

# Appendix C – Attachment 1

## Automated Data Review (ADR) Reference Output Files by Sample Delivery Group

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**CASE NARRATIVE**  
**Client: Sundance Consulting, Inc.**  
**Project: Fort Wingate, New Mexico**  
**Report Number: 280-67267-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

**Sample Receipt**

The following report contains the analytical results for twenty-one water samples received April 2, 2015, according to documented sample acceptance procedures. The samples were received at temperatures of 2.6°C, 1.8°C, 4.2°C, 4.0°C, 3.2°C, 0.3°C, 4.0°C, 1.8°C, 1.9°C, 2.5°C, 3.3°C, 4.8°C, 2.3°C, 4.1°C, 1.1°C and 3.8°C.

Sample IDs on the chain-of-custody end with 042014; however, the sample IDs on the container labels end with 042015. The sample IDs were logged per the container labels. The client was notified on April 3, 2015.

Sample TMW07042015 (280-67267-6) lists collection time 1015 on the VOA chain-of-custody (COC), collection time 1130 on the container labels and collection time 1130 on the non-VOA COC. The collection time was logged as 1130. The client was notified on April 3, 2015.

No containers were received listing ID TMW22S042015, as listed on the VOA chain-of-custody (COC). The laboratory received VOA vials for sample TMW22042015 (no "S") collection time 1055, which was not listed on the VOA COC. Sample TMW22042015 (280-67267-21) was logged for 8260 VOC analysis per the containers received. The client was notified on April 3, 2015.

The Total Metals bottle received for sample TMW40S042015 (280-67267-22) was received unpreserved. The bottle was sent to the metals laboratory upon receipt for preservation. The client was notified on April 3, 2015.

Due to current capacity for 8270D, the turnaround time (TAT) has been changed from 15 business days to 17 business days. The client was contacted on April 13, 2015, and approved the TAT change.

Please note the Caprolactam data are reported under separate cover (280-67267-2), as the laboratory does not hold DOD ELAP certification for this compound.

No other anomalies were encountered during sample receipt.

**GC/MS Volatiles - 8260B**

Samples TMW41042015 (280-67267-1), FW31042015 (280-67267-2), TMW30042015 (280-67267-3), TMW39S042015 (280-67267-4), TMW44042015 (280-67267-5), TMW07042015 (280-67267-6), TMW23042015 (280-67267-7), BGMW03042015 (280-67267-9), MW01042015 (280-67267-10), MW02042015 (280-67267-12), TB-01-042015 (280-67267-13), TMW18042015 (280-67267-14), TMW19042015 (280-67267-15), TMW36042015 (280-67267-16), TMW37042015 (280-67267-17), TMW16042015 (280-67267-18), FW35042015 (280-67267-20) and TMW22042015 (280-67267-21) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/07/2015, 04/08/2015 and 04/09/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Surrogate 1,2-Dichloroethane-d4 was recovered above the QC control limits in samples TMW41042015 (280-67267-1), FW31042015 (280-67267-2), TMW39S042015 (280-67267-4), TMW44042015 (280-67267-5) and TMW23042015 (280-67267-7). This is an indicator that data may be biased high. As the samples do not contain any detectable concentrations for constituents associated with this surrogate, corrective action is deemed unnecessary. The associated data have been flagged "Q" in accordance with the DOD QSM.

MS/MSD analyses for analytical batches 280-271372, 280-271563 and 280-271756 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**GC/MS Semivolatiles - 8270D**

Samples TMW41042015 (280-67267-1), FW31042015 (280-67267-2), TMW30042015 (280-67267-3), TMW39S042015 (280-67267-4), TMW44042015 (280-67267-5), TMW07042015 (280-67267-6), BGMW03042015 (280-67267-9), TMW18042015 (280-67267-14), TMW19042015 (280-67267-15), TMW36042015 (280-67267-16), TMW37042015 (280-67267-17), TMW16042015 (280-67267-18), FW35042015 (280-67267-20), TMW22042015 (280-67267-21) and TMW40S042015 (280-67267-22) were analyzed for semivolatile

organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 04/03/2015 and analyzed on 04/10/2015 and 04/11/2015.

Please note the Caprolactam data are reported under separate cover (280-67267-2), as the laboratory does not hold DOD ELAP certification for this compound.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Surrogate 2-Fluorobiphenyl or Terphenyl-d14 was recovered below the QC control limits in samples TMW18042015 (280-67267-14), FW35042015 (280-67267-20), TMW22042015 (280-67267-21) and TMW40S042015 (280-67267-22). These anomalies are due to obvious matrix interferences; therefore, corrective action is deemed unnecessary. The associated data have been flagged "Q" in accordance with the DOD QSM.

The LCS/LCSD associated with prep batch 280-271075 exhibited a percent recovery and RPD data outside the QC control limits for Benzidine. Benzidine has been identified as a poor performing analyte when analyzed using this method; therefore, corrective action was deemed unnecessary. The associated data have been flagged "Q" in accordance with the DOD QSM.

MS/MSD analyses for prep batch 280-271075 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Gasoline Range Organics - 8015C**

Samples MW01042015 (280-67267-10), MW22S042015 (280-67267-11), MW02042015 (280-67267-12) and TB-40-042015 (280-67267-19) were analyzed for gasoline range organics in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 04/06/2015.

Sample MW22S042015 (280-67267-11) was received at the laboratory with a pH value >2. The vials indicate the sample was preserved with hydrochloric acid. The sample was analyzed within 7 days as recommended in SW846 for unpreserved samples; therefore, there should be no bias to the reported results.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

MS/MSD analyses for analytical batch 280-271313 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Diesel Range Organics - 8015C**

Samples MW01042015 (280-67267-10) and MW02042015 (280-67267-12) were analyzed for Diesel Range Organics in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/02/2015 and analyzed on 04/10/2015.

Samples MW01042015 (280-67267-10) and MW02042015 (280-67267-12) formed emulsion during the extraction procedure. The emulsions were broken up by using pour backs.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

MS/MSD analyses for prep batch 280-270958 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Organochlorine Pesticides - 8081A**

Samples TMW41042015 (280-67267-1), FW31042015 (280-67267-2), TMW30042015 (280-67267-3), TMW39S042015 (280-67267-4), TMW44042015 (280-67267-5), TMW23042015 (280-67267-7), BGMW03042015 (280-67267-9), MW01042015 (280-67267-10), MW02042015 (280-67267-12), TMW36042015 (280-67267-16) and TMW37042015 (280-67267-17) were analyzed for chlorinated pesticides in accordance with EPA SW-846 Method 8081A. The samples were prepared on 04/03/2015 and analyzed on 04/07/2015.

TestAmerica Denver's practice for the reporting of dual column data in packages requiring forms and/or raw data is to report the surrogates from both columns, and the preferred result for any given target analyte from the analyst selected column. The preferred results for target analytes and surrogates are reported as PRIMARY on the Sample Datasheets.

Samples TMW41042015 (280-67267-1) and TMW23042015 (280-67267-7) formed emulsion during the extraction procedure. The emulsions were broken up using pour backs.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Surrogate 2-Fluorobiphenyl or Terphenyl-d14 was recovered below the QC control limits in samples TMW18042015 (280-67267-14), FW35042015 (280-67267-20), TMW22042015 (280-67267-21) and TMW40S042015 (280-67267-22). These anomalies are due to obvious matrix interferences; therefore, corrective action is deemed unnecessary. The associated data have been flagged "Q" in accordance with the DOD QSM.

Surrogate Decachlorobiphenyl was recovered below the QC control limits in samples TMW39S042015 (280-67267-4) and TMW44042015 (280-67267-5). These anomalies are due to obvious matrix interferences; therefore, corrective action is deemed unnecessary. The associated data have been flagged "Q" in accordance with the DOD QSM.

The RPD between the primary and confirmation columns exceeded 40% for 4,4'-DDD in sample TMW23042015 (280-67267-7). The lower of the two values has been reported, as matrix interference is evident. The result in the analytical report has been flagged with "J" in accordance with the DOD QSM.

MS/MSD analyses for prep batch 280-271082 were not requested.

The Continuing Calibration Verification (CCV) standard associated with analytical batch 280-271432 exhibited a %Difference (%D) value out of range, biased high, for Endrin on the back column. As no detectable concentration of Endrin is present in the associated samples, the data have been reported from the front column which was in control.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

### **Explosives - 8330B**

Samples TMW41042015 (280-67267-1), FW31042015 (280-67267-2), TMW30042015 (280-67267-3), TMW39S042015 (280-67267-4), TMW44042015 (280-67267-5), TMW07042015 (280-67267-6), TMW23042015 (280-67267-7), BGMW03042015 (280-67267-9), MW01042015 (280-67267-10), MW22S042015 (280-67267-11), MW02042015 (280-67267-12), TMW18042015 (280-67267-14), TMW19042015 (280-67267-15), TMW36042015 (280-67267-16), TMW37042015 (280-67267-17), TMW16042015 (280-67267-18), FW35042015 (280-67267-20) and TMW22042015 (280-67267-21) were analyzed for explosives in accordance with EPA SW-846 Method 8330B. The samples were prepared on 04/03/2015 and 04/09/2015 and analyzed on 04/07/2015, 04/09/2015 and 04/11/2015.

TestAmerica Denver's practice for the reporting of dual column data in packages requiring forms and/or raw data is to report the surrogates from both columns, and the preferred result for any given target analyte from the analyst selected column. The preferred results for target analytes and surrogates are reported as PRIMARY on the Sample Datasheets.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Samples TMW39S042015 (280-67267-4), TMW44042015 (280-67267-5), TMW07042015 (280-67267-6), TMW23042015 (280-67267-7), BGMW03042015 (280-67267-9), MW01042015 (280-67267-10), MW22S042015 (280-67267-11), MW02042015 (280-67267-12), FW35042015 (280-67267-20) and TMW22042015 (280-67267-21) required filtration to reduce matrix interferences.

A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows:

The cartridges were eluted with 0.1% Acetic Acid in ACN instead of ACN to increase Tetryl recovery. This deviation was performed with QA and supervisor approval. The SOP is currently under revision to capture this change.

Due to low surrogate recoveries, sample TMW37042015 (280-67267-17) was re-extracted out of the prescribed hold time and reanalyzed. In accordance with the client's instructions provided on April 28, 2015, both sets of data have been reported. Please note that the sample results should be considered estimated.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high concentrations of target analytes and/or analytes present above the linear calibration curve, sample TMW23042015 (280-67267-7) had to be analyzed at a dilution. Surrogate recoveries could not be accurately calculated for the diluted analysis because the extract was diluted beyond the ability to reliably quantitate recoveries. The reporting limits and method detection limits have been adjusted relative to the dilutions required.

Surrogate 1,2-Dinitrobenzene was recovered above the QC control limits on the confirmation column in sample TMW23042015 (280-67267-7). This anomaly is due to obvious matrix interference; therefore, corrective action is deemed unnecessary. The associated data have been flagged "Q" in accordance with the DOD QSM.

Surrogate 1,2-Dinitrobenzene was recovered below the QC control limits in sample TMW37042015 (280-67267-17). Upon re-extraction past hold time and reanalysis, surrogate recoveries were 100% in control. In accordance with the client's instructions provided on April 28, 2015, both sets of data have been reported. The associated data have been flagged "Q" in accordance with the DOD QSM.

The RPD between the primary and confirmation columns exceeded 40% for Nitrobenzene in sample TMW30042015 (280-67267-3). The RPD between the primary and confirmation columns exceeded 40% for o-Nitrotoluene in samples TMW39S042015 (280-67267-4) and MW02042015 (280-67267-12). The RPD between the primary and confirmation columns exceeded 40% for 2-Amino-4,6-dinitrotoluene and 4-Amino-2,6-dinitrotoluene in sample TMW44042015 (280-67267-5). The RPD between the primary and confirmation columns exceeded 40% for 1,2-Dinitrobenzene and 2-Amino-4,6-dinitrotoluene in sample TMW23042015 (280-67267-7). The lower of the two values has been reported, as matrix interference is evident. The results in the analytical report have been flagged with "J" in accordance with the DOD QSM.

2-Amino-4,6-dinitrotoluene was detected in method blank MB 280-271030/1-A at a level that was less than the reporting limit on the back column. The front column result is ND; therefore, the method blank is ND. Detections in the associated samples less than 10X the amount found in the blank are suspect due to potential interferences on the confirmation column. Samples with detections for 2-Amino-4,6-dinitrotoluene less than 10X the amount found in the blank were confirmed using method 8321. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

o-Nitrotoluene was detected in method blank MB 280-271030/1-A at a level that was less than one half the reporting limit; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

MS/MSD analyses for prep batches 280-271030 and 280-271968 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Perchlorate - 6860**

Samples TMW41042015 (280-67267-1), TMW30042015 (280-67267-3), TMW39S042015 (280-67267-4), TMW44042015 (280-67267-5), TMW23042015 (280-67267-7), BGMW03042015 (280-67267-9), MW01042015 (280-67267-10), TMW18042015 (280-67267-14), TMW19042015 (280-67267-15), TMW36042015 (280-67267-16), TMW37042015 (280-67267-17), TMW16042015 (280-67267-18) and TMW22042015 (280-67267-21) were analyzed for Perchlorate in accordance with SW846 6860. The samples were analyzed on 04/13/2015 and 04/14/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high concentrations of target analytes and/or analytes present above the linear calibration curve, samples TMW41042015 (280-67267-1), TMW30042015 (280-67267-3) and TMW39S042015 (280-67267-4) had to be analyzed at dilutions. The reporting limits and method detection limits have been adjusted relative to the dilutions required.

MS/MSD analyses for analytical batch 280-272464 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Total Metals - 6010C**

Samples TMW41042015 (280-67267-1), FW31042015 (280-67267-2), TMW30042015 (280-67267-3), TMW39S042015 (280-67267-4), TMW44042015 (280-67267-5), TMW07042015 (280-67267-6), TMW23042015 (280-67267-7), BGMW03042015 (280-67267-9), MW01042015 (280-67267-10), MW02042015 (280-67267-12), TMW18042015 (280-67267-14), TMW19042015 (280-67267-15), TMW36042015 (280-67267-16), TMW37042015 (280-67267-17), TMW16042015 (280-67267-18), TMW22042015 (280-67267-21) and TMW40S042015 (280-67267-22) were analyzed for Total Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 04/03/2015 and analyzed on 04/06/2015, 04/07/2015 and 04/08/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Sodium was detected in method blank MB 280-270982/1-A at a level that was less than one half the reporting limit; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

The MS/MSD associated with prep batch 280-270982 was performed on sample FW31042015 (280-67267-2). The MS/MSD exhibited spike compound recoveries outside the QC control limits for Aluminum. In addition, the MS/MSD spike compound recoveries and RPD data could not be reliably calculated for Sodium because the sample concentration was greater than four times the spike amounts. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample have been flagged "J" in accordance with the DOD QSM.

The post digestion spike (PDS) and serial dilution (SD) associated with prep batch 280-270982 was performed on sample FW31042015 (280-67267-2). The PDS exhibited a percent recovery outside the control limits for Sodium; however, the PDS performed on this sample was in control.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Dissolved Metals - 6010C**

Samples TMW41042015 (280-67267-1), FW31042015 (280-67267-2), TMW30042015 (280-67267-3), TMW39S042015 (280-67267-4), TMW44042015 (280-67267-5), TMW07042015 (280-67267-6), TMW23042015 (280-67267-7), BGMW03042015 (280-67267-9), MW01042015 (280-67267-10), MW02042015 (280-67267-12), TMW18042015 (280-67267-14), TMW19042015 (280-67267-15), TMW36042015 (280-67267-16), TMW37042015 (280-67267-17), TMW16042015 (280-67267-18) and TMW22042015 (280-67267-21) were analyzed for Dissolved Metals in accordance with EPA SW-846 Method 6010C. The samples were prepared on 04/03/2015 and analyzed on 04/06/2015 and 04/07/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Sodium was detected in method blank MB 280-270974/1-A at a level that was less than one half the reporting limit; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

The MS/MSD associated with prep batch 280-270974 was performed on sample FW31042015 (280-67267-2). The MS/MSD spike compound recoveries and RPD data could not be reliably calculated for Sodium because the sample concentration was greater than four

times the spike amounts. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample has been flagged "J" in accordance with the DOD QSM.

The post digestion spike (PDS) and serial dilution (SD) associated with prep batch 280-270974 was performed on sample FW31042015 (280-67267-2). The SD was not calculable and the PDS exhibited a percent recovery outside the control limits for Iron. The associated data in the parent sample has been flagged "J" in accordance with the DOD QSM.

The post digestion spike (PDS) and serial dilution (SD) associated with prep batch 280-270974 was performed on sample FW31042015 (280-67267-2). The PDS exhibited a percent recovery outside the control limits for Sodium; however, the PDS performed on this sample was in control.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Total Metals - 6020A**

Samples TMW41042015 (280-67267-1), FW31042015 (280-67267-2), TMW30042015 (280-67267-3), TMW39S042015 (280-67267-4), TMW44042015 (280-67267-5), TMW07042015 (280-67267-6), TMW23042015 (280-67267-7), BGMW03042015 (280-67267-9), MW01042015 (280-67267-10), MW02042015 (280-67267-12), TMW18042015 (280-67267-14), TMW19042015 (280-67267-15), TMW36042015 (280-67267-16), TMW37042015 (280-67267-17), TMW16042015 (280-67267-18), TMW22042015 (280-67267-21) and TMW40S042015 (280-67267-22) were analyzed for total metals (ICPMS) in accordance with SW846 6020A. The samples were prepared on 04/03/2015 and analyzed on 04/06/2015, 04/07/2015, 04/08/2015, 04/10/2015, 04/18/2015 and 04/20/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

The MS/MSD associated with prep batch 280-270983 was performed on sample TMW41042015 (280-67267-1). The MS/MSD exhibited a spike compound recovery outside the QC control limits for Beryllium. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample has been flagged "J" in accordance with the DOD QSM.

The ICSA solution associated with analytical batch 280-273486 was above DOD QSM Version 4.2 criteria of less than the LOD for Cadmium. The laboratory has confirmed with the vendor that this element is a trace impurity in the ICSA solution; therefore, no corrective action was needed. The associated data have been flagged "Q" in accordance with the DOD QSM.

The post digestion spike (PDS) and serial dilution (SD) associated with prep batch 280-270983 was performed on sample TMW41042015 (280-67267-1). The SD was not calculable and the PDS exhibited a percent recovery outside the control limits for Silver. The associated data in the parent sample has been flagged "J" in accordance with the DOD QSM.

The low Continuing Calibration Verification (CCVL) standard associated with analytical batch 280-271626 exhibited a %Difference (%D) value out of range, biased high, for Barium. This is an indicator that data may be biased high. As the associated sample amounts are ten times greater than the CCVL concentration, corrective action was deemed unnecessary. The associated data have been flagged "Q" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Dissolved Metals - 6020A**

Samples TMW41042015 (280-67267-1), FW31042015 (280-67267-2), TMW30042015 (280-67267-3), TMW39S042015 (280-67267-4), TMW44042015 (280-67267-5), TMW07042015 (280-67267-6), TMW23042015 (280-67267-7), BGMW03042015 (280-67267-9), MW01042015 (280-67267-10), MW02042015 (280-67267-12), TMW18042015 (280-67267-14), TMW19042015 (280-67267-15), TMW36042015 (280-67267-16), TMW37042015 (280-67267-17), TMW16042015 (280-67267-18) and TMW22042015 (280-67267-21) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 04/03/2015 and analyzed on 04/06/2015, 04/07/2015 and 04/08/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

The ICSA solution associated with analytical batch 280-271413 was above DOD QSM Version 4.2 criteria of less than the LOD for Cadmium. The laboratory has confirmed with the vendor that this element is a trace impurity in the ICSA solution; therefore, no corrective action was needed. The associated data have been flagged "Q" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Total Mercury - 7470A**

Samples TMW41042015 (280-67267-1), FW31042015 (280-67267-2), TMW30042015 (280-67267-3), TMW39S042015 (280-67267-4), TMW44042015 (280-67267-5), TMW07042015 (280-67267-6), TMW23042015 (280-67267-7), BGMW03042015 (280-67267-9), MW01042015 (280-67267-10), MW02042015 (280-67267-12), TMW18042015 (280-67267-14), TMW19042015 (280-67267-15), TMW36042015 (280-67267-16), TMW37042015 (280-67267-17), TMW16042015 (280-67267-18), TMW22042015 (280-67267-21) and TMW40S042015 (280-67267-22) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 04/08/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

MS/MSD analyses for prep batch 280-271100 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Dissolved Mercury - 7470A**

Samples TMW41042015 (280-67267-1), FW31042015 (280-67267-2), TMW30042015 (280-67267-3), TMW39S042015 (280-67267-4), TMW44042015 (280-67267-5), TMW07042015 (280-67267-6), TMW23042015 (280-67267-7), BGMW03042015 (280-67267-9), MW01042015 (280-67267-10), MW02042015 (280-67267-12), TMW18042015 (280-67267-14), TMW19042015 (280-67267-15), TMW36042015 (280-67267-16), TMW37042015 (280-67267-17), TMW16042015 (280-67267-18) and TMW22042015 (280-67267-21) were analyzed for dissolved mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 04/09/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Nitrate & Nitrite - 9056**

Samples TMW41042015 (280-67267-1), FW31042015 (280-67267-2), TMW30042015 (280-67267-3), TMW39S042015 (280-67267-4), TMW44042015 (280-67267-5), TMW07042015 (280-67267-6), TMW23042015 (280-67267-7), BGMW03042015 (280-67267-9), MW01042015 (280-67267-10), MW22S042015 (280-67267-11), MW02042015 (280-67267-12), TMW18042015 (280-67267-14), TMW36042015 (280-67267-16), TMW37042015 (280-67267-17) and TMW22042015 (280-67267-21) were analyzed for anions (48 hours) in accordance with EPA SW-846 Method 9056. The samples were analyzed on 04/02/2015 and 04/03/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Due to a required dilution, samples TMW44042015 (280-67267-5), TMW23042015 (280-67267-7), MW22S042015 (280-67267-11) and TMW22042015 (280-67267-21) were reanalyzed past holding time for Nitrate. The original analyses of the undiluted samples were performed within holding time. The diluted results have been reported and flagged accordingly.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high concentrations of target analytes and/or matrix interference, samples TMW30042015 (280-67267-3), TMW44042015 (280-67267-5), TMW07042015 (280-67267-6), TMW23042015 (280-67267-7), MW22S042015 (280-67267-11) and TMW22042015 (280-67267-21) had to be analyzed at dilutions. The reporting limits and method detection limits have been adjusted relative to the dilutions required.

MS/MSD analyses for analytical batch 280-271034 were not requested.

The MS/MSD associated with analytical batch 280-270843 was performed on sample TMW30042015 (280-67267-3). The MS/MSD exhibited a spike compound recovery outside the QC control limits for Nitrite as N. The acceptable LCS/LCSD analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample has been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.





### Field QC Assignments and Associated Samples

EDD File Name: 280-67267-1  
eQapp Name: FtWingate\_Primary\_120405

	Associated Samples	Sample Collection Date
<b>Field QC</b> TB-01-042015		
<b>QC Type:</b> TB		
	BGMW03042015	4/1/2015 12:47:00 PM
	FW31042015	4/1/2015 8:20:00 AM
	FW35042015	4/1/2015 2:43:00 PM
	MW01042015	4/1/2015 10:50:00 AM
	MW02042015	4/1/2015 9:40:00 AM
	MW22S042015	4/1/2015 9:15:00 AM
	TMW07042015	4/1/2015 11:30:00 AM
	TMW16042015	4/1/2015 12:25:00 PM
	TMW18042015	4/1/2015 8:35:00 AM
	TMW19042015	4/1/2015 9:40:00 AM
	TMW22042015	4/1/2015 10:55:00 AM
	TMW23042015	4/1/2015 12:00:00 PM
	TMW30042015	4/1/2015 9:38:00 AM
	TMW36042015	4/1/2015 11:25:00 AM
	TMW37042015	4/1/2015 10:35:00 AM
	TMW39S042015	4/1/2015 9:10:00 AM
	TMW40S042015	4/1/2015 8:07:00 AM
	TMW41042015	4/1/2015 12:25:00 PM
	TMW44042015	4/1/2015 10:15:00 AM
<b>Field QC</b> TB-40-042015		
<b>QC Type:</b> TB		
	BGMW03042015	4/1/2015 12:47:00 PM
	FW31042015	4/1/2015 8:20:00 AM
	FW35042015	4/1/2015 2:43:00 PM
	MW01042015	4/1/2015 10:50:00 AM
	MW02042015	4/1/2015 9:40:00 AM
	MW22S042015	4/1/2015 9:15:00 AM
	TMW07042015	4/1/2015 11:30:00 AM
	TMW16042015	4/1/2015 12:25:00 PM
	TMW18042015	4/1/2015 8:35:00 AM
	TMW19042015	4/1/2015 9:40:00 AM
	TMW22042015	4/1/2015 10:55:00 AM
	TMW23042015	4/1/2015 12:00:00 PM

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<b>Associated Samples</b>	<b>Sample Collection Date</b>
TMW30042015	4/1/2015 9:38:00 AM
TMW36042015	4/1/2015 11:25:00 AM
TMW37042015	4/1/2015 10:35:00 AM
TMW39S042015	4/1/2015 9:10:00 AM
TMW40S042015	4/1/2015 8:07:00 AM
TMW41042015	4/1/2015 12:25:00 PM
TMW44042015	4/1/2015 10:15:00 AM



## History of Manual Changes to Automated Data Review Qualifiers

Changed by: Doug Scott

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> BGMW03042015								
<b>BARIUM</b>	6020A	RE2/DIS	28	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:	CCVL high bias							
<b>BARIUM</b>	6020A	RE2/TOT	38	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:	CCVL high bias							
<b>CHROMIUM</b>	6020A	RES/TOT	0.88	ug/L	Equipment Blank Contamination		U	5/18/2015 14:44
Reason for change:	5X the blank > sample							
<b>CHROMIUM</b>	6020A	RES/TOT	0.88	ug/L	Equipment Blank Contamination	U		5/18/2015 14:45
Reason for change:	flagged in error							
<b>IRON</b>	6010C	RES/DIS	30	ug/L	Professional Judgment		UJ	5/18/2015 15:23
Reason for change:	post spike and serial DL out							
<b>LEAD</b>	6020A	RE2/TOT	0.74	ug/L	Field Blank Contamination		U	5/18/2015 14:41
Reason for change:	5X the blank > sample							
<b>LEAD</b>	6020A	RE2/TOT	0.74	ug/L	Field Blank Contamination	U		5/18/2015 14:42
Reason for change:	flagged in error							
<b>LEAD</b>	6020A	RE2/TOT	0.74	ug/L	Equipment Blank Contamination		U	5/18/2015 14:42
Reason for change:	5X the blank > sample							
<b>LEAD</b>	6020A	RE2/TOT	0.74	ug/L	Equipment Blank Contamination	U		5/18/2015 14:45
Reason for change:	flaggd in error							
<b>MANGANESE</b>	6020A	RE3/TOT	43	ug/L	Equipment Blank Contamination		U	5/18/2015 14:42
Reason for change:	5X the blank > sample							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> BGMW03042015								
<b>MANGANESE</b>	6020A	RE3/TOT	43	ug/L	Equipment Blank Contamination	U		5/18/2015 14:45
Reason for change:	flagged in error							
<b>NICKEL</b>	6020A	RES/TOT	0.97	ug/L	Equipment Blank Contamination		U	5/18/2015 14:43
Reason for change:	5X the blank > sample							
<b>NICKEL</b>	6020A	RES/TOT	0.97	ug/L	Equipment Blank Contamination	U		5/18/2015 14:45
Reason for change:	flagged in error							
<b>SODIUM</b>	6010C	RE2/DIS	690000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:22
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	710000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:21
Reason for change:	4X rule							
<b>ZINC</b>	6020A	RES/DIS	2.3	ug/L	Field Blank Contamination		U	5/18/2015 14:41
Reason for change:	5X the blank > sample							
<b>ZINC</b>	6020A	RES/DIS	2.3	ug/L	Field Blank Contamination	U		5/18/2015 14:43
Reason for change:	flagged in error							
<b>ZINC</b>	6020A	RES/DIS	2.3	ug/L	Equipment Blank Contamination		U	5/18/2015 14:43
Reason for change:	5X the blank > sample							
<b>ZINC</b>	6020A	RES/DIS	2.3	ug/L	Equipment Blank Contamination	U		5/18/2015 14:45
Reason for change:	flagged in error							
<b>ZINC</b>	6020A	RES/TOT	5.2	ug/L	Equipment Blank Contamination		U	5/18/2015 14:44
Reason for change:	5X the blank > sample							
<b>ZINC</b>	6020A	RES/TOT	5.2	ug/L	Equipment Blank Contamination	U		5/18/2015 14:45
Reason for change:	flagged in error							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> FW31042015								
<b>BARIUM</b>	6020A	RE2/DIS	11	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:	CCVL high bias							
<b>BARIUM</b>	6020A	RE2/TOT	56	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:	CCVL high bias							
<b>CHROMIUM</b>	6020A	RES/TOT	2.0	ug/L	Equipment Blank Contamination		U	5/18/2015 14:49
Reason for change:	5X the blank > sample							
<b>IRON</b>	6010C	RES/TOT	590	ug/L	Field Blank Contamination		U	5/18/2015 14:39
Reason for change:	5X the blank > sample							
<b>IRON</b>	6010C	RES/TOT	590	ug/L	Field Blank Contamination	U		5/18/2015 14:47
Reason for change:	flagged in error							
<b>IRON</b>	6010C	RES/TOT	590	ug/L	Equipment Blank Contamination		U	5/18/2015 14:47
Reason for change:	5X the blank > sample							
<b>LEAD</b>	6020A	RE2/TOT	0.64	ug/L	Equipment Blank Contamination		U	5/18/2015 14:48
Reason for change:	5X the blank > sample							
<b>MANGANESE</b>	6020A	RES/DIS	0.43	ug/L	Equipment Blank Contamination		U	5/18/2015 14:47
Reason for change:	5X the blank > sample							
<b>NICKEL</b>	6020A	RES/TOT	1.6	ug/L	Equipment Blank Contamination		U	5/18/2015 14:49
Reason for change:	5X the blank > sample							
<b>SODIUM</b>	6010C	RE2/DIS	500000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:22
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	490000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:21
Reason for change:	4X rule							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> FW31042015								
ZINC	6020A	RES/TOT	6.5	ug/L	Equipment Blank Contamination		U	5/18/2015 14:49
Reason for change:		5X the blank > sample						
<b>Field Sample ID:</b> MW01042015								
BARIUM	6020A	RE2/DIS	21	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:		CCVL high bias						
BARIUM	6020A	RE2/TOT	130	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:		CCVL high bias						
SODIUM	6010C	RE2/DIS	880000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:22
Reason for change:		4X rule						
SODIUM	6010C	RE2/TOT	880000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:21
Reason for change:		4X rule						
<b>Field Sample ID:</b> MW02042015								
2-NITROTOLUENE	8330B	RE2	0.33	ug/L	Professional Judgment		J	5/18/2015 15:17
Reason for change:		>40% confirmation						
BARIUM	6020A	RE2/DIS	29	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:		CCVL high bias						
BARIUM	6020A	RE3/TOT	130	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:		CCVL high bias						
SODIUM	6010C	RE2/DIS	380000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:22
Reason for change:		4X rule						
SODIUM	6010C	RE2/TOT	390000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:21
Reason for change:		4X rule						

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID: TMW07042015</b>								
<b>BARIUM</b>	6020A	RE2/DIS	21	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:	CCVL high bias							
<b>BARIUM</b>	6020A	RE2/TOT	30	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:	CCVL high bias							
<b>SODIUM</b>	6010C	RE2/DIS	1200000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:22
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	1200000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:21
Reason for change:	4X rule							
<b>Field Sample ID: TMW16042015</b>								
<b>BARIUM</b>	6020A	RE2/DIS	15	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:	CCVL high bias							
<b>BARIUM</b>	6020A	RE3/TOT	34	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:	CCVL high bias							
<b>SODIUM</b>	6010C	RE2/DIS	420000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:22
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	440000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:21
Reason for change:	4X rule							
<b>Field Sample ID: TMW18042015</b>								
<b>BARIUM</b>	6020A	RE2/DIS	12	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:	CCVL high bias							
<b>BARIUM</b>	6020A	RE3/TOT	19	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:	CCVL high bias							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW18042015								
<b>SODIUM</b>	6010C	RE2/DIS	640000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:22
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	670000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:21
Reason for change:	4X rule							
<b>Field Sample ID:</b> TMW19042015								
<b>BARIUM</b>	6020A	RE2/DIS	8.4	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:	CCVL high bias							
<b>BARIUM</b>	6020A	RE4/TOT	12	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:	CCVL high bias							
<b>SODIUM</b>	6010C	RE2/DIS	640000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:22
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	680000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:21
Reason for change:	4X rule							
<b>Field Sample ID:</b> TMW22042015								
<b>BARIUM</b>	6020A	RE2/DIS	17	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:	CCVL high bias							
<b>BARIUM</b>	6020A	RE3/TOT	28	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:	CCVL high bias							
<b>SODIUM</b>	6010C	RE2/DIS	780000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:22
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	820000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:21
Reason for change:	4X rule							



Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW23042015								
<b>2-AMINO-4,6-DINITROTOLUENE</b>	8330B	RES	0.55	ug/L	Professional Judgment		J	5/18/2015 15:18
Reason for change:	>40% confirmation							
<b>4,4'-DDD</b>	8081A	RES	0.010	ug/L	Professional Judgment		J	5/18/2015 15:08
Reason for change:	>40% confirmation							
<b>BARIUM</b>	6020A	RE2/DIS	18	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:	CCVL high bias							
<b>BARIUM</b>	6020A	RE2/TOT	42	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:	CCVL high bias							
<b>SODIUM</b>	6010C	RE2/DIS	760000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:22
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	730000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:21
Reason for change:	4X rule							
<b>Field Sample ID:</b> TMW30042015								
<b>BARIUM</b>	6020A	RE2/DIS	8.6	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:	CCVL high bias							
<b>BARIUM</b>	6020A	RE2/TOT	16	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:	CCVL high bias							
<b>NITROBENZENE</b>	8330B	RE2	0.15	ug/L	Professional Judgment		J	5/18/2015 15:16
Reason for change:	>40% confirmation							
<b>SODIUM</b>	6010C	RE2/DIS	420000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:22
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	440000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:21
Reason for change:	4X rule							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW36042015								
<b>BARIUM</b>	6020A	RE2/DIS	8.4	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:	CCVL high bias							
<b>BARIUM</b>	6020A	RE4/TOT	12	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:	CCVL high bias							
<b>SODIUM</b>	6010C	RE2/DIS	620000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:22
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	660000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:21
Reason for change:	4X rule							
<b>Field Sample ID:</b> TMW37042015								
<b>1,3,5-TRINITROBENZENE</b>	8330B	RE	0.40	ug/L	Sampling to Analysis Rejection		R	5/18/2015 15:12
Reason for change:	using 1st run, sample surr out low in the first run but not significantly so.							
<b>1,3-DINITROBENZENE</b>	8330B	RE	0.15	ug/L	Sampling to Analysis Rejection		R	5/18/2015 15:12
Reason for change:	using 1st run, sample surr out low in the first run but not significantly so.							
<b>2,4,6-TRINITROTOLUENE</b>	8330B	RE	0.15	ug/L	Sampling to Analysis Rejection		R	5/18/2015 15:12
Reason for change:	using 1st run, sample surr out low in the first run but not significantly so.							
<b>2-AMINO-4,6-DINITROTOLUENE</b>	8330B	RE	0.15	ug/L	Sampling to Analysis Rejection		R	5/18/2015 15:12
Reason for change:	using 1st run, sample surr out low in the first run but not significantly so.							
<b>2-NITROTOLUENE</b>	8330B	RE	0.15	ug/L	Sampling to Analysis Rejection		R	5/18/2015 15:12
Reason for change:	using 1st run, sample surr out low in the first run but not significantly so.							
<b>3-NITROTOLUENE</b>	8330B	RE	0.15	ug/L	Sampling to Analysis Rejection		R	5/18/2015 15:12
Reason for change:	using 1st run, sample surr out low in the first run but not significantly so.							
<b>3-NITROTOLUENE</b>	8330B	RE2	0.15	ug/L	Surrogate/Tracer Recovery Low		UJ	5/18/2015 15:13
Reason for change:	59% R low bias							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW37042015								
<b>4-AMINO-2,6-DINITROTOLUENE</b>	8330B	RE	0.15	ug/L	Sampling to Analysis Rejection		R	5/18/2015 15:12
Reason for change: using 1st run, sample surr out low in the first run but not significantly so.								
<b>4-NITROTOLUENE</b>	8330B	RE	0.40	ug/L	Sampling to Analysis Rejection		R	5/18/2015 15:12
Reason for change: using 1st run, sample surr out low in the first run but not significantly so.								
<b>BARIUM</b>	6020A	RE2/DIS	12	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change: CCVL high bias								
<b>BARIUM</b>	6020A	RE4/TOT	15	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change: CCVL high bias								
<b>Dinitrotoluene, 2,4-</b>	8330B	RE	0.15	ug/L	Sampling to Analysis Rejection		R	5/18/2015 15:12
Reason for change: using 1st run, sample surr out low in the first run but not significantly so.								
<b>Dinitrotoluene, 2,6-</b>	8330B	RE	0.15	ug/L	Sampling to Analysis Rejection		R	5/18/2015 15:12
Reason for change: using 1st run, sample surr out low in the first run but not significantly so.								
<b>HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE</b>	8330B	RE	0.15	ug/L	Sampling to Analysis Rejection		R	5/18/2015 15:12
Reason for change: using 1st run, sample surr out low in the first run but not significantly so.								
<b>METHYL-2,4,6-TRINITROBENZENE/ METRAMINE</b>	8330B	RE	0.15	ug/L	Sampling to Analysis Rejection		R	5/18/2015 15:12
Reason for change: using 1st run, sample surr out low in the first run but not significantly so.								
<b>NITROBENZENE</b>	8330B	RE	0.15	ug/L	Sampling to Analysis Rejection		R	5/18/2015 15:12
Reason for change: using 1st run, sample surr out low in the first run but not significantly so.								
<b>Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazine (HMTX)</b>	8330B	RE	0.15	ug/L	Sampling to Analysis Rejection		R	5/18/2015 15:12
Reason for change: using 1st run, sample surr out low in the first run but not significantly so.								
<b>SODIUM</b>	6010C	RE2/DIS	520000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:22
Reason for change: 4X rule								

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW37042015								
<b>SODIUM</b>	6010C	RE2/TOT	510000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:21
Reason for change: 4X rule								
<b>Field Sample ID:</b> TMW39S042015								
<b>2-NITROTOLUENE</b>	8330B	RES	0.19	ug/L	Professional Judgment		J	5/18/2015 15:17
Reason for change: >40% confirmation								
<b>BARIUM</b>	6020A	RE2/DIS	15	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change: CCVL high bias								
<b>BARIUM</b>	6020A	RE4/TOT	99	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change: CCVL high bias								
<b>SODIUM</b>	6010C	RE2/DIS	840000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:22
Reason for change: 4X rule								
<b>SODIUM</b>	6010C	RE2/TOT	850000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:21
Reason for change: 4X rule								
<b>Field Sample ID:</b> TMW40S042015								
<b>BARIUM</b>	6020A	RE3/TOT	1800	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change: CCVL high bias								
<b>SODIUM</b>	6010C	RE2/TOT	980000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:21
Reason for change: 4X rule								
<b>Field Sample ID:</b> TMW41042015								
<b>BARIUM</b>	6020A	RE2/DIS	11	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change: CCVL high bias								

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID: TMW41042015</b>								
<b>BARIUM</b>	6020A	RE2/TOT	13	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:	CCVL high bias							
<b>SILVER</b>	6020A	RE2/TOT	0.10	ug/L	Professional Judgment		UJ	5/18/2015 15:26
Reason for change:	post spike and serial DL out							
<b>SODIUM</b>	6010C	RE2/DIS	810000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:22
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	790000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:21
Reason for change:	4X rule							
<b>Field Sample ID: TMW44042015</b>								
<b>2-AMINO-4,6-DINITROTOLUENE</b>	8330B	RES	0.86	ug/L	Professional Judgment		J	5/18/2015 15:17
Reason for change:	>40% confirmation							
<b>BARIUM</b>	6020A	RE2/DIS	15	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:	CCVL high bias							
<b>BARIUM</b>	6020A	RE2/TOT	170	ug/L	Continuing Calibration Verificatic		J	5/18/2015 15:28
Reason for change:	CCVL high bias							
<b>PERCHLORATE</b>	6860	RES	0.037	ug/L	Equipment Blank Contamination		U	5/18/2015 14:53
Reason for change:	5X the blank > sample							
<b>SODIUM</b>	6010C	RE2/DIS	710000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:22
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	700000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 15:21
Reason for change:	4X rule							
<b>ZINC</b>	6020A	RES/DIS	3.8	ug/L	Equipment Blank Contamination		U	5/18/2015 14:51
Reason for change:	5X the blank > sample							



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	GENCHEM	
<b>Method:</b>	9056	<b>Matrix:</b> AQ

Sample ID:FW31042015 Collected:4/1/2015 8:20:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE	0.099	J	0.10	LOD	0.50	LOQ	mg/L	J	RI

Sample ID:MW22S042015 Collected:4/1/2015 9:15:00 AM Analysis Type:RE2/TOT Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE	17	H D	0.20	LOD	1.0	LOQ	mg/L	J	StoA

4/1/2015 11:30:00  
Sample ID:TMW07042015 Collected:AM Analysis Type:RES/TOT Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE	0.19	J D	0.20	LOD	1.0	LOQ	mg/L	J	RI

4/1/2015 10:55:00  
Sample ID:TMW22042015 Collected:AM Analysis Type:RE2/TOT Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE	11	H D	0.20	LOD	1.0	LOQ	mg/L	J	StoA

4/1/2015 12:00:00  
Sample ID:TMW23042015 Collected:PM Analysis Type:RE2/TOT Dilution: 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE	27	H D	0.50	LOD	2.5	LOQ	mg/L	J	StoA

4/1/2015 10:15:00  
Sample ID:TMW44042015 Collected:AM Analysis Type:RE2/TOT Dilution: 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE	48	H D	1.0	LOD	5.0	LOQ	mg/L	J	StoA

<b>Method Category:</b>	METALS	
<b>Method:</b>	6010C	<b>Matrix:</b> AQ

4/1/2015 12:47:00  
Sample ID:BGW03042015 Collected:PM Analysis Type:RE3/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	1100		31	LOD	300	LOQ	ug/L	J	Ms

\* denotes a non-reportable result

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5/18/2015 3:48:29 PM

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Page 1 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS	
<b>Method:</b>	6010C	<b>Matrix:</b> AQ

4/1/2015 12:47:00  
**Sample ID:** BGMW03042015      **Collected:** PM      **Analysis Type:** RES/DIS      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	30	U	30	LOD	100	LOQ	ug/L	UJ	ProfJudg
POTASSIUM	1700	J	250	LOD	3000	LOQ	ug/L	J	RI

4/1/2015 12:47:00  
**Sample ID:** BGMW03042015      **Collected:** PM      **Analysis Type:** RES/TOT      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2200	J	250	LOD	3000	LOQ	ug/L	J	RI

4/1/2015 8:20:00 AM  
**Sample ID:** FW31042015      **Collected:** 4/1/2015 8:20:00 AM      **Analysis Type:** RE2/TOT      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	1300	J	31	LOD	300	LOQ	ug/L	J	Ms

4/1/2015 8:20:00 AM  
**Sample ID:** FW31042015      **Collected:** 4/1/2015 8:20:00 AM      **Analysis Type:** RES/DIS      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1700	J	250	LOD	3000	LOQ	ug/L	J	RI

4/1/2015 8:20:00 AM  
**Sample ID:** FW31042015      **Collected:** 4/1/2015 8:20:00 AM      **Analysis Type:** RES/TOT      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	590		30	LOD	100	LOQ	ug/L	U	Eb
POTASSIUM	2000	J	250	LOD	3000	LOQ	ug/L	J	RI

4/1/2015 10:50:00  
**Sample ID:** MW01042015      **Collected:** AM      **Analysis Type:** RE3/TOT      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12000		31	LOD	300	LOQ	ug/L	J	Ms

4/1/2015 10:50:00  
**Sample ID:** MW01042015      **Collected:** AM      **Analysis Type:** RES/DIS      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	690	J	250	LOD	3000	LOQ	ug/L	J	RI

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5/18/2015 3:48:29 PM

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Page 2 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6010C	<b>Matrix:</b>	AQ						

<b>Sample ID:</b> MW01042015		<b>Collected:</b> 4/1/2015 10:50:00 AM			<b>Analysis Type:</b> RES/TOT			<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
POTASSIUM	2500	J	250	LOD	3000	LOQ	ug/L	J	RI

<b>Sample ID:</b> MW02042015		<b>Collected:</b> 4/1/2015 9:40:00 AM			<b>Analysis Type:</b> RE2/DIS			<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
ALUMINUM	36	J	31	LOD	300	LOQ	ug/L	J	RI

<b>Sample ID:</b> MW02042015		<b>Collected:</b> 4/1/2015 9:40:00 AM			<b>Analysis Type:</b> RE2/TOT			<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
ALUMINUM	9200		31	LOD	300	LOQ	ug/L	J	Ms

<b>Sample ID:</b> MW02042015		<b>Collected:</b> 4/1/2015 9:40:00 AM			<b>Analysis Type:</b> RES/DIS			<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
IRON	34	J	30	LOD	100	LOQ	ug/L	J	RI
POTASSIUM	910	J	250	LOD	3000	LOQ	ug/L	J	RI

<b>Sample ID:</b> MW02042015		<b>Collected:</b> 4/1/2015 9:40:00 AM			<b>Analysis Type:</b> RES/TOT			<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
POTASSIUM	1800	J	250	LOD	3000	LOQ	ug/L	J	RI

<b>Sample ID:</b> TMW07042015		<b>Collected:</b> 4/1/2015 11:30:00 AM			<b>Analysis Type:</b> RE3/TOT			<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
ALUMINUM	860		31	LOD	300	LOQ	ug/L	J	Ms

<b>Sample ID:</b> TMW07042015		<b>Collected:</b> 4/1/2015 11:30:00 AM			<b>Analysis Type:</b> RES/DIS			<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
IRON	39	J	30	LOD	100	LOQ	ug/L	J	RI

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Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:29 PM

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Page 3 of 34





## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6010C	<b>Matrix:</b>	AQ						

Sample ID:TMW16042015		4/1/2015 12:25:00			Collected:PM			Analysis Type:RE2/DIS		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
ALUMINUM	93	J	31	LOD	300	LOQ	ug/L	J	RI		

Sample ID:TMW16042015		4/1/2015 12:25:00			Collected:PM			Analysis Type:RE2/TOT		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
ALUMINUM	1900		31	LOD	300	LOQ	ug/L	J	Ms		

Sample ID:TMW16042015		4/1/2015 12:25:00			Collected:PM			Analysis Type:RES/DIS		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
IRON	52	J	30	LOD	100	LOQ	ug/L	J	RI		
MAGNESIUM	430	J	25	LOD	500	LOQ	ug/L	J	RI		
POTASSIUM	720	J	250	LOD	3000	LOQ	ug/L	J	RI		

Sample ID:TMW16042015		4/1/2015 12:25:00			Collected:PM			Analysis Type:RES/TOT		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
POTASSIUM	1000	J	250	LOD	3000	LOQ	ug/L	J	RI		

Sample ID:TMW18042015		4/1/2015 8:35:00 AM			Collected:PM			Analysis Type:RE2/DIS		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
ALUMINUM	100	J	31	LOD	300	LOQ	ug/L	J	RI		

Sample ID:TMW18042015		4/1/2015 8:35:00 AM			Collected:PM			Analysis Type:RE2/TOT		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
ALUMINUM	440		31	LOD	300	LOQ	ug/L	J	Ms		

Sample ID:TMW18042015		4/1/2015 8:35:00 AM			Collected:PM			Analysis Type:RES/DIS		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
IRON	29	J	30	LOD	100	LOQ	ug/L	J	RI		

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Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:29 PM

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Page 4 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS									
<b>Method:</b>	6010C	<b>Matrix:</b>	AQ							

Sample ID:TMW19042015 Collected:4/1/2015 9:40:00 AM Analysis Type:RE2/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	100	J	31	LOD	300	LOQ	ug/L	J	RI

Sample ID:TMW19042015 Collected:4/1/2015 9:40:00 AM Analysis Type:RE2/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	1200		31	LOD	300	LOQ	ug/L	J	Ms

Sample ID:TMW19042015 Collected:4/1/2015 9:40:00 AM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	63	J	30	LOD	100	LOQ	ug/L	J	RI
POTASSIUM	1100	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW19042015 Collected:4/1/2015 9:40:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1200	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW22042015 Collected:4/1/2015 10:55:00 AM Analysis Type:RE2/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	200	J	31	LOD	300	LOQ	ug/L	J	RI

Sample ID:TMW22042015 Collected:4/1/2015 10:55:00 AM Analysis Type:RE2/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	530		31	LOD	300	LOQ	ug/L	J	Ms

Sample ID:TMW22042015 Collected:4/1/2015 10:55:00 AM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1100	J	250	LOD	3000	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:29 PM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 5 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6010C	<b>Matrix:</b>	AQ						

<b>Sample ID:</b> TMW22042015		<b>Collected:</b> 4/1/2015 10:55:00 AM			<b>Analysis Type:</b> RES/TOT			<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
POTASSIUM	910	J	250	LOD	3000	LOQ	ug/L	J	RI

<b>Sample ID:</b> TMW23042015		<b>Collected:</b> 4/1/2015 12:00:00 PM			<b>Analysis Type:</b> RE2/DIS			<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
ALUMINUM	45	J	31	LOD	300	LOQ	ug/L	J	RI

<b>Sample ID:</b> TMW23042015		<b>Collected:</b> 4/1/2015 12:00:00 PM			<b>Analysis Type:</b> RE3/TOT			<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
ALUMINUM	1800		31	LOD	300	LOQ	ug/L	J	Ms

<b>Sample ID:</b> TMW23042015		<b>Collected:</b> 4/1/2015 12:00:00 PM			<b>Analysis Type:</b> RES/DIS			<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
IRON	32	J	30	LOD	100	LOQ	ug/L	J	RI
POTASSIUM	750	J	250	LOD	3000	LOQ	ug/L	J	RI

<b>Sample ID:</b> TMW23042015		<b>Collected:</b> 4/1/2015 12:00:00 PM			<b>Analysis Type:</b> RES/TOT			<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
POTASSIUM	1000	J	250	LOD	3000	LOQ	ug/L	J	RI

<b>Sample ID:</b> TMW30042015		<b>Collected:</b> 4/1/2015 9:38:00 AM			<b>Analysis Type:</b> RE2/DIS			<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
ALUMINUM	23	J	31	LOD	300	LOQ	ug/L	J	RI

<b>Sample ID:</b> TMW30042015		<b>Collected:</b> 4/1/2015 9:38:00 AM			<b>Analysis Type:</b> RE3/TOT			<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
ALUMINUM	500		31	LOD	300	LOQ	ug/L	J	Ms

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:29 PM

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Page 6 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6010C	<b>Matrix:</b>	AQ						

Sample ID:TMW30042015 Collected:4/1/2015 9:38:00 AM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	870	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW30042015 Collected:4/1/2015 9:38:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	940	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW36042015 Collected:4/1/2015 11:25:00 AM Analysis Type:RE2/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	650		31	LOD	300	LOQ	ug/L	J	Ms

Sample ID:TMW36042015 Collected:4/1/2015 11:25:00 AM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1000	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW36042015 Collected:4/1/2015 11:25:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1100	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW37042015 Collected:4/1/2015 10:35:00 AM Analysis Type:RE2/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	380		31	LOD	300	LOQ	ug/L	J	Ms

Sample ID:TMW37042015 Collected:4/1/2015 10:35:00 AM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	890	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW37042015 Collected:4/1/2015 10:35:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	840	J	250	LOD	3000	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:29 PM

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Page 7 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6010C	<b>Matrix:</b>	AQ						

Sample ID:TMW39S042015 Collected:4/1/2015 9:10:00 AM Analysis Type:RE2/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	30	J	31	LOD	300	LOQ	ug/L	J	RI

Sample ID:TMW39S042015 Collected:4/1/2015 9:10:00 AM Analysis Type:RE3/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	7300		31	LOD	300	LOQ	ug/L	J	Ms

Sample ID:TMW39S042015 Collected:4/1/2015 9:10:00 AM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	24	J	30	LOD	100	LOQ	ug/L	J	RI
POTASSIUM	940	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW39S042015 Collected:4/1/2015 9:10:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1900	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW40S042015 Collected:4/1/2015 8:07:00 AM Analysis Type:RE2/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	120000		31	LOD	300	LOQ	ug/L	J	Ms

Sample ID:TMW41042015 Collected:4/1/2015 12:25:00 PM Analysis Type:RE2/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	22	J	31	LOD	300	LOQ	ug/L	J	RI

Sample ID:TMW41042015 Collected:4/1/2015 12:25:00 PM Analysis Type:RE2/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	360		31	LOD	300	LOQ	ug/L	J	Ms

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:29 PM

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Page 8 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS	
<b>Method:</b>	6010C	<b>Matrix:</b> AQ

Sample ID: TMW41042015      Collected: 4/1/2015 12:25:00 PM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	860	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID: TMW41042015      Collected: 4/1/2015 12:25:00 PM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	870	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID: TMW44042015      Collected: 4/1/2015 10:15:00 AM      Analysis Type: RE2/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	64	J	31	LOD	300	LOQ	ug/L	J	RI

Sample ID: TMW44042015      Collected: 4/1/2015 10:15:00 AM      Analysis Type: RE3/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	16000		31	LOD	300	LOQ	ug/L	J	Ms

Sample ID: TMW44042015      Collected: 4/1/2015 10:15:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	44	J	30	LOD	100	LOQ	ug/L	J	RI
POTASSIUM	580	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID: TMW44042015      Collected: 4/1/2015 10:15:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2900	J	250	LOD	3000	LOQ	ug/L	J	RI

<b>Method Category:</b>	METALS	
<b>Method:</b>	6020A	<b>Matrix:</b> AQ

Sample ID: BGMW03042015      Collected: 4/1/2015 12:47:00 PM      Analysis Type: RE2/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	28		0.85	LOD	3.0	LOQ	ug/L	J	Ccv

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: BGMW03042015      Collected: 4/1/2015 12:47:00 PM      Analysis Type: RE2/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	2.1	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
BARIIUM	38	Q	0.85	LOD	3.0	LOQ	ug/L	J	Ccv
LEAD	0.74	J	0.50	LOD	3.0	LOQ	ug/L	J	RI

Sample ID: BGMW03042015      Collected: 4/1/2015 12:47:00 PM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	2.1	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.19	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	0.89	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
ZINC	2.3	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: BGMW03042015      Collected: 4/1/2015 12:47:00 PM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.11	J	0.24	LOD	1.0	LOQ	ug/L	J	RI
CHROMIUM	0.88	J	1.5	LOD	10	LOQ	ug/L	J	RI
COBALT	0.48	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	0.97	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
ZINC	5.2	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: FW31042015      Collected: 4/1/2015 8:20:00 AM      Analysis Type: RE2/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.51	J	0.60	LOD	6.0	LOQ	ug/L	J	RI
BARIIUM	11		0.85	LOD	3.0	LOQ	ug/L	J	Ccv

Sample ID: FW31042015      Collected: 4/1/2015 8:20:00 AM      Analysis Type: RE2/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIIUM	56		0.85	LOD	3.0	LOQ	ug/L	J	Ccv
LEAD	0.64	J	0.50	LOD	3.0	LOQ	ug/L	U	Eb
SILVER	0.11	J	0.10	LOD	5.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:29 PM

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Page 10 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID:FW31042015 Collected:4/1/2015 8:20:00 AM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.17	J	0.24	LOD	1.0	LOQ	ug/L	J	RI
CHROMIUM	0.77	J	1.5	LOD	10	LOQ	ug/L	J	RI
COBALT	0.058	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	1.0	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
MANGANESE	0.43	J	0.90	LOD	3.5	LOQ	ug/L	U	Eb
SILVER	0.61	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.22	J	0.20	LOD	1.0	LOQ	ug/L	J	RI

Sample ID:FW31042015 Collected:4/1/2015 8:20:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.54	J	0.60	LOD	6.0	LOQ	ug/L	J	RI
BERYLLIUM	0.11	J	0.24	LOD	1.0	LOQ	ug/L	J	RI
CHROMIUM	2.0	J	1.5	LOD	10	LOQ	ug/L	U	Eb
COBALT	0.57	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	1.1	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	1.6	J	0.90	LOD	3.0	LOQ	ug/L	U	Eb
THALLIUM	0.25	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
ZINC	6.5	J	6.0	LOD	20	LOQ	ug/L	U	Eb

Sample ID:MW01042015 Collected:4/1/2015 10:50:00 AM Analysis Type:RE2/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	21		0.85	LOD	3.0	LOQ	ug/L	J	Ccv

Sample ID:MW01042015 Collected:4/1/2015 10:50:00 AM Analysis Type:RE2/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	2.5	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
BARIUM	130	Q	0.85	LOD	3.0	LOQ	ug/L	J	Ccv

Sample ID:MW01042015 Collected:4/1/2015 10:50:00 AM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.58	J	1.0	LOD	5.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:29 PM

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Page 11 of 34





## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: MW01042015									
Collected: 4/1/2015 10:50:00 AM									
Analysis Type: RES/DIS									
Dilution: 1									
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	0.76	J	1.5	LOD	10	LOQ	ug/L	J	RI
COBALT	0.19	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
LEAD	0.27	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
NICKEL	0.92	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	2.6	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	13	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: MW01042015									
Collected: 4/1/2015 10:50:00 AM									
Analysis Type: RES/TOT									
Dilution: 1									
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.53	J	0.24	LOD	1.0	LOQ	ug/L	J	RI
CHROMIUM	7.6	J	1.5	LOD	10	LOQ	ug/L	J	RI
THALLIUM	0.11	J	0.20	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: MW02042015									
Collected: 4/1/2015 9:40:00 AM									
Analysis Type: RE2/DIS									
Dilution: 1									
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIIUM	29		0.85	LOD	3.0	LOQ	ug/L	J	Ccv

Sample ID: MW02042015									
Collected: 4/1/2015 9:40:00 AM									
Analysis Type: RE2/TOT									
Dilution: 1									
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	1.6	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CADMIUM	0.57	J	0.40	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: MW02042015									
Collected: 4/1/2015 9:40:00 AM									
Analysis Type: RE3/TOT									
Dilution: 1									
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIIUM	130	Q	0.85	LOD	3.0	LOQ	ug/L	J	Ccv

Sample ID: MW02042015									
Collected: 4/1/2015 9:40:00 AM									
Analysis Type: RES/DIS									
Dilution: 1									
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	0.50	J	1.5	LOD	10	LOQ	ug/L	J	RI
COBALT	0.11	J	0.10	LOD	1.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:29 PM

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Page 12 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: MW02042015 Collected: 4/1/2015 9:40:00 AM Analysis Type: RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	1.2	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	0.83	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
THALLIUM	0.066	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
VANADIUM	1.3	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID: MW02042015 Collected: 4/1/2015 9:40:00 AM Analysis Type: RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.38	J	0.24	LOD	1.0	LOQ	ug/L	J	RI
CHROMIUM	4.7	J	1.5	LOD	10	LOQ	ug/L	J	RI
THALLIUM	0.069	J	0.20	LOD	1.0	LOQ	ug/L	J	RI

4/1/2015 11:30:00  
Sample ID: TMW07042015 Collected: AM Analysis Type: RE2/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	21		0.85	LOD	3.0	LOQ	ug/L	J	Ccv

4/1/2015 11:30:00  
Sample ID: TMW07042015 Collected: AM Analysis Type: RE2/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	30		0.85	LOD	3.0	LOQ	ug/L	J	Ccv

4/1/2015 11:30:00  
Sample ID: TMW07042015 Collected: AM Analysis Type: RE4/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	0.58	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
SILVER	0.060	J	0.10	LOD	5.0	LOQ	ug/L	J	RI

4/1/2015 11:30:00  
Sample ID: TMW07042015 Collected: AM Analysis Type: RE5/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	1.3	J	1.0	LOD	5.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:29 PM

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Page 13 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS	
<b>Method:</b>	6020A	<b>Matrix:</b> AQ

Sample ID: TMW07042015      Collected: AM      4/1/2015 11:30:00      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	1.1	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.65	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	0.64	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	2.3	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	4.2	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	4.1	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW07042015      Collected: AM      4/1/2015 11:30:00      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.40	J	0.60	LOD	6.0	LOQ	ug/L	J	RI
CHROMIUM	1.6	J	1.5	LOD	10	LOQ	ug/L	J	RI
COBALT	0.91	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	0.57	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	2.9	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
ZINC	5.4	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW16042015      Collected: PM      4/1/2015 12:25:00      Analysis Type: RE2/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	15		0.85	LOD	3.0	LOQ	ug/L	J	Ccv

Sample ID: TMW16042015      Collected: PM      4/1/2015 12:25:00      Analysis Type: RE2/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.61	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
LEAD	0.79	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
SILVER	0.43	J	0.10	LOD	5.0	LOQ	ug/L	J	RI

Sample ID: TMW16042015      Collected: PM      4/1/2015 12:25:00      Analysis Type: RE3/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	34	Q	0.85	LOD	3.0	LOQ	ug/L	J	Ccv

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:29 PM

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Page 14 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: TMW16042015      Collected: 4/1/2015 12:25:00 PM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.49	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	1.4	J	1.5	LOD	10	LOQ	ug/L	J	RI
COBALT	0.20	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	1.1	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
ZINC	6.3	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW16042015      Collected: 4/1/2015 12:25:00 PM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	4.2	J	1.5	LOD	10	LOQ	ug/L	J	RI
COBALT	0.68	J	0.10	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: TMW18042015      Collected: 4/1/2015 8:35:00 AM      Analysis Type: RE2/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIIUM	12		0.85	LOD	3.0	LOQ	ug/L	J	Ccv

Sample ID: TMW18042015      Collected: 4/1/2015 8:35:00 AM      Analysis Type: RE2/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	2.0	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
LEAD	0.75	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
SILVER	0.25	J	0.10	LOD	5.0	LOQ	ug/L	J	RI

Sample ID: TMW18042015      Collected: 4/1/2015 8:35:00 AM      Analysis Type: RE3/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIIUM	19	Q	0.85	LOD	3.0	LOQ	ug/L	J	Ccv

Sample ID: TMW18042015      Collected: 4/1/2015 8:35:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	2.8	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	1.0	J	1.5	LOD	10	LOQ	ug/L	J	RI
COPPER	1.5	J	1.5	LOD	2.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:29 PM

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Page 15 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: TMW18042015 Collected: 4/1/2015 8:35:00 AM Analysis Type: RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	0.84	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
MANGANESE	2.3	J	0.90	LOD	3.5	LOQ	ug/L	J	RI
NICKEL	0.47	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SILVER	0.034	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
ZINC	2.2	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW18042015 Collected: 4/1/2015 8:35:00 AM Analysis Type: RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	0.92	J	1.5	LOD	10	LOQ	ug/L	J	RI
COBALT	0.11	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	0.64	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
ZINC	7.8	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW19042015 Collected: 4/1/2015 9:40:00 AM Analysis Type: RE2/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	8.4		0.85	LOD	3.0	LOQ	ug/L	J	Ccv

Sample ID: TMW19042015 Collected: 4/1/2015 9:40:00 AM Analysis Type: RE2/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.33	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
LEAD	0.59	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
SILVER	0.40	J	0.10	LOD	5.0	LOQ	ug/L	J	RI

Sample ID: TMW19042015 Collected: 4/1/2015 9:40:00 AM Analysis Type: RE4/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	12		0.85	LOD	3.0	LOQ	ug/L	J	Ccv

Sample ID: TMW19042015 Collected: 4/1/2015 9:40:00 AM Analysis Type: RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	1.2	J	0.90	LOD	3.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:29 PM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 16 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS	
<b>Method:</b>	6020A	<b>Matrix:</b> AQ

Sample ID: TMW19042015      Collected: 4/1/2015 9:40:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	2.7	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW19042015      Collected: 4/1/2015 9:40:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.12	J	0.24	LOD	1.0	LOQ	ug/L	J	RI
CHROMIUM	0.86	J	1.5	LOD	10	LOQ	ug/L	J	RI
COBALT	0.34	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	0.68	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
ZINC	7.1	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW22042015      Collected: 4/1/2015 10:55:00 AM      Analysis Type: RE2/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	17	Q	0.85	LOD	3.0	LOQ	ug/L	J	Ccv

Sample ID: TMW22042015      Collected: 4/1/2015 10:55:00 AM      Analysis Type: RE2/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.90	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
LEAD	1.2	J	0.50	LOD	3.0	LOQ	ug/L	J	RI

Sample ID: TMW22042015      Collected: 4/1/2015 10:55:00 AM      Analysis Type: RE3/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	28	Q	0.85	LOD	3.0	LOQ	ug/L	J	Ccv

Sample ID: TMW22042015      Collected: 4/1/2015 10:55:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.98	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	1.4	J	1.5	LOD	10	LOQ	ug/L	J	RI
COBALT	0.13	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	1.5	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	0.61	J	0.90	LOD	3.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:29 PM

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Page 17 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: TMW22042015      Collected: 4/1/2015 10:55:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	3.1	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
VANADIUM	5.4	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	6.5	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW22042015      Collected: 4/1/2015 10:55:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	1.9	J	1.5	LOD	10	LOQ	ug/L	J	RI
COBALT	0.25	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	0.91	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	1.1	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SELENIUM	2.8	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
ZINC	11	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW23042015      Collected: 4/1/2015 12:00:00 PM      Analysis Type: RE2/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	18		0.85	LOD	3.0	LOQ	ug/L	J	Ccv

Sample ID: TMW23042015      Collected: 4/1/2015 12:00:00 PM      Analysis Type: RE2/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	1.4	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
BARIUM	42	Q	0.85	LOD	3.0	LOQ	ug/L	J	Ccv
LEAD	0.80	J	0.50	LOD	3.0	LOQ	ug/L	J	RI

Sample ID: TMW23042015      Collected: 4/1/2015 12:00:00 PM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	1.0	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	0.82	J	1.5	LOD	10	LOQ	ug/L	J	RI
COBALT	0.058	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	1.7	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	0.78	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	2.7	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:29 PM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 18 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: TMW23042015      Collected: 4/1/2015 12:00:00 PM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	2.9	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW23042015      Collected: 4/1/2015 12:00:00 PM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	2.8	J	1.5	LOD	10	LOQ	ug/L	J	RI
COBALT	0.69	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	1.5	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	1.8	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
ZINC	7.2	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW30042015      Collected: 4/1/2015 9:38:00 AM      Analysis Type: RE2/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	8.6		0.85	LOD	3.0	LOQ	ug/L	J	Ccv

Sample ID: TMW30042015      Collected: 4/1/2015 9:38:00 AM      Analysis Type: RE2/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	1.0	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
BARIUM	16		0.85	LOD	3.0	LOQ	ug/L	J	Ccv
LEAD	0.56	J	0.50	LOD	3.0	LOQ	ug/L	J	RI

Sample ID: TMW30042015      Collected: 4/1/2015 9:38:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.92	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COPPER	1.4	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
LEAD	0.19	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
MANGANESE	0.72	J	0.90	LOD	3.5	LOQ	ug/L	J	RI
SILVER	0.14	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.055	J	0.20	LOD	1.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:29 PM

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Page 19 of 34





## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS	
<b>Method:</b>	6020A	<b>Matrix:</b> AQ

Sample ID: TMW30042015      Collected: 4/1/2015 9:38:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.088	J	0.24	LOD	1.0	LOQ	ug/L	J	RI
CHROMIUM	0.90	J	1.5	LOD	10	LOQ	ug/L	J	RI
COBALT	0.24	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	0.88	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	0.40	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
THALLIUM	0.060	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
ZINC	9.3	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW36042015      Collected: 4/1/2015 11:25:00 AM      Analysis Type: RE2/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	8.4		0.85	LOD	3.0	LOQ	ug/L	J	Ccv

Sample ID: TMW36042015      Collected: 4/1/2015 11:25:00 AM      Analysis Type: RE2/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.45	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
LEAD	1.8	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
SILVER	0.45	J	0.10	LOD	5.0	LOQ	ug/L	J	RI

Sample ID: TMW36042015      Collected: 4/1/2015 11:25:00 AM      Analysis Type: RE4/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	12		0.85	LOD	3.0	LOQ	ug/L	J	Ccv

Sample ID: TMW36042015      Collected: 4/1/2015 11:25:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	0.066	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	1.1	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	2.4	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	6.5	J	6.0	LOD	20	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:29 PM

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Page 20 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

4/1/2015 11:25:00									
Sample ID:TMW36042015		Collected:AM			Analysis Type:RES/TOT			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.096	J	0.24	LOD	1.0	LOQ	ug/L	J	RI
CHROMIUM	0.83	J	1.5	LOD	10	LOQ	ug/L	J	RI
COBALT	0.28	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	1.5	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	3.4	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

4/1/2015 10:35:00									
Sample ID:TMW37042015		Collected:AM			Analysis Type:RE2/DIS			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	12		0.85	LOD	3.0	LOQ	ug/L	J	Ccv

4/1/2015 10:35:00									
Sample ID:TMW37042015		Collected:AM			Analysis Type:RE2/TOT			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.68	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
LEAD	1.3	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
SILVER	0.058	J	0.10	LOD	5.0	LOQ	ug/L	J	RI

4/1/2015 10:35:00									
Sample ID:TMW37042015		Collected:AM			Analysis Type:RE4/TOT			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	15		0.85	LOD	3.0	LOQ	ug/L	J	Ccv

4/1/2015 10:35:00									
Sample ID:TMW37042015		Collected:AM			Analysis Type:RES/DIS			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.73	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.057	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	1.9	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
ZINC	3.6	J	6.0	LOD	20	LOQ	ug/L	J	RI

4/1/2015 10:35:00									
Sample ID:TMW37042015		Collected:AM			Analysis Type:RES/TOT			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	1.3	J	1.5	LOD	10	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:29 PM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 21 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: TMW37042015      Collected: 4/1/2015 10:35:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	0.20	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	1.1	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	2.8	J	0.90	LOD	3.0	LOQ	ug/L	J	RI

Sample ID: TMW39S042015      Collected: 4/1/2015 9:10:00 AM      Analysis Type: RE2/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	15		0.85	LOD	3.0	LOQ	ug/L	J	Ccv

Sample ID: TMW39S042015      Collected: 4/1/2015 9:10:00 AM      Analysis Type: RE2/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	1.2	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
LEAD	1.9	J	0.50	LOD	3.0	LOQ	ug/L	J	RI

Sample ID: TMW39S042015      Collected: 4/1/2015 9:10:00 AM      Analysis Type: RE4/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	99		0.85	LOD	3.0	LOQ	ug/L	J	Ccv

Sample ID: TMW39S042015      Collected: 4/1/2015 9:10:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.53	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	2.3	J	1.5	LOD	10	LOQ	ug/L	J	RI
COPPER	1.0	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
MANGANESE	2.7	J	0.90	LOD	3.5	LOQ	ug/L	J	RI
THALLIUM	0.062	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
VANADIUM	3.5	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID: TMW39S042015      Collected: 4/1/2015 9:10:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.34	J	0.24	LOD	1.0	LOQ	ug/L	J	RI
CHROMIUM	6.8	J	1.5	LOD	10	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:29 PM

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Page 22 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID:TMW39S042015 Collected:4/1/2015 9:10:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.11	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
ZINC	11	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID:TMW40S042015 Collected:4/1/2015 8:07:00 AM Analysis Type:RE2/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.72	J	0.40	LOD	1.0	LOQ	ug/L	J	RI
SILVER	0.22	J	0.10	LOD	5.0	LOQ	ug/L	J	RI

Sample ID:TMW40S042015 Collected:4/1/2015 8:07:00 AM Analysis Type:RE3/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	1800	Q	0.85	LOD	3.0	LOQ	ug/L	J	Ccv

Sample ID:TMW40S042015 Collected:4/1/2015 8:07:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.39	J	0.20	LOD	1.0	LOQ	ug/L	J	RI

Sample ID:TMW41042015 Collected:4/1/2015 12:25:00 PM Analysis Type:RE2/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.3	J	0.60	LOD	6.0	LOQ	ug/L	J	RI
BARIUM	11		0.85	LOD	3.0	LOQ	ug/L	J	Ccv

Sample ID:TMW41042015 Collected:4/1/2015 12:25:00 PM Analysis Type:RE2/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.61	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
BARIUM	13		0.85	LOD	3.0	LOQ	ug/L	J	Ccv
LEAD	0.23	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
SILVER	0.10	U J	0.10	LOD	5.0	LOQ	ug/L	UJ	ProfJudg

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:29 PM

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Page 23 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: TMW41042015      4/1/2015 12:25:00      Collected: PM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.54	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	2.2	J	1.5	LOD	10	LOQ	ug/L	J	RI
COPPER	0.83	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
LEAD	0.18	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
MANGANESE	0.48	J	0.90	LOD	3.5	LOQ	ug/L	J	RI
SELENIUM	1.6	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
SILVER	0.064	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.15	J	0.20	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: TMW41042015      4/1/2015 12:25:00      Collected: PM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.5	J	0.60	LOD	6.0	LOQ	ug/L	J	RI
CHROMIUM	2.0	J	1.5	LOD	10	LOQ	ug/L	J	RI
COBALT	0.10	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
SELENIUM	1.4	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.18	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
ZINC	5.5	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW44042015      4/1/2015 10:15:00      Collected: AM      Analysis Type: RE2/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIIUM	15		0.85	LOD	3.0	LOQ	ug/L	J	Ccv

Sample ID: TMW44042015      4/1/2015 10:15:00      Collected: AM      Analysis Type: RE2/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	3.5	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
BARIIUM	170	Q	0.85	LOD	3.0	LOQ	ug/L	J	Ccv

Sample ID: TMW44042015      4/1/2015 10:15:00      Collected: AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.88	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.067	J	0.10	LOD	1.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:29 PM

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Page 24 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: TMW44042015      Collected: 4/1/2015 10:15:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	1.0	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
SELENIUM	2.2	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
VANADIUM	4.2	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	3.8	J	6.0	LOD	20	LOQ	ug/L	U	Eb

Sample ID: TMW44042015      Collected: 4/1/2015 10:15:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.69	J	0.24	LOD	1.0	LOQ	ug/L	J	RI
CHROMIUM	9.7	J	1.5	LOD	10	LOQ	ug/L	J	RI
SELENIUM	2.3	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.17	J	0.20	LOD	1.0	LOQ	ug/L	J	RI

<b>Method Category:</b>	METALS								
<b>Method:</b>	7470A	<b>Matrix:</b>	AQ						

Sample ID: TMW40S042015      Collected: 4/1/2015 8:07:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.027	J	0.080	LOD	0.20	LOQ	ug/L	J	RI

<b>Method Category:</b>	SVOA								
<b>Method:</b>	6860	<b>Matrix:</b>	AQ						

Sample ID: TMW16042015      Collected: 4/1/2015 12:25:00 PM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	0.020	J	0.020	LOD	0.050	LOQ	ug/L	J	RI

Sample ID: TMW22042015      Collected: 4/1/2015 10:55:00 AM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	0.021	J	0.020	LOD	0.050	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:29 PM

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Page 25 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA								
<b>Method:</b>	6860	<b>Matrix:</b>	AQ						

Sample ID: TMW44042015      Collected: 4/1/2015 10:15:00 AM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	0.037	J	0.020	LOD	0.050	LOQ	ug/L	U	Eb

<b>Method Category:</b>	SVOA								
<b>Method:</b>	8081A	<b>Matrix:</b>	AQ						

Sample ID: TMW23042015      Collected: 4/1/2015 12:00:00 PM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.010	J	0.020	LOD	0.051	LOQ	ug/L	J	RI, ProfJudg

Sample ID: TMW39S042015      Collected: 4/1/2015 9:10:00 AM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.021	U Q	0.021	LOD	0.053	LOQ	ug/L	UJ	Surr
4,4'-DDE	0.021	U Q	0.021	LOD	0.053	LOQ	ug/L	UJ	Surr
4,4'-DDT	0.021	U Q	0.021	LOD	0.053	LOQ	ug/L	UJ	Surr
ALDRIN	0.021	U Q	0.021	LOD	0.053	LOQ	ug/L	UJ	Surr
ALPHA-BHC	0.021	U Q	0.021	LOD	0.053	LOQ	ug/L	UJ	Surr
ALPHA-CHLORDANE	0.021	U Q	0.021	LOD	0.053	LOQ	ug/L	UJ	Surr
BETA-BHC	0.021	U Q	0.021	LOD	0.053	LOQ	ug/L	UJ	Surr
DELTA-BHC	0.021	U Q	0.021	LOD	0.053	LOQ	ug/L	UJ	Surr
DIELDRIN	0.021	U Q	0.021	LOD	0.053	LOQ	ug/L	UJ	Surr
ENDOSULFAN I	0.021	U Q	0.021	LOD	0.053	LOQ	ug/L	UJ	Surr
ENDOSULFAN II	0.021	U Q	0.021	LOD	0.053	LOQ	ug/L	UJ	Surr
ENDOSULFAN SULFATE	0.021	U Q	0.021	LOD	0.053	LOQ	ug/L	UJ	Surr
ENDRIN	0.021	U Q	0.021	LOD	0.053	LOQ	ug/L	UJ	Surr
ENDRIN ALDEHYDE	0.021	U Q	0.021	LOD	0.053	LOQ	ug/L	UJ	Surr
ENDRIN KETONE	0.021	U Q	0.021	LOD	0.053	LOQ	ug/L	UJ	Surr
GAMMA-BHC	0.021	U Q	0.021	LOD	0.053	LOQ	ug/L	UJ	Surr
GAMMA-CHLORDANE	0.021	U Q	0.021	LOD	0.053	LOQ	ug/L	UJ	Surr
HEPTACHLOR	0.021	U Q	0.021	LOD	0.053	LOQ	ug/L	UJ	Surr
HEPTACHLOR EPOXIDE	0.021	U Q	0.021	LOD	0.053	LOQ	ug/L	UJ	Surr
METHOXYCHLOR	0.021	U Q	0.021	LOD	0.11	LOQ	ug/L	UJ	Surr
TOXAPHENE	0.84	U Q	0.84	LOD	5.3	LOQ	ug/L	UJ	Surr

\* denotes a non-reportable result

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5/18/2015 3:48:30 PM

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Page 26 of 34



## Data Qualifier Summary

**Lab Reporting Batch ID: 280-67267-1**
**Laboratory: TA DEN**
**EDD Filename: 280-67267-1**
**eQAPP Name: FtWingate\_Primary\_120405**

<b>Method Category:</b>	SVOA	<b>Method:</b>	8081A	<b>Matrix:</b>	AQ
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**Sample ID:** TMW44042015     
 **Collected:** 4/1/2015 10:15:00 AM     
 **Analysis Type:** RES     
 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.020	U Q	0.020	LOD	0.051	LOQ	ug/L	UJ	Surr
4,4'-DDE	0.020	U Q	0.020	LOD	0.051	LOQ	ug/L	UJ	Surr
4,4'-DDT	0.020	U Q	0.020	LOD	0.051	LOQ	ug/L	UJ	Surr
ALDRIN	0.020	U Q	0.020	LOD	0.051	LOQ	ug/L	UJ	Surr
ALPHA-BHC	0.020	U Q	0.020	LOD	0.051	LOQ	ug/L	UJ	Surr
ALPHA-CHLORDANE	0.020	U Q	0.020	LOD	0.051	LOQ	ug/L	UJ	Surr
BETA-BHC	0.020	U Q	0.020	LOD	0.051	LOQ	ug/L	UJ	Surr
DELTA-BHC	0.020	U Q	0.020	LOD	0.051	LOQ	ug/L	UJ	Surr
DIELDRIN	0.020	U Q	0.020	LOD	0.051	LOQ	ug/L	UJ	Surr
ENDOSULFAN I	0.020	U Q	0.020	LOD	0.051	LOQ	ug/L	UJ	Surr
ENDOSULFAN II	0.020	U Q	0.020	LOD	0.051	LOQ	ug/L	UJ	Surr
ENDOSULFAN SULFATE	0.020	U Q	0.020	LOD	0.051	LOQ	ug/L	UJ	Surr
ENDRIN	0.020	U Q	0.020	LOD	0.051	LOQ	ug/L	UJ	Surr
ENDRIN ALDEHYDE	0.020	U Q	0.020	LOD	0.051	LOQ	ug/L	UJ	Surr
ENDRIN KETONE	0.020	U Q	0.020	LOD	0.051	LOQ	ug/L	UJ	Surr
GAMMA-BHC	0.020	U Q	0.020	LOD	0.051	LOQ	ug/L	UJ	Surr
GAMMA-CHLORDANE	0.020	U Q	0.020	LOD	0.051	LOQ	ug/L	UJ	Surr
HEPTACHLOR	0.020	U Q	0.020	LOD	0.051	LOQ	ug/L	UJ	Surr
HEPTACHLOR EPOXIDE	0.020	U Q	0.020	LOD	0.051	LOQ	ug/L	UJ	Surr
METHOXYCHLOR	0.020	U Q	0.020	LOD	0.10	LOQ	ug/L	UJ	Surr
TOXAPHENE	0.82	U Q	0.82	LOD	5.1	LOQ	ug/L	UJ	Surr

<b>Method Category:</b>	SVOA	<b>Method:</b>	8270D	<b>Matrix:</b>	AQ
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**Sample ID:** BGMW03042015     
 **Collected:** 4/1/2015 12:47:00 PM     
 **Analysis Type:** RES-BASE/NEUTRAL     
 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	100	U Q	100	LOD	200	LOQ	ug/L	R	Lcs, Lcs
HEXACHLOROCYCLOPENTADIENE	20	U	20	LOD	51	LOQ	ug/L	UJ	Lcs

\* denotes a non-reportable result

**Project Name and Number: 102012 - FWDA 102012 GW**

5/18/2015 3:48:30 PM

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Page 27 of 34





## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA		
<b>Method:</b>	8270D	<b>Matrix:</b>	AQ

**Sample ID:**FW31042015 **Collected:**4/1/2015 8:20:00 AM **Analysis Type:**RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	100	U Q	100	LOD	210	LOQ	ug/L	R	Lcs, Lcs
HEXACHLOROCYCLOPENTADIENE	21	U	21	LOD	52	LOQ	ug/L	UJ	Lcs

**Sample ID:**FW35042015 **Collected:**4/1/2015 2:43:00 PM **Analysis Type:**RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	100	U Q	100	LOD	210	LOQ	ug/L	R	Lcs, Lcs
HEXACHLOROCYCLOPENTADIENE	21	U	21	LOD	52	LOQ	ug/L	UJ	Lcs

4/1/2015 11:30:00

**Sample ID:**TMW07042015 **Collected:**AM **Analysis Type:**RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	99	U Q	99	LOD	200	LOQ	ug/L	R	Lcs, Lcs
BIS(2-ETHYLHEXYL) PHTHALATE	2.1	J	0.99	LOD	9.9	LOQ	ug/L	J	RI
HEXACHLOROCYCLOPENTADIENE	20	U	20	LOD	50	LOQ	ug/L	UJ	Lcs

4/1/2015 12:25:00

**Sample ID:**TMW16042015 **Collected:**PM **Analysis Type:**RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	100	U Q	100	LOD	200	LOQ	ug/L	R	Lcs, Lcs
BIS(2-ETHYLHEXYL) PHTHALATE	0.71	J	1.0	LOD	10	LOQ	ug/L	J	RI
HEXACHLOROCYCLOPENTADIENE	20	U	20	LOD	51	LOQ	ug/L	UJ	Lcs

**Sample ID:**TMW18042015 **Collected:**4/1/2015 8:35:00 AM **Analysis Type:**RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETOPHENONE	1.2	J	5.0	LOD	10	LOQ	ug/L	J	RI
BENZIDINE	100	U Q	100	LOD	200	LOQ	ug/L	R	Lcs, Lcs
BIS(2-ETHYLHEXYL) PHTHALATE	8.1	J Q	1.0	LOD	10	LOQ	ug/L	J	RI
HEXACHLOROCYCLOPENTADIENE	20	U Q	20	LOD	50	LOQ	ug/L	UJ	Lcs

**Sample ID:**TMW19042015 **Collected:**4/1/2015 9:40:00 AM **Analysis Type:**RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETOPHENONE	1.4	J	4.9	LOD	9.9	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:30 PM

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Page 28 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA	
<b>Method:</b>	8270D	<b>Matrix:</b> AQ

**Sample ID:** TMW19042015 **Collected:** 4/1/2015 9:40:00 AM **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	99	U Q	99	LOD	200	LOQ	ug/L	R	Lcs, Lcs
BIS(2-ETHYLHEXYL) PHTHALATE	1.0	J	0.99	LOD	9.9	LOQ	ug/L	J	RI
HEXACHLOROCYCLOPENTADIENE	20	U	20	LOD	49	LOQ	ug/L	UJ	Lcs

**Sample ID:** TMW22042015 **Collected:** 4/1/2015 10:55:00 AM **Analysis Type:** RES-ACID **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	11	J	19	LOD	78	LOQ	ug/L	J	RI

**Sample ID:** TMW22042015 **Collected:** 4/1/2015 10:55:00 AM **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	97	U Q	97	LOD	190	LOQ	ug/L	R	Lcs, Lcs
BIS(2-ETHYLHEXYL) PHTHALATE	1.9	J	0.97	LOD	9.7	LOQ	ug/L	J	RI
HEXACHLOROCYCLOPENTADIENE	19	U	19	LOD	49	LOQ	ug/L	UJ	Lcs

**Sample ID:** TMW30042015 **Collected:** 4/1/2015 9:38:00 AM **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	100	U Q	100	LOD	210	LOQ	ug/L	R	Lcs, Lcs
HEXACHLOROCYCLOPENTADIENE	21	U	21	LOD	51	LOQ	ug/L	UJ	Lcs

**Sample ID:** TMW36042015 **Collected:** 4/1/2015 11:25:00 AM **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	95	U Q	95	LOD	190	LOQ	ug/L	R	Lcs, Lcs
BIS(2-ETHYLHEXYL) PHTHALATE	0.87	J	0.95	LOD	9.5	LOQ	ug/L	J	RI
HEXACHLOROCYCLOPENTADIENE	19	U	19	LOD	48	LOQ	ug/L	UJ	Lcs

**Sample ID:** TMW37042015 **Collected:** 4/1/2015 10:35:00 AM **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETOPHENONE	0.40	J	4.8	LOD	9.6	LOQ	ug/L	J	RI
BENZIDINE	96	U Q	96	LOD	190	LOQ	ug/L	R	Lcs, Lcs
BIS(2-ETHYLHEXYL) PHTHALATE	2.4	J	0.96	LOD	9.6	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:30 PM

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Page 29 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA									
<b>Method:</b>	8270D			<b>Matrix:</b> AQ						

Sample ID: TMW37042015      Collected: 4/1/2015 10:35:00 AM      Analysis Type: RES-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXACHLOROCYCLOPENTADIENE	19	U	19	LOD	48	LOQ	ug/L	UJ	Lcs

Sample ID: TMW39S042015      Collected: 4/1/2015 9:10:00 AM      Analysis Type: RES-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	100	U Q	100	LOD	210	LOQ	ug/L	R	Lcs, Lcs
HEXACHLOROCYCLOPENTADIENE	21	U	21	LOD	51	LOQ	ug/L	UJ	Lcs

Sample ID: TMW40S042015      Collected: 4/1/2015 8:07:00 AM      Analysis Type: RES-ACID      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	15	J	21	LOD	83	LOQ	ug/L	J	RI

Sample ID: TMW40S042015      Collected: 4/1/2015 8:07:00 AM      Analysis Type: RES-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	100	U Q	100	LOD	210	LOQ	ug/L	R	Lcs, Lcs
HEXACHLOROCYCLOPENTADIENE	21	U	21	LOD	52	LOQ	ug/L	UJ	Lcs

Sample ID: TMW41042015      Collected: 4/1/2015 12:25:00 PM      Analysis Type: RES-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	99	U Q	99	LOD	200	LOQ	ug/L	R	Lcs, Lcs
BIS(2-ETHYLHEXYL) PHTHALATE	1.0	J	0.99	LOD	9.9	LOQ	ug/L	J	RI
HEXACHLOROCYCLOPENTADIENE	20	U	20	LOD	50	LOQ	ug/L	UJ	Lcs

Sample ID: TMW44042015      Collected: 4/1/2015 10:15:00 AM      Analysis Type: RES-ACID      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	10	J	20	LOD	80	LOQ	ug/L	J	RI

Sample ID: TMW44042015      Collected: 4/1/2015 10:15:00 AM      Analysis Type: RES-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	100	U Q	100	LOD	200	LOQ	ug/L	R	Lcs, Lcs
HEXACHLOROCYCLOPENTADIENE	20	U	20	LOD	50	LOQ	ug/L	UJ	Lcs

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:48:30 PM

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Page 30 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA	<b>Matrix:</b>	AQ
<b>Method:</b>	8270D		

<b>Method Category:</b>	SVOA	<b>Matrix:</b>	AQ
<b>Method:</b>	8330B		

Sample ID: MW02042015      Collected: 4/1/2015 9:40:00 AM      Analysis Type: RE2      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-NITROTOLUENE	0.33	M J	0.17	LOD	0.44	LOQ	ug/L	J	RI, ProfJudg

Sample ID: TMW23042015      Collected: 4/1/2015 12:00:00 PM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-AMINO-4,6-DINITROTOLUENE	0.55	J	0.17	LOD	0.23	LOQ	ug/L	J	ProfJudg

Sample ID: TMW30042015      Collected: 4/1/2015 9:38:00 AM      Analysis Type: RE2      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITROBENZENE	0.15	J	0.16	LOD	0.43	LOQ	ug/L	J	RI, ProfJudg

Sample ID: TMW37042015      Collected: 4/1/2015 10:35:00 AM      Analysis Type: RE2      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3-NITROTOLUENE	0.15	U Q	0.15	LOD	0.40	LOQ	ug/L	UJ	Surr

Sample ID: TMW37042015      Collected: 4/1/2015 10:35:00 AM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3,5-TRINITROBENZENE	0.40	U Q	0.40	LOD	0.99	LOQ	ug/L	UJ	Surr
1,3-DINITROBENZENE	0.15	U Q	0.15	LOD	0.40	LOQ	ug/L	UJ	Surr
2,4,6-TRINITROTOLUENE	0.15	U Q	0.15	LOD	0.40	LOQ	ug/L	UJ	Surr
2-AMINO-4,6-DINITROTOLUENE	0.15	U Q	0.15	LOD	0.20	LOQ	ug/L	UJ	Surr
2-NITROTOLUENE	0.15	U Q	0.15	LOD	0.40	LOQ	ug/L	UJ	Surr
4-AMINO-2,6-DINITROTOLUENE	0.15	U Q	0.15	LOD	0.20	LOQ	ug/L	UJ	Surr
4-NITROTOLUENE	0.40	U Q	0.40	LOD	0.99	LOQ	ug/L	UJ	Surr
Dinitrotoluene, 2,4-	0.15	U Q	0.15	LOD	0.40	LOQ	ug/L	UJ	Surr
Dinitrotoluene, 2,6-	0.15	U Q	0.15	LOD	0.20	LOQ	ug/L	UJ	Surr
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	0.15	U Q	0.15	LOD	0.20	LOQ	ug/L	UJ	Surr
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	0.15	U Q	0.15	LOD	0.24	LOQ	ug/L	UJ	Surr
NITROBENZENE	0.15	U Q	0.15	LOD	0.40	LOQ	ug/L	UJ	Surr

\* denotes a non-reportable result

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5/18/2015 3:48:30 PM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 31 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA								
<b>Method:</b>	8330B	<b>Matrix:</b>	AQ						

Sample ID: TMW37042015      Collected: 4/1/2015 10:35:00 AM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.15	U Q	0.15	LOD	0.40	LOQ	ug/L	UJ	Surr

Sample ID: TMW39S042015      Collected: 4/1/2015 9:10:00 AM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-NITROTOLUENE	0.19	M J	0.17	LOD	0.46	LOQ	ug/L	J	RI, ProfJudg
4-NITROTOLUENE	0.29	J M	0.46	LOD	1.2	LOQ	ug/L	J	RI

Sample ID: TMW44042015      Collected: 4/1/2015 10:15:00 AM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-AMINO-4,6-DINITROTOLUENE	0.86	J	0.18	LOD	0.24	LOQ	ug/L	J	ProfJudg

<b>Method Category:</b>	VOA								
<b>Method:</b>	8260B	<b>Matrix:</b>	AQ						

Sample ID: TMW16042015      Collected: 4/1/2015 12:25:00 PM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOLUENE	0.20	J	0.40	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: TMW18042015      Collected: 4/1/2015 8:35:00 AM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	4.9	J	6.4	LOD	10	LOQ	ug/L	J	RI

Sample ID: TMW19042015      Collected: 4/1/2015 9:40:00 AM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOLUENE	0.39	J	0.40	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: TMW37042015      Collected: 4/1/2015 10:35:00 AM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOLUENE	0.28	J	0.40	LOD	1.0	LOQ	ug/L	J	RI

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5/18/2015 3:48:30 PM

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Page 32 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<i>Method Category:</i>	VOA		
<i>Method:</i>	8260B	<i>Matrix:</i>	AQ

\* denotes a non-reportable result

**Project Name and Number: 102012 - FWDA 102012 GW**

5/18/2015 3:48:30 PM

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Page 33 of 34



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

### Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
Ccv	Continuing Calibration Verification Percent Recovery Upper Estimation
Eb	Equipment Blank Contamination
Lcs	Laboratory Control Precision
Lcs	Laboratory Control Spike Lower Estimation
Lcs	Laboratory Control Spike Lower Rejection
Mb	Method Blank Contamination
Ms	Matrix Spike Lower Estimation
Ms	Matrix Spike Upper Estimation
ProfJudg	Professional Judgment
RI	Reporting Limit Trace Value
StoA	Sampling to Analysis Estimation
StoA	Sampling to Analysis Rejection
Surr	Surrogate/Tracer Recovery Lower Estimation
Surr	Surrogate/Tracer Recovery Upper Estimation

\* denotes a non-reportable result

**Project Name and Number: 102012 - FWDA 102012 GW**

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Page 34 of 34



## Data Review Sample Summary Report by Analysis Method

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<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Lab Reporting Batch: 280-67267-1</b>						
<b>Method: 6010C</b>						
BGMW03042015	280-67267-9	AQ	N	3005A	4/1/2015 12:47:00 PM	S2AVE
BGMW03042015	280-67267-9	AQ	N	3010A	4/1/2015 12:47:00 PM	S2AVE
FW31042015	280-67267-2	AQ	N	3005A	4/1/2015 8:20:00 AM	S2AVE
FW31042015	280-67267-2	AQ	N	3010A	4/1/2015 8:20:00 AM	S2AVE
FW31042015MS	280-67267-2MS	AQ	MS	3005A	4/1/2015 8:20:00 AM	S2AVE
FW31042015MS	280-67267-2MS	AQ	MS	3010A	4/1/2015 8:20:00 AM	S2AVE
FW31042015MSD	280-67267-2MSD	AQ	MSD	3005A	4/1/2015 8:20:00 AM	S2AVE
FW31042015MSD	280-67267-2MSD	AQ	MSD	3010A	4/1/2015 8:20:00 AM	S2AVE
MW01042015	280-67267-10	AQ	N	3005A	4/1/2015 10:50:00 AM	S2AVE
MW01042015	280-67267-10	AQ	N	3010A	4/1/2015 10:50:00 AM	S2AVE
MW02042015	280-67267-12	AQ	N	3005A	4/1/2015 9:40:00 AM	S2AVE
MW02042015	280-67267-12	AQ	N	3010A	4/1/2015 9:40:00 AM	S2AVE
TMW07042015	280-67267-6	AQ	N	3005A	4/1/2015 11:30:00 AM	S2AVE
TMW07042015	280-67267-6	AQ	N	3010A	4/1/2015 11:30:00 AM	S2AVE
TMW16042015	280-67267-18	AQ	N	3005A	4/1/2015 12:25:00 PM	S2AVE
TMW16042015	280-67267-18	AQ	N	3010A	4/1/2015 12:25:00 PM	S2AVE
TMW18042015	280-67267-14	AQ	N	3005A	4/1/2015 8:35:00 AM	S2AVE
TMW18042015	280-67267-14	AQ	N	3010A	4/1/2015 8:35:00 AM	S2AVE
TMW19042015	280-67267-15	AQ	N	3005A	4/1/2015 9:40:00 AM	S2AVE
TMW19042015	280-67267-15	AQ	N	3010A	4/1/2015 9:40:00 AM	S2AVE
TMW22042015	280-67267-21	AQ	N	3005A	4/1/2015 10:55:00 AM	S2AVE
TMW22042015	280-67267-21	AQ	N	3010A	4/1/2015 10:55:00 AM	S2AVE





## Data Review Sample Summary Report by Analysis Method

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<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 6010C</b>						
TMW23042015	280-67267-7	AQ	N	3005A	4/1/2015 12:00:00 PM	S2AVE
TMW23042015	280-67267-7	AQ	N	3010A	4/1/2015 12:00:00 PM	S2AVE
TMW30042015	280-67267-3	AQ	N	3005A	4/1/2015 9:38:00 AM	S2AVE
TMW30042015	280-67267-3	AQ	N	3010A	4/1/2015 9:38:00 AM	S2AVE
TMW36042015	280-67267-16	AQ	N	3005A	4/1/2015 11:25:00 AM	S2AVE
TMW36042015	280-67267-16	AQ	N	3010A	4/1/2015 11:25:00 AM	S2AVE
TMW37042015	280-67267-17	AQ	N	3005A	4/1/2015 10:35:00 AM	S2AVE
TMW37042015	280-67267-17	AQ	N	3010A	4/1/2015 10:35:00 AM	S2AVE
TMW39S042015	280-67267-4	AQ	N	3005A	4/1/2015 9:10:00 AM	S2AVE
TMW39S042015	280-67267-4	AQ	N	3010A	4/1/2015 9:10:00 AM	S2AVE
TMW40S042015	280-67267-22	AQ	N	3010A	4/1/2015 8:07:00 AM	S2AVE
TMW41042015	280-67267-1	AQ	N	3005A	4/1/2015 12:25:00 PM	S2AVE
TMW41042015	280-67267-1	AQ	N	3010A	4/1/2015 12:25:00 PM	S2AVE
TMW44042015	280-67267-5	AQ	N	3005A	4/1/2015 10:15:00 AM	S2AVE
TMW44042015	280-67267-5	AQ	N	3010A	4/1/2015 10:15:00 AM	S2AVE
<b>Method: 6020A</b>						
BGMW03042015	280-67267-9	AQ	N	3005A	4/1/2015 12:47:00 PM	S2AVE
BGMW03042015	280-67267-9	AQ	N	3020A	4/1/2015 12:47:00 PM	S2AVE
FW31042015	280-67267-2	AQ	N	3005A	4/1/2015 8:20:00 AM	S2AVE
FW31042015	280-67267-2	AQ	N	3020A	4/1/2015 8:20:00 AM	S2AVE
MW01042015	280-67267-10	AQ	N	3005A	4/1/2015 10:50:00 AM	S2AVE
MW01042015	280-67267-10	AQ	N	3020A	4/1/2015 10:50:00 AM	S2AVE
MW02042015	280-67267-12	AQ	N	3005A	4/1/2015 9:40:00 AM	S2AVE
MW02042015	280-67267-12	AQ	N	3020A	4/1/2015 9:40:00 AM	S2AVE

5/18/2015 3:31:13 PM

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Page 2 of 10



## Data Review Sample Summary Report by Analysis Method

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<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 6020A</b>						
TMW07042015	280-67267-6	AQ	N	3005A	4/1/2015 11:30:00 AM	S2AVE
TMW07042015	280-67267-6	AQ	N	3020A	4/1/2015 11:30:00 AM	S2AVE
TMW16042015	280-67267-18	AQ	N	3005A	4/1/2015 12:25:00 PM	S2AVE
TMW16042015	280-67267-18	AQ	N	3020A	4/1/2015 12:25:00 PM	S2AVE
TMW18042015	280-67267-14	AQ	N	3005A	4/1/2015 8:35:00 AM	S2AVE
TMW18042015	280-67267-14	AQ	N	3020A	4/1/2015 8:35:00 AM	S2AVE
TMW19042015	280-67267-15	AQ	N	3005A	4/1/2015 9:40:00 AM	S2AVE
TMW19042015	280-67267-15	AQ	N	3020A	4/1/2015 9:40:00 AM	S2AVE
TMW22042015	280-67267-21	AQ	N	3005A	4/1/2015 10:55:00 AM	S2AVE
TMW22042015	280-67267-21	AQ	N	3020A	4/1/2015 10:55:00 AM	S2AVE
TMW23042015	280-67267-7	AQ	N	3005A	4/1/2015 12:00:00 PM	S2AVE
TMW23042015	280-67267-7	AQ	N	3020A	4/1/2015 12:00:00 PM	S2AVE
TMW30042015	280-67267-3	AQ	N	3005A	4/1/2015 9:38:00 AM	S2AVE
TMW30042015	280-67267-3	AQ	N	3020A	4/1/2015 9:38:00 AM	S2AVE
TMW36042015	280-67267-16	AQ	N	3005A	4/1/2015 11:25:00 AM	S2AVE
TMW36042015	280-67267-16	AQ	N	3020A	4/1/2015 11:25:00 AM	S2AVE
TMW37042015	280-67267-17	AQ	N	3005A	4/1/2015 10:35:00 AM	S2AVE
TMW37042015	280-67267-17	AQ	N	3020A	4/1/2015 10:35:00 AM	S2AVE
TMW39S042015	280-67267-4	AQ	N	3005A	4/1/2015 9:10:00 AM	S2AVE
TMW39S042015	280-67267-4	AQ	N	3020A	4/1/2015 9:10:00 AM	S2AVE
TMW40S042015	280-67267-22	AQ	N	3020A	4/1/2015 8:07:00 AM	S2AVE
TMW41042015	280-67267-1	AQ	N	3005A	4/1/2015 12:25:00 PM	S2AVE
TMW41042015	280-67267-1	AQ	N	3020A	4/1/2015 12:25:00 PM	S2AVE
TMW41042015MS	280-67267-1MS	AQ	MS	3005A	4/1/2015 12:25:00 PM	S2AVE

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Page 3 of 10



## Data Review Sample Summary Report by Analysis Method

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<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 6020A</b>						
TMW41042015MS	280-67267-1MS	AQ	MS	3020A	4/1/2015 12:25:00 PM	S2AVE
TMW41042015MSD	280-67267-1MSD	AQ	MSD	3005A	4/1/2015 12:25:00 PM	S2AVE
TMW41042015MSD	280-67267-1MSD	AQ	MSD	3020A	4/1/2015 12:25:00 PM	S2AVE
TMW44042015	280-67267-5	AQ	N	3005A	4/1/2015 10:15:00 AM	S2AVE
TMW44042015	280-67267-5	AQ	N	3020A	4/1/2015 10:15:00 AM	S2AVE
<b>Method: 6860</b>						
BGMW03042015	280-67267-9	AQ	N	METHOD	4/1/2015 12:47:00 PM	S2AVE
MW01042015	280-67267-10	AQ	N	METHOD	4/1/2015 10:50:00 AM	S2AVE
TMW16042015	280-67267-18	AQ	N	METHOD	4/1/2015 12:25:00 PM	S2AVE
TMW18042015	280-67267-14	AQ	N	METHOD	4/1/2015 8:35:00 AM	S2AVE
TMW19042015	280-67267-15	AQ	N	METHOD	4/1/2015 9:40:00 AM	S2AVE
TMW22042015	280-67267-21	AQ	N	METHOD	4/1/2015 10:55:00 AM	S2AVE
TMW23042015	280-67267-7	AQ	N	METHOD	4/1/2015 12:00:00 PM	S2AVE
TMW30042015	280-67267-3	AQ	N	METHOD	4/1/2015 9:38:00 AM	S2AVE
TMW36042015	280-67267-16	AQ	N	METHOD	4/1/2015 11:25:00 AM	S2AVE
TMW37042015	280-67267-17	AQ	N	METHOD	4/1/2015 10:35:00 AM	S2AVE
TMW39S042015	280-67267-4	AQ	N	METHOD	4/1/2015 9:10:00 AM	S2AVE
TMW41042015	280-67267-1	AQ	N	METHOD	4/1/2015 12:25:00 PM	S2AVE
TMW44042015	280-67267-5	AQ	N	METHOD	4/1/2015 10:15:00 AM	S2AVE
<b>Method: 7470A</b>						
BGMW03042015	280-67267-9	AQ	N	7470A	4/1/2015 12:47:00 PM	S2AVE
FW31042015	280-67267-2	AQ	N	7470A	4/1/2015 8:20:00 AM	S2AVE
MW01042015	280-67267-10	AQ	N	7470A	4/1/2015 10:50:00 AM	S2AVE
MW02042015	280-67267-12	AQ	N	7470A	4/1/2015 9:40:00 AM	S2AVE

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Page 4 of 10



## Data Review Sample Summary Report by Analysis Method

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<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 7470A</b>						
TMW07042015	280-67267-6	AQ	N	7470A	4/1/2015 11:30:00 AM	S2AVE
TMW16042015	280-67267-18	AQ	N	7470A	4/1/2015 12:25:00 PM	S2AVE
TMW18042015	280-67267-14	AQ	N	7470A	4/1/2015 8:35:00 AM	S2AVE
TMW19042015	280-67267-15	AQ	N	7470A	4/1/2015 9:40:00 AM	S2AVE
TMW22042015	280-67267-21	AQ	N	7470A	4/1/2015 10:55:00 AM	S2AVE
TMW22042015MS	280-67267-21MS	AQ	MS	7470A	4/1/2015 10:55:00 AM	S2AVE
TMW22042015MSD	280-67267-21MSD	AQ	MSD	7470A	4/1/2015 10:55:00 AM	S2AVE
TMW23042015	280-67267-7	AQ	N	7470A	4/1/2015 12:00:00 PM	S2AVE
TMW30042015	280-67267-3	AQ	N	7470A	4/1/2015 9:38:00 AM	S2AVE
TMW36042015	280-67267-16	AQ	N	7470A	4/1/2015 11:25:00 AM	S2AVE
TMW37042015	280-67267-17	AQ	N	7470A	4/1/2015 10:35:00 AM	S2AVE
TMW39S042015	280-67267-4	AQ	N	7470A	4/1/2015 9:10:00 AM	S2AVE
TMW40S042015	280-67267-22	AQ	N	7470A	4/1/2015 8:07:00 AM	S2AVE
TMW41042015	280-67267-1	AQ	N	7470A	4/1/2015 12:25:00 PM	S2AVE
TMW44042015	280-67267-5	AQ	N	7470A	4/1/2015 10:15:00 AM	S2AVE
<b>Method: 8015C DRO</b>						
MW01042015	280-67267-10	AQ	N	3510C	4/1/2015 10:50:00 AM	S2AVE
MW02042015	280-67267-12	AQ	N	3510C	4/1/2015 9:40:00 AM	S2AVE
<b>Method: 8015C GRO</b>						
MW01042015	280-67267-10	AQ	N	METHOD	4/1/2015 10:50:00 AM	S2AVE
MW02042015	280-67267-12	AQ	N	METHOD	4/1/2015 9:40:00 AM	S2AVE
MW22S042015	280-67267-11	AQ	N	METHOD	4/1/2015 9:15:00 AM	S2AVE
TB-40-042015	280-67267-19	AQ	TB	METHOD	4/1/2015 8:00:00 AM	S2AVE



## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 8081A</b>						
BGMW03042015	280-67267-9	AQ	N	3510C	4/1/2015 12:47:00 PM	S2AVE
FW31042015	280-67267-2	AQ	N	3510C	4/1/2015 8:20:00 AM	S2AVE
MW01042015	280-67267-10	AQ	N	3510C	4/1/2015 10:50:00 AM	S2AVE
MW02042015	280-67267-12	AQ	N	3510C	4/1/2015 9:40:00 AM	S2AVE
TMW23042015	280-67267-7	AQ	N	3510C	4/1/2015 12:00:00 PM	S2AVE
TMW30042015	280-67267-3	AQ	N	3510C	4/1/2015 9:38:00 AM	S2AVE
TMW36042015	280-67267-16	AQ	N	3510C	4/1/2015 11:25:00 AM	S2AVE
TMW37042015	280-67267-17	AQ	N	3510C	4/1/2015 10:35:00 AM	S2AVE
TMW39S042015	280-67267-4	AQ	N	3510C	4/1/2015 9:10:00 AM	S2AVE
TMW41042015	280-67267-1	AQ	N	3510C	4/1/2015 12:25:00 PM	S2AVE
TMW44042015	280-67267-5	AQ	N	3510C	4/1/2015 10:15:00 AM	S2AVE
<b>Method: 8260B</b>						
BGMW03042015	280-67267-9	AQ	N	5030	4/1/2015 12:47:00 PM	S2AVE
FW31042015	280-67267-2	AQ	N	5030	4/1/2015 8:20:00 AM	S2AVE
FW35042015	280-67267-20	AQ	N	5030	4/1/2015 2:43:00 PM	S2AVE
MW01042015	280-67267-10	AQ	N	5030	4/1/2015 10:50:00 AM	S2AVE
MW02042015	280-67267-12	AQ	N	5030	4/1/2015 9:40:00 AM	S2AVE
TB-01-042015	280-67267-13	AQ	TB	5030	4/1/2015 8:00:00 AM	S2AVE
TMW07042015	280-67267-6	AQ	N	5030	4/1/2015 11:30:00 AM	S2AVE
TMW16042015	280-67267-18	AQ	N	5030	4/1/2015 12:25:00 PM	S2AVE
TMW18042015	280-67267-14	AQ	N	5030	4/1/2015 8:35:00 AM	S2AVE
TMW19042015	280-67267-15	AQ	N	5030	4/1/2015 9:40:00 AM	S2AVE
TMW22042015	280-67267-21	AQ	N	5030	4/1/2015 10:55:00 AM	S2AVE
TMW23042015	280-67267-7	AQ	N	5030	4/1/2015 12:00:00 PM	S2AVE

5/18/2015 3:31:13 PM

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Page 6 of 10



## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 8260B</b>						
TMW30042015	280-67267-3	AQ	N	5030	4/1/2015 9:38:00 AM	S2AVE
TMW36042015	280-67267-16	AQ	N	5030	4/1/2015 11:25:00 AM	S2AVE
TMW37042015	280-67267-17	AQ	N	5030	4/1/2015 10:35:00 AM	S2AVE
TMW39S042015	280-67267-4	AQ	N	5030	4/1/2015 9:10:00 AM	S2AVE
TMW41042015	280-67267-1	AQ	N	5030	4/1/2015 12:25:00 PM	S2AVE
TMW44042015	280-67267-5	AQ	N	5030	4/1/2015 10:15:00 AM	S2AVE
<b>Method: 8270D</b>						
BGMW03042015	280-67267-9	AQ	N	3520C	4/1/2015 12:47:00 PM	S2AVE
FW31042015	280-67267-2	AQ	N	3520C	4/1/2015 8:20:00 AM	S2AVE
FW35042015	280-67267-20	AQ	N	3520C	4/1/2015 2:43:00 PM	S2AVE
TMW07042015	280-67267-6	AQ	N	3520C	4/1/2015 11:30:00 AM	S2AVE
TMW16042015	280-67267-18	AQ	N	3520C	4/1/2015 12:25:00 PM	S2AVE
TMW18042015	280-67267-14	AQ	N	3520C	4/1/2015 8:35:00 AM	S2AVE
TMW19042015	280-67267-15	AQ	N	3520C	4/1/2015 9:40:00 AM	S2AVE
TMW22042015	280-67267-21	AQ	N	3520C	4/1/2015 10:55:00 AM	S2AVE
TMW30042015	280-67267-3	AQ	N	3520C	4/1/2015 9:38:00 AM	S2AVE
TMW36042015	280-67267-16	AQ	N	3520C	4/1/2015 11:25:00 AM	S2AVE
TMW37042015	280-67267-17	AQ	N	3520C	4/1/2015 10:35:00 AM	S2AVE
TMW39S042015	280-67267-4	AQ	N	3520C	4/1/2015 9:10:00 AM	S2AVE
TMW40S042015	280-67267-22	AQ	N	3520C	4/1/2015 8:07:00 AM	S2AVE
TMW41042015	280-67267-1	AQ	N	3520C	4/1/2015 12:25:00 PM	S2AVE
TMW44042015	280-67267-5	AQ	N	3520C	4/1/2015 10:15:00 AM	S2AVE
<b>Method: 8330B</b>						
BGMW03042015	280-67267-9	AQ	N	3535	4/1/2015 12:47:00 PM	S2AVE

5/18/2015 3:31:13 PM

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Page 7 of 10



## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 8330B</b>						
FW31042015	280-67267-2	AQ	N	3535	4/1/2015 8:20:00 AM	S2AVE
FW35042015	280-67267-20	AQ	N	3535	4/1/2015 2:43:00 PM	S2AVE
MW01042015	280-67267-10	AQ	N	3535	4/1/2015 10:50:00 AM	S2AVE
MW02042015	280-67267-12	AQ	N	3535	4/1/2015 9:40:00 AM	S2AVE
MW22S042015	280-67267-11	AQ	N	3535	4/1/2015 9:15:00 AM	S2AVE
TMW07042015	280-67267-6	AQ	N	3535	4/1/2015 11:30:00 AM	S2AVE
TMW16042015	280-67267-18	AQ	N	3535	4/1/2015 12:25:00 PM	S2AVE
TMW18042015	280-67267-14	AQ	N	3535	4/1/2015 8:35:00 AM	S2AVE
TMW19042015	280-67267-15	AQ	N	3535	4/1/2015 9:40:00 AM	S2AVE
TMW22042015	280-67267-21	AQ	N	3535	4/1/2015 10:55:00 AM	S2AVE
TMW23042015	280-67267-7	AQ	N	3535	4/1/2015 12:00:00 PM	S2AVE
TMW30042015	280-67267-3	AQ	N	3535	4/1/2015 9:38:00 AM	S2AVE
TMW36042015	280-67267-16	AQ	N	3535	4/1/2015 11:25:00 AM	S2AVE
TMW37042015	280-67267-17	AQ	N	3535	4/1/2015 10:35:00 AM	S2AVE
TMW39S042015	280-67267-4	AQ	N	3535	4/1/2015 9:10:00 AM	S2AVE
TMW41042015	280-67267-1	AQ	N	3535	4/1/2015 12:25:00 PM	S2AVE
TMW44042015	280-67267-5	AQ	N	3535	4/1/2015 10:15:00 AM	S2AVE
<b>Method: 9056</b>						
BGMW03042015	280-67267-9	AQ	N	METHOD	4/1/2015 12:47:00 PM	S2AVE
FW31042015	280-67267-2	AQ	N	METHOD	4/1/2015 8:20:00 AM	S2AVE
MW01042015	280-67267-10	AQ	N	METHOD	4/1/2015 10:50:00 AM	S2AVE
MW02042015	280-67267-12	AQ	N	METHOD	4/1/2015 9:40:00 AM	S2AVE
MW22S042015	280-67267-11	AQ	N	METHOD	4/1/2015 9:15:00 AM	S2AVE
TMW07042015	280-67267-6	AQ	N	METHOD	4/1/2015 11:30:00 AM	S2AVE

5/18/2015 3:31:13 PM

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Page 8 of 10



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

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Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 9056</b>						
TMW18042015	280-67267-14	AQ	N	METHOD	4/1/2015 8:35:00 AM	S2AVE
TMW22042015	280-67267-21	AQ	N	METHOD	4/1/2015 10:55:00 AM	S2AVE
TMW23042015	280-67267-7	AQ	N	METHOD	4/1/2015 12:00:00 PM	S2AVE
TMW30042015	280-67267-3	AQ	N	METHOD	4/1/2015 9:38:00 AM	S2AVE
TMW30042015DUP	280-67267-3DUP	AQ	DUP	METHOD	4/1/2015 9:38:00 AM	S2AVE
TMW30042015MS	280-67267-3MS	AQ	MS	METHOD	4/1/2015 9:38:00 AM	S2AVE
TMW30042015MSD	280-67267-3MSD	AQ	MSD	METHOD	4/1/2015 9:38:00 AM	S2AVE
TMW36042015	280-67267-16	AQ	N	METHOD	4/1/2015 11:25:00 AM	S2AVE
TMW37042015	280-67267-17	AQ	N	METHOD	4/1/2015 10:35:00 AM	S2AVE
TMW39S042015	280-67267-4	AQ	N	METHOD	4/1/2015 9:10:00 AM	S2AVE
TMW41042015	280-67267-1	AQ	N	METHOD	4/1/2015 12:25:00 PM	S2AVE
TMW44042015	280-67267-5	AQ	N	METHOD	4/1/2015 10:15:00 AM	S2AVE





## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
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### *Validation Label Legend*

<i>Label Code</i>	<i>Label Description</i>	<i>EPA Level</i>
S1VE	Stage_1_Validation_Electronic	N/A
S1VM	Stage_1_Validation_Manual	N/A
S1VEM	Stage_1_Validation_Electronic_and_Manual	N/A
S2AVE	Stage_2A_Validation_Electronic	Level 3 w/o calibration
S2AVM	Stage_2A_Validation_Manual	Level 3 w/o calibration
S2AVEM	Stage_2A_Validation_Electronic_and_Manual	Level 3 w/o calibration
S2BVE	Stage_2B_Validation_Electronic	Level 3 with calibration
S2BVM	Stage_2B_Validation_Manual	Level 3 with calibration
S2BVEM	Stage_2B_Validation_Electronic_and_Manual	Level 3 with calibration
S3VE	Stage_3_Validation_Electronic	Level 4
S3VM	Stage_3_Validation_Manual	Level 4
S3VEM	Stage_3_Validation_Electronic_and_Manual	Level 4
S4VE	Stage_4_Validation_Electronic	Level 4
S4VM	Stage_4_Validation_Manual	Level 4
S4VEM	Stage_4_Validation_Electronic_and_Manual	Level 4
NV	Not_Validated	N/A



## Data Review Summary

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<i>Validation Area</i>	<i>Note</i>
Technical Holding Times	SR
Temperature	A
Initial Calibration	N
Continuing Calibration/Initial Calibration Verification	N
Method Blanks	SR
Surrogate/Tracer Spikes	SR
Matrix Spike/Matrix Spike Duplicates	SR
Laboratory Duplicates	A
Laboratory Replicates	N
Laboratory Control Samples	SR
Compound Quantitation	SR
Field Duplicates	N
Field Triplicates	N
Field Blanks	SR

A = Acceptable, N = Not provided/applicable, SR = See report

The contents of this report reflect findings made by ADR during Automated Data Review, manual applied qualifiers are not considered. Please refer to the Overall Qualifier Summary report for manual qualifiers.

## QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

Method: 9056		Preparation Method: METHOD			
Matrix: AQ					
<i>Sample ID</i>	<i>Type</i>	<i>Actual</i>	<i>Criteria</i>	<i>Units</i>	<i>Flag</i>
MW22S042015 (RE2/TOT)	Sampling To Analysis	52.50	48.00	HOURS	J (all detects)
TMW22042015 (RE2/TOT)		51.25	48.00	HOURS	UJ (all non-detects)
TMW23042015 (RE2/TOT)		49.50	48.00	HOURS	
TMW44042015 (RE2/TOT)		51.00	48.00	HOURS	

Project Name and Number: 102012 - FWDA 102012

5/18/2015 3:32:48 PM

ADR version 1.9.0.325

Page 1 of 1

## Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

**Method:** 8270D**Matrix:** AQ

<b>QC Sample ID (Associated Samples)</b>	<b>Compound</b>	<b>LCS %R</b>	<b>LCSD %R</b>	<b>%R Limits</b>	<b>RPD (Limits)</b>	<b>Affected Compounds</b>	<b>Flag</b>
LCS 280-271075/3-A (BGMW03042015 FW31042015 FW35042015 TMW07042015 TMW16042015 TMW18042015 TMW19042015 TMW22042015 TMW30042015 TMW36042015 TMW37042015 TMW39S042015 TMW40S042015 TMW41042015 TMW44042015)	BENZIDINE	-	0	10.00-110.00	200 (30.00)	BENZIDINE	J (all detects) R (all non-detects)
LCS 280-271075/2-A LCSD 280-271075/3-A (BGMW03042015 FW31042015 FW35042015 TMW07042015 TMW16042015 TMW18042015 TMW19042015 TMW22042015 TMW30042015 TMW36042015 TMW37042015 TMW39S042015 TMW40S042015 TMW41042015 TMW44042015)	HEXACHLOROCYCLOPENTADIEN	44	40	50.00-130.00	-	HEXACHLOROCYCLOPENTADIE	J(all detects) UJ(all non-detects)

**Project Name and Number: 102012 - FWDA 102012 GW**

5/18/2015 3:33:20 PM

ADR version 1.9.0.325

Page 1 of 1

## Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

Method: 6010C							
Matrix: AQ							
QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
FW31042015MSD (DIS) (BGMW03042015 FW31042015 MW01042015 MW02042015 TMW07042015 TMW16042015 TMW18042015 TMW19042015 TMW22042015 TMW23042015 TMW30042015 TMW36042015 TMW37042015 TMW39S042015 TMW41042015 TMW44042015)	SODIUM	-	77	80.00-120.00	-	SODIUM	J (all detects) UJ (all non-detects)
FW31042015MS (TOT) FW31042015MSD (TOT) (BGMW03042015 FW31042015 MW01042015 MW02042015 TMW07042015 TMW16042015 TMW18042015 TMW19042015 TMW22042015 TMW23042015 TMW30042015 TMW36042015 TMW37042015 TMW39S042015 TMW40S042015 TMW41042015 TMW44042015)	ALUMINUM	243	232	80.00-120.00	-	ALUMINUM	J(all detects)
FW31042015MSD (TOT) (BGMW03042015 FW31042015 MW01042015 MW02042015 TMW07042015 TMW16042015 TMW18042015 TMW19042015 TMW22042015 TMW23042015 TMW30042015 TMW36042015 TMW37042015 TMW39S042015 TMW40S042015 TMW41042015 TMW44042015)	SODIUM	-	72	80.00-120.00	-	SODIUM	J(all detects) UJ(all non-detects)

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:33:12 PM

ADR version 1.9.0.325

Page 1 of 1

## Method Blank Outlier Report

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

Method: 6010C Matrix: AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-270974/1-A	4/7/2015 12:39:00 PM	SODIUM	130 ug/L	BGMW03042015 FW31042015 MW01042015 MW02042015 TMW07042015 TMW16042015 TMW18042015 TMW19042015 TMW22042015 TMW23042015 TMW30042015 TMW36042015 TMW37042015 TMW39S042015 TMW41042015 TMW44042015
MB 280-270982/1-A	4/7/2015 2:18:00 PM	SODIUM	214 ug/L	BGMW03042015 FW31042015 MW01042015 MW02042015 TMW07042015 TMW16042015 TMW18042015 TMW19042015 TMW22042015 TMW23042015 TMW30042015 TMW36042015 TMW37042015 TMW39S042015 TMW40S042015 TMW41042015 TMW44042015

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:32:57 PM

ADR version 1.9.0.325

Page 1 of 1

## Reporting Limit Outliers

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method:</b> 6010C
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
BGMW03042015	POTASSIUM	J	1700	3000	LOQ	ug/L	J (all detects)
FW31042015	POTASSIUM	J	1700	3000	LOQ	ug/L	J (all detects)
MW01042015	POTASSIUM	J	690	3000	LOQ	ug/L	J (all detects)
MW02042015	ALUMINUM IRON POTASSIUM	J J J	36 34 910	300 100 3000	LOQ LOQ LOQ	ug/L ug/L ug/L	J (all detects)
TMW07042015	IRON	J	39	100	LOQ	ug/L	J (all detects)
TMW16042015	ALUMINUM IRON MAGNESIUM POTASSIUM	J J J J	93 52 430 720	300 100 500 3000	LOQ LOQ LOQ LOQ	ug/L ug/L ug/L ug/L	J (all detects)
TMW18042015	ALUMINUM IRON	J J	100 29	300 100	LOQ LOQ	ug/L ug/L	J (all detects)
TMW19042015	ALUMINUM IRON POTASSIUM	J J J	100 63 1100	300 100 3000	LOQ LOQ LOQ	ug/L ug/L ug/L	J (all detects)
TMW22042015	ALUMINUM POTASSIUM	J J	200 1100	300 3000	LOQ LOQ	ug/L ug/L	J (all detects)
TMW23042015	ALUMINUM IRON POTASSIUM	J J J	45 32 750	300 100 3000	LOQ LOQ LOQ	ug/L ug/L ug/L	J (all detects)
TMW30042015	ALUMINUM POTASSIUM	J J	23 870	300 3000	LOQ LOQ	ug/L ug/L	J (all detects)
TMW36042015	POTASSIUM	J	1000	3000	LOQ	ug/L	J (all detects)
TMW37042015	POTASSIUM	J	890	3000	LOQ	ug/L	J (all detects)
TMW39S042015	ALUMINUM IRON POTASSIUM	J J J	30 24 940	300 100 3000	LOQ LOQ LOQ	ug/L ug/L ug/L	J (all detects)
TMW41042015	ALUMINUM POTASSIUM	J J	22 860	300 3000	LOQ LOQ	ug/L ug/L	J (all detects)
TMW44042015	ALUMINUM IRON POTASSIUM	J J J	64 44 580	300 100 3000	LOQ LOQ LOQ	ug/L ug/L ug/L	J (all detects)

<b>Method:</b> 6020A
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
BGMW03042015	ARSENIC BERYLLIUM CHROMIUM COBALT LEAD NICKEL ZINC	J J J J J J J	2.1 0.11 0.88 0.19 0.74 0.89 2.3	5.0 1.0 10 1.0 3.0 3.0 20	LOQ LOQ LOQ LOQ LOQ LOQ LOQ	ug/L ug/L ug/L ug/L ug/L ug/L ug/L	J (all detects)

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:33:28 PM

ADR version 1.9.0.325

Page 1 of 6

## Reporting Limit Outliers

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

Method: 6020A							
Matrix: AQ							
SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
FW31042015	ANTIMONY	J	0.51	6.0	LOQ	ug/L	J (all detects)
	BERYLLIUM	J	0.17	1.0	LOQ	ug/L	
	CHROMIUM	J	0.77	10	LOQ	ug/L	
	COBALT	J	0.058	1.0	LOQ	ug/L	
	COPPER	J	1.0	2.0	LOQ	ug/L	
	LEAD	J	0.64	3.0	LOQ	ug/L	
	MANGANESE	J	0.43	3.5	LOQ	ug/L	
	NICKEL	J	1.6	3.0	LOQ	ug/L	
	SILVER	J	0.11	5.0	LOQ	ug/L	
	THALLIUM	J	0.22	1.0	LOQ	ug/L	
ZINC	J	6.5	20	LOQ	ug/L		
MW01042015	ARSENIC	J	2.5	5.0	LOQ	ug/L	J (all detects)
	BERYLLIUM	J	0.53	1.0	LOQ	ug/L	
	CHROMIUM	J	0.76	10	LOQ	ug/L	
	COBALT	J	0.19	1.0	LOQ	ug/L	
	LEAD	J	0.27	3.0	LOQ	ug/L	
	NICKEL	J	0.92	3.0	LOQ	ug/L	
	THALLIUM	J	0.11	1.0	LOQ	ug/L	
	VANADIUM	J	2.6	6.0	LOQ	ug/L	
ZINC	J	13	20	LOQ	ug/L		
MW02042015	ARSENIC	J	1.6	5.0	LOQ	ug/L	J (all detects)
	BERYLLIUM	J	0.38	1.0	LOQ	ug/L	
	CADMIUM	J	0.57	1.0	LOQ	ug/L	
	CHROMIUM	J	0.50	10	LOQ	ug/L	
	COBALT	J	0.11	1.0	LOQ	ug/L	
	COPPER	J	1.2	2.0	LOQ	ug/L	
	NICKEL	J	0.83	3.0	LOQ	ug/L	
	THALLIUM	J	0.066	1.0	LOQ	ug/L	
	VANADIUM	J	1.3	6.0	LOQ	ug/L	
TMW07042015	ANTIMONY	J	0.40	6.0	LOQ	ug/L	J (all detects)
	ARSENIC	J	1.3	5.0	LOQ	ug/L	
	CHROMIUM	J	1.6	10	LOQ	ug/L	
	COBALT	J	0.65	1.0	LOQ	ug/L	
	COPPER	J	0.64	2.0	LOQ	ug/L	
	LEAD	J	0.58	3.0	LOQ	ug/L	
	NICKEL	J	2.3	3.0	LOQ	ug/L	
	SILVER	J	0.060	5.0	LOQ	ug/L	
	VANADIUM	J	4.2	6.0	LOQ	ug/L	
	ZINC	J	4.1	20	LOQ	ug/L	
TMW16042015	ARSENIC	J	0.61	5.0	LOQ	ug/L	J (all detects)
	CHROMIUM	J	1.4	10	LOQ	ug/L	
	COBALT	J	0.20	1.0	LOQ	ug/L	
	COPPER	J	1.1	2.0	LOQ	ug/L	
	LEAD	J	0.79	3.0	LOQ	ug/L	
	SILVER	J	0.43	5.0	LOQ	ug/L	
	ZINC	J	6.3	20	LOQ	ug/L	



## Reporting Limit Outliers

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

Method: 6020A							
Matrix: AQ							
SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW18042015	ARSENIC	J	2.0	5.0	LOQ	ug/L	J (all detects)
	CHROMIUM	J	1.0	10	LOQ	ug/L	
	COBALT	J	0.11	1.0	LOQ	ug/L	
	COPPER	J	1.5	2.0	LOQ	ug/L	
	LEAD	J	0.75	3.0	LOQ	ug/L	
	MANGANESE	J	2.3	3.5	LOQ	ug/L	
	NICKEL	J	0.47	3.0	LOQ	ug/L	
	SILVER	J	0.25	5.0	LOQ	ug/L	
ZINC	J	2.2	20	LOQ	ug/L		
TMW19042015	ARSENIC	J	0.33	5.0	LOQ	ug/L	J (all detects)
	BERYLLIUM	J	0.12	1.0	LOQ	ug/L	
	CHROMIUM	J	0.86	10	LOQ	ug/L	
	COBALT	J	0.34	1.0	LOQ	ug/L	
	COPPER	J	0.68	2.0	LOQ	ug/L	
	LEAD	J	0.59	3.0	LOQ	ug/L	
	NICKEL	J	1.2	3.0	LOQ	ug/L	
	SILVER	J	0.40	5.0	LOQ	ug/L	
ZINC	J	2.7	20	LOQ	ug/L		
TMW22042015	ARSENIC	J	0.90	5.0	LOQ	ug/L	J (all detects)
	CHROMIUM	J	1.4	10	LOQ	ug/L	
	COBALT	J	0.13	1.0	LOQ	ug/L	
	COPPER	J	1.5	2.0	LOQ	ug/L	
	LEAD	J	1.2	3.0	LOQ	ug/L	
	NICKEL	J	0.61	3.0	LOQ	ug/L	
	SELENIUM	J	3.1	5.0	LOQ	ug/L	
	VANADIUM	J	5.4	6.0	LOQ	ug/L	
ZINC	J	6.5	20	LOQ	ug/L		
TMW23042015	ARSENIC	J	1.4	5.0	LOQ	ug/L	J (all detects)
	CHROMIUM	J	0.82	10	LOQ	ug/L	
	COBALT	J	0.058	1.0	LOQ	ug/L	
	COPPER	J	1.7	2.0	LOQ	ug/L	
	LEAD	J	0.80	3.0	LOQ	ug/L	
	NICKEL	J	0.78	3.0	LOQ	ug/L	
	VANADIUM	J	2.7	6.0	LOQ	ug/L	
	ZINC	J	2.9	20	LOQ	ug/L	
TMW30042015	ARSENIC	J	1.0	5.0	LOQ	ug/L	J (all detects)
	BERYLLIUM	J	0.088	1.0	LOQ	ug/L	
	CHROMIUM	J	0.90	10	LOQ	ug/L	
	COBALT	J	0.24	1.0	LOQ	ug/L	
	COPPER	J	1.4	2.0	LOQ	ug/L	
	LEAD	J	0.56	3.0	LOQ	ug/L	
	MANGANESE	J	0.72	3.5	LOQ	ug/L	
	NICKEL	J	0.40	3.0	LOQ	ug/L	
	SILVER	J	0.14	5.0	LOQ	ug/L	
	THALLIUM	J	0.055	1.0	LOQ	ug/L	
	ZINC	J	9.3	20	LOQ	ug/L	

## Reporting Limit Outliers

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method:</b> 6020A
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW36042015	ARSENIC	J	0.45	5.0	LOQ	ug/L	J (all detects)
	BERYLLIUM	J	0.096	1.0	LOQ	ug/L	
	CHROMIUM	J	0.83	10	LOQ	ug/L	
	COBALT	J	0.066	1.0	LOQ	ug/L	
	LEAD	J	1.8	3.0	LOQ	ug/L	
	NICKEL	J	1.1	3.0	LOQ	ug/L	
	SILVER	J	0.45	5.0	LOQ	ug/L	
	VANADIUM	J	2.4	6.0	LOQ	ug/L	
ZINC	J	6.5	20	LOQ	ug/L		
TMW37042015	ARSENIC	J	0.68	5.0	LOQ	ug/L	J (all detects)
	CHROMIUM	J	1.3	10	LOQ	ug/L	
	COBALT	J	0.057	1.0	LOQ	ug/L	
	COPPER	J	1.1	2.0	LOQ	ug/L	
	LEAD	J	1.3	3.0	LOQ	ug/L	
	NICKEL	J	1.9	3.0	LOQ	ug/L	
	SILVER	J	0.058	5.0	LOQ	ug/L	
	ZINC	J	3.6	20	LOQ	ug/L	
TMW39S042015	ARSENIC	J	1.2	5.0	LOQ	ug/L	J (all detects)
	BERYLLIUM	J	0.34	1.0	LOQ	ug/L	
	CHROMIUM	J	2.3	10	LOQ	ug/L	
	COPPER	J	1.0	2.0	LOQ	ug/L	
	LEAD	J	1.9	3.0	LOQ	ug/L	
	MANGANESE	J	2.7	3.5	LOQ	ug/L	
	THALLIUM	J	0.062	1.0	LOQ	ug/L	
	VANADIUM	J	3.5	6.0	LOQ	ug/L	
	ZINC	J	11	20	LOQ	ug/L	
TMW40S042015	CADMIUM	J	0.72	1.0	LOQ	ug/L	J (all detects)
	SILVER	J	0.22	5.0	LOQ	ug/L	
	THALLIUM	J	0.39	1.0	LOQ	ug/L	
TMW41042015	ANTIMONY	J	1.3	6.0	LOQ	ug/L	J (all detects)
	ARSENIC	J	0.61	5.0	LOQ	ug/L	
	CHROMIUM	J	2.2	10	LOQ	ug/L	
	COBALT	J	0.10	1.0	LOQ	ug/L	
	COPPER	J	0.83	2.0	LOQ	ug/L	
	LEAD	J	0.23	3.0	LOQ	ug/L	
	MANGANESE	J	0.48	3.5	LOQ	ug/L	
	SELENIUM	J	1.6	5.0	LOQ	ug/L	
	SILVER	J	0.064	5.0	LOQ	ug/L	
	THALLIUM	J	0.15	1.0	LOQ	ug/L	
	ZINC	J	5.5	20	LOQ	ug/L	
TMW44042015	ARSENIC	J	3.5	5.0	LOQ	ug/L	J (all detects)
	BERYLLIUM	J	0.69	1.0	LOQ	ug/L	
	CHROMIUM	J	9.7	10	LOQ	ug/L	
	COBALT	J	0.067	1.0	LOQ	ug/L	
	COPPER	J	1.0	2.0	LOQ	ug/L	
	SELENIUM	J	2.2	5.0	LOQ	ug/L	
	THALLIUM	J	0.17	1.0	LOQ	ug/L	
	VANADIUM	J	4.2	6.0	LOQ	ug/L	
	ZINC	J	3.8	20	LOQ	ug/L	

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:33:28 PM

ADR version 1.9.0.325

Page 4 of 6

## Reporting Limit Outliers

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method:</b> 6860
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW16042015	PERCHLORATE	J	0.020	0.050	LOQ	ug/L	J (all detects)
TMW22042015	PERCHLORATE	J	0.021	0.050	LOQ	ug/L	J (all detects)
TMW44042015	PERCHLORATE	J	0.037	0.050	LOQ	ug/L	J (all detects)

<b>Method:</b> 7470A
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW40S042015	MERCURY	J	0.027	0.20	LOQ	ug/L	J (all detects)

<b>Method:</b> 8081A
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW23042015	4,4'-DDD	J	0.010	0.051	LOQ	ug/L	J (all detects)

<b>Method:</b> 8260B
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW16042015	TOLUENE	J	0.20	1.0	LOQ	ug/L	J (all detects)
TMW18042015	ACETONE	J	4.9	10	LOQ	ug/L	J (all detects)
TMW19042015	TOLUENE	J	0.39	1.0	LOQ	ug/L	J (all detects)
TMW37042015	TOLUENE	J	0.28	1.0	LOQ	ug/L	J (all detects)

<b>Method:</b> 8270D
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW07042015	BIS(2-ETHYLHEXYL) PHTHALATE	J	2.1	9.9	LOQ	ug/L	J (all detects)
TMW16042015	BIS(2-ETHYLHEXYL) PHTHALATE	J	0.71	10	LOQ	ug/L	J (all detects)
TMW18042015	ACETOPHENONE	J	1.2	10	LOQ	ug/L	J (all detects)
	BIS(2-ETHYLHEXYL) PHTHALATE	J Q	8.1	10	LOQ	ug/L	J (all detects)
TMW19042015	ACETOPHENONE	J	1.4	9.9	LOQ	ug/L	J (all detects)
	BIS(2-ETHYLHEXYL) PHTHALATE	J	1.0	9.9	LOQ	ug/L	J (all detects)
TMW22042015	2,4-DINITROPHENOL	J	11	78	LOQ	ug/L	J (all detects)
	BIS(2-ETHYLHEXYL) PHTHALATE	J	1.9	9.7	LOQ	ug/L	J (all detects)

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:33:28 PM

ADR version 1.9.0.325

Page 5 of 6

## Reporting Limit Outliers

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method:</b> 8270D
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW36042015	BIS(2-ETHYLHEXYL) PHTHALATE	J	0.87	9.5	LOQ	ug/L	J (all detects)
TMW37042015	ACETOPHENONE	J	0.40	9.6	LOQ	ug/L	J (all detects)
	BIS(2-ETHYLHEXYL) PHTHALATE	J	2.4	9.6	LOQ	ug/L	
TMW40S042015	2,4-DINITROPHENOL	J	15	83	LOQ	ug/L	J (all detects)
TMW41042015	BIS(2-ETHYLHEXYL) PHTHALATE	J	1.0	9.9	LOQ	ug/L	J (all detects)
TMW44042015	2,4-DINITROPHENOL	J	10	80	LOQ	ug/L	J (all detects)

<b>Method:</b> 8330B
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
MW02042015	2-NITROTOLUENE	M J	0.33	0.44	LOQ	ug/L	J (all detects)
TMW30042015	NITROBENZENE	J	0.15	0.43	LOQ	ug/L	J (all detects)
TMW39S042015	2-NITROTOLUENE	M J	0.19	0.46	LOQ	ug/L	J (all detects)
	4-NITROTOLUENE	J M	0.29	1.2	LOQ	ug/L	

<b>Method:</b> 9056
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
FW31042015	NITRATE	J	0.099	0.50	LOQ	mg/L	J (all detects)
TMW07042015	NITRATE	J D	0.19	1.0	LOQ	mg/L	J (all detects)

## Surrogate Outlier Report

Lab Reporting Batch ID: 280-67267-1

Laboratory: TA DEN

EDD Filename: 280-67267-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method:</b> 8081A
<b>Matrix:</b> AQ

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
TMW39S042015	DECACHLOROBIPHENYL	23	30.00-135.00	All Target Analytes	J(all detects) UJ(all non-detects)
TMW44042015	DECACHLOROBIPHENYL	26	30.00-135.00	All Target Analytes	J(all detects) UJ(all non-detects)

<b>Method:</b> 8260B
<b>Matrix:</b> AQ

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
FW31042015	1,2-DICHLOROETHANE-D4	121	70.00-120.00	All Target Analytes	J (all detects)
TMW23042015	1,2-DICHLOROETHANE-D4	121	70.00-120.00	All Target Analytes	J(all detects)
TMW39S042015	1,2-DICHLOROETHANE-D4	124	70.00-120.00	All Target Analytes	J(all detects)
TMW41042015	1,2-DICHLOROETHANE-D4	123	70.00-120.00	All Target Analytes	J(all detects)
TMW44042015	1,2-DICHLOROETHANE-D4	123	70.00-120.00	All Target Analytes	J(all detects)

<b>Method:</b> 8270D
<b>Matrix:</b> AQ

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
FW35042015	Terphenyl-d14	37	50.00-135.00	No Affected Compounds	
TMW18042015	2-FLUOROBIPHENYL	48	50.00-110.00	No Affected Compounds	
TMW22042015	Terphenyl-d14	12	50.00-135.00	No Affected Compounds	
TMW40S042015	Terphenyl-d14	15	50.00-135.00	No Affected Compounds	

<b>Method:</b> 8330B
<b>Matrix:</b> AQ

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
TMW37042015	1,2-DINITROBENZENE	59	75.00-118.00	All Target Analytes	J(all detects) UJ(all non-detects)

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 3:33:04 PM

ADR version 1.9.0.325

Page 1 of 1



## ***Data Qualifier Summary***

**Lab Reporting Batch ID: 280-67267-2**

**Laboratory: TA DEN**

**EDD Filename: 280-67267-2**

**eQAPP Name: FtWingate\_Primary\_120405**

**No Data Review Qualifiers Applied.**



## Data Review Summary

Lab Reporting Batch ID: 280-67267-2

Laboratory: TA DEN

EDD Filename: 280-67267-2

eQAPP Name: FtWingate\_Primary\_120405

<i>Validation Area</i>	<i>Note</i>
Technical Holding Times	A
Temperature	A
Initial Calibration	N
Continuing Calibration/Initial Calibration Verification	N
Method Blanks	A
Surrogate/Tracer Spikes	SR
Matrix Spike/Matrix Spike Duplicates	N
Laboratory Duplicates	N
Laboratory Replicates	N
Laboratory Control Samples	A
Compound Quantitation	A
Field Duplicates	N
Field Triplicates	N
Field Blanks	N

A = Acceptable, N = Not provided/applicable, SR = See report

The contents of this report reflect findings made by ADR during Automated Data Review, manual applied qualifiers are not considered. Please refer to the Overall Qualifier Summary report for manual qualifiers.



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Lab Reporting Batch: 280-67267-2</b>						
<b>Method: 8270D</b>						
BGMW03042015	280-67267-9	AQ	N	3520C	4/1/2015 12:47:00 PM	S2AVE
FW31042015	280-67267-2	AQ	N	3520C	4/1/2015 8:20:00 AM	S2AVE
FW35042015	280-67267-20	AQ	N	3520C	4/1/2015 2:43:00 PM	S2AVE
TMW07042015	280-67267-6	AQ	N	3520C	4/1/2015 11:30:00 AM	S2AVE
TMW16042015	280-67267-18	AQ	N	3520C	4/1/2015 12:25:00 PM	S2AVE
TMW18042015	280-67267-14	AQ	N	3520C	4/1/2015 8:35:00 AM	S2AVE
TMW19042015	280-67267-15	AQ	N	3520C	4/1/2015 9:40:00 AM	S2AVE
TMW22042015	280-67267-21	AQ	N	3520C	4/1/2015 10:55:00 AM	S2AVE
TMW30042015	280-67267-3	AQ	N	3520C	4/1/2015 9:38:00 AM	S2AVE
TMW36042015	280-67267-16	AQ	N	3520C	4/1/2015 11:25:00 AM	S2AVE
TMW37042015	280-67267-17	AQ	N	3520C	4/1/2015 10:35:00 AM	S2AVE
TMW39S042015	280-67267-4	AQ	N	3520C	4/1/2015 9:10:00 AM	S2AVE
TMW40S042015	280-67267-22	AQ	N	3520C	4/1/2015 8:07:00 AM	S2AVE
TMW41042015	280-67267-1	AQ	N	3520C	4/1/2015 12:25:00 PM	S2AVE
TMW44042015	280-67267-5	AQ	N	3520C	4/1/2015 10:15:00 AM	S2AVE





## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
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### *Validation Label Legend*

<i>Label Code</i>	<i>Label Description</i>	<i>EPA Level</i>
S1VE	Stage_1_Validation_Electronic	N/A
S1VM	Stage_1_Validation_Manual	N/A
S1VEM	Stage_1_Validation_Electronic_and_Manual	N/A
S2AVE	Stage_2A_Validation_Electronic	Level 3 w/o calibration
S2AVM	Stage_2A_Validation_Manual	Level 3 w/o calibration
S2AVEM	Stage_2A_Validation_Electronic_and_Manual	Level 3 w/o calibration
S2BVE	Stage_2B_Validation_Electronic	Level 3 with calibration
S2BVM	Stage_2B_Validation_Manual	Level 3 with calibration
S2BVEM	Stage_2B_Validation_Electronic_and_Manual	Level 3 with calibration
S3VE	Stage_3_Validation_Electronic	Level 4
S3VM	Stage_3_Validation_Manual	Level 4
S3VEM	Stage_3_Validation_Electronic_and_Manual	Level 4
S4VE	Stage_4_Validation_Electronic	Level 4
S4VM	Stage_4_Validation_Manual	Level 4
S4VEM	Stage_4_Validation_Electronic_and_Manual	Level 4
NV	Not_Validated	N/A

## Surrogate Outlier Report

Lab Reporting Batch ID: 280-67267-2

Laboratory: TA DEN

EDD Filename: 280-67267-2

eQAPP Name: FtWingate\_Primary\_120405

Method: 8270D					
Matrix: AQ					
<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
FW35042015	Terphenyl-d14	37	50.00-135.00	No Affected Compounds	
TMW18042015	2-FLUOROBIPHENYL	48	50.00-110.00	No Affected Compounds	
TMW22042015	Terphenyl-d14	12	50.00-135.00	No Affected Compounds	
TMW40S042015	Terphenyl-d14	15	50.00-135.00	No Affected Compounds	

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 9:52:49 AM

ADR version 1.9.0.325

Page 1 of 1

**CASE NARRATIVE**

**Client: Sundance Consulting, Inc.**  
**Project: Fort Wingate, New Mexico**  
**Report Number: 280-67267-2**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

**Sample Receipt**

The following report contains the analytical results for fifteen water samples received April 2, 2015, according to documented sample acceptance procedures. The samples were received at temperatures of 2.6°C, 1.8°C, 4.2°C, 4.0°C, 3.2°C, 0.3°C, 4.0°C, 1.8°C, 1.9°C, 2.5°C, 3.3°C, 4.8°C, 2.3°C, 4.1°C, 1.1°C and 3.8°C.

Sample IDs on the chain-of-custody end with 042014; however, the sample IDs on the container labels end with 042015. The sample IDs were logged per the container labels. The client was notified on April 3, 2015.

Sample TMW07042015 (280-67267-6) lists collection time 1015 on the VOA chain-of-custody (COC), collection time 1130 on the container labels and collection time 1130 on the non-VOA COC. The collection time was logged as 1130. The client was notified on April 3, 2015.

Additional samples/analyses requested on the chain-of-custody are reported under separate cover (280-67267-1).

No other anomalies were encountered during sample receipt.

**GC/MS Semivolatiles - 8270D**

Samples TMW41042015 (280-67267-1), FW31042015 (280-67267-2), TMW30042015 (280-67267-3), TMW39S042015 (280-67267-4), TMW44042015 (280-67267-5), TMW07042015 (280-67267-6), BGMW03042015 (280-67267-9), TMW18042015 (280-67267-14), TMW19042015 (280-67267-15), TMW36042015 (280-67267-16), TMW37042015 (280-67267-17), TMW16042015 (280-67267-18), FW35042015 (280-67267-20), TMW22042015 (280-67267-21) and TMW40S042015 (280-67267-22) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 04/03/2015 and analyzed on 04/10/2015 and 04/11/2015.

Please note the Caprolactam data are reported under separate cover, as the laboratory does not hold DOD ELAP certification for this compound. The laboratory does not maintain quarterly QC requirements for precision, accuracy and detections.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Surrogate Terphenyl-d14 was recovered below the QC control limits in samples TMW22042015 (280-67267-21) and TMW40S042015 (280-67267-22). These anomalies are due to obvious matrix interferences; therefore, corrective action is deemed unnecessary.

MS/MSD analyses for prep batch 280-271821 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



## ***Data Qualifier Summary***

Lab Reporting Batch ID: 280-67267-2

Laboratory: TA DEN

EDD Filename: 280-67267-2

eQAPP Name: FtWingate\_Primary\_120405

**No Data Review Qualifiers Applied.**



## Data Review Summary

Lab Reporting Batch ID: 280-67267-2

Laboratory: TA DEN

EDD Filename: 280-67267-2

eQAPP Name: FtWingate\_Primary\_120405

<i>Validation Area</i>	<i>Note</i>
Technical Holding Times	A
Temperature	A
Initial Calibration	N
Continuing Calibration/Initial Calibration Verification	N
Method Blanks	A
Surrogate/Tracer Spikes	SR
Matrix Spike/Matrix Spike Duplicates	N
Laboratory Duplicates	N
Laboratory Replicates	N
Laboratory Control Samples	A
Compound Quantitation	A
Field Duplicates	N
Field Triplicates	N
Field Blanks	N

A = Acceptable, N = Not provided/applicable, SR = See report

The contents of this report reflect findings made by ADR during Automated Data Review, manual applied qualifiers are not considered. Please refer to the Overall Qualifier Summary report for manual qualifiers.



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Lab Reporting Batch: 280-67267-2</b>						
<b>Method: 8270D</b>						
BGMW03042015	280-67267-9	AQ	N	3520C	4/1/2015 12:47:00 PM	S2AVE
FW31042015	280-67267-2	AQ	N	3520C	4/1/2015 8:20:00 AM	S2AVE
FW35042015	280-67267-20	AQ	N	3520C	4/1/2015 2:43:00 PM	S2AVE
TMW07042015	280-67267-6	AQ	N	3520C	4/1/2015 11:30:00 AM	S2AVE
TMW16042015	280-67267-18	AQ	N	3520C	4/1/2015 12:25:00 PM	S2AVE
TMW18042015	280-67267-14	AQ	N	3520C	4/1/2015 8:35:00 AM	S2AVE
TMW19042015	280-67267-15	AQ	N	3520C	4/1/2015 9:40:00 AM	S2AVE
TMW22042015	280-67267-21	AQ	N	3520C	4/1/2015 10:55:00 AM	S2AVE
TMW30042015	280-67267-3	AQ	N	3520C	4/1/2015 9:38:00 AM	S2AVE
TMW36042015	280-67267-16	AQ	N	3520C	4/1/2015 11:25:00 AM	S2AVE
TMW37042015	280-67267-17	AQ	N	3520C	4/1/2015 10:35:00 AM	S2AVE
TMW39S042015	280-67267-4	AQ	N	3520C	4/1/2015 9:10:00 AM	S2AVE
TMW40S042015	280-67267-22	AQ	N	3520C	4/1/2015 8:07:00 AM	S2AVE
TMW41042015	280-67267-1	AQ	N	3520C	4/1/2015 12:25:00 PM	S2AVE
TMW44042015	280-67267-5	AQ	N	3520C	4/1/2015 10:15:00 AM	S2AVE



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
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### *Validation Label Legend*

<i>Label Code</i>	<i>Label Description</i>	<i>EPA Level</i>
S1VE	Stage_1_Validation_Electronic	N/A
S1VM	Stage_1_Validation_Manual	N/A
S1VEM	Stage_1_Validation_Electronic_and_Manual	N/A
S2AVE	Stage_2A_Validation_Electronic	Level 3 w/o calibration
S2AVM	Stage_2A_Validation_Manual	Level 3 w/o calibration
S2AVEM	Stage_2A_Validation_Electronic_and_Manual	Level 3 w/o calibration
S2BVE	Stage_2B_Validation_Electronic	Level 3 with calibration
S2BVM	Stage_2B_Validation_Manual	Level 3 with calibration
S2BVEM	Stage_2B_Validation_Electronic_and_Manual	Level 3 with calibration
S3VE	Stage_3_Validation_Electronic	Level 4
S3VM	Stage_3_Validation_Manual	Level 4
S3VEM	Stage_3_Validation_Electronic_and_Manual	Level 4
S4VE	Stage_4_Validation_Electronic	Level 4
S4VM	Stage_4_Validation_Manual	Level 4
S4VEM	Stage_4_Validation_Electronic_and_Manual	Level 4
NV	Not_Validated	N/A

## Surrogate Outlier Report

Lab Reporting Batch ID: 280-67267-2

Laboratory: TA DEN

EDD Filename: 280-67267-2

eQAPP Name: FtWingate\_Primary\_120405

**Method:** 8270D**Matrix:** AQ

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
FW35042015	Terphenyl-d14	37	50.00-135.00	No Affected Compounds	
TMW18042015	2-FLUOROBIPHENYL	48	50.00-110.00	No Affected Compounds	
TMW22042015	Terphenyl-d14	12	50.00-135.00	No Affected Compounds	
TMW40S042015	Terphenyl-d14	15	50.00-135.00	No Affected Compounds	

**Project Name and Number: 102012 - FWDA 102012 GW**

5/15/2015 9:52:49 AM

ADR version 1.9.0.325

Page 1 of 1



**CASE NARRATIVE****Client: Sundance Consulting, Inc.****Project: Fort Wingate, New Mexico****Report Number: 280-67316-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

**Sample Receipt**

The following report contains the analytical results for fourteen water samples received April 3, 2015, according to documented sample acceptance procedures. The samples were received at temperatures of 0.5°C, 3.0°C, 4.1°C, 0.3°C, 3.1°C, 2.0°C, 0.2°C, 0.3°C, 2.0°C, 1.4°C and 2.1°C.

Some sample IDs on the chain-of-custody end with 042014. All sample IDs on the container labels end with 042015. In accordance with the client's instruction, the samples' IDs were logged per the container labels.

A 125mL Perchlorate bottle was received for sample TMW40S042015 (280-67316-6); however, Perchlorate is not requested on the chain-of-custody. The sample was logged for Perchlorate analysis per the volume received. The client was notified on April 6, 2015.

The 125mL Perchlorate bottle submitted for sample MW22S042015 (280-67316-5) lists the collection date/time as 04/01/15 @ 0915 on the container label. The collection date/time on the chain-of-custody is 04/02/15 @ 1329; therefore, this sample was logged separately. In accordance with the client's instructions provided on April 6, 2015, the bottle label was mistakenly filled out before sampling and not updated. The Perchlorate bottle was re-designated to sample MW22S042015 (280-67316-5).

Please note the Caprolactam data are reported under separate cover (280-67316-2), as the laboratory does not hold DOD ELAP certification for this compound.

No other anomalies were encountered during sample receipt.

**GC/MS Volatiles - 8260B**

Samples TMW46042015 (280-67316-1), TMW31S042015 (280-67316-2), FW31042015EQU002 (280-67316-3), TMW44042015EQU003 (280-67316-4), MW22S042015 (280-67316-5), TMW40S042015 (280-67316-6), BGMW01042015 (280-67316-7), BGMW02042015 (280-67316-8), TMW33042015 (280-67316-9), FW042015EQU001 (280-67316-10) and TB-02-042015 (280-67316-11) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/09/2015 and 04/10/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

1,2,3-Trichlorobenzene and Methylene Chloride were detected in method blank MB 280-271782/6 at levels that were less than one half the reporting limits; therefore, corrective action was deemed unnecessary. The values should be considered estimates, and have been flagged "J" in accordance with the DOD QSM.

MS/MSD analyses for analytical batches 280-271782 and 280-272044 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**GC/MS Semivolatiles - 8270D**

Samples TMW46042015 (280-67316-1), TMW31S042015 (280-67316-2), FW31042015EQU002 (280-67316-3), TMW44042015EQU003 (280-67316-4), MW22S042015 (280-67316-5), BGMW01042015 (280-67316-7), BGMW02042015 (280-67316-8), TMW33042015 (280-67316-9) and FW042015EQU001 (280-67316-10) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 04/04/2015 and 04/11/2015 and analyzed on 04/09/2015 and 04/17/2015.

Please note the Caprolactam data are reported under separate cover (280-67316-2), as the laboratory does not hold DOD ELAP certification for this compound.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

A deviation from the Standard Operating Procedure (SOP) occurred. The details are as follows:

The samples were extracted per SW-846 3520C for 18 hours at a pH of 1-2 and 18 hours at a pH of 11-12; however, the laboratory's

SOP requires the samples be extracted for 24 hours at each pH range. The laboratory's SOP is in the process of being revised for these changes.

Due to a low surrogate recovery, sample TMW33042015 (280-67316-9) was re-extracted out of the prescribed hold time and reanalyzed. In accordance with the client's instructions provided on April 30, 2015, both sets of data have been reported. Please note that the sample results should be considered estimated.

Surrogate Terphenyl-d14 was recovered below the QC control limits in samples TMW46042015 (280-67316-1) and TMW31S042015 (280-67316-2). This is an indicator that data may be biased low. Upon re-extraction past hold time and reanalysis, surrogate recovery outliers were still present, demonstrating these anomalies are most likely due to matrix interference. The original in hold data have been reported. The associated data have been flagged "Q" in accordance with the DOD QSM.

Surrogate Terphenyl-d14 was recovered below the QC control limits in samples TMW46042015 (280-67316-1) and TMW31S042015 (280-67316-2). This is an indicator that data may be biased low. Upon re-extraction past hold time and reanalysis, surrogate recoveries were 100% in control. In accordance with the client's instructions provided on April 30, 2015, both sets of data have been reported. The associated data have been flagged "Q" in accordance with the DOD QSM.

Several analytes were detected in method blank MB 280-271191/1-A at levels that were less than one half the reporting limits; therefore, corrective action was deemed unnecessary. The values should be considered estimates, and have been flagged "J" in accordance with the DOD QSM.

Phenanthrene was detected in method blank MB 280-272314/1-A at a level that was less than one half the reporting limit; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

Due to an oversight by the preparation chemist, MB 280-272314/1-A and LCS 280-272314/2-A were S-evaporated lower than directed by the laboratory's SOP. As the associated MB and LCS recoveries were in control for the temperature sensitive analytes and surrogates, corrective action was deemed unnecessary.

The LCS associated with prep batch 280-271191 exhibited a percent recovery below the QC control limits for Hexachlorocyclopentadiene. This compound has been identified as a poor performing analyte when analyzed using this method; therefore, corrective action was not performed. The associated data have been flagged "Q" in accordance with the DOD QSM.

The LCS/LCSD associated with prep batch 280-272314 exhibited percent recoveries below the QC control limits for Hexachlorocyclopentadiene. In addition, the RPD data for this compound was above the QC control limits. This compound has been identified as a poor performing analyte when analyzed using this method; therefore, corrective action was not performed. The associated data have been flagged "Q" in accordance with the DOD QSM.

The MS/MSD associated with prep batch 280-271191 was performed on sample BGMW02042015 (280-67316-8). The MS/MSD exhibited RPD data outside the QC control limits for Benzoic acid. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample has been flagged "J" in accordance with the DOD QSM.

MS/MSD analyses for prep batch 280-272314 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Gasoline Range Organics - 8015C**

Samples TMW33042015 (280-67316-9), FW042015EQU001 (280-67316-10) and TB-41-042015 (280-67316-12) were analyzed for gasoline range organics in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 04/09/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Sample TMW33042015 (280-67316-9) was received at the laboratory with a pH value >2. The sample was analyzed within 7 days as recommended in SW846 for unpreserved samples; therefore, there should be no bias to the reported results.

MS/MSD analyses for analytical batch 280-271833 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Diesel & Residual Range Organics - 8015C**

Samples TMW33042015 (280-67316-9) and FW042015EQU001 (280-67316-10) were analyzed for Diesel Range Organics in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/07/2015 and analyzed on 04/10/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

MS/MSD analyses for prep batch 280-271425 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organochlorine Pesticides - 8081A**

Samples TMW46042015 (280-67316-1), TMW31S042015 (280-67316-2), FW31042015EQU002 (280-67316-3), TMW44042015EQU003 (280-67316-4), BGMW01042015 (280-67316-7), BGMW02042015 (280-67316-8) and FW042015EQU001 (280-67316-10) were analyzed for chlorinated pesticides in accordance with EPA SW-846 Method 8081A. The samples were prepared on 04/06/2015 and analyzed on 04/08/2015.

TestAmerica Denver's practice for the reporting of dual column data in packages requiring forms and/or raw data is to report the surrogates from both columns, and the preferred result for any given target analyte from the analyst selected column. The preferred results for target analytes and surrogates are reported as PRIMARY on the Sample Datasheets.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Surrogate Decachlorobiphenyl was recovered below the QC control limits in sample TMW46042015 (280-67316-1). This is an indicator that data may be biased low. This anomaly is due to obvious matrix interference; therefore, corrective action is deemed unnecessary. The associated data have been flagged "Q" in accordance with the DOD QSM.

The initial calibration curve analyzed in batch 280-271615 was outside acceptance criteria for Toxaphene and Technical Chlordane. The calibration for Endosulfan II is within criteria on both columns; however, a different curve fit was used for quantitation for the back column. The incorrect calibration was used to quantify these compounds in Chrome. The calibration reported in the laboratory's LIM system is correct. The samples showed no visible Toxaphene or Chlordane pattern and as such are reported as ND. Endosulfan II is reported from the front column, which is ND for all samples and in control for all QC. Toxaphene was not fully integrated within the incorrect calibration and Chlordane was calibrated using a single concentration. Toxaphene is biased high in the reported CCVs and samples due to it being fully integrated.

The Continuing Calibration Verification (CCV) standard associated with analytical batch 280-271615 exhibited a %Difference (%D) value out of range, biased high, for gamma-Chlordane on the front column. As no detectable concentration of gamma-Chlordane is present in the associated samples, the data have been reported from the back column which was in control.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Explosives - 8330B**

Samples TMW46042015 (280-67316-1), TMW31S042015 (280-67316-2), FW31042015EQU002 (280-67316-3), TMW44042015EQU003 (280-67316-4), TMW40S042015 (280-67316-6), BGMW01042015 (280-67316-7), BGMW02042015 (280-67316-8) and FW042015EQU001 (280-67316-10) were analyzed for explosives in accordance with EPA SW-846 Method 8330B. The samples were prepared on 04/07/2015 and analyzed on 04/09/2015, 04/10/2015 and 04/16/2015.

TestAmerica Denver's practice for the reporting of dual column data in packages requiring forms and/or raw data is to report the surrogates from both columns, and the preferred result for any given target analyte from the analyst selected column. The preferred results for target analytes and surrogates are reported as PRIMARY on the Sample Datasheets.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high concentrations of target analytes and/or analytes present above the calibration curve, sample TMW40S042015 (280-67316-6) had to be analyzed at a dilution. Surrogate recoveries could not be accurately calculated for the diluted analysis because the extract was diluted beyond the ability to reliably quantitate recoveries. The reporting limits have been adjusted relative to the dilution required.

Surrogate 1,2-Dinitrobenzene was recovered outside the QC control limits in samples FW31042015EQU002 (280-67316-3), TMW44042015EQU003 (280-67316-4), TMW40S042015 (280-67316-6) and FW042015EQU001 (280-67316-10). These anomalies are due to obvious matrix interferences; therefore, corrective action is deemed unnecessary. The associated data have been flagged "Q" in accordance with the DOD QSM.

It is the opinion of the analyst, based on review of the chromatograms, the evident matrix interferences may be causing false positive and/or false negative results for sample TMW40S042015 (280-67316-6).

The RPD between the primary and confirmation columns exceeded 40% for Nitrobenzene in sample TMW31S042015 (280-67316-2). The RPD between the primary and confirmation columns exceeded 40% for 1,3,5-Trinitrobenzene, HMX, m-Nitrotoluene and Nitrobenzene in sample TMW40S042015 (280-67316-6). The RPD between the primary and confirmation columns exceeded 40% for HMX in sample FW042015EQU001 (280-67316-10). The lower of the two values has been reported, as matrix interference is evident. The results in the analytical report have been flagged with "J" in accordance with the DOD QSM.

2-Amino-4,6-dinitrotoluene was detected in method blank MB 280-271434/1-A at a level that was greater than the reporting limit on the confirmation column. The primary column result is ND; therefore, the method blank is ND. Detections in the associated samples less than 10X the amount found in the blank are suspect due to potential interferences on the confirmation column. Samples with detections for 2-Amino-4,6-dinitrotoluene less than 10X the amount found in the blank were confirmed using method 8321.

o-Nitrotoluene was detected in method blank MB 280-271434/1-A at a level that was less than one half the reporting limit on the confirmation column; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been

flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Perchlorate - 6860**

Samples TMW46042015 (280-67316-1), TMW31S042015 (280-67316-2), TMW44042015EQU003 (280-67316-4), MW22S042015 (280-67316-5), TMW40S042015 (280-67316-6), BGMW01042015 (280-67316-7), BGMW02042015 (280-67316-8), FW042015EQU001 (280-67316-10) and MW02S042015 (280-67316-13) were analyzed for Perchlorate in accordance with SW846 6860. The samples were analyzed on 04/14/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high concentrations of target analytes and/or analytes present above the calibration curve, samples TMW31S042015 (280-67316-2) and TMW40S042015 (280-67316-6) had to be analyzed at dilutions. The reporting limits have been adjusted relative to the dilutions required.

The MS/MSD associated with analytical batch 280-272596 was performed on sample BGMW02042015 (280-67316-8). The MS/MSD spike compound recoveries and RPD data could not be reliably calculated for Perchlorate because the sample concentration was greater than four times the spike amounts. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample has been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Total Metals - 6010C**

Samples TMW46042015 (280-67316-1), TMW31S042015 (280-67316-2), FW31042015EQU002 (280-67316-3), TMW44042015EQU003 (280-67316-4), BGMW01042015 (280-67316-7), BGMW02042015 (280-67316-8), TMW33042015 (280-67316-9), FW042015EQU001 (280-67316-10) and FW35042015 (280-67316-14) were analyzed for Total Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 04/07/2015 and analyzed on 04/08/2015, 04/09/2015 and 04/14/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to matrix interference, samples TMW46042015 (280-67316-1), TMW31S042015 (280-67316-2) and BGMW01042015 (280-67316-7) had to be analyzed at dilutions. The reporting limits have been adjusted relative to the dilutions required.

Magnesium was detected in method blank MB 280-271161/1-A at a level that was less than one half the reporting limit; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

The MS/MSD associated with prep batch 280-271161 was performed on sample BGMW02042015 (280-67316-8). The MS/MSD spike compound recoveries and RPD data could not be reliably calculated for Sodium because the sample concentration was greater than four times the spike amounts. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample has been flagged "J" in accordance with the DOD QSM.

The post digestion spike (PDS) and serial dilution (SD) associated with prep batch 280-271161 was performed on sample BGMW02042015 (280-67316-8). The PDS exhibited a percent recovery outside the control limits for Sodium; however, the SD performed on this sample was in control.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Dissolved Metals - 6010C**

Samples TMW46042015 (280-67316-1), TMW31S042015 (280-67316-2), FW31042015EQU002 (280-67316-3), TMW44042015EQU003 (280-67316-4), TMW40S042015 (280-67316-6), BGMW01042015 (280-67316-7), BGMW02042015 (280-67316-8), TMW33042015 (280-67316-9), FW042015EQU001 (280-67316-10) and FW35042015 (280-67316-14) were analyzed for Dissolved Metals in accordance with EPA SW-846 Method 6010C. The samples were prepared on 04/07/2015 and analyzed on 04/08/2015, 04/09/2015 and 04/10/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to matrix interference, samples BGMW02042015 (280-67316-8), BGMW02042015 (280-67316-8 MS), BGMW02042015 (280-67316-8 MSD), TMW33042015 (280-67316-9) and FW35042015 (280-67316-14) had to be analyzed at dilutions. The reporting limits have been adjusted relative to the dilutions required.

Sodium was detected in method blank MB 280-271149/1-A at a level that was less than one half the reporting limit; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

The MS/MSD associated with prep batch 280-271149 was performed on sample BGMW02042015 (280-67316-8). The MS/MSD exhibited a spike compound recovery above the QC control limits for Calcium. In addition, the MS/MSD spike compound recoveries and RPD data could not be reliably calculated for Sodium because the sample concentration was greater than four times the spike amounts. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample have been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Total Metals - 6020A**

Samples TMW46042015 (280-67316-1), TMW31S042015 (280-67316-2), FW31042015EQU002 (280-67316-3), TMW44042015EQU003 (280-67316-4), BGMW01042015 (280-67316-7), BGMW02042015 (280-67316-8), TMW33042015 (280-67316-9), FW042015EQU001 (280-67316-10) and FW35042015 (280-67316-14) were analyzed for total metals (ICPMS) in accordance with SW846 6020A. The samples were prepared on 04/07/2015 and analyzed on 04/10/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Thallium was detected in method blank MB 280-271162/1-A at a level that was less than one half the reporting limit; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

The ICSA solution associated with analytical batch 280-272121 was above DOD QSM Version 4.2 criteria of less than the LOD for Cadmium and Chromium. The laboratory has confirmed with the vendor that these elements are trace impurities in the ICSA solution; therefore, no corrective action was needed. The associated data have been flagged "Q" in accordance with the DOD QSM.

The post digestion spike (PDS) and serial dilution (SD) associated with prep batch 280-271162 was performed on sample BGMW02042015 (280-67316-8). The SD exhibited a percent recovery outside the control limits for Barium; however, the PDS performed on this sample was in control.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Dissolved Metals - 6020A**

Samples TMW46042015 (280-67316-1), TMW31S042015 (280-67316-2), FW31042015EQU002 (280-67316-3), TMW44042015EQU003 (280-67316-4), TMW40S042015 (280-67316-6), BGMW01042015 (280-67316-7), BGMW02042015 (280-67316-8), TMW33042015 (280-67316-9), FW042015EQU001 (280-67316-10) and FW35042015 (280-67316-14) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 04/07/2015 and analyzed on 04/08/2015, 04/09/2015 and 04/15/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Total Mercury - 7470A**

Samples TMW46042015 (280-67316-1), TMW31S042015 (280-67316-2), FW31042015EQU002 (280-67316-3), TMW44042015EQU003 (280-67316-4), BGMW01042015 (280-67316-7), BGMW02042015 (280-67316-8), TMW33042015 (280-67316-9), FW042015EQU001 (280-67316-10) and FW35042015 (280-67316-14) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 04/09/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Dissolved Mercury - 7470A**

Samples TMW46042015 (280-67316-1), TMW31S042015 (280-67316-2), FW31042015EQU002 (280-67316-3), TMW44042015EQU003 (280-67316-4), TMW40S042015 (280-67316-6), BGMW01042015 (280-67316-7), BGMW02042015 (280-67316-8), TMW33042015 (280-67316-9), FW042015EQU001 (280-67316-10) and FW35042015 (280-67316-14) were analyzed for dissolved mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 04/09/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Nitrate & Nitrite - 9056**

Samples TMW46042015 (280-67316-1), TMW31S042015 (280-67316-2), FW31042015EQU002 (280-67316-3), TMW44042015EQU003 (280-67316-4), BGMW01042015 (280-67316-7), BGMW02042015 (280-67316-8), TMW33042015 (280-67316-9), FW042015EQU001 (280-67316-10) and FW35042015 (280-67316-14) were analyzed for anions (48 hours) in accordance with EPA SW-846 Method 9056. The samples were analyzed on 04/03/2015 and 04/04/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to matrix interference, samples TMW46042015 (280-67316-1), BGMW02042015 (280-67316-8) and TMW33042015 (280-67316-9) had to be analyzed at dilutions. The reporting limits and method detection limits have been adjusted relative to the dilutions required.

The MS/MSD associated with analytical batch 280-271060 was performed on sample BGMW02042015 (280-67316-8). The MS/MSD exhibited spike compound recoveries outside the QC control limits for Nitrate as N. The acceptable LCS/LCSD analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample has been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



## Field QC Assignments and Associated Samples

**EDD File Name:** 280-67316-1

**eQapp Name:** FtWingate\_Primary\_120405

	Associated Samples	Sample Collection Date
<b>Field QC</b> TB-02-042015		
<b>QC Type:</b> TB		
	BGMW01042015	4/2/2015 1:12:00 PM
	BGMW02042015	4/2/2015 9:20:00 AM
	FW35042015	4/2/2015 8:50:00 AM
	MW02S042015	4/2/2015 9:40:00 AM
	MW22S042015	4/2/2015 1:29:00 PM
	TMW31S042015	4/2/2015 1:05:00 PM
	TMW33042015	4/2/2015 11:45:00 AM
	TMW40S042015	4/2/2015 8:50:00 AM
	TMW46042015	4/2/2015 12:18:00 PM
<b>Field QC</b> TB-41-042015		
<b>QC Type:</b> TB		
	BGMW01042015	4/2/2015 1:12:00 PM
	BGMW02042015	4/2/2015 9:20:00 AM
	FW35042015	4/2/2015 8:50:00 AM
	MW02S042015	4/2/2015 9:40:00 AM
	MW22S042015	4/2/2015 1:29:00 PM
	TMW31S042015	4/2/2015 1:05:00 PM
	TMW33042015	4/2/2015 11:45:00 AM
	TMW40S042015	4/2/2015 8:50:00 AM
	TMW46042015	4/2/2015 12:18:00 PM



## History of Manual Changes to Automated Data Review Qualifiers

Changed by: Doug Scott

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> BGMW01042015								
<b>ALUMINUM</b>	6010C	RES/TOT	58	ug/L	Equipment Blank Contamination		U	5/18/2015 16:01
Reason for change:	EB 5X the sample result							
<b>BENZIDINE</b>	8270D	RES	110	ug/L	Matrix Spike Lower Rejection		R	5/18/2015 9:57
Reason for change:	0 %R MS/MSD							
<b>BENZIDINE</b>	8270D	RES	110	ug/L	Matrix Spike Lower Estimation	UJ		5/18/2015 9:57
Reason for change:	rejected %R Ms MSD							
<b>COPPER</b>	6020A	RES/TOT	1.5	ug/L	Equipment Blank Contamination		U	5/18/2015 16:03
Reason for change:	EB 5X the sample result							
<b>HEXACHLOROCYCLOPENTADIENE</b>	8270D	RES	21	ug/L	Laboratory Control Spike Lower		R	5/18/2015 9:55
Reason for change:	LCS 5-7% recovery							
<b>HEXACHLOROCYCLOPENTADIENE</b>	8270D	RES	21	ug/L	Laboratory Control Spike Lower	UJ		5/18/2015 9:56
Reason for change:	Rejected low MS MSD %R							
<b>IRON</b>	6010C	RES/TOT	57	ug/L	Equipment Blank Contamination		U	5/18/2015 16:01
Reason for change:	EB 5X the sample result							
<b>NICKEL</b>	6020A	RES/TOT	2.2	ug/L	Equipment Blank Contamination		U	5/18/2015 16:02
Reason for change:	EB 5X the sample result							
<b>PERCHLORATE</b>	6860	RES	0.020	ug/L	Matrix Spike Lower Estimation	UJ		5/18/2015 10:34
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE3/DIS	790000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 10:36
Reason for change:	4X rule							



Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> BGMW01042015								
<b>SODIUM</b>	6010C	RE3/TOT	700000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 10:35
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE3/TOT	700000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 10:35
Reason for change:	4x rule							
<b>Field Sample ID:</b> BGMW02042015								
<b>BENZIDINE</b>	8270D	RES	100	ug/L	Matrix Spike Lower Rejection		R	5/18/2015 9:57
Reason for change:	0 %R MS/MSD							
<b>BENZIDINE</b>	8270D	RES	100	ug/L	Matrix Spike Lower Estimation	UJ		5/18/2015 9:57
Reason for change:	rejected %R Ms MSD							
<b>HEXACHLOROCYCLOPENTADIENE</b>	8270D	RES	21	ug/L	Laboratory Control Spike Lower		R	5/18/2015 9:55
Reason for change:	LCS 5-7% recovery							
<b>HEXACHLOROCYCLOPENTADIENE</b>	8270D	RES	21	ug/L	Laboratory Control Spike Lower	UJ		5/18/2015 9:56
Reason for change:	Rejected low MS MSD %R							
<b>NITRATE</b>	9056	RES/TOT	12	mg/L	Matrix Spike Upper Estimation		J	5/18/2015 10:41
Reason for change:	118% recovery							
<b>PERCHLORATE</b>	6860	RES	0.51	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 10:34
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE3/DIS	1000000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 10:36
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RES/TOT	860000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 10:35
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RES/TOT	860000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 10:35
Reason for change:	4x rule							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> FW042015EQU001								
<b>BENZIDINE</b>	8270D	RES	100	ug/L	Matrix Spike Lower Rejection		R	5/18/2015 9:57
Reason for change:	0 %R MS/MSD							
<b>BENZIDINE</b>	8270D	RES	100	ug/L	Matrix Spike Lower Estimation	UJ		5/18/2015 9:57
Reason for change:	rejected %R Ms MSD							
<b>HEXACHLOROCYCLOPENTADIENE</b>	8270D	RES	21	ug/L	Laboratory Control Spike Lower		R	5/18/2015 9:55
Reason for change:	LCS 5-7% recovery							
<b>HEXACHLOROCYCLOPENTADIENE</b>	8270D	RES	21	ug/L	Laboratory Control Spike Lower	UJ		5/18/2015 9:56
Reason for change:	Rejected low MS MSD %R							
<b>Octahydro-1,3,5,7-tetranitro-1,3,5,7-</b>	8330B	RES	0.16	ug/L	Professional Judgment		J	5/18/2015 10:12
Reason for change:	>40% confirmation							
<b>PERCHLORATE</b>	6860	RES	0.0086	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 10:34
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE3/DIS	120	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 10:36
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RES/TOT	1400	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 10:35
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RES/TOT	1400	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 10:35
Reason for change:	4x rule							
<b>Field Sample ID:</b> FW31042015EQU002								
<b>BENZIDINE</b>	8270D	RES	110	ug/L	Matrix Spike Lower Rejection		R	5/18/2015 9:57
Reason for change:	0 %R MS/MSD							
<b>BENZIDINE</b>	8270D	RES	110	ug/L	Matrix Spike Lower Estimation	UJ		5/18/2015 9:57
Reason for change:	rejected %R Ms MSD							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> FW31042015EQU002								
<b>HEXACHLOROCYCLOPENTADIENE</b>	8270D	RES	21	ug/L	Laboratory Control Spike Lower		R	5/18/2015 9:55
Reason for change: LCS 5-7% recovery								
<b>HEXACHLOROCYCLOPENTADIENE</b>	8270D	RES	21	ug/L	Laboratory Control Spike Lower	UJ		5/18/2015 9:56
Reason for change: Rejected low MS MSD %R								
<b>SODIUM</b>	6010C	RE3/DIS	1900	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 10:36
Reason for change: 4X rule								
<b>SODIUM</b>	6010C	RE3/TOT	110	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 10:35
Reason for change: 4X rule								
<b>SODIUM</b>	6010C	RE3/TOT	110	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 10:35
Reason for change: 4x rule								
<b>Field Sample ID:</b> FW35042015								
<b>SODIUM</b>	6010C	RE3/DIS	59000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 10:36
Reason for change: 4X rule								
<b>SODIUM</b>	6010C	RES/TOT	650000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 10:35
Reason for change: 4X rule								
<b>SODIUM</b>	6010C	RES/TOT	650000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 10:35
Reason for change: 4x rule								
<b>Field Sample ID:</b> MW02S042015								
<b>PERCHLORATE</b>	6860	RES	0.096	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 10:34
Reason for change: 4X rule								

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> MW22S042015								
<b>BENZIDINE</b>	8270D	RES	100	ug/L	Matrix Spike Lower Rejection		R	5/18/2015 9:57
Reason for change:	0 %R MS/MSD							
<b>BENZIDINE</b>	8270D	RES	100	ug/L	Matrix Spike Lower Estimation	UJ		5/18/2015 9:57
Reason for change:	rejected %R Ms MSD							
<b>HEXACHLOROCYCLOPENTADIENE</b>	8270D	RES	20	ug/L	Laboratory Control Spike Lower		R	5/18/2015 9:55
Reason for change:	LCS 5-7% recovery							
<b>HEXACHLOROCYCLOPENTADIENE</b>	8270D	RES	20	ug/L	Laboratory Control Spike Lower	UJ		5/18/2015 9:56
Reason for change:	Rejected low MS MSD %R							
<b>PERCHLORATE</b>	6860	RES	0.068	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 10:34
Reason for change:	4X rule							
<b>Field Sample ID:</b> TMW31S042015								
<b>BENZIDINE</b>	8270D	RES	96	ug/L	Matrix Spike Lower Rejection		R	5/18/2015 9:57
Reason for change:	0 %R MS/MSD							
<b>BENZIDINE</b>	8270D	RES	96	ug/L	Matrix Spike Lower Estimation	UJ		5/18/2015 9:57
Reason for change:	rejected %R Ms MSD							
<b>HEXACHLOROCYCLOPENTADIENE</b>	8270D	RES	19	ug/L	Laboratory Control Spike Lower		R	5/18/2015 9:55
Reason for change:	LCS 5-7% recovery							
<b>HEXACHLOROCYCLOPENTADIENE</b>	8270D	RES	19	ug/L	Laboratory Control Spike Lower	UJ		5/18/2015 9:56
Reason for change:	Rejected low MS MSD %R							
<b>NITROBENZENE</b>	8330B	RE2	0.23	ug/L	Professional Judgment		J	5/18/2015 10:12
Reason for change:	>40% confirmation							
<b>PERCHLORATE</b>	6860	RES	480	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 10:34
Reason for change:	4X rule							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW31S042015								
<b>SODIUM</b>	6010C	RE3/DIS	520000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 10:36
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE3/TOT	580000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 10:35
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE3/TOT	580000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 10:35
Reason for change:	4x rule							
<b>Field Sample ID:</b> TMW33042015								
<b>1,2,4,5-TETRACHLOROBENZENE</b>	8270D	RE2	2.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>1,2,4,5-TETRACHLOROBENZENE</b>	8270D	RE2	2.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>1,2,4-TRICHLOROBENZENE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>1,2,4-TRICHLOROBENZENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>1,2-DICHLOROBENZENE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>1,2-DICHLOROBENZENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>1,2-DIPHENYLHYDRAZINE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>1,2-DIPHENYLHYDRAZINE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW33042015								
<b>1,3-DICHLOROBENZENE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>1,3-DICHLOROBENZENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>1,4-DICHLOROBENZENE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>1,4-DICHLOROBENZENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2,3,4,6-TETRACHLOROPHENOL</b>	8270D	RE2	2.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2,3,4,6-TETRACHLOROPHENOL</b>	8270D	RE2	2.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2,4,5-TRICHLOROPHENOL</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2,4,5-TRICHLOROPHENOL</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2,4,6-TRICHLOROPHENOL</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2,4,6-TRICHLOROPHENOL</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2,4-DICHLOROPHENOL</b>	8270D	RE2	2.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW33042015								
<b>2,4-DICHLOROPHENOL</b>	8270D	RE2	2.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2,4-DIMETHYLPHENOL</b>	8270D	RE2	4.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2,4-DIMETHYLPHENOL</b>	8270D	RE2	4.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2,4-DINITROPHENOL</b>	8270D	RE2	20	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2,4-DINITROPHENOL</b>	8270D	RE2	20	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2,4-DINITROTOLUENE</b>	8270D	RE2	4.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2,4-DINITROTOLUENE</b>	8270D	RE2	4.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2,6-DICHLOROPHENOL</b>	8270D	RE2	4.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2,6-DICHLOROPHENOL</b>	8270D	RE2	4.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2,6-DINITROTOLUENE</b>	8270D	RE2	4.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2,6-DINITROTOLUENE</b>	8270D	RE2	4.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW33042015								
<b>2-CHLORONAPHTHALENE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2-CHLORONAPHTHALENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2-CHLOROPHENOL</b>	8270D	RE2	4.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2-CHLOROPHENOL</b>	8270D	RE2	4.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2-METHYLNAPHTHALENE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2-METHYLNAPHTHALENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2-METHYLPHENOL</b>	8270D	RE2	4.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2-METHYLPHENOL</b>	8270D	RE2	4.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2-NITROANILINE</b>	8270D	RE2	4.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2-NITROANILINE</b>	8270D	RE2	4.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>2-NITROPHENOL</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							



Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW33042015								
<b>2-NITROPHENOL</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>3,3'-DICHLOROBENZIDINE</b>	8270D	RE2	10	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>3,3'-DICHLOROBENZIDINE</b>	8270D	RE2	10	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>3-NITROANILINE</b>	8270D	RE2	2.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>3-NITROANILINE</b>	8270D	RE2	2.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>4,6-DINITRO-2-METHYLPHENOL</b>	8270D	RE2	10	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>4,6-DINITRO-2-METHYLPHENOL</b>	8270D	RE2	10	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>4-BROMOPHENYL-PHENYLETHER</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>4-BROMOPHENYL-PHENYLETHER</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>4-CHLORO-3-METHYLPHENOL</b>	8270D	RE2	5.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>4-CHLORO-3-METHYLPHENOL</b>	8270D	RE2	5.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW33042015								
<b>4-CHLOROANILINE</b>	8270D	RE2	5.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>4-CHLOROANILINE</b>	8270D	RE2	5.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>4-CHLOROPHENYL-PHENYLETHER</b>	8270D	RE2	4.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>4-CHLOROPHENYL-PHENYLETHER</b>	8270D	RE2	4.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>4-NITROANILINE</b>	8270D	RE2	4.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>4-NITROANILINE</b>	8270D	RE2	4.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>4-NITROPHENOL</b>	8270D	RE2	10	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>4-NITROPHENOL</b>	8270D	RE2	10	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>ACENAPHTHENE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>ACENAPHTHENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>ACENAPHTHYLENE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW33042015								
<b>ACENAPHTHYLENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>ACETOPHENONE</b>	8270D	RE2	5.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>ACETOPHENONE</b>	8270D	RE2	5.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>ANTHRACENE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>ANTHRACENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BENZALDEHYDE</b>	8270D	RE2	2.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BENZALDEHYDE</b>	8270D	RE2	2.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BENZIDINE</b>	8270D	RE2	100	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BENZIDINE</b>	8270D	RE2	100	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BENZIDINE</b>	8270D	RES	100	ug/L	Matrix Spike Lower Rejection		R	5/18/2015 9:57
Reason for change:	0 %R MS/MSD							
<b>BENZIDINE</b>	8270D	RES	100	ug/L	Matrix Spike Lower Estimation	UJ		5/18/2015 9:57
Reason for change:	rejected %R Ms MSD							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW33042015								
<b>BENZO(A)ANTHRACENE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BENZO(A)ANTHRACENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BENZO(A)PYRENE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BENZO(A)PYRENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BENZO(B)FLUORANTHENE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BENZO(B)FLUORANTHENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BENZO(G,H,I)PERYLENE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BENZO(G,H,I)PERYLENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BENZO(K)FLUORANTHENE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BENZO(K)FLUORANTHENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BENZOIC ACID</b>	8270D	RE2	50	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW33042015								
<b>BENZOIC ACID</b>	8270D	RE2	50	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BENZYL ALCOHOL</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BENZYL ALCOHOL</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BIS(2-CHLOROETHOXY)METHANE</b>	8270D	RE2	4.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BIS(2-CHLOROETHOXY)METHANE</b>	8270D	RE2	4.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BIS(2-CHLOROETHYL) ETHER</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BIS(2-CHLOROETHYL) ETHER</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BIS(2-CHLOROISOPROPYL)ETHER</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BIS(2-CHLOROISOPROPYL)ETHER</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BIS(2-ETHYLHEXYL) PHTHALATE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>BIS(2-ETHYLHEXYL) PHTHALATE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW33042015								
<b>Butyl Benzyl Phthlate</b>	8270D	RE2	4.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>Butyl Benzyl Phthlate</b>	8270D	RE2	4.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>CARBAZOLE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>CARBAZOLE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>CHRYSENE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>CHRYSENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>DIBENZ(A,H)ANTHRACENE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>DIBENZ(A,H)ANTHRACENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>DIBENZOFURAN</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>DIBENZOFURAN</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>DIETHYL PHTHALATE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW33042015								
<b>DIETHYL PHTHALATE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>DIMETHYL PHTHALATE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>DIMETHYL PHTHALATE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>DI-N-BUTYL PHTHALATE</b>	8270D	RE2	4.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>DI-N-BUTYL PHTHALATE</b>	8270D	RE2	4.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>DI-N-OCTYL PHTHALATE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>DI-N-OCTYL PHTHALATE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>FLUORANTHENE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>FLUORANTHENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>FLUORENE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>FLUORENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW33042015								
<b>HEXACHLOROBENZENE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>HEXACHLOROBENZENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>HEXACHLOROBUTADIENE</b>	8270D	RE2	10	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>HEXACHLOROBUTADIENE</b>	8270D	RE2	10	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>HEXACHLOROCYCLOPENTADIENE</b>	8270D	RE2	20	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>HEXACHLOROCYCLOPENTADIENE</b>	8270D	RE2	20	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>HEXACHLOROCYCLOPENTADIENE</b>	8270D	RES	20	ug/L	Laboratory Control Spike Lower		R	5/18/2015 9:55
Reason for change:	LCS 5-7% recovery							
<b>HEXACHLOROCYCLOPENTADIENE</b>	8270D	RES	20	ug/L	Laboratory Control Spike Lower	UJ		5/18/2015 9:56
Reason for change:	Rejected low MS MSD %R							
<b>HEXACHLOROETHANE</b>	8270D	RE2	4.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>HEXACHLOROETHANE</b>	8270D	RE2	4.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>INDENO(1,2,3-CD)PYRENE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							



Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW33042015								
<b>INDENO(1,2,3-CD)PYRENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>ISOPHORONE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>ISOPHORONE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>M,P-CRESOL</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>M,P-CRESOL</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>NAPHTHALENE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>NAPHTHALENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>NITROBENZENE</b>	8270D	RE2	2.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>NITROBENZENE</b>	8270D	RE2	2.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>N-NITROSODIMETHYLAMINE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>N-NITROSODIMETHYLAMINE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW33042015								
<b>N-NITROSO-DI-N-PROPYLAMINE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>N-NITROSO-DI-N-PROPYLAMINE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>N-NITROSODIPHENYLAMINE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>N-NITROSODIPHENYLAMINE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>PENTACHLOROPHENOL</b>	8270D	RE2	40	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>PENTACHLOROPHENOL</b>	8270D	RE2	40	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>PHENANTHRENE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>PHENANTHRENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>PHENOL</b>	8270D	RE2	5.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>PHENOL</b>	8270D	RE2	5.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							
<b>PYRENE</b>	8270D	RE2	1.0	ug/L	Sampling to Analysis Rejection		R	5/18/2015 9:51
Reason for change:	keep original, surrogate %R marginal low and only terphenyl							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW33042015								
<b>PYRENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Estimatio	UJ		5/18/2015 9:51
Reason for change: keep original, surrogate %R marginal low and only terphenyl								
<b>SODIUM</b>	6010C	RE3/DIS	3000000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 10:36
Reason for change: 4X rule								
<b>SODIUM</b>	6010C	RES/TOT	1900000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 10:35
Reason for change: 4X rule								
<b>SODIUM</b>	6010C	RES/TOT	1900000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 10:35
Reason for change: 4x rule								
<b>Field Sample ID:</b> TMW40S042015								
<b>1,3,5-TRINITROBENZENE</b>	8330B	RE2	2.2	ug/L	Professional Judgment		J	5/18/2015 10:08
Reason for change: possible false positive or negative data, matrix interference								
<b>1,3-DINITROBENZENE</b>	8330B	RE2	0.18	ug/L	Professional Judgment		UJ	5/18/2015 10:08
Reason for change: possible false positive or negative data, matrix interference								
<b>2,4,6-TRINITROTOLUENE</b>	8330B	RE2	0.18	ug/L	Professional Judgment		UJ	5/18/2015 10:08
Reason for change: possible false positive or negative data, matrix interference								
<b>2,4-DINITROTOLUENE</b>	8330B	RES	0.18	ug/L	Professional Judgment		UJ	5/18/2015 10:09
Reason for change: possible false positive or negative data, matrix interference								
<b>2,6-DINITROTOLUENE</b>	8330B	RES	0.18	ug/L	Professional Judgment		UJ	5/18/2015 10:09
Reason for change: possible false positive or negative data, matrix interference								
<b>2-AMINO-4,6-DINITROTOLUENE</b>	8330B	RES	2.0	ug/L	Professional Judgment		J	5/18/2015 10:08
Reason for change: possible false positive or negative data, matrix interference								
<b>2-NITROTOLUENE</b>	8330B	RES	0.18	ug/L	Professional Judgment		UJ	5/18/2015 10:08
Reason for change: possible false positive or negative data, matrix interference								

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW40S042015								
<b>3-NITROTOLUENE</b>	8330B	RE2	0.78	ug/L	Professional Judgment		J	5/18/2015 10:08
Reason for change:	possibe false postive or negative data, matix interference							
<b>4-AMINO-2,6-DINITROTOLUENE</b>	8330B	RES	1.3	ug/L	Professional Judgment		J	5/18/2015 10:08
Reason for change:	possibe false postive or negative data, matix interference							
<b>4-NITROTOLUENE</b>	8330B	RES	0.47	ug/L	Professional Judgment		UJ	5/18/2015 10:09
Reason for change:	possibe false postive or negative data, matix interference							
<b>HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE</b>	8330B	DL	1200	ug/L	Professional Judgment		J	5/18/2015 10:08
Reason for change:	possibe false postive or negative data, matix interference							
<b>METHYL-2,4,6-TRINITROBENZENE/NITRAMINE</b>	8330B	RES	0.18	ug/L	Professional Judgment		UJ	5/18/2015 10:09
Reason for change:	possibe false postive or negative data, matix interference							
<b>NITROBENZENE</b>	8330B	RES	2.6	ug/L	Professional Judgment		J	5/18/2015 10:09
Reason for change:	possibe false postive or negative data, matix interference							
<b>Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazine (HMTX)</b>	8330B	RES	22	ug/L	Professional Judgment		J	5/18/2015 10:09
Reason for change:	possibe false postive or negative data, matix interference							
<b>PERCHLORATE</b>	6860	RES	4.0	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 10:34
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE3/DIS	1000000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 10:36
Reason for change:	4X rule							
<b>Field Sample ID:</b> TMW44042015EQU003								
<b>BENZIDINE</b>	8270D	RES	100	ug/L	Matrix Spike Lower Rejection		R	5/18/2015 9:57
Reason for change:	0 %R MS/MSD							
<b>BENZIDINE</b>	8270D	RES	100	ug/L	Matrix Spike Lower Estimation	UJ		5/18/2015 9:57
Reason for change:	rejected %R Ms MSD							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW44042015EQU003								
<b>HEXACHLOROCYCLOPENTADIENE</b>	8270D	RES	20	ug/L	Laboratory Control Spike Lower		R	5/18/2015 9:55
Reason for change: LCS 5-7% recovery								
<b>HEXACHLOROCYCLOPENTADIENE</b>	8270D	RES	20	ug/L	Laboratory Control Spike Lower	UJ		5/18/2015 9:56
Reason for change: Rejected low MS MSD %R								
<b>PERCHLORATE</b>	6860	RES	0.011	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 10:34
Reason for change: 4X rule								
<b>SODIUM</b>	6010C	RE3/DIS	370	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 10:36
Reason for change: 4X rule								
<b>SODIUM</b>	6010C	RE3/TOT	250	ug/L	Matrix Spike Lower Estimation	UJ		5/18/2015 10:35
Reason for change: 4X rule								
<b>Field Sample ID:</b> TMW46042015								
<b>BENZIDINE</b>	8270D	RES	100	ug/L	Matrix Spike Lower Rejection		R	5/18/2015 9:57
Reason for change: 0 %R MS/MSD								
<b>BENZIDINE</b>	8270D	RES	100	ug/L	Matrix Spike Lower Estimation	UJ		5/18/2015 9:57
Reason for change: rejected %R Ms MSD								
<b>HEXACHLOROCYCLOPENTADIENE</b>	8270D	RES	20	ug/L	Laboratory Control Spike Lower		R	5/18/2015 9:55
Reason for change: LCS 5-7% recovery								
<b>HEXACHLOROCYCLOPENTADIENE</b>	8270D	RES	20	ug/L	Laboratory Control Spike Lower	UJ		5/18/2015 9:56
Reason for change: Rejected low MS MSD %R								
<b>PERCHLORATE</b>	6860	RES	0.37	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 10:34
Reason for change: 4X rule								
<b>SODIUM</b>	6010C	RE3/DIS	1200000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 10:36
Reason for change: 4X rule								

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW46042015								
<b>SODIUM</b>	6010C	RE3/TOT	1200000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 10:35
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE3/TOT	1200000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 10:35
Reason for change:	4x rule							



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: Prep280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	GENCHEM								
<b>Method:</b>	9056	<b>Matrix:</b>	AQ						

Sample ID: BGMW02042015      Collected: 4/2/2015 9:20:00 AM      Analysis Type: RES/TOT      Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE	12	J D	0.20	LOD	1.0	LOQ	mg/L	J	Ms

Sample ID: FW35042015      Collected: 4/2/2015 8:50:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE	0.099	J	0.10	LOD	0.50	LOQ	mg/L	J	RI

Sample ID: TMW33042015      Collected: 4/2/2015 11:45:00 AM      Analysis Type: RES/TOT      Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE	0.22	J D	0.20	LOD	1.0	LOQ	mg/L	J	RI

<b>Method Category:</b>	METALS								
<b>Method:</b>	6010C	<b>Matrix:</b>	AQ						

Sample ID: BGMW01042015      Collected: 4/2/2015 1:12:00 PM      Analysis Type: RE2/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	51000		80	LOD	1000	LOQ	ug/L	J	Ms

Sample ID: BGMW01042015      Collected: 4/2/2015 1:12:00 PM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	540	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID: BGMW01042015      Collected: 4/2/2015 1:12:00 PM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	58	J	31	LOD	300	LOQ	ug/L	U	Eb
IRON	57	J	30	LOD	100	LOQ	ug/L	U	Eb
POTASSIUM	490	J	250	LOD	3000	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - USACE Project: FWDA 102012 GW

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Page 1 of 22



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: Prep280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6010C	<b>Matrix:</b>	AQ						

Sample ID: BGMW02042015 Collected: 4/2/2015 9:20:00 AM Analysis Type: RE2/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	55	J	30	LOD	100	LOQ	ug/L	J	RI

Sample ID: BGMW02042015 Collected: 4/2/2015 9:20:00 AM Analysis Type: RE3/DIS Dilution: 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	91000	D J	400	LOD	5000	LOQ	ug/L	J	Ms

Sample ID: BGMW02042015 Collected: 4/2/2015 9:20:00 AM Analysis Type: RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	670	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID: BGMW02042015 Collected: 4/2/2015 9:20:00 AM Analysis Type: RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	130	J	31	LOD	300	LOQ	ug/L	J	RI
IRON	82	J	30	LOD	100	LOQ	ug/L	J	RI
POTASSIUM	590	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID: FW042015EQU001 Collected: 4/2/2015 10:15:00 AM Analysis Type: RE2/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	47	J	80	LOD	1000	LOQ	ug/L	J	RI, Ms

Sample ID: FW042015EQU001 Collected: 4/2/2015 10:15:00 AM Analysis Type: RE3/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	120	J	250	LOD	5000	LOQ	ug/L	U	Mb

Sample ID: FW042015EQU001 Collected: 4/2/2015 10:15:00 AM Analysis Type: RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MAGNESIUM	11	J	25	LOD	500	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - USACE Project: FWDA 102012 GW

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Page 2 of 22





## Data Qualifier Summary

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: Prep280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS	
<b>Method:</b>	6010C	<b>Matrix:</b> AQ

**Sample ID:** FW042015EQU001      **Collected:** 4/2/2015 10:15:00 AM      **Analysis Type:** RES/TOT      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	61	J	31	LOD	300	LOQ	ug/L	J	RI
CALCIUM	120	J	80	LOD	1000	LOQ	ug/L	J	RI
IRON	40	J	30	LOD	100	LOQ	ug/L	J	RI
MAGNESIUM	23	J	25	LOD	500	LOQ	ug/L	U	Mb
SODIUM	1400	J	250	LOD	5000	LOQ	ug/L	J	RI

**Sample ID:** FW31042015EQU002      **Collected:** 4/2/2015 9:30:00 AM      **Analysis Type:** RE2/DIS      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	67	J	80	LOD	1000	LOQ	ug/L	J	RI, Ms

**Sample ID:** FW31042015EQU002      **Collected:** 4/2/2015 9:30:00 AM      **Analysis Type:** RE2/TOT      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	390	J	80	LOD	1000	LOQ	ug/L	J	RI

**Sample ID:** FW31042015EQU002      **Collected:** 4/2/2015 9:30:00 AM      **Analysis Type:** RE3/DIS      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	1900	J	250	LOD	5000	LOQ	ug/L	J	RI

**Sample ID:** FW31042015EQU002      **Collected:** 4/2/2015 9:30:00 AM      **Analysis Type:** RE3/TOT      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	110	J	250	LOD	5000	LOQ	ug/L	J	RI

**Sample ID:** FW31042015EQU002      **Collected:** 4/2/2015 9:30:00 AM      **Analysis Type:** RES/TOT      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	230	J	31	LOD	300	LOQ	ug/L	J	RI
MAGNESIUM	76	J	25	LOD	500	LOQ	ug/L	U	Mb

\* denotes a non-reportable result

**Project Name and Number:** 102012 - USACE Project: FWDA 102012 GW



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: Prep280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS	<b>Matrix:</b>	AQ
<b>Method:</b>	6010C		

**Sample ID:**FW35042015      **Collected:**4/2/2015 8:50:00 AM      **Analysis Type:**RE2/DIS      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	330000		80	LOD	1000	LOQ	ug/L	J	Ms

**Sample ID:**FW35042015      **Collected:**4/2/2015 8:50:00 AM      **Analysis Type:**RES/DIS      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	720	J	250	LOD	3000	LOQ	ug/L	J	RI

**Sample ID:**TMW31S042015      **Collected:**4/2/2015 1:05:00 PM      **Analysis Type:**RE2/DIS      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	120000		80	LOD	1000	LOQ	ug/L	J	Ms

**Sample ID:**TMW31S042015      **Collected:**4/2/2015 1:05:00 PM      **Analysis Type:**RES/DIS      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2200	J	250	LOD	3000	LOQ	ug/L	J	RI

**Sample ID:**TMW33042015      **Collected:**4/2/2015 11:45:00 AM      **Analysis Type:**RE2/DIS      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	110000		80	LOD	1000	LOQ	ug/L	J	Ms

**Sample ID:**TMW33042015      **Collected:**4/2/2015 11:45:00 AM      **Analysis Type:**RES/DIS      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1200	J	250	LOD	3000	LOQ	ug/L	J	RI

**Sample ID:**TMW33042015      **Collected:**4/2/2015 11:45:00 AM      **Analysis Type:**RES/TOT      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2100	J	250	LOD	3000	LOQ	ug/L	J	RI

\* denotes a non-reportable result

**Project Name and Number:** 102012 - USACE Project: FWDA 102012 GW

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Page 4 of 22



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: Prep280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS	
<b>Method:</b>	6010C	<b>Matrix:</b> AQ

Sample ID:TMW40S042015 Collected:4/2/2015 8:50:00 AM Analysis Type:RE2/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	80000		80	LOD	1000	LOQ	ug/L	J	Ms

Sample ID:TMW40S042015 Collected:4/2/2015 8:50:00 AM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1800	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW44042015EQU003 Collected:4/2/2015 10:00:00 AM Analysis Type:RE2/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	150	J	80	LOD	1000	LOQ	ug/L	J	RI

Sample ID:TMW44042015EQU003 Collected:4/2/2015 10:00:00 AM Analysis Type:RE3/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	370	J	250	LOD	5000	LOQ	ug/L	U	Mb

Sample ID:TMW44042015EQU003 Collected:4/2/2015 10:00:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	76	J	31	LOD	300	LOQ	ug/L	J	RI
IRON	53	J	30	LOD	100	LOQ	ug/L	J	RI
MAGNESIUM	28	J	25	LOD	500	LOQ	ug/L	U	Mb

Sample ID:TMW46042015 Collected:4/2/2015 12:18:00 PM Analysis Type:RE2/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	74000		80	LOD	1000	LOQ	ug/L	J	Ms

Sample ID:TMW46042015 Collected:4/2/2015 12:18:00 PM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	450	J	250	LOD	3000	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - USACE Project: FWDA 102012 GW

5/18/2015 4:09:02 PM

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Page 5 of 22



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: Prep280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6010C	<b>Matrix:</b>	AQ						

Sample ID: TMW46042015      Collected: 4/2/2015 12:18:00 PM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1200	J	250	LOD	3000	LOQ	ug/L	J	RI

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: BGMW01042015      Collected: 4/2/2015 1:12:00 PM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.73	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.29	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	2.1	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	1.7	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID: BGMW01042015      Collected: 4/2/2015 1:12:00 PM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.77	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.31	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	1.5	U	1.5	LOD	2.0	LOQ	ug/L	U	Eb
NICKEL	2.2	J	0.90	LOD	3.0	LOQ	ug/L	U	Eb
VANADIUM	2.0	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID: BGMW02042015      Collected: 4/2/2015 9:20:00 AM      Analysis Type: RE3/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	0.79	J	1.5	LOD	2.0	LOQ	ug/L	J	RI

Sample ID: BGMW02042015      Collected: 4/2/2015 9:20:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.79	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.071	J	0.10	LOD	1.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - USACE Project: FWDA 102012 GW

5/18/2015 4:09:02 PM

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Page 6 of 22



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: Prep280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: BGMW02042015      Collected: 4/2/2015 9:20:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.69	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.12	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	0.81	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
LEAD	0.18	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
NICKEL	0.57	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SILVER	0.036	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.066	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb
ZINC	2.1	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: FW042015EQU001      Collected: 4/2/2015 10:15:00 AM      Analysis Type: RE2/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	1.4	J	0.85	LOD	3.0	LOQ	ug/L	J	RI

Sample ID: FW042015EQU001      Collected: 4/2/2015 10:15:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	0.65	J	0.85	LOD	3.0	LOQ	ug/L	J	RI

Sample ID: FW042015EQU001      Collected: 4/2/2015 10:15:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	0.61	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
MANGANESE	1.6	J	0.90	LOD	3.5	LOQ	ug/L	J	RI
NICKEL	0.55	J	0.90	LOD	3.0	LOQ	ug/L	J	RI

Sample ID: FW31042015EQU002      Collected: 4/2/2015 9:30:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	0.34	J	0.90	LOD	3.5	LOQ	ug/L	J	RI
ZINC	2.6	J	6.0	LOD	20	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - USACE Project: FWDA 102012 GW

5/18/2015 4:09:02 PM

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Page 7 of 22



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: Prep280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID:FW31042015EQU002 Collected:4/2/2015 9:30:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	4.2	J Q	1.5	LOD	10	LOQ	ug/L	J	RI
COBALT	0.10	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
LEAD	0.26	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
ZINC	3.1	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID:FW35042015 Collected:4/2/2015 8:50:00 AM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	0.70	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	1.4	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	1.9	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	4.6	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID:FW35042015 Collected:4/2/2015 8:50:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	2.5	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
SELENIUM	1.1	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
SILVER	0.14	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.15	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb

Sample ID:TMW31S042015 Collected:4/2/2015 1:05:00 PM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.67	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
BERYLLIUM	0.51	J	0.24	LOD	1.0	LOQ	ug/L	J	RI
CHROMIUM	6.9	J	1.5	LOD	10	LOQ	ug/L	J	RI
THALLIUM	0.069	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
ZINC	18	J	6.0	LOD	20	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - USACE Project: FWDA 102012 GW

5/18/2015 4:09:02 PM

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Page 8 of 22



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: Prep280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID:TMW31S042015 Collected:4/2/2015 1:05:00 PM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	3.4	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
SILVER	0.10	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.27	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb

4/2/2015 11:45:00  
Sample ID:TMW33042015 Collected:AM Analysis Type:RE2/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.055	J	0.10	LOD	5.0	LOQ	ug/L	J	RI

4/2/2015 11:45:00  
Sample ID:TMW33042015 Collected:AM Analysis Type:RE3/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	1.5	J	1.5	LOD	2.0	LOQ	ug/L	J	RI

4/2/2015 11:45:00  
Sample ID:TMW33042015 Collected:AM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.46	J	0.60	LOD	6.0	LOQ	ug/L	J	RI
ARSENIC	0.93	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
BERYLLIUM	0.28	J	0.24	LOD	1.0	LOQ	ug/L	J	RI
COBALT	0.18	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
LEAD	0.81	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
NICKEL	1.5	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SELENIUM	0.82	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.14	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
VANADIUM	3.4	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	2.0	J	6.0	LOD	20	LOQ	ug/L	J	RI

4/2/2015 11:45:00  
Sample ID:TMW33042015 Collected:AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.44	J	0.60	LOD	6.0	LOQ	ug/L	J	RI
ARSENIC	1.5	J	1.0	LOD	5.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - USACE Project: FWDA 102012 GW

5/18/2015 4:09:02 PM

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Page 9 of 22



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: Prep280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: TMW33042015		4/2/2015 11:45:00			Collected: AM			Analysis Type: RES/TOT		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
BERYLLIUM	0.44	J	0.24	LOD	1.0	LOQ	ug/L	J	RI		
CHROMIUM	3.9	J Q	1.5	LOD	10	LOQ	ug/L	J	RI		
LEAD	2.5	J	0.50	LOD	3.0	LOQ	ug/L	J	RI		
SELENIUM	0.88	J	2.0	LOD	5.0	LOQ	ug/L	J	RI		
SILVER	0.11	J	0.10	LOD	5.0	LOQ	ug/L	J	RI		
THALLIUM	0.18	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb		
ZINC	13	J	6.0	LOD	20	LOQ	ug/L	J	RI		

Sample ID: TMW40S042015		4/2/2015 8:50:00 AM			Collected: AM			Analysis Type: RES/DIS		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
CHROMIUM	7.1	J	1.5	LOD	10	LOQ	ug/L	J	RI		
THALLIUM	0.066	J	0.20	LOD	1.0	LOQ	ug/L	J	RI		

Sample ID: TMW44042015EQU003		4/2/2015 10:00:00			Collected: AM			Analysis Type: RES/DIS		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
ZINC	2.2	J	6.0	LOD	20	LOQ	ug/L	J	RI		

Sample ID: TMW44042015EQU003		4/2/2015 10:00:00			Collected: AM			Analysis Type: RES/TOT		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
BARIIUM	1.6	J	0.85	LOD	3.0	LOQ	ug/L	J	RI		
CHROMIUM	0.92	J Q	1.5	LOD	10	LOQ	ug/L	J	RI		
MANGANESE	2.7	J	0.90	LOD	3.5	LOQ	ug/L	J	RI		
NICKEL	1.1	J	0.90	LOD	3.0	LOQ	ug/L	J	RI		

Sample ID: TMW46042015		4/2/2015 12:18:00			Collected: PM			Analysis Type: RE2/DIS		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
SILVER	0.045	J	0.10	LOD	5.0	LOQ	ug/L	J	RI		

\* denotes a non-reportable result

Project Name and Number: 102012 - USACE Project: FWDA 102012 GW

5/18/2015 4:09:02 PM

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Page 10 of 22





## Data Qualifier Summary

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: Prep280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: TMW46042015      4/2/2015 12:18:00      Collected: PM      Analysis Type: RE3/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	1.3	J	1.5	LOD	2.0	LOQ	ug/L	J	RI

Sample ID: TMW46042015      4/2/2015 12:18:00      Collected: PM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.4	J	0.60	LOD	6.0	LOQ	ug/L	J	RI
ARSENIC	0.50	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
BERYLLIUM	0.11	J	0.24	LOD	1.0	LOQ	ug/L	J	RI
COBALT	0.10	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
MANGANESE	0.31	J	0.90	LOD	3.5	LOQ	ug/L	J	RI
THALLIUM	0.079	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
VANADIUM	2.3	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID: TMW46042015      4/2/2015 12:18:00      Collected: PM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.2	J	0.60	LOD	6.0	LOQ	ug/L	J	RI
ARSENIC	0.88	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
BERYLLIUM	0.20	J	0.24	LOD	1.0	LOQ	ug/L	J	RI
CHROMIUM	2.4	J Q	1.5	LOD	10	LOQ	ug/L	J	RI
LEAD	2.0	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
NICKEL	1.8	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SILVER	0.058	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.13	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb
VANADIUM	5.8	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	15	J	6.0	LOD	20	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - USACE Project: FWDA 102012 GW

5/18/2015 4:09:02 PM

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Page 11 of 22



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: Prep280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA	<b>Matrix:</b>	AQ
<b>Method:</b>	6860		

<b>Sample ID:</b> FW042015EQU001		<b>Collected:</b> AM			<b>Analysis Type:</b> RES			<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
PERCHLORATE	0.0086	J	0.020	LOD	0.050	LOQ	ug/L	J	RI

<b>Sample ID:</b> TMW44042015EQU003		<b>Collected:</b> AM			<b>Analysis Type:</b> RES			<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
PERCHLORATE	0.011	J	0.020	LOD	0.050	LOQ	ug/L	J	RI

<b>Method Category:</b>	SVOA	<b>Matrix:</b>	AQ
<b>Method:</b>	8015C DRO		

<b>Sample ID:</b> FW042015EQU001		<b>Collected:</b> AM			<b>Analysis Type:</b> RE2			<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
DIESEL RANGE ORGANICS	0.093	J M	0.095	LOD	0.24	LOQ	mg/L	J	RI, Lcs

<b>Sample ID:</b> TMW33042015		<b>Collected:</b> AM			<b>Analysis Type:</b> RE2			<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
DIESEL RANGE ORGANICS	0.079	J M	0.10	LOD	0.25	LOQ	mg/L	J	RI, Lcs

<b>Method Category:</b>	SVOA	<b>Matrix:</b>	AQ
<b>Method:</b>	8081A		

<b>Sample ID:</b> TMW46042015		<b>Collected:</b> PM			<b>Analysis Type:</b> RES			<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
4,4'-DDD	0.020	U Q	0.020	LOD	0.049	LOQ	ug/L	UJ	Surr
4,4'-DDE	0.020	U Q	0.020	LOD	0.049	LOQ	ug/L	UJ	Surr
4,4'-DDT	0.020	U Q	0.020	LOD	0.049	LOQ	ug/L	UJ	Surr
ALDRIN	0.020	U Q	0.020	LOD	0.049	LOQ	ug/L	UJ	Surr
ALPHA-BHC	0.020	U Q	0.020	LOD	0.049	LOQ	ug/L	UJ	Surr
ALPHA-CHLORDANE	0.020	U Q	0.020	LOD	0.049	LOQ	ug/L	UJ	Surr

\* denotes a non-reportable result

**Project Name and Number: 102012 - USACE Project: FWDA 102012 GW**



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: Prep280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA	
<b>Method:</b>	8081A	<b>Matrix:</b> AQ

Sample ID: TMW46042015      Collected: 4/2/2015 12:18:00 PM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BETA-BHC	0.020	U Q	0.020	LOD	0.049	LOQ	ug/L	UJ	Surr
DELTA-BHC	0.020	U Q	0.020	LOD	0.049	LOQ	ug/L	UJ	Surr
DIELDRIN	0.020	U Q	0.020	LOD	0.049	LOQ	ug/L	UJ	Surr
ENDOSULFAN I	0.020	U Q	0.020	LOD	0.049	LOQ	ug/L	UJ	Surr
ENDOSULFAN II	0.020	U Q	0.020	LOD	0.049	LOQ	ug/L	UJ	Surr
ENDOSULFAN SULFATE	0.020	U Q	0.020	LOD	0.049	LOQ	ug/L	UJ	Surr
ENDRIN	0.020	U Q	0.020	LOD	0.049	LOQ	ug/L	UJ	Surr
ENDRIN ALDEHYDE	0.020	U Q	0.020	LOD	0.049	LOQ	ug/L	UJ	Surr
ENDRIN KETONE	0.020	U Q	0.020	LOD	0.049	LOQ	ug/L	UJ	Surr
GAMMA-BHC	0.020	U Q	0.020	LOD	0.049	LOQ	ug/L	UJ	Surr
GAMMA-CHLORDANE	0.020	U Q	0.020	LOD	0.049	LOQ	ug/L	UJ	Surr
HEPTACHLOR	0.020	U Q	0.020	LOD	0.049	LOQ	ug/L	UJ	Surr
HEPTACHLOR EPOXIDE	0.020	U Q	0.020	LOD	0.049	LOQ	ug/L	UJ	Surr
METHOXYCHLOR	0.020	U Q	0.020	LOD	0.098	LOQ	ug/L	UJ	Surr
TOXAPHENE	0.78	U Q	0.78	LOD	4.9	LOQ	ug/L	UJ	Surr

<b>Method Category:</b>	SVOA	
<b>Method:</b>	8270D	<b>Matrix:</b> AQ

Sample ID: BGMW01042015      Collected: 4/2/2015 1:12:00 PM      Analysis Type: RES-ACID      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	53	U	53	LOD	85	LOQ	ug/L	UJ	Ms

Sample ID: BGMW01042015      Collected: 4/2/2015 1:12:00 PM      Analysis Type: RES-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	110	U	110	LOD	210	LOQ	ug/L	R	Ms
DIMETHYL PHTHALATE	0.43	J	1.1	LOD	21	LOQ	ug/L	U	Mb
HEXACHLOROCYCLOPENTADIENE	21	U Q	21	LOD	53	LOQ	ug/L	R	Lcs

\* denotes a non-reportable result

Project Name and Number: 102012 - USACE Project: FWDA 102012 GW

5/18/2015 4:09:02 PM

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Page 13 of 22



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: Prep280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA									
<b>Method:</b>	8270D			<b>Matrix:</b> AQ						

**Sample ID:** BGMW02042015 **Collected:** 4/2/2015 9:20:00 AM **Analysis Type:** RES-ACID **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	52	U J	52	LOD	83	LOQ	ug/L	UJ	Ms

**Sample ID:** BGMW02042015 **Collected:** 4/2/2015 9:20:00 AM **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	100	U J	100	LOD	210	LOQ	ug/L	R	Ms
HEXACHLOROCYCLOPENTADIENE	21	U	21	LOD	52	LOQ	ug/L	R	Lcs

**Sample ID:** FW042015EQU001 **Collected:** 4/2/2015 10:15:00 AM **Analysis Type:** RES-ACID **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	52	U	52	LOD	83	LOQ	ug/L	UJ	Ms

**Sample ID:** FW042015EQU001 **Collected:** 4/2/2015 10:15:00 AM **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETOPHENONE	2.2	J	5.2	LOD	10	LOQ	ug/L	J	RI
BENZIDINE	100	U	100	LOD	210	LOQ	ug/L	R	Ms
BENZYL ALCOHOL	4.9	J	1.0	LOD	26	LOQ	ug/L	J	RI
HEXACