	ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	1,1,1-Trichloroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	1,1,2,2-Tetrachloroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	1,1,2-Trichloro-1,2,2-trifluoroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	1,1,2-Trichloroethane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	1,1-Dichloroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	1,1-Dichloroethene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	1,2,3-Trichlorobenzene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	1,2,4-Trichlorobenzene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	1,2-Dibromo-3-chloropropane	4.00	2.00 U	2.00 UJ		ug/l	I

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW71-96-17	BA35168	W	N	1,2-Dibromoethane (EDB)	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	1,2-Dichlorobenzene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	1,2-Dichloroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	1,2-Dichloropropane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	1,3-Dichlorobenzene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	1,4-Dichlorobenzene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	2-Butanone (MEK)	20.0	4.00 U	4.00 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	2-Hexanone	20.0	4.00 U	4.00 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	4-Methyl-2-pentanone (MIBK)	20.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Acetone	20.0	4.00 U	4.00 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Benzene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Bromochloromethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Bromodichloromethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Bromoform	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Bromomethane	4.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Carbon disulfide	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Carbon tetrachloride	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Chlorobenzene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Chloroethane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Chloroform	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Chloromethane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	cis-1,2-Dichloroethene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	cis-1,3-Dichloropropene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Cyclohexane	20.0	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Dibromochloromethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Dichlorodifluoromethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Ethylbenzene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Isopropylbenzene (Cumene)	2.00	0.600 U	0.600 UJ		ug/l	I

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW71-96-17	BA35168	W	N	m,p-Xylene	4.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Methyl acetate	20.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Methyl tert-butyl ether (MTBE)	2.00	1.04 U	1.04 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Methylcyclohexane	20.0	4.00 U	4.00 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Methylene chloride	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	o-Xylene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Styrene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Tetrachloroethene (PCE)	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Toluene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	trans-1,2-Dichloroethene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	trans-1,3-Dichloropropene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Trichloroethene (TCE)	20.0	820	820 J		ug/l	H1/I
FEW4-MW71-96-17	BA35168	W	N	Trichlorofluoromethane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-17	BA35168	W	N	Vinyl chloride	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	1,1,1-Trichloroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	1,1,2,2-Tetrachloroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	1,1,2-Trichloro-1,2,2-trifluoroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	1,1,2-Trichloroethane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	1,1-Dichloroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	1,1-Dichloroethene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	1,2,3-Trichlorobenzene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	1,2,4-Trichlorobenzene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	1,2-Dibromo-3-chloropropane	4.00	2.00 U	2.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	1,2-Dibromoethane (EDB)	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	1,2-Dichlorobenzene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	1,2-Dichloroethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	1,2-Dichloropropane	2.00	0.600 U	0.600 UJ		ug/l	I

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW71-96-PDB-17	BA35169	W	N	1,3-Dichlorobenzene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	1,4-Dichlorobenzene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	2-Butanone (MEK)	20.0	4.00 U	4.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	2-Hexanone	20.0	4.00 U	4.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	4-Methyl-2-pentanone (MIBK)	20.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Acetone	20.0	4.00 U	4.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Benzene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Bromochloromethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Bromodichloromethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Bromoform	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Bromomethane	4.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Carbon disulfide	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Carbon tetrachloride	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Chlorobenzene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Chloroethane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Chloroform	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Chloromethane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	cis-1,2-Dichloroethene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	cis-1,3-Dichloropropene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Cyclohexane	20.0	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Dibromochloromethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Dichlorodifluoromethane	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Ethylbenzene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Isopropylbenzene (Cumene)	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	m,p-Xylene	4.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Methyl acetate	20.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Methyl tert-butyl ether (MTBE)	2.00	1.04 U	1.04 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Methylcyclohexane	20.0	4.00 U	4.00 UJ		ug/l	I

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW71-96-PDB-17	BA35169	W	N	Methylene chloride	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	o-Xylene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Styrene	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Tetrachloroethene (PCE)	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Toluene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	trans-1,2-Dichloroethene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	trans-1,3-Dichloropropene	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Trichloroethene (TCE)	20.0	910	910 J	-	ug/l	H1/I
FEW4-MW71-96-PDB-17	BA35169	W	N	Trichlorofluoromethane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW71-96-PDB-17	BA35169	W	N	Vinyl chloride	2.00	0.600 U	0.600 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	I

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW74-359-PDB-17	BA35171	W	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Acetone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	I

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW74-359-PDB-17	BA35171	W	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Trichloroethene (TCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW74-359-PDB-17	BA35171	W	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	1,1,1-Trichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	1,1,2,2-Tetrachloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	1,1,2-Trichloro-1,2,2-trifluoroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	1,1,2-Trichloroethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	1,1-Dichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	1,1-Dichloroethene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	1,2,3-Trichlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	1,2,4-Trichlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	1,2-Dibromo-3-chloropropane	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	1,2-Dibromoethane (EDB)	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	1,2-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	1,2-Dichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	1,2-Dichloropropane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	1,3-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	1,4-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	2-Butanone (MEK)	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	2-Hexanone	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	4-Methyl-2-pentanone (MIBK)	50.0	25.0 U	25.0 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Acetone	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Benzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Bromochloromethane	5.00	1.50 U	1.50 UJ		ug/l	I

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW81-207-17	BA35172	W	N	Bromodichloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Bromoform	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Bromomethane	10.0	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Carbon disulfide	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Carbon tetrachloride	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Chlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Chloroethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Chloroform	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Chloromethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	cis-1,2-Dichloroethene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	cis-1,3-Dichloropropene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Cyclohexane	50.0	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Dibromochloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Dichlorodifluoromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Ethylbenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Isopropylbenzene (Cumene)	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	m,p-Xylene	10.0	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Methyl acetate	50.0	25.0 U	25.0 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Methyl tert-butyl ether (MTBE)	5.00	2.60 U	2.60 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Methylcyclohexane	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Methylene chloride	25.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	o-Xylene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Styrene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Tetrachloroethene (PCE)	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Toluene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	trans-1,2-Dichloroethene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	trans-1,3-Dichloropropene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Trichloroethene (TCE)	50.0	1800	1800 J	-	ug/l	I

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW81-207-17	BA35172	W	N	Trichlorofluoromethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-17	BA35172	W	N	Vinyl chloride	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	1,1,1-Trichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	1,1,2,2-Tetrachloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	1,1,2-Trichloro-1,2,2-trifluoroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	1,1,2-Trichloroethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	1,1-Dichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	1,1-Dichloroethene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	1,2,3-Trichlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	1,2,4-Trichlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	1,2-Dibromo-3-chloropropane	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	1,2-Dibromoethane (EDB)	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	1,2-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	1,2-Dichloroethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	1,2-Dichloropropane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	1,3-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	1,4-Dichlorobenzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	2-Butanone (MEK)	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	2-Hexanone	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	4-Methyl-2-pentanone (MIBK)	50.0	25.0 U	25.0 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Acetone	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Benzene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Bromochloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Bromodichloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Bromoform	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Bromomethane	10.0	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Carbon disulfide	5.00	2.50 U	2.50 UJ		ug/l	I

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW81-207-PDB-17	BA35173	W	N	Carbon tetrachloride	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Chlorobenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Chloroethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Chloroform	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Chloromethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	cis-1,2-Dichloroethene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	cis-1,3-Dichloropropene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Cyclohexane	50.0	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Dibromochloromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Dichlorodifluoromethane	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Ethylbenzene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Isopropylbenzene (Cumene)	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	m,p-Xylene	10.0	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Methyl acetate	50.0	25.0 U	25.0 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Methyl tert-butyl ether (MTBE)	5.00	2.60 U	2.60 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Methylcyclohexane	50.0	10.0 U	10.0 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Methylene chloride	25.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	o-Xylene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Styrene	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Tetrachloroethene (PCE)	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Toluene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	trans-1,2-Dichloroethene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	trans-1,3-Dichloropropene	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Trichlorofluoromethane	5.00	2.50 U	2.50 UJ		ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	Vinyl chloride	5.00	1.50 U	1.50 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	I

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW92B-288-17	BA35174	W	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Acetone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	I

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW92B-288-17	BA35174	W	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Trichloroethene (TCE)	20.0	61.0	61.0 J	-	ug/l	H1/I
FEW4-MW92B-288-17	BA35174	W	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-17	BA35174	W	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW92B-288-FD-17	BA35175	W	FD	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Acetone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Benzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	I

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Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW92B-288-FD-17	BA35175	W	FD	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Styrene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Toluene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Trichloroethene (TCE)	20.0	58.0	58.0 J	-	ug/l	H1/I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-FD-17	BA35175	W	FD	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	I

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW92B-288-PDB-17	BA35176	W	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Acetone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	I

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Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW92B-288-PDB-17	BA35176	W	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Trichloroethene (TCE)	20.0	69.0	69.0 J	-	ug/l	H1
FEW4-MW92B-288-PDB-17	BA35176	W	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-MW92B-288-PDB-17	BA35176	W	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	I

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Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-TB21-17	BA35177	W	TB	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Acetone	10.0	2.00 U	2.00 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Benzene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	I

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Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-TB21-17	BA35177	W	TB	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Styrene	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Toluene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Trichloroethene (TCE)	1.00	0.300 U	0.300 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	I
FEW4-TB21-17	BA35177	W	TB	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	I

Qualified analytes in samples are reported as estimated, not detected (UJ) at the Limit of Detection (LOD).

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Detected Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Dilution	Analyte	LOQ	Lab Result	Qualified Result	Units	Reason
FEW4-MW20-PDB-17	BA35160	W	N	1	Trichloroethene (TCE)	1.00	14.0	14.0	ug/l	
FEW4-MW31-17	BA35161	W	N	1	Trichloroethene (TCE)	1.00	16.0	16.0	ug/l	
FEW4-MW31-PDB-17	BA35162	W	N	1	Trichloroethene (TCE)	1.00	27.0	27.0	ug/l	
FEW4-MW59-183-17	BA35163	W	N	1	Trichloroethene (TCE)	1.00	2.80	2.80	ug/l	
FEW4-MW59-183-PDB-17	BA35164	W	N	1	Trichloroethene (TCE)	1.00	58.0	58.0	ug/l	
FEW4-MW66-205-17	BA35165	W	N	50	Trichloroethene (TCE)	50.0	1600	1600 J	ug/l	I
FEW4-MW66-205-PDB-17	BA35166	W	N	50	Trichloroethene (TCE)	50.0	1200	1200 J	ug/l	I
FEW4-MW69-164-PDB-17	BA35167	W	N	1	Trichloroethene (TCE)	1.00	4.70	4.70 J	ug/l	I
FEW4-MW71-96-17	BA35168	W	N	20	Trichloroethene (TCE)	20.0	820	820 J	ug/l	H1/I
FEW4-MW71-96-PDB-17	BA35169	W	N	20	Trichloroethene (TCE)	20.0	910	910 J	ug/l	H1/I
FEW4-MW81-207-17	BA35172	W	N	50	Trichloroethene (TCE)	50.0	1800	1800 J	ug/l	I
FEW4-MW81-207-PDB-17	BA35173	W	N	50	Trichloroethene (TCE)	50.0	1700	1700	ug/l	
FEW4-MW92B-288-17	BA35174	W	N	20	Trichloroethene (TCE)	20.0	61.0	61.0 J	ug/l	H1/I
FEW4-MW92B-288-FD-17	BA35175	W	FD	20	Trichloroethene (TCE)	20.0	58.0	58.0 J	ug/l	H1/I
FEW4-MW92B-288-PDB-17	BA35176	W	N	20	Trichloroethene (TCE)	20.0	69.0	69.0 J	ug/l	H1

Rejected Results

--No Records Found--

Facility:	B08WY0467-02, F.E. Warren AFB, Site 4, Feasibility Study
Event:	FE Warren Site 4 FS Spring 2021
SDG:	96688
Guidance Document:	F.E. Warren Atlas Site 4 - Draft Final LT & PM UFP-QAPP Addendum 1
Prime Contractor:	URS Group, Inc.
Project Manager:	Robert Mallisee
Contract Laboratory(ies):	Agriculture & Priority Pollutants Laboratories, Inc., Clovis, CA
Data Review Contractor:	URS Group, Inc.
Data Review Level:	S2BVEM
Primary Data Reviewer:	Gary Torf, Project Chemist
Date Submitted:	November 10, 2021

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	SW8260C
FEW4-MW101-238-17	BA35299	Water	Field Sample/N	X
FEW4-MW101-238-PDB-17	BA35300	Water	Field Sample/N	X
FEW4-MW20-17	BA35301	Water	Field Sample/N	X
FEW4-MW45R-299-17	BA35302	Water	Field Sample/N	X
FEW4-MW45R-299-PDB-17	BA35303	Water	Field Sample/N	X
FEW4-MW69-164-17	BA35304	Water	Field Sample/N	X
FEW4-MW73-218-17	BA35305	Water	Field Sample/N	X
FEW4-MW73-218-PDB-17	BA35306	Water	Field Sample/N	X
FEW4-MW80-128-17	BA35307	Water	Field Sample/N	X
FEW4-MW80-128-PDB-17	BA35308	Water	Field Sample/N	X
FEW4-MW80-223-17	BA35309	Water	Field Sample/N	X
FEW4-MW80-223-PDB-17	BA35310	Water	Field Sample/N	X
FEW4-TB23-17	BA35311	Water	Trip Blank/TB	X

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page at S2BVEM data validation level. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the F.E. Warren Atlas Site 4 - Draft Final LT & PM UFP-QAPP Addendum 1 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by URS Group, Inc.; analyses were performed by Agriculture & Priority Pollutants Laboratories, Inc., Clovis, CA and were reported under sample delivery group (SDG) 96688. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Lab Blank
- LCS Recovery
- MS Recovery
- MS RPD
- Prep Hold Time
- Surrogate
- Test Hold Time
- Trip Blank

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 5 results (0.75%) out of the 663 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected or deemed a serious deficiency (X qualifier). Trace values, defined as results that are qualified as estimated because they fall between the detection limit and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Analytical Method	Data Reviewer Comment
SW8260C	No additional comments; see Checklist for detail.

Gary Torf

November 10, 2021

Reviewed by Gary Torf, Project Chemist, URS Group, Inc.

As the Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of the reported sample results and method quality control data between the two deliverables.

Quality Control Outliers for test method SW8260C, MS Recovery

Data for matrix spikes/matrix spike duplicates (MS/MSD) are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. These data alone cannot be used to evaluate the precision and accuracy of individual samples. However, when exercising professional judgment, MS/MSD data can be used in conjunction with other available QC information. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
FEW4-MW101-238-MS-17 (MS)/ BA35299MS	1,1,1-Trichloroethane	138.0	74 - 131	74 - 131	percent	J/None	M	
FEW4-MW101-238-MS-17 (MS)/ BA35299MS	1,1,2-Trichloroethane	78.00	80 - 119	80 - 119	percent	J/X	M	
FEW4-MW101-238-MS-17 (MS)/ BA35299MS	1,2-Dichloroethane	131.0	73 - 128	73 - 128	percent	J/None	M	
FEW4-MW101-238-MS-17 (MS)/ BA35299MS	Trichloroethene (TCE)	125.0	79 - 123	79 - 123	percent	J/None	M	
FEW4-MW101-238-MSD-17 (SD)/ BA35299MSD	1,1,1-Trichloroethane	141.0	74 - 131	74 - 131	percent	J/None	M	
FEW4-MW101-238-MSD-17 (SD)/ BA35299MSD	Carbon tetrachloride	140.0	72 - 136	72 - 136	percent	J/None	M	
FEW4-MW101-238-MSD-17 (SD)/ BA35299MSD	Methyl acetate	52.00	56 - 136	56 - 136	percent	J/X	M	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8260C, Test Hold Time

Hold times are ascertained based on project requirements. Holding times were determined by comparing the chain of custody records with the dates of analysis found in the electronic data deliverable and laboratory summary forms. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
FEW4-MW101-238-17 (N)/ BA35299		14.21	< 14	< 28	days	J/UJ	H1	Test Exceeds UWL
FEW4-MW101-238-PDB-17 (N)/ BA35300		14.53	< 14	< 28	days	J/UJ	H1	Test Exceeds UWL
FEW4-MW20-17 (N)/ BA35301		14.24	< 14	< 28	days	J/UJ	H1	Test Exceeds UWL
FEW4-MW45R-299-17 (N)/ BA35302		14.32	< 14	< 28	days	J/UJ	H1	Test Exceeds UWL
FEW4-MW45R-299-PDB-17 (N)/ BA35303		14.38	< 14	< 28	days	J/UJ	H1	Test Exceeds UWL
FEW4-MW69-164-17 (N)/ BA35304		14.44	< 14	< 28	days	J/UJ	H1	Test Exceeds UWL
FEW4-MW73-218-17 (N)/ BA35305		14.52	< 14	< 28	days	J/UJ	H1	Test Exceeds UWL
FEW4-MW73-218-PDB-17 (N)/ BA35306		14.62	< 14	< 28	days	J/UJ	H1	Test Exceeds UWL
FEW4-MW80-128-17 (N)/ BA35307		14.36	< 14	< 28	days	J/UJ	H1	Test Exceeds UWL
FEW4-MW80-128-17 (N)/ BA35307		16.50	< 14	< 28	days	J/UJ	H1	Test Exceeds UWL
FEW4-MW80-128-PDB-17 (N)/ BA35308		14.72	< 14	< 28	days	J/UJ	H1	Test Exceeds UWL
FEW4-MW80-128-PDB-17 (N)/ BA35308		16.86	< 14	< 28	days	J/UJ	H1	Test Exceeds UWL
FEW4-MW80-223-17 (N)/ BA35309		14.66	< 14	< 28	days	J/UJ	H1	Test Exceeds UWL
FEW4-MW80-223-17 (N)/ BA35309		16.80	< 14	< 28	days	J/UJ	H1	Test Exceeds UWL
FEW4-MW80-223-PDB-17 (N)/ BA35310		14.73	< 14	< 28	days	J/UJ	H1	Test Exceeds UWL
FEW4-MW80-223-PDB-17 (N)/ BA35310		16.87	< 14	< 28	days	J/UJ	H1	Test Exceeds UWL
FEW4-TB23-17 (TB)/ BA35311		14.81	< 14	< 28	days	J/UJ	H1	Test Exceeds UWL

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Test Hold Time for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW80-128-17 BA35307	N	Trichloroethene (TCE)	700	33000	33000 J		ug/l	H1/V5
FEW4-MW80-128-PDB-17 BA35308	N	Trichloroethene (TCE)	700	27000	27000 J		ug/l	H1/V5
FEW4-MW80-223-17 BA35309	N	Trichloroethene (TCE)	400	7400	7400 J		ug/l	H1/V5

Qualified Results associated with the Test Hold Time for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW80-223-PDB-17 BA35310	N	Trichloroethene (TCE)	400	7700	7700 J		ug/l	H1/V5

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW8260C, Trip Blank

The purpose of trip blanks is to determine the existence and magnitude of cross-contamination problems resulting from the shipping of samples. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in trip blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
FEW4-TB23-17 (TB)/ BA35311	Trichloroethene (TCE)	50.00	< 0.15	< 1	ug/l	U/None*	T	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOQ will be qualified based on the validation type such as J+ at the sample result.

No results associated with this QC element required qualification.

Table of All Qualified Results

Test Method: SW8260C		**Extraction Method: SW5030**						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW80-128-17 BA35307	N	Trichloroethene (TCE)	700	33000	33000 J		ug/l	H1/V5
FEW4-MW80-128-PDB-17 BA35308	N	Trichloroethene (TCE)	700	27000	27000 J		ug/l	H1/V5
FEW4-MW80-223-17 BA35309	N	Trichloroethene (TCE)	400	7400	7400 J		ug/l	H1/V5
FEW4-MW80-223-PDB-17 BA35310	N	Trichloroethene (TCE)	400	7700	7700 J		ug/l	H1/V5
FEW4-TB23-17 BA35311	TB	Trichloroethene (TCE)	1.00	50.0	0.300 UJ		ug/l	Y1

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Table of All Trace Results

Test Method: SW8260C	**Extraction Method: SW5030**							
FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW101-238-MS-17	MS	Cyclohexane	10.0	9.17	9.17 J		ug/L	TR
FEW4-MW101-238-MS-17	MS	Methyl acetate	10.0	5.91	5.91 J		ug/L	TR
FEW4-MW101-238-MS-17	MS	Methylcyclohexane	10.0	8.89	8.89 J		ug/L	TR
FEW4-MW101-238-MSD-17	SD	Cyclohexane	10.0	8.60	8.60 J		ug/L	TR
FEW4-MW101-238-MSD-17	SD	Methyl acetate	10.0	5.23 *	5.23 J		ug/L	TR
FEW4-MW101-238-MSD-17	SD	Methylcyclohexane	10.0	9.19	9.19 J		ug/L	TR

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-MW101-238-17 BA35299	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 X	0.500 U	
FEW4-MW101-238-17 BA35299	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-17 BA35299	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-17 BA35299	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-17 BA35299	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ	1.00 U	
FEW4-MW101-238-17 BA35299	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-17 BA35299	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW101-238-17 BA35299	N	2-Hexanone	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW101-238-17 BA35299	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-MW101-238-17 BA35299	N	Acetone	10.0	6.20 J	6.20 J	2.00 U	
FEW4-MW101-238-17 BA35299	N	Benzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	Bromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	Bromoform	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	Bromomethane	2.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-17 BA35299	N	Carbon disulfide	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-17 BA35299	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ	0.300 U	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C							
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-MW101-238-17 BA35299	N	Chlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-17 BA35299	N	Chloroethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-17 BA35299	N	Chloroform	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	Chloromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-17 BA35299	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	Cyclohexane	10.0	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	Ethylbenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-17 BA35299	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	m,p-Xylene	2.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	Methyl acetate	10.0	5.00 U	5.00 X	5.00 U	
FEW4-MW101-238-17 BA35299	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ	0.520 U	
FEW4-MW101-238-17 BA35299	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW101-238-17 BA35299	N	Methylene chloride	5.00	1.00 U	1.00 UJ	1.00 U	
FEW4-MW101-238-17 BA35299	N	o-Xylene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	Styrene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-17 BA35299	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	Toluene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	Trichloroethene (TCE)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-17 BA35299	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-17 BA35299	N	Vinyl chloride	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ	0.300 U	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C							
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-MW101-238-PDB-17 BA35300	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-PDB-17 BA35300	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-PDB-17 BA35300	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-PDB-17 BA35300	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-PDB-17 BA35300	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ	1.00 U	
FEW4-MW101-238-PDB-17 BA35300	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-PDB-17 BA35300	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW101-238-PDB-17 BA35300	N	2-Hexanone	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW101-238-PDB-17 BA35300	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-MW101-238-PDB-17 BA35300	N	Acetone	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW101-238-PDB-17 BA35300	N	Benzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	Bromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	Bromoform	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	Bromomethane	2.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-PDB-17 BA35300	N	Carbon disulfide	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-PDB-17 BA35300	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	Chlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-PDB-17 BA35300	N	Chloroethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-PDB-17 BA35300	N	Chloroform	1.00	0.300 U	0.300 UJ	0.300 U	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C							
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-MW101-238-PDB-17 BA35300	N	Chloromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-PDB-17 BA35300	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	Cyclohexane	10.0	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	Ethylbenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-PDB-17 BA35300	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	m,p-Xylene	2.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	Methyl acetate	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-MW101-238-PDB-17 BA35300	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ	0.520 U	
FEW4-MW101-238-PDB-17 BA35300	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW101-238-PDB-17 BA35300	N	Methylene chloride	5.00	1.00 U	1.00 UJ	1.00 U	
FEW4-MW101-238-PDB-17 BA35300	N	o-Xylene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	Styrene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-PDB-17 BA35300	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	Toluene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	Trichloroethene (TCE)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW101-238-PDB-17 BA35300	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW101-238-PDB-17 BA35300	N	Vinyl chloride	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW20-17 BA35301	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-MW20-17 BA35301	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW20-17 BA35301	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW20-17 BA35301	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW20-17 BA35301	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ	1.00 U	
FEW4-MW20-17 BA35301	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW20-17 BA35301	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW20-17 BA35301	N	2-Hexanone	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW20-17 BA35301	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-MW20-17 BA35301	N	Acetone	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW20-17 BA35301	N	Benzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	Bromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	Bromoform	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	Bromomethane	2.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW20-17 BA35301	N	Carbon disulfide	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW20-17 BA35301	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	Chlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW20-17 BA35301	N	Chloroethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW20-17 BA35301	N	Chloroform	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	Chloromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW20-17 BA35301	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C							
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-MW20-17 BA35301	N	Cyclohexane	10.0	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	Ethylbenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW20-17 BA35301	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	m,p-Xylene	2.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	Methyl acetate	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-MW20-17 BA35301	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ	0.520 U	
FEW4-MW20-17 BA35301	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW20-17 BA35301	N	Methylene chloride	5.00	1.00 U	1.00 UJ	1.00 U	
FEW4-MW20-17 BA35301	N	o-Xylene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	Styrene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW20-17 BA35301	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	Toluene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	Trichloroethene (TCE)	6.20	6.20	6.20 UJ	0.300 U	
FEW4-MW20-17 BA35301	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW20-17 BA35301	N	Vinyl chloride	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-17 BA35302	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-17 BA35302	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-17 BA35302	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C							
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-MW45R-299-17 BA35302	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ	1.00 U	
FEW4-MW45R-299-17 BA35302	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-17 BA35302	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW45R-299-17 BA35302	N	2-Hexanone	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW45R-299-17 BA35302	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-MW45R-299-17 BA35302	N	Acetone	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW45R-299-17 BA35302	N	Benzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	Bromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	Bromoform	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	Bromomethane	2.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-17 BA35302	N	Carbon disulfide	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-17 BA35302	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	Chlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-17 BA35302	N	Chloroethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-17 BA35302	N	Chloroform	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	Chloromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-17 BA35302	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	Cyclohexane	10.0	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ	0.300 U	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C							
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-MW45R-299-17 BA35302	N	Ethylbenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-17 BA35302	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	m,p-Xylene	2.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	Methyl acetate	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-MW45R-299-17 BA35302	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ	0.520 U	
FEW4-MW45R-299-17 BA35302	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW45R-299-17 BA35302	N	Methylene chloride	5.00	1.00 U	1.00 UJ	1.00 U	
FEW4-MW45R-299-17 BA35302	N	o-Xylene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	Styrene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-17 BA35302	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	Toluene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	Trichloroethene (TCE)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-17 BA35302	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-17 BA35302	N	Vinyl chloride	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-PDB-17 BA35303	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-PDB-17 BA35303	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-PDB-17 BA35303	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-PDB-17 BA35303	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ	1.00 U	
FEW4-MW45R-299-PDB-17 BA35303	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-PDB-17 BA35303	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C							
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-MW45R-299-PDB-17 BA35303	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW45R-299-PDB-17 BA35303	N	2-Hexanone	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW45R-299-PDB-17 BA35303	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Acetone	10.0	11.0	11.0 J	11.0 J	
FEW4-MW45R-299-PDB-17 BA35303	N	Benzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Bromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Bromoform	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Bromomethane	2.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Carbon disulfide	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Chlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Chloroethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Chloroform	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Chloromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-PDB-17 BA35303	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Cyclohexane	10.0	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Ethylbenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	m,p-Xylene	2.00	0.300 U	0.300 UJ	0.300 U	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C							
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-MW45R-299-PDB-17 BA35303	N	Methyl acetate	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ	0.520 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Methylene chloride	5.00	1.00 U	1.00 UJ	1.00 U	
FEW4-MW45R-299-PDB-17 BA35303	N	o-Xylene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Styrene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Toluene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Trichloroethene (TCE)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW45R-299-PDB-17 BA35303	N	Vinyl chloride	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW69-164-17 BA35304	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW69-164-17 BA35304	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW69-164-17 BA35304	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW69-164-17 BA35304	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ	1.00 U	
FEW4-MW69-164-17 BA35304	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW69-164-17 BA35304	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-MW69-164-17 BA35304	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW69-164-17 BA35304	N	2-Hexanone	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW69-164-17 BA35304	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-MW69-164-17 BA35304	N	Acetone	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW69-164-17 BA35304	N	Benzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	Bromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	Bromoform	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	Bromomethane	2.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW69-164-17 BA35304	N	Carbon disulfide	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW69-164-17 BA35304	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	Chlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW69-164-17 BA35304	N	Chloroethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW69-164-17 BA35304	N	Chloroform	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	Chloromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW69-164-17 BA35304	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	Cyclohexane	10.0	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	Ethylbenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW69-164-17 BA35304	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	m,p-Xylene	2.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	Methyl acetate	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-MW69-164-17 BA35304	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ	0.520 U	
FEW4-MW69-164-17 BA35304	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ	2.00 U	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-MW69-164-17 BA35304	N	Methylene chloride	5.00	1.00 U	1.00 UJ	1.00 U	
FEW4-MW69-164-17 BA35304	N	o-Xylene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	Styrene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW69-164-17 BA35304	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	Toluene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	Trichloroethene (TCE)	10.0	10.0	10.0 UJ	0.300 U	
FEW4-MW69-164-17 BA35304	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW69-164-17 BA35304	N	Vinyl chloride	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-17 BA35305	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-17 BA35305	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-17 BA35305	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-17 BA35305	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ	1.00 U	
FEW4-MW73-218-17 BA35305	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-17 BA35305	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW73-218-17 BA35305	N	2-Hexanone	10.0	2.00 U	2.00 UJ	2.00 U	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C							
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-MW73-218-17 BA35305	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-MW73-218-17 BA35305	N	Acetone	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW73-218-17 BA35305	N	Benzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	Bromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	Bromoform	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	Bromomethane	2.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-17 BA35305	N	Carbon disulfide	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-17 BA35305	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	Chlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-17 BA35305	N	Chloroethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-17 BA35305	N	Chloroform	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	Chloromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-17 BA35305	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	Cyclohexane	10.0	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	Ethylbenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-17 BA35305	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	m,p-Xylene	2.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	Methyl acetate	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-MW73-218-17 BA35305	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ	0.520 U	
FEW4-MW73-218-17 BA35305	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW73-218-17 BA35305	N	Methylene chloride	5.00	1.00 U	1.00 UJ	1.00 U	
FEW4-MW73-218-17 BA35305	N	o-Xylene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	Styrene	1.00	0.500 U	0.500 UJ	0.500 U	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-MW73-218-17 BA35305	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	Toluene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	Trichloroethene (TCE)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-17 BA35305	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-17 BA35305	N	Vinyl chloride	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-PDB-17 BA35306	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-PDB-17 BA35306	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-PDB-17 BA35306	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-PDB-17 BA35306	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ	1.00 U	
FEW4-MW73-218-PDB-17 BA35306	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-PDB-17 BA35306	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW73-218-PDB-17 BA35306	N	2-Hexanone	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW73-218-PDB-17 BA35306	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-MW73-218-PDB-17 BA35306	N	Acetone	10.0	5.60 J	5.60 J	2.00 U	
FEW4-MW73-218-PDB-17 BA35306	N	Benzene	1.00	0.300 U	0.300 UJ	0.300 U	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-MW73-218-PDB-17 BA35306	N	Bromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	Bromoform	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	Bromomethane	2.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-PDB-17 BA35306	N	Carbon disulfide	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-PDB-17 BA35306	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	Chlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-PDB-17 BA35306	N	Chloroethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-PDB-17 BA35306	N	Chloroform	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	Chloromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-PDB-17 BA35306	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	Cyclohexane	10.0	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	Ethylbenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-PDB-17 BA35306	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	m,p-Xylene	2.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	Methyl acetate	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-MW73-218-PDB-17 BA35306	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ	0.520 U	
FEW4-MW73-218-PDB-17 BA35306	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW73-218-PDB-17 BA35306	N	Methylene chloride	5.00	1.00 U	1.00 UJ	1.00 U	
FEW4-MW73-218-PDB-17 BA35306	N	o-Xylene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	Styrene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-PDB-17 BA35306	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	Toluene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ	0.300 U	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-MW73-218-PDB-17 BA35306	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	Trichloroethene (TCE)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW73-218-PDB-17 BA35306	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW73-218-PDB-17 BA35306	N	Vinyl chloride	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-17 BA35307	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-17 BA35307	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-17 BA35307	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-17 BA35307	N	1,1,2-Trichloroethane	1.00	11.0	11.0 J	11.0	
FEW4-MW80-128-17 BA35307	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-17 BA35307	N	1,1-Dichloroethene	1.00	2.70	2.70 J	2.70	
FEW4-MW80-128-17 BA35307	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-128-17 BA35307	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-128-17 BA35307	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ	1.00 U	
FEW4-MW80-128-17 BA35307	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-128-17 BA35307	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-17 BA35307	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-17 BA35307	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-17 BA35307	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-17 BA35307	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-17 BA35307	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW80-128-17 BA35307	N	2-Hexanone	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW80-128-17 BA35307	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-MW80-128-17 BA35307	N	Acetone	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW80-128-17 BA35307	N	Benzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-17 BA35307	N	Bromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-17 BA35307	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-17 BA35307	N	Bromoform	1.00	0.300 U	0.300 UJ	0.300 U	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C							
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-MW80-128-17 BA35307	N	Bromomethane	2.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-128-17 BA35307	N	Carbon disulfide	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-128-17 BA35307	N	Carbon tetrachloride	1.00	2.40	2.40 J	2.40	
FEW4-MW80-128-17 BA35307	N	Chlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-128-17 BA35307	N	Chloroethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-128-17 BA35307	N	Chloroform	1.00	14.0	14.0 J	14.0	
FEW4-MW80-128-17 BA35307	N	Chloromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-128-17 BA35307	N	cis-1,2-Dichloroethene	1.00	68.0	68.0 J	68.0	
FEW4-MW80-128-17 BA35307	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-17 BA35307	N	Cyclohexane	10.0	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-17 BA35307	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-17 BA35307	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-17 BA35307	N	Ethylbenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-128-17 BA35307	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-17 BA35307	N	m,p-Xylene	2.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-17 BA35307	N	Methyl acetate	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-MW80-128-17 BA35307	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ	0.520 U	
FEW4-MW80-128-17 BA35307	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW80-128-17 BA35307	N	Methylene chloride	5.00	1.00 U	1.00 UJ	1.00 U	
FEW4-MW80-128-17 BA35307	N	o-Xylene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-17 BA35307	N	Styrene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-128-17 BA35307	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-17 BA35307	N	Toluene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-17 BA35307	N	trans-1,2-Dichloroethene	1.00	2.60	2.60 J	2.60	
FEW4-MW80-128-17 BA35307	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-17 BA35307	N	Trichloroethene (TCE)	700	33000	33000 J	33000 J	H1/V5
FEW4-MW80-128-17 BA35307	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ	0.500 U	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-MW80-128-17 BA35307	N	Vinyl chloride	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-PDB-17 BA35308	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-PDB-17 BA35308	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-PDB-17 BA35308	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-PDB-17 BA35308	N	1,1,2-Trichloroethane	1.00	12.0	12.0 J	12.0	
FEW4-MW80-128-PDB-17 BA35308	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-PDB-17 BA35308	N	1,1-Dichloroethene	1.00	3.50	3.50 J	3.50	
FEW4-MW80-128-PDB-17 BA35308	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-128-PDB-17 BA35308	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-128-PDB-17 BA35308	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ	1.00 U	
FEW4-MW80-128-PDB-17 BA35308	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-128-PDB-17 BA35308	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-PDB-17 BA35308	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-PDB-17 BA35308	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-PDB-17 BA35308	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-PDB-17 BA35308	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-PDB-17 BA35308	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW80-128-PDB-17 BA35308	N	2-Hexanone	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW80-128-PDB-17 BA35308	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-MW80-128-PDB-17 BA35308	N	Acetone	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW80-128-PDB-17 BA35308	N	Benzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-PDB-17 BA35308	N	Bromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-PDB-17 BA35308	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-PDB-17 BA35308	N	Bromoform	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-PDB-17 BA35308	N	Bromomethane	2.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-128-PDB-17 BA35308	N	Carbon disulfide	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-128-PDB-17 BA35308	N	Carbon tetrachloride	1.00	1.90	1.90 J	1.90	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C							
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-MW80-128-PDB-17 BA35308	N	Chlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-128-PDB-17 BA35308	N	Chloroethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-128-PDB-17 BA35308	N	Chloroform	1.00	15.0	15.0 J	15.0	
FEW4-MW80-128-PDB-17 BA35308	N	Chloromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-128-PDB-17 BA35308	N	cis-1,2-Dichloroethene	1.00	73.0	73.0 J	73.0	
FEW4-MW80-128-PDB-17 BA35308	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-PDB-17 BA35308	N	Cyclohexane	10.0	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-PDB-17 BA35308	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-PDB-17 BA35308	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-PDB-17 BA35308	N	Ethylbenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-128-PDB-17 BA35308	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-PDB-17 BA35308	N	m,p-Xylene	2.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-PDB-17 BA35308	N	Methyl acetate	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-MW80-128-PDB-17 BA35308	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ	0.520 U	
FEW4-MW80-128-PDB-17 BA35308	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW80-128-PDB-17 BA35308	N	Methylene chloride	5.00	1.00 U	1.00 UJ	1.00 U	
FEW4-MW80-128-PDB-17 BA35308	N	o-Xylene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-PDB-17 BA35308	N	Styrene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-128-PDB-17 BA35308	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-PDB-17 BA35308	N	Toluene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-PDB-17 BA35308	N	trans-1,2-Dichloroethene	1.00	2.40	2.40 J	2.40	
FEW4-MW80-128-PDB-17 BA35308	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-128-PDB-17 BA35308	N	Trichloroethene (TCE)	700	27000	27000 J	27000 J	H1/V5
FEW4-MW80-128-PDB-17 BA35308	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-128-PDB-17 BA35308	N	Vinyl chloride	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ	0.300 U	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-MW80-223-17 BA35309	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	1,1,2-Trichloroethane	1.00	1.60	1.60 J	1.60	
FEW4-MW80-223-17 BA35309	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-223-17 BA35309	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-223-17 BA35309	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-223-17 BA35309	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ	1.00 U	
FEW4-MW80-223-17 BA35309	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-223-17 BA35309	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW80-223-17 BA35309	N	2-Hexanone	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW80-223-17 BA35309	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-MW80-223-17 BA35309	N	Acetone	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW80-223-17 BA35309	N	Benzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	Bromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	Bromoform	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	Bromomethane	2.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-223-17 BA35309	N	Carbon disulfide	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-223-17 BA35309	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	Chlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-223-17 BA35309	N	Chloroethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-223-17 BA35309	N	Chloroform	1.00	1.80	1.80 J	1.80	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C							
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-MW80-223-17 BA35309	N	Chloromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-223-17 BA35309	N	cis-1,2-Dichloroethene	1.00	23.0	23.0 J	23.0	
FEW4-MW80-223-17 BA35309	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	Cyclohexane	10.0	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	Ethylbenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-223-17 BA35309	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	m,p-Xylene	2.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	Methyl acetate	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-MW80-223-17 BA35309	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ	0.520 U	
FEW4-MW80-223-17 BA35309	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW80-223-17 BA35309	N	Methylene chloride	5.00	1.00 U	1.00 UJ	1.00 U	
FEW4-MW80-223-17 BA35309	N	o-Xylene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	Styrene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-223-17 BA35309	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	Toluene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-17 BA35309	N	Trichloroethene (TCE)	400	7400	7400 J	7400 J	H1/V5
FEW4-MW80-223-17 BA35309	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-223-17 BA35309	N	Vinyl chloride	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-PDB-17 BA35310	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-PDB-17 BA35310	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-PDB-17 BA35310	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-PDB-17 BA35310	N	1,1,2-Trichloroethane	1.00	2.20	2.20 J	2.20	
FEW4-MW80-223-PDB-17 BA35310	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-MW80-223-PDB-17 BA35310	N	1,1-Dichloroethene	1.00	0.770 J	0.770 J	0.770	
FEW4-MW80-223-PDB-17 BA35310	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-223-PDB-17 BA35310	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-223-PDB-17 BA35310	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ	1.00 U	
FEW4-MW80-223-PDB-17 BA35310	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-223-PDB-17 BA35310	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-PDB-17 BA35310	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-PDB-17 BA35310	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-PDB-17 BA35310	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-PDB-17 BA35310	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-PDB-17 BA35310	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW80-223-PDB-17 BA35310	N	2-Hexanone	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW80-223-PDB-17 BA35310	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-MW80-223-PDB-17 BA35310	N	Acetone	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW80-223-PDB-17 BA35310	N	Benzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-PDB-17 BA35310	N	Bromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-PDB-17 BA35310	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-PDB-17 BA35310	N	Bromoform	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-PDB-17 BA35310	N	Bromomethane	2.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-223-PDB-17 BA35310	N	Carbon disulfide	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-223-PDB-17 BA35310	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-PDB-17 BA35310	N	Chlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-223-PDB-17 BA35310	N	Chloroethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-223-PDB-17 BA35310	N	Chloroform	1.00	1.80	1.80 J	1.80	
FEW4-MW80-223-PDB-17 BA35310	N	Chloromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-223-PDB-17 BA35310	N	cis-1,2-Dichloroethene	1.00	21.0	21.0 J	21.0	
FEW4-MW80-223-PDB-17 BA35310	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C							
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-MW80-223-PDB-17 BA35310	N	Cyclohexane	10.0	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-PDB-17 BA35310	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-PDB-17 BA35310	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-PDB-17 BA35310	N	Ethylbenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-223-PDB-17 BA35310	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-PDB-17 BA35310	N	m,p-Xylene	2.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-PDB-17 BA35310	N	Methyl acetate	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-MW80-223-PDB-17 BA35310	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ	0.520 U	
FEW4-MW80-223-PDB-17 BA35310	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-MW80-223-PDB-17 BA35310	N	Methylene chloride	5.00	1.00 U	1.00 UJ	1.00 U	
FEW4-MW80-223-PDB-17 BA35310	N	o-Xylene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-PDB-17 BA35310	N	Styrene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-223-PDB-17 BA35310	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-PDB-17 BA35310	N	Toluene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-PDB-17 BA35310	N	trans-1,2-Dichloroethene	1.00	0.540 J	0.540 J	0.540	
FEW4-MW80-223-PDB-17 BA35310	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-MW80-223-PDB-17 BA35310	N	Trichloroethene (TCE)	400	7700	7700 J	7700 J	H1/V5
FEW4-MW80-223-PDB-17 BA35310	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-MW80-223-PDB-17 BA35310	N	Vinyl chloride	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-TB23-17 BA35311	TB	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-TB23-17 BA35311	TB	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-TB23-17 BA35311	TB	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C							
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-TB23-17 BA35311	TB	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ	1.00 U	
FEW4-TB23-17 BA35311	TB	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-TB23-17 BA35311	TB	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-TB23-17 BA35311	TB	2-Hexanone	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-TB23-17 BA35311	TB	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-TB23-17 BA35311	TB	Acetone	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-TB23-17 BA35311	TB	Benzene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	Bromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	Bromodichloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	Bromoform	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	Bromomethane	2.00	0.500 U	0.500 UJ	0.500 U	
FEW4-TB23-17 BA35311	TB	Carbon disulfide	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-TB23-17 BA35311	TB	Carbon tetrachloride	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	Chlorobenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-TB23-17 BA35311	TB	Chloroethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-TB23-17 BA35311	TB	Chloroform	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	Chloromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-TB23-17 BA35311	TB	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	Cyclohexane	10.0	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	Dibromochloromethane	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ	0.300 U	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8260C

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
FEW4-TB23-17 BA35311	TB	Ethylbenzene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-TB23-17 BA35311	TB	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	m,p-Xylene	2.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	Methyl acetate	10.0	5.00 U	5.00 UJ	5.00 U	
FEW4-TB23-17 BA35311	TB	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ	0.520 U	
FEW4-TB23-17 BA35311	TB	Methylcyclohexane	10.0	2.00 U	2.00 UJ	2.00 U	
FEW4-TB23-17 BA35311	TB	Methylene chloride	5.00	1.00 U	1.00 UJ	1.00 U	
FEW4-TB23-17 BA35311	TB	o-Xylene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	Styrene	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-TB23-17 BA35311	TB	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	Toluene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ	0.300 U	
FEW4-TB23-17 BA35311	TB	Trichloroethene (TCE)	1.00	50.0	50.0 J	0.300 UJ	Y1
FEW4-TB23-17 BA35311	TB	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ	0.500 U	
FEW4-TB23-17 BA35311	TB	Vinyl chloride	1.00	0.300 U	0.300 UJ	0.300 U	

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Reason Code Definitions

Code	Definition
H1	Test Hold Time
M	MS Recovery
T	Trip Blank
TR	Trace Level Detect
V5	Ending Continuing Calibration Verification
Y1	False Positive

Flag Code and Definitions

Flag	Definition

J	Estimated: The analyte was positively identified, the quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.

Bias	
-	The result may be biased low
+	The result may be biased high
Note - The bias field is a separate field; however, it is an integral part of the final flag (qualifier) on the sample result	

Review Questions

Method: SW8260C (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Were all samples documented correctly on the chain-of-custody (COC)?	•			
Did samples listed on COCs match the sample labels?	•			
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservattion, pH, and temperature) are documented?	•			
Were sample results reported with percent moisture correction if required?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified laboratory PQLs achieved?	•			
Were holding times met?	•			ADR noted that the following several samples exceeded the 14 day analysis holding time on the 14th day between 0000 and 2359 hours: FEW4-MW101-238-17, FEW4-MW101-238-PDB-17, FEW4-MW20-17, FEW4-MW45R-299-17, FEW4-MW45R-299-PDB-17, FEW4-MW69-164-17, FEW4-MW73-218-17, FEW4-MW73-218-PDB-17, FEW4-MW80-128-17, FEW4-MW80-128-PDB-17, FEW4-MW80-223-17, FEW4-MW80-223-PDB-17, and FEW4-TB23-17. According to DoD “Module 1 Data Validation Guidelines: Data Validation Procedure for Organic Analyses by GC/MS” – For a maximum holding time measured in days, "…the holding time is tracked by the day." "An exceedance of holding time for a sample with a 14-day holding time will occur when the 15th day is reached.” A sample with a 14-day holding time must be analyzed or extracted before 12:00 AM (midnight, the start of the 15th day), or an exceedance has occurred. Therefore, no holding time exceedance is considered to have occurred for these samples. Dilution analyses for trichloroethene missed holding times by one day for FEW4-MW80-128-17, FEW4-MW80-128-PDB-17, FEW4-MW80-223-17, and FEW4-MW80-223-PDB-17.
Were trip blanks analyzed at the proper frequency and in control?		•		FEW4-TB23-17: Trichloroethene 50 ug/L. The sample was analyzed after sample FEW4-MW80 -223-PDB-17, which contained trichloroethene over-range at 11,000 ug/L.
Were field blanks analyzed at the proper frequency and in control?			•	A field blank was not collected with this SDG.
Were equipment blanks analyzed at the proper frequency and in control?			•	An equipment blank was not collected with this SDG.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			A laboratory duplicate control sample was not analyzed with this SDG.

Review Questions

Method: SW8260C (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	A laboratory duplicate control sample was not analyzed with this SDG.
Was a MS/MSD pair prepared with each batch?	•			Matrix spike duplicate samples were collected for FEW4-MW101-238-17.
Were MS/MSD recoveries within project acceptance limits?		•		1,1,1-TRICHLOROETHANE 138%/141%, UCL 131% 1,1,2-TRICHLOROETHANE 78.2%, LCL 80% 1,2-DICHLOROETHANE 131%, UCL 128% 1,2-DICHLOROPROPANE 77.9%, LCL 78% CARBON TETRACHLORIDE 140%, UCL 136% METHYL ACETATE 52.3%, LCL 56% TRICHLOROETHENE 125%, UCL 123%
Was the MS/MSD RPD within project acceptance limits?	•			
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were surrogate recoveries within project acceptance limits?	•			1,2-Dichloroethane-d4 was greater than the upper control limit and toluene-d8 was less than the lower control limit for the MS/MSD of FEW4-MW101-238-17
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?		•		Field duplicate samples were not collected with this SDG.
Were reported sample concentrations within calibration range?	•			
Was the GC/MS system properly tuned based on method criteria?	•			
Was instrument tuning completed every 12 hours during sample analysis?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?		•		Max 0707M13: Methyl acetate 23%, 2-butanone 22%, bromoform 23%, and 1,2,3-trichloropropane 26% were outside the 20% control limit. The analytes were not detected in the associated samples.
Were CCVs run at the required frequency and within project acceptance criteria?		•		Max Ending CCV 0707M37: Vinyl acetate 172% and trichloroethene 196% were outside the control limit. Max CCV 0707M13: Chloroethane 31% was outside the control limit. The analyte was not detected in any associated samples.
Were internal standard retention times and area criteria within project acceptance criteria?	•			
Were internal standards spiked for every sample, standard, and QC sample?	•			
Were instrument run logs present and filled out appropriately?		•		Instrument runlog for dilutiion analyses on 7/10/21 were not present in the data package.
Were sample preparation sheets present and filled out appropriately?			•	
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			

Review Questions

Method: SW8260C (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Were any data recommended for exclusion in the data validation process?	•			The trichloroethene 50 ug/L detection for trip blank sample FEW4-TB23-17 was changed to non-detect because of presumed cross-contamination from the sample preceeding it in analysis (FEW4-MW80-223-PDB-17, 11,000 ug/L). Detections of common lab contaminants that have not historically been seen at the site, including 2-butanone, acetone, and methylene chloride have been revised to non-detect at the direction of the USACE-Omaha Project Chemist citing professional judgment. This includes the acetone results for samples FEW4-MW101-238-17 (6.2 ug/L) and FEW4-MW73-218-PDB-17 (5.6 ug/L).

Automated Data Review Detail Report for 96688
B08WY0467-02, F.E. Warren AFB, Site 4, Feasibility Study
F.E. Warren Atlas Site 4 - Draft Final LT & PM UFP-QAPP Addendum 1

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Sample Summary

Location	Field Sample ID	Date	Time	Sample Type	Matrix	SBD	SED	SW8260C
FEW4-MW101-238	FEW4-MW101-238-17	06-23-2021	1548	N	WG	230.20	240.20	X
FEW4-MW101-238	FEW4-MW101-238-MS-17	06-23-2021	1548	MS	WG	230.20	240.20	X
FEW4-MW101-238	FEW4-MW101-238-MSD-17	06-23-2021	1548	SD	WG	230.20	240.20	X
FEW4-MW101-238	FEW4-MW101-238-PDB-17	06-23-2021	0846	N	WG	230.20	240.20	X
FEW4-MW20	FEW4-MW20-17	06-23-2021	1612	N	WG	253.90	263.90	X
FEW4-MW45R-299	FEW4-MW45R-299-17	06-23-2021	1445	N	WG	295.70	305.70	X
FEW4-MW45R-299	FEW4-MW45R-299-PDB-17	06-23-2021	1340	N	WG	295.70	305.70	X
FEW4-MW69-164	FEW4-MW69-164-17	06-23-2021	1244	N	WG	156.70	166.70	X
FEW4-MW73-218	FEW4-MW73-218-17	06-23-2021	1214	N	WG	204.50	219.50	X
FEW4-MW73-218	FEW4-MW73-218-PDB-17	06-23-2021	1022	N	WG	204.50	219.50	X
FEW4-MW80-128	FEW4-MW80-128-17	06-23-2021	1654	N	WG	120.60	130.60	X
FEW4-MW80-128	FEW4-MW80-128-PDB-17	06-23-2021	0842	N	WG	120.60	130.60	X
FEW4-MW80-223	FEW4-MW80-223-17	06-23-2021	1041	N	WG	214.60	224.60	X
FEW4-MW80-223	FEW4-MW80-223-PDB-17	06-23-2021	0928	N	WG	214.60	224.60	X
FIELDQC	FEW4-TB23-17	06-23-2021	0800	TB	WQ	0.00	0.00	X
							Total	**15**

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Batch Report

Test Method: SW8260C Analysis Batch: 267610

Location	Matrix	Field Sample ID	Lab Sample ID	Calibration Ref	Run#/ Dil'n	Collection Date/Time	Extraction Date/Time	Analysis Date/Time	Prep/Leach Batch	Sample Type
LABQC	WQ	LB-M210707AW-267610	LB-M210707AW-267610		1/1	7/7/2021 17:41	7/7/2021 17:41	7/7/2021 17:41	267610/	LB
FEW4-MW101-238	WG	FEW4-MW101-238-17	BA35299		1/1	6/23/2021 15:48	7/7/2021 20:57	7/7/2021 20:57	267610/	N
FEW4-MW101-238	WG	FEW4-MW101-238-PDB-17	BA35300		1/1	6/23/2021 08:46	7/7/2021 21:25	7/7/2021 21:25	267610/	N
FEW4-MW20	WG	FEW4-MW20-17	BA35301		1/1	6/23/2021 16:12	7/7/2021 21:53	7/7/2021 21:53	267610/	N
FEW4-MW45R-299	WG	FEW4-MW45R-299-17	BA35302		1/1	6/23/2021 14:45	7/7/2021 22:20	7/7/2021 22:20	267610/	N
FEW4-MW45R-299	WG	FEW4-MW45R-299-PDB-17	BA35303		1/1	6/23/2021 13:40	7/7/2021 22:48	7/7/2021 22:48	267610/	N
FEW4-MW69-164	WG	FEW4-MW69-164-17	BA35304		1/1	6/23/2021 12:44	7/7/2021 23:16	7/7/2021 23:16	267610/	N
LABQC	WQ	BS-M210707AW-267610	BS-M210707AW-267610		1/1	7/7/2021 23:44	7/7/2021 23:44	7/7/2021 23:44	267610/	BS
FEW4-MW73-218	WG	FEW4-MW73-218-17	BA35305		1/1	6/23/2021 12:14	7/8/2021 00:40	7/8/2021 00:40	267610/	N
FEW4-MW73-218	WG	FEW4-MW73-218-PDB-17	BA35306		1/1	6/23/2021 10:22	7/8/2021 01:08	7/8/2021 01:08	267610/	N
FEW4-MW80-128	WG	FEW4-MW80-128-17	BA35307		1/1	6/23/2021 16:54	7/8/2021 01:36	7/8/2021 01:36	267610/	N
FEW4-MW80-128	WG	FEW4-MW80-128-PDB-17	BA35308		1/1	6/23/2021 08:42	7/8/2021 02:04	7/8/2021 02:04	267610/	N
FEW4-MW80-223	WG	FEW4-MW80-223-17	BA35309		1/1	6/23/2021 10:41	7/8/2021 02:32	7/8/2021 02:32	267610/	N
FEW4-MW80-223	WG	FEW4-MW80-223-PDB-17	BA35310		1/1	6/23/2021 09:28	7/8/2021 03:00	7/8/2021 03:00	267610/	N
FIELDQC	WQ	FEW4-TB23-17	BA35311		1/1	6/23/2021 08:00	7/8/2021 03:28	7/8/2021 03:28	267610/	TB
FEW4-MW101-238	WG	FEW4-MW101-238-MS-17	BA35299MS		1/1	6/23/2021 15:48	9/5/2021 18:53	9/5/2021 18:53	267610/	MS

Test Method: SW8260C Analysis Batch: 267610

Location	Matrix	Field Sample ID	Lab Sample ID	Calibration Ref	Run#/ Dil'n	Collection Date/Time	Extraction Date/Time	Analysis Date/Time	Prep/Leach Batch	Sample Type
FEW4-MW101-238	WG	FEW4-MW101-238-MSD-17	BA35299MSD		1/1	6/23/2021 15:48	9/5/2021 19:21	9/5/2021 19:21	267610/	SD

Test Method: SW8260C Analysis Batch: 267611

Location	Matrix	Field Sample ID	Lab Sample ID	Calibration Ref	Run#/ Dil'n	Collection Date/Time	Extraction Date/Time	Analysis Date/Time	Prep/Leach Batch	Sample Type
LABQC	WQ	BS-L210709BW-267611	BS-L210709BW-267611		3/1	7/10/2021 03:02	7/10/2021 03:02	7/10/2021 03:02	267611/	BS
LABQC	WQ	LB-L210709BW-267611	LB-L210709BW-267611		3/1	7/10/2021 03:57	7/10/2021 03:57	7/10/2021 03:57	267611/	LB
FEW4-MW80-128	WG	FEW4-MW80-128-17	BA35307		3/700	6/23/2021 16:54	7/10/2021 04:52	7/10/2021 04:52	267611/	N
FEW4-MW80-128	WG	FEW4-MW80-128-PDB-17	BA35308		3/700	6/23/2021 08:42	7/10/2021 05:19	7/10/2021 05:19	267611/	N
FEW4-MW80-223	WG	FEW4-MW80-223-17	BA35309		3/400	6/23/2021 10:41	7/10/2021 05:47	7/10/2021 05:47	267611/	N
FEW4-MW80-223	WG	FEW4-MW80-223-PDB-17	BA35310		3/400	6/23/2021 09:28	7/10/2021 06:14	7/10/2021 06:14	267611/	N

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Field Batch Report

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

EBLOT	TBLOT	ABLOT	LOCID	Matrix	FLDSAMPID	LABSAMPID	LOGDATE	SACODE
	23062101		FEW4-MW101-238	WG	FEW4-MW101-238-17	BA35299	6/23/2021 15:48	N
	23062101		FEW4-MW101-238	WG	FEW4-MW101-238-MS-17	BA35299MS	6/23/2021 15:48	MS
	23062101		FEW4-MW101-238	WG	FEW4-MW101-238-MSD-17	BA35299MSD	6/23/2021 15:48	SD
	23062101		FEW4-MW101-238	WG	FEW4-MW101-238-PDB-17	BA35300	6/23/2021 08:46	N
	23062101		FEW4-MW20	WG	FEW4-MW20-17	BA35301	6/23/2021 16:12	N
	23062101		FEW4-MW45R-299	WG	FEW4-MW45R-299-17	BA35302	6/23/2021 14:45	N
	23062101		FEW4-MW45R-299	WG	FEW4-MW45R-299-PDB-17	BA35303	6/23/2021 13:40	N
	23062101		FEW4-MW69-164	WG	FEW4-MW69-164-17	BA35304	6/23/2021 12:44	N
	23062101		FEW4-MW73-218	WG	FEW4-MW73-218-17	BA35305	6/23/2021 12:14	N
	23062101		FEW4-MW73-218	WG	FEW4-MW73-218-PDB-17	BA35306	6/23/2021 10:22	N
	23062101		FEW4-MW80-128	WG	FEW4-MW80-128-17	BA35307	6/23/2021 16:54	N
	23062101		FEW4-MW80-128	WG	FEW4-MW80-128-PDB-17	BA35308	6/23/2021 08:42	N
	23062101		FEW4-MW80-223	WG	FEW4-MW80-223-17	BA35309	6/23/2021 10:41	N
	23062101		FEW4-MW80-223	WG	FEW4-MW80-223-PDB-17	BA35310	6/23/2021 09:28	N
	23062101		FIELDQC	WQ	FEW4-TB23-17	BA35311	6/23/2021 08:00	TB

MS Mismatch Report

--No Records Found--

Section to identify Matrix Spike mismatches where parent sample differs from MS by dilution.

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QC Outlier Report

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

QC Element	Sample ID/ Lab Sample ID	Run#/ Dil'n	Analyte	Result (Units)	Qualifier	Warning Limits	Control Limits	Reason	Comment	Rule	Action Level
MS Recovery	FEW4-MW101-238-MS-17 (MS) / BA35299MS	1 / 1.00	1,1,1-Trichloroethane	138.0 (percent)	J/None	74 - 131	74 - 131	M			
MS Recovery	FEW4-MW101-238-MS-17 (MS) / BA35299MS	1 / 1.00	1,1,2-Trichloroethane	78.00 (percent)	J/X	80 - 119	80 - 119	M			
MS Recovery	FEW4-MW101-238-MS-17 (MS) / BA35299MS	1 / 1.00	1,2-Dichloroethane	131.0 (percent)	J/None	73 - 128	73 - 128	M			
MS Recovery	FEW4-MW101-238-MS-17 (MS) / BA35299MS	1 / 1.00	Trichloroethene (TCE)	125.0 (percent)	J/None	79 - 123	79 - 123	M			
MS Recovery	FEW4-MW101-238-MSD-17 (SD) / BA35299MSD	1 / 1.00	1,1,1-Trichloroethane	141.0 (percent)	J/None	74 - 131	74 - 131	M			
MS Recovery	FEW4-MW101-238-MSD-17 (SD) / BA35299MSD	1 / 1.00	Carbon tetrachloride	140.0 (percent)	J/None	72 - 136	72 - 136	M			
MS Recovery	FEW4-MW101-238-MSD-17 (SD) / BA35299MSD	1 / 1.00	Methyl acetate	52.00 (percent)	J/X	56 - 136	56 - 136	M			
Test Hold Time	FEW4-MW101-238-17 (N) / BA35299	1 / 1.00	All in Run	14.21 (days)	J/UJ	< 14	< 28	H1	Test Exceeds UWL		
Test Hold Time	FEW4-MW101-238-PDB-17 (N) / BA35300	1 / 1.00	All in Run	14.53 (days)	J/UJ	< 14	< 28	H1	Test Exceeds UWL		
Test Hold Time	FEW4-MW20-17 (N) / BA35301	1 / 1.00	All in Run	14.24 (days)	J/UJ	< 14	< 28	H1	Test Exceeds UWL		
Test Hold Time	FEW4-MW45R-299-17 (N) / BA35302	1 / 1.00	All in Run	14.32 (days)	J/UJ	< 14	< 28	H1	Test Exceeds UWL		
Test Hold Time	FEW4-MW45R-299-PDB-17 (N) / BA35303	1 / 1.00	All in Run	14.38 (days)	J/UJ	< 14	< 28	H1	Test Exceeds UWL		

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QC Outlier Report

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

QC Element	Sample ID/ Lab Sample ID	Run#/ Dil'n	Analyte	Result (Units)	Qualifier	Warning Limits	Control Limits	Reason	Comment	Rule	Action Level
Test Hold Time	FEW4-MW69-164-17 (N) / BA35304	1 / 1.00	All in Run	14.44 (days)	J/UJ	< 14	< 28	H1	Test Exceeds UWL		
Test Hold Time	FEW4-MW73-218-17 (N) / BA35305	1 / 1.00	All in Run	14.52 (days)	J/UJ	< 14	< 28	H1	Test Exceeds UWL		
Test Hold Time	FEW4-MW73-218-PDB-17 (N) / BA35306	1 / 1.00	All in Run	14.62 (days)	J/UJ	< 14	< 28	H1	Test Exceeds UWL		
Test Hold Time	FEW4-MW80-128-17 (N) / BA35307	1 / 1.00	All in Run	14.36 (days)	J/UJ	< 14	< 28	H1	Test Exceeds UWL		
Test Hold Time	FEW4-MW80-128-17 (N) / BA35307	3 / 700.00	All in Run	16.50 (days)	J/UJ	< 14	< 28	H1	Test Exceeds UWL		
Test Hold Time	FEW4-MW80-128-PDB-17 (N) / BA35308	1 / 1.00	All in Run	14.72 (days)	J/UJ	< 14	< 28	H1	Test Exceeds UWL		
Test Hold Time	FEW4-MW80-128-PDB-17 (N) / BA35308	3 / 700.00	All in Run	16.86 (days)	J/UJ	< 14	< 28	H1	Test Exceeds UWL		
Test Hold Time	FEW4-MW80-223-17 (N) / BA35309	1 / 1.00	All in Run	14.66 (days)	J/UJ	< 14	< 28	H1	Test Exceeds UWL		
Test Hold Time	FEW4-MW80-223-17 (N) / BA35309	3 / 400.00	All in Run	16.80 (days)	J/UJ	< 14	< 28	H1	Test Exceeds UWL		
Test Hold Time	FEW4-MW80-223-PDB-17 (N) / BA35310	1 / 1.00	All in Run	14.73 (days)	J/UJ	< 14	< 28	H1	Test Exceeds UWL		
Test Hold Time	FEW4-MW80-223-PDB-17 (N) / BA35310	3 / 400.00	All in Run	16.87 (days)	J/UJ	< 14	< 28	H1	Test Exceeds UWL		
Test Hold Time	FEW4-TB23-17 (TB) / BA35311	1 / 1.00	All in Run	14.81 (days)	J/UJ	< 14	< 28	H1	Test Exceeds UWL		

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QC Outlier Report

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

QC Element	Sample ID/ Lab Sample ID	Run#/ Dil'n	Analyte	Result (Units)	Qualifier	Warning Limits	Control Limits	Reason	Comment	Rule	Action Level
Trip Blank	FEW4-TB23-17 (TB) / BA35311	1 / 1.00	Trichloroethene (TCE)	50.00 (ug/l)	U/None*	< 0.15	< 1	T		1	50.0

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOQ will be qualified based on the validation type such as J+ at the sample result.

Rule is the multiplier used when blank contamination occurs to determine action level.

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW101-238-17	BA35299	W	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 X		ug/l	H1/M
FEW4-MW101-238-17	BA35299	W	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	Acetone	10.0	6.20 J	6.20 J	-	ug/l	H1/TR
FEW4-MW101-238-17	BA35299	W	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	H1

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW101-238-17	BA35299	W	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	Methyl acetate	10.0	5.00 U	5.00 X		ug/l	H1/M
FEW4-MW101-238-17	BA35299	W	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	Trichloroethene (TCE)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-17	BA35299	W	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW101-238-PDB-17	BA35300	W	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Acetone	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	H1

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW101-238-PDB-17	BA35300	W	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Trichloroethene (TCE)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW101-238-PDB-17	BA35300	W	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW20-17	BA35301	W	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Acetone	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	H1

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW20-17	BA35301	W	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Trichloroethene (TCE)	6.20	6.20	6.20 UJ		ug/l	T/H1
FEW4-MW20-17	BA35301	W	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW20-17	BA35301	W	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	H1

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW45R-299-17	BA35302	W	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Acetone	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	H1

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW45R-299-17	BA35302	W	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Trichloroethene (TCE)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-17	BA35302	W	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	H1

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Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW45R-299-PDB-17	BA35303	W	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Acetone	10.0	11.0	11.0 J	-	ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	H1

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Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW45R-299-PDB-17	BA35303	W	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Trichloroethene (TCE)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW45R-299-PDB-17	BA35303	W	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	H1

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW69-164-17	BA35304	W	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Acetone	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	H1

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW69-164-17	BA35304	W	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Trichloroethene (TCE)	10.0	10.0	10.0 UJ		ug/l	T/H1
FEW4-MW69-164-17	BA35304	W	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW69-164-17	BA35304	W	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Acetone	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW73-218-17	BA35305	W	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Trichloroethene (TCE)	1.00	0.300 U	0.300 UJ		ug/l	H1

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW73-218-17	BA35305	W	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-17	BA35305	W	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Acetone	10.0	5.60 J	5.60 J	-	ug/l	H1/TR
FEW4-MW73-218-PDB-17	BA35306	W	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	H1

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW73-218-PDB-17	BA35306	W	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Trichloroethene (TCE)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW80-128-17	BA35307	W	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	1,1,2-Trichloroethane	1.00	11.0	11.0 J	-	ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	1,1-Dichloroethene	1.00	2.70	2.70 J	-	ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Acetone	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Carbon tetrachloride	1.00	2.40	2.40 J	-	ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Chloroform	1.00	14.0	14.0 J	-	ug/l	H1

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW80-128-17	BA35307	W	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	cis-1,2-Dichloroethene	1.00	68.0	68.0 J	-	ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	trans-1,2-Dichloroethene	1.00	2.60	2.60 J	-	ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Trichloroethene (TCE)	700	33000	33000 J	-	ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	1,1,2-Trichloroethane	1.00	12.0	12.0 J	-	ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW80-128-PDB-17	BA35308	W	N	1,1-Dichloroethene	1.00	3.50	3.50 J	-	ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Acetone	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Carbon tetrachloride	1.00	1.90	1.90 J	-	ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Chloroform	1.00	15.0	15.0 J	-	ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	cis-1,2-Dichloroethene	1.00	73.0	73.0 J	-	ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	H1

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW80-128-PDB-17	BA35308	W	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	trans-1,2-Dichloroethene	1.00	2.40	2.40 J	-	ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Trichloroethene (TCE)	700	27000	27000 J	-	ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	1,1,2-Trichloroethane	1.00	1.60	1.60 J	-	ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	H1

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW80-223-17	BA35309	W	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Acetone	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Chloroform	1.00	1.80	1.80 J	-	ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	cis-1,2-Dichloroethene	1.00	23.0	23.0 J	-	ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	H1

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW80-223-17	BA35309	W	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Trichloroethene (TCE)	400	7400	7400 J	-	ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	1,1,2-Trichloroethane	1.00	2.20	2.20 J	-	ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	1,1-Dichloroethene	1.00	0.770 J	0.770 J	-	ug/l	H1/TR
FEW4-MW80-223-PDB-17	BA35310	W	N	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	H1

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW80-223-PDB-17	BA35310	W	N	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Acetone	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Benzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Chloroform	1.00	1.80	1.80 J	-	ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	cis-1,2-Dichloroethene	1.00	21.0	21.0 J	-	ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	H1

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-MW80-223-PDB-17	BA35310	W	N	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Toluene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	trans-1,2-Dichloroethene	1.00	0.540 J	0.540 J	-	ug/l	H1/TR
FEW4-MW80-223-PDB-17	BA35310	W	N	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Trichloroethene (TCE)	400	7700	7700 J	-	ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	1,1,1-Trichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	1,1,2,2-Tetrachloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	1,1,2-Trichloro-1,2,2-trifluoroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	1,1-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	1,2,3-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	1,2,4-Trichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	1,2-Dibromo-3-chloropropane	2.00	1.00 U	1.00 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	1,2-Dibromoethane (EDB)	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	1,2-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	1,2-Dichloroethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	1,2-Dichloropropane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	1,3-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	1,4-Dichlorobenzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	2-Butanone (MEK)	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	2-Hexanone	10.0	2.00 U	2.00 UJ		ug/l	H1

US Army Corps of Engineers

Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-TB23-17	BA35311	W	TB	4-Methyl-2-pentanone (MIBK)	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Acetone	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Benzene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Bromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Bromodichloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Bromoform	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Bromomethane	2.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Carbon disulfide	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Carbon tetrachloride	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Chloroethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Chloroform	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Chloromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	cis-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	cis-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Cyclohexane	10.0	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Dibromochloromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Dichlorodifluoromethane	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Isopropylbenzene (Cumene)	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	m,p-Xylene	2.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Methyl acetate	10.0	5.00 U	5.00 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Methyl tert-butyl ether (MTBE)	1.00	0.520 U	0.520 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Methylcyclohexane	10.0	2.00 U	2.00 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Methylene chloride	5.00	1.00 U	1.00 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	o-Xylene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Styrene	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Tetrachloroethene (PCE)	1.00	0.300 U	0.300 UJ		ug/l	H1

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Qualified Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
FEW4-TB23-17	BA35311	W	TB	Toluene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	trans-1,2-Dichloroethene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	trans-1,3-Dichloropropene	1.00	0.300 U	0.300 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Trichloroethene (TCE)	1.00	50.0	50.0 J	-	ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Trichlorofluoromethane	1.00	0.500 U	0.500 UJ		ug/l	H1
FEW4-TB23-17	BA35311	W	TB	Vinyl chloride	1.00	0.300 U	0.300 UJ		ug/l	H1

Qualified analytes in samples are reported as estimated, not detected (UJ) at the Limit of Detection (LOD).

Detected Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Dilution	Analyte	LOQ	Lab Result	Qualified Result	Units	Reason
FEW4-MW101-238-17	BA35299	W	N	1	Acetone	10.0	6.20 J	6.20 J	ug/l	H1/TR
FEW4-MW45R-299-PDB-17	BA35303	W	N	1	Acetone	10.0	11.0	11.0 J	ug/l	H1
FEW4-MW73-218-PDB-17	BA35306	W	N	1	Acetone	10.0	5.60 J	5.60 J	ug/l	H1/TR
FEW4-MW80-128-17	BA35307	W	N	1	1,1,2-Trichloroethane	1.00	11.0	11.0 J	ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	1	1,1-Dichloroethene	1.00	2.70	2.70 J	ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	1	Carbon tetrachloride	1.00	2.40	2.40 J	ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	1	Chloroform	1.00	14.0	14.0 J	ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	1	cis-1,2-Dichloroethene	1.00	68.0	68.0 J	ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	1	trans-1,2-Dichloroethene	1.00	2.60	2.60 J	ug/l	H1
FEW4-MW80-128-17	BA35307	W	N	700	Trichloroethene (TCE)	700	33000	33000 J	ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	1	1,1,2-Trichloroethane	1.00	12.0	12.0 J	ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	1	1,1-Dichloroethene	1.00	3.50	3.50 J	ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	1	Carbon tetrachloride	1.00	1.90	1.90 J	ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	1	Chloroform	1.00	15.0	15.0 J	ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	1	cis-1,2-Dichloroethene	1.00	73.0	73.0 J	ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	1	trans-1,2-Dichloroethene	1.00	2.40	2.40 J	ug/l	H1
FEW4-MW80-128-PDB-17	BA35308	W	N	700	Trichloroethene (TCE)	700	27000	27000 J	ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	1	1,1,2-Trichloroethane	1.00	1.60	1.60 J	ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	1	Chloroform	1.00	1.80	1.80 J	ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	1	cis-1,2-Dichloroethene	1.00	23.0	23.0 J	ug/l	H1
FEW4-MW80-223-17	BA35309	W	N	400	Trichloroethene (TCE)	400	7400	7400 J	ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	1	1,1,2-Trichloroethane	1.00	2.20	2.20 J	ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	1	1,1-Dichloroethene	1.00	0.770 J	0.770 J	ug/l	H1/TR
FEW4-MW80-223-PDB-17	BA35310	W	N	1	Chloroform	1.00	1.80	1.80 J	ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	1	cis-1,2-Dichloroethene	1.00	21.0	21.0 J	ug/l	H1
FEW4-MW80-223-PDB-17	BA35310	W	N	1	trans-1,2-Dichloroethene	1.00	0.540 J	0.540 J	ug/l	H1/TR
FEW4-MW80-223-PDB-17	BA35310	W	N	400	Trichloroethene (TCE)	400	7700	7700 J	ug/l	H1

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Detected Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Dilution	Analyte	LOQ	Lab Result	Qualified Result	Units	Reason
FEW4-TB23-17	BA35311	W	TB	1	Trichloroethene (TCE)	1.00	50.0	50.0 J	ug/l	H1

US Army Corps of Engineers ®

Rejected Results

Test Method: SW8260C Extraction Method: SW5030 Leach Method: NONE

FieldSample ID	LabSample ID	Matrix	Type	Analyte	LOQ	Lab Result	Qualified Result	Units	Reason
FEW4-MW101-238-17	BA35299	W	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 X	ug/l	H1/M
FEW4-MW101-238-17	BA35299	W	N	Methyl acetate	10.0	5.00 U	5.00 X	ug/l	H1/M

PROJECT NAME:	Atlas D Missile Site 4	**Date:**	6/3/2021
Location:	Cheyenne, Wyoming	**Weather:**	Clear, sunny, calm. 53-78°F
USACE PM:	Laura Deck	**URS PM:**	Robert Mallisee
URS Project No.:	60613342	**Contract/DO:**	W912DY-16-D-0026/W9128F19F0192

PERSONNEL:

Name	Company
Mike Easterday	URS
Jake Kokesh	URS
Jon Kinkade	URS
Jennifer Hussey	Na Ali'i
Harman Guraya	Na Ali'i
Joe Mastromarchi	Na Ali'i
Todd Marguiles	Na Ali'i
Devon Gibson	Na Ali'i
Holly Young	Na Ali'i

FIELD INSTALLATIONS:

ID Nos.	Drilled From:	Drilled To:
None	NA	NA

Description	Description
(1) Geotech Water Level Meter	
(2) Heron Water Level Meter	
(3) Redi-Flo 2 controller	
(8) Redi-Flo pumps	
Bailers	
PDBs and weights	

ENVIRONMENTAL SAMPLES COLLECTED:

Sample ID Nos.	Analytes
FEW4-MW10-17	VOCs (8260C)
FEW4-MW10-FD-17	VOCs (8260C)
FEW4-MW15-17	VOCs (8260C)
FEW4-MW77-40-17	VOCs (8260C)
FEW4-MW77-40-FD-17	VOCs (8260C)
FEW4-MW77-255-17	VOCs (8260C)

Brief Description of Work Performed:

Collected 4 groundwater samples and 2 field duplicate samples. Passive diffusion bags (PDBs) were deployed at MW95-288, MW56-203, MW56-290, MW97-266, MW48-255, and TH5.

Health and Safety Levels/Activities:

Level D, Daily Safety Tailgate Meeting

Problems Encountered and Corrective Action taken:

None

Changes from Workplan:

NA

Remarks/Visitors:

NA

Signature: Mike Easterday

PROJECT NAME: Atlas D Missile Site 4 **Date:** 6/4/2021

Location: Cheyenne, Wyoming **Weather:** Clear, sunny, calm. 65-85°F

USACE PM: Laura Deck **URS PM:** Robert Mallisee

URS Project No.: 60613342 **Contract/DO:** W912DY-16-D-0026/W9128F19F0192

PERSONNEL:

Name	Company
Mike Easterday	URS
Jake Kokesh	URS
Jon Kinkade	URS
Harman Guraya	Na Ali'i
Joe Mastromarchi	Na Ali'i
Todd Marguiles	Na Ali'i
Devon Gibson	Na Ali'i
Holly Young	Na Ali'i

FIELD INSTALLATIONS:

ID Nos.	Drilled From:	Drilled To:
None	NA	NA

Description	Description
(1) Geotech Water Level Meter	
(2) Heron Water Level Meter	
(3) Redi-Flo 2 controller	
(8) Redi-Flo pumps	
Bailers	
PDBs and weights	

ENVIRONMENTAL SAMPLES COLLECTED:

Sample ID Nos.	Analytes
FEW4-MW71-128-17	VOCs (8260C)
FEW4-MW71-205-17	VOCs (8260C)
FEW4-MW91-313-17	VOCs (8260C)

Brief Description of Work Performed:

Collected 3 groundwater samples. Passive diffusion bags (PDBs) were deployed at MW55-250, MW45R-299, MW50-250, MW31, MW32B-288, MW106-272, MW20, and MW101-238.

Health and Safety Levels/Activities:

Level D, Daily Safety Tailgate Meeting

Problems Encountered and Corrective Action taken:

None

Changes from Workplan:

NA

Remarks/Visitors:

NA

Signature: Mike Easterday

PROJECT NAME:	Atlas D Missile Site 4	**Date:**	6/5/2021
Location:	Cheyenne, Wyoming	**Weather:**	Clear, sunny, calm. 60-80°F
USACE PM:	Laura Deck	**URS PM:**	Robert Mallisee
URS Project No.:	60613342	**Contract/DO:**	W912DY-16-D-0026/W9128F19F0192

PERSONNEL:

Name	Company
Mike Easterday	URS
Jake Kokesh	URS
Jon Kinkade	URS
Harman Guraya	Na Ali'i
Joe Mastromarchi	Na Ali'i
Todd Marguiles	Na Ali'i
Devon Gibson	Na Ali'i
Holly Young	Na Ali'i

FIELD INSTALLATIONS:

ID Nos.	Drilled From:	Drilled To:
None	NA	NA

Description	Description
(1) Geotech Water Level Meter	
(2) Heron Water Level Meter	
(3) Redi-Flo 2 controller	
(8) Redi-Flo pumps	
Bailers	
PDBs and weights	

ENVIRONMENTAL SAMPLES COLLECTED:

Sample ID Nos.	Analytes
FEW4-MW53-177-17	VOCs (8260C)
FEW4-MW68-80-17	VOCs (8260C)
FEW4-MW70-142-17	VOCs (8260C)

Brief Description of Work Performed:

Collected 3 groundwater samples. Passive diffusion bags (PDBs) were deployed at MW73-208, MW74-359, MW59-183, MW83-88, MW69-164, MW88-133, MW71-96, MW66-205, and MW01.

Health and Safety Levels/Activities:

Level D, Daily Safety Tailgate Meeting

Field activities were delayed for 2 hours for lightning during the afternoon.

Problems Encountered and Corrective Action taken:

None

Changes from Workplan:

NA

Remarks/Visitors:

NA

Signature: Mike Easterday

PROJECT NAME:	Atlas D Missile Site 4	**Date:**	6/6/2021
Location:	Cheyenne, Wyoming	**Weather:**	Mostly sunny (am), cloudy (pm), breeze. 75 to 80° F.
USACE PM:	Laura Deck	**URS PM:**	Robert Mallisee
URS Project No.:	60613342	**Contract/DO:**	W912DY-16-D-0026/W9128F19F0192

PERSONNEL:

Name	Company
Mike Easterday	URS
Jake Kokesh	URS
Jon Kinkade	URS
Harman Guraya	Na Ali'i
Joe Mastromarchi	Na Ali'i
Todd Marguiles	Na Ali'i
Devon Gibson	Na Ali'i
Holly Young	Na Ali'i

FIELD INSTALLATIONS:

ID Nos.	Drilled From:	Drilled To:
None	NA	NA

Description	Description
(1) Geotech Water Level Meter	
(2) Heron Water Level Meter	
(3) Redi-Flo 2 controller	
(8) Redi-Flo pumps	
Bailers	
PDBs and weights	

ENVIRONMENTAL SAMPLES COLLECTED:

Sample ID Nos.	Analytes
FEW4-BELVOIR-BORIE 1-17	VOCs (8260C)
FEW4-COW CAMP NO. 1-17	VOCs (8260C)
FEW4-EAST STRIP 1-17	VOCs (8260C)
FEW4-Johnson No. 1-17	VOCs (8260C)
FEW4-MW68-185-17	VOCs (8260C)
FEW4-MW68-185-MS-17	VOCs (8260C)
FEW4-MW68-185-MSD-17	VOCs (8260C)
FEW4-MW77-129-17	VOCs (8260C)

Brief Description of Work Performed:

Collected 6 groundwater samples and 1 MS/MSD. Passive diffusion bags (PDBs) were deployed at MW81-207, MW80-223, and MW80-128. Completing the PDB deployment.

Health and Safety Levels/Activities:

Level D, Daily Safety Tailgate Meeting

Problems Encountered and Corrective Action taken:

Saler No. 4 - Well not operable. No sample collected

King No. 3 - Unable to access control box to turn pump on. No sample collected.

Changes from Workplan:

NA

Remarks/Visitors:

NA

Signature: Mike Easterday

PROJECT NAME:	Atlas D Missile Site 4	**Date:**	6/18/2021
Location:	Cheyenne, Wyoming	**Weather:**	Partly cloudy, 80° to 85° F, breeze
USACE PM:	Laura Deck	**URS PM:**	Robert Mallisee
URS Project No.:	60613342	**Contract/DO:**	W912DY-16-D-0026/W9128F19F0192

PERSONNEL:

Name	Company
Mike Easterday	URS
Jake Kokesh	URS
Alex Bos	URS
Dan Abercibia	Na Ali'i
Todd Marguiles	Na Ali'i
Holly Young	Na Ali'i
Harman Guraya	Na Ali'i

Description	Description
(1) Geotech Water Level Meter	
(2) Heron Water Level Meter	
(3) Redi-Flo 2 controller	
(8) Redi-Flo pumps	
Bailers	

FIELD INSTALLATIONS:

ID Nos.	Drilled From:	Drilled To:
None	NA	NA

NA NA

Sample ID Nos.	Analytes
FEW4-MW04-17	VOCs (8260C)
FEW4-MW106-316-17	VOCs (8260C)
FEW4-MW61-221-17	VOCs (8260C)
FEW4-MW67-97-17	VOCs (8260C)
FEW4-MW81-100-17	VOCs (8260C)
FEW4-MW82-83-17	VOCs (8260C)
FEW4-MW85-205-17	VOCs (8260C)
FEW4-MW85-92-17	VOCs (8260C)
FEW4-MW48-225-PDB-17	VOCs (8260C)
FEW4-MW56-290-PDB-17	VOCs (8260C)

Brief Description of Work Performed:

Collected 8 groundwater samples and 2 passive diffusion bag samples.

Health and Safety Levels/Activities:

Level D, Daily Safety Tailgate Meeting

Problems Encountered and Corrective Action taken:

None

Changes from Workplan:

NA

Remarks/Visitors:

NA

Signature: Mike Easterday

PROJECT NAME:	Atlas D Missile Site 4	**Date:**	6/19/2021
Location:	Cheyenne, Wyoming	**Weather:**	Partly Sunny, 70° to 90° F, breezy
USACE PM:	Laura Deck	**URS PM:**	Robert Mallisee
URS Project No.:	60613342	**Contract/DO:**	W912DY-16-D-0026/W9128F19F0192

PERSONNEL:

Name	Company
Mike Easterday	URS
Jake Kokesh	URS
Alex Bos	URS
Dan Abercibia	Na Ali'i
Todd Marguiles	Na Ali'i
Holly Young	Na Ali'i
Harman Guraya	Na Ali'i

FIELD INSTALLATIONS:

ID Nos.	Drilled From:	Drilled To:
None	NA	NA

Description	Description
(1) Geotech Water Level Meter	
(2) Heron Water Level Meter	
(3) Redi-Flo 2 controller	
(8) Redi-Flo pumps	
Bailers	

NA Sample ID Nos.	NA Analytes
FEW4-MW101-138-17	VOCs (8260C)
FEW4-MW106-230-17	VOCs (8260C)
FEW4-MW19-17	VOCs (8260C)
FEW4-MW24-17	VOCs (8260C)
FEW4-MW56-203-FD-17	VOCs (8260C)
FEW4-MW85-151-17	VOCs (8260C)
FEW4-MW85-151-FD-17	VOCs (8260C)
FEW4-MW106-272-17	VOCs (8260C)
FEW4-MW106-272-PDB-17	VOCs (8260C)
FEW4-MW50-250-17	VOCs (8260C)
FEW4-MW50-250-MS-17	VOCs (8260C)
FEW4-MW50-250-MSD-17	VOCs (8260C)
FEW4-MW50-250-PDB-17	VOCs (8260C)
FEW4-MW56-203-17	VOCs (8260C)
FEW4-MW56-203-PDB-17	VOCs (8260C)
FEW4-TH5-205-17	VOCs (8260C)
FEW4-TH5-205-PDB-17	VOCs (8260C)

Brief Description of Work Performed:

Collected 9 groundwater samples, 2 field duplicates, 4 passive diffusion bag samples, and 1 MS/MSD.

Health and Safety Levels/Activities:

Level D, Daily Safety Tailgate Meeting

Problems Encountered and Corrective Action taken:

None

Changes from Workplan:

NA

Remarks/Visitors:

NA

Signature: Mike Easterday

PROJECT NAME:	Atlas D Missile Site 4	**Date:**	6/20/2021
Location:	Cheyenne, Wyoming	**Weather:**	Mostly sunny, 70° to 75° F, breeze
USACE PM:	Laura Deck	**URS PM:**	Robert Mallisee
URS Project No.:	60613342	**Contract/DO:**	W912DY-16-D-0026/W9128F19F0192

PERSONNEL:

Name	Company
Mike Easterday	URS
Jake Kokesh	URS
Alex Bos	URS
Dan Abercibia	Na Ali'i
Todd Marguiles	Na Ali'i
Holly Young	Na Ali'i
Harman Guraya	Na Ali'i

FIELD INSTALLATIONS:

ID Nos.	Drilled From:	Drilled To:
None	NA	NA

Description	Description
(1) Geotech Water Level Meter	
(2) Heron Water Level Meter	
(3) Redi-Flo 2 controller	
(8) Redi-Flo pumps	
Bailers	

NA	NA
Sample ID Nos.	**Analytes**
FEW4-MW101-106-17	VOCs (8260C)
FEW4-MW59-125-PS1-5	VOCs (8260C), TAL Metals (6020B/7470A)
FEW4-MW74-104-PS1-5	VOCs (8260C), TAL Metals (6020B/7470A)
FEW4-MW82-132-17	VOCs (8260C)
FEW4-MW01-17	VOCs (8260C)
FEW4-MW01-PDB-17	VOCs (8260C)
FEW4-MW55-250-17	VOCs (8260C)
FEW4-MW55-250-FD-17	VOCs (8260C)
FEW4-MW55-250-PDB-17	VOCs (8260C)
FEW4-MW83-88-17	VOCs (8260C)
FEW4-MW83-88-FD-17	VOCs (8260C)
FEW4-MW83-88-PDB-17	VOCs (8260C)
FEW4-MW88-133-17	VOCs (8260C)
FEW4-MW88-133-PDB-17	VOCs (8260C)
FEW4-MW95-288-17	VOCs (8260C)
FEW4-MW95-288-FD-17	VOCs (8260C)
FEW4-MW95-288-PDB-17	VOCs (8260C)
FEW4-MW97-266-17	VOCs (8260C)
FEW4-MW97-266-PDB-17	VOCs (8260C)

Brief Description of Work Performed:

Collected 10 groundwater samples, 6 passive diffusion bag samples, and 3 field duplicate samples. Performance monitoring sampling was completed at 2 monitoring wells. One rinstate blank for was collected after MW82-132 on the Redi-Flo pump to show the decon procedure is working properly.

Health and Safety Levels/Activities:

Level D, Daily Safety Tailgate Meeting

Problems Encountered and Corrective Action taken:

None

Changes from Workplan:

NA

Remarks/Visitors:

NA

Signature: Mike Easterday

PROJECT NAME:	Atlas D Missile Site 4	**Date:**	6/21/2021
Location:	Cheyenne, Wyoming	**Weather:**	Mostly sunny, 60° to 70° F, breeze
USACE PM:	Laura Deck	**URS PM:**	Robert Mallisee
URS Project No.:	60613342	**Contract/DO:**	W912DY-16-D-0026/W9128F19F0192

PERSONNEL:

Name	Company
Mike Easterday	URS
Jake Kokesh	URS
Alex Bos	URS
Dan Abercibia	Na Ali'i
Todd Marguiles	Na Ali'i
Holly Young	Na Ali'i
Harman Guraya	Na Ali'i

FIELD INSTALLATIONS:

ID Nos.	Drilled From:	Drilled To:
None	NA	NA

Description	Description
(1) Geotech Water Level Meter	
(2) Heron Water Level Meter	
(3) Redi-Flo 2 controller	
(8) Redi-Flo pumps	
Bailers	

NA NA

Sample ID Nos.	Analytes
FEW4-MW31-17	VOCs (8260C)
FEW4-MW31-PDB-17	VOCs (8260C)
FEW4-MW66-205-PDB-17	VOCs (8260C)
FEW4-MW66-205-PDB-17	VOCs (8260C)
FEW4-MW69-164-PDB-17	VOCs (8260C)
FEW4-MW71-96-17	VOCs (8260C)
FEW4-MW71-96-PDB-17	VOCs (8260C)
FEW4-MW74-359-PDB-17	VOCs (8260C)
FEW4-MW92B-288-17	VOCs (8260C)
FEW4-MW92B-288-FD-17	VOCs (8260C)
FEW4-MW92B-288-PDB-17	VOCs (8260C)

Brief Description of Work Performed:

Collected 3 groundwater samples, 7 passive diffusion bag samples, and 1 field duplicate sample.
Treated 750 gallons of LTM purge water.

Health and Safety Levels/Activities:

Level D, Daily Safety Tailgate Meeting

Problems Encountered and Corrective Action taken:

None

Changes from Workplan:

NA

Remarks/Visitors:

NA

Signature: Mike Easterday

PROJECT NAME:	Atlas D Missile Site 4	**Date:**	6/22/2021
Location:	Cheyenne, Wyoming	**Weather:**	Partly cloudy, 80° to 85° F, breeze
USACE PM:	Laura Deck	**URS PM:**	Robert Mallisee
URS Project No.:	60613342	**Contract/DO:**	W912DY-16-D-0026/W9128F19F0192

PERSONNEL:

Name	Company
Mike Easterday	URS
Jake Kokesh	URS
Alex Bos	URS
Dan Abercibia	Na Ali'i
Todd Marguiles	Na Ali'i
Holly Young	Na Ali'i
Harman Guraya	Na Ali'i

FIELD INSTALLATIONS:

ID Nos.	Drilled From:	Drilled To:
None	NA	NA

Description	Description
(1) Geotech Water Level Meter	
(2) Heron Water Level Meter	
(3) Redi-Flo 2 controller	
(8) Redi-Flo pumps	
Bailers	

NA NA

Sample ID Nos.	Analytes
FEW4-MW20-PDB-17	VOCs (8260C)
FEW4-MW59-183-17	VOCs (8260C)
FEW4-MW59-183-MS-17	VOCs (8260C)
FEW4-MW59-183-MSD-17	VOCs (8260C)
FEW4-MW59-183-PDB-17	VOCs (8260C)
FEW4-MW66-205-17	VOCs (8260C)
FEW4-MW74-359-17	VOCs (8260C)
FEW4-MW81-207-17	VOCs (8260C)
FEW4-MW81-207-PDB-17	VOCs (8260C)
FEW4-MW28-17	VOCs (8260C)
FEW4-MW66-158-17	VOCs (8260C)
FEW4-MW83-129-17	VOCs (8260C)

Brief Description of Work Performed:

Collected 7 groundwater samples, 3 passive diffusion bag samples, and 1 MS/MSD sample.

Health and Safety Levels/Activities:

Level D, Daily Safety Tailgate Meeting

Problems Encountered and Corrective Action taken:

None

Changes from Workplan:

NA

Remarks/Visitors:

NA

Signature: Mike Easterday

PROJECT NAME:	Atlas D Missile Site 4	**Date:**	6/23/2021
Location:	Cheyenne, Wyoming	**Weather:**	Partly cloudy, 80° to 85° F, breeze
USACE PM:	Laura Deck	**URS PM:**	Robert Mallisee
URS Project No.:	60613342	**Contract/DO:**	W912DY-16-D-0026/W9128F19F0192

PERSONNEL:

Name	Company
Mike Easterday	URS
Jake Kokesh	URS
Alex Bos	URS
Dan Abercibia	Na Ali'i
Todd Marguiles	Na Ali'i
Holly Young	Na Ali'i
Harman Guraya	Na Ali'i

FIELD INSTALLATIONS:

ID Nos.	Drilled From:	Drilled To:
None	NA	NA

EQUIPMENT:

Description	Description
(1) Geotech Water Level Meter	
(2) Heron Water Level Meter	
(3) Redi-Flo 2 controller	
(8) Redi-Flo pumps	
Bailers	

ENVIRONMENTAL SAMPLES COLLECTED:

Sample ID Nos.	Analytes
FEW4-MW101-238-17	VOCs (8260C)
FEW4-MW101-238-MS-17	VOCs (8260C)
FEW4-MW101-238-MSD-17	VOCs (8260C)
FEW4-MW101-238-PDB-17	VOCs (8260C)
FEW4-MW20-17	VOCs (8260C)
FEW4-MW45R-299-17	VOCs (8260C)
FEW4-MW45R-299-PDB-17	VOCs (8260C)
FEW4-MW69-164-17	VOCs (8260C)
FEW4-MW73-218-17	VOCs (8260C)
FEW4-MW73-218-PDB-17	VOCs (8260C)
FEW4-MW80-128-17	VOCs (8260C)
FEW4-MW80-128-PDB-17	VOCs (8260C)
FEW4-MW80-223-17	VOCs (8260C)
FEW4-MW80-223-PDB-17	VOCs (8260C)

Brief Description of Work Performed:

Collected 7 groundwater samples, 5 passive diffusion bag samples, and 1 MS/MSD.
Completed fieldwork for the Spring LTM Sampling Event 17.

Health and Safety Levels/Activities:

Level D, Daily Safety Tailgate Meeting

Problems Encountered and Corrective Action taken:

None

Changes from Workplan:

NA

Remarks/Visitors:

NA

Signature: Mike Easterday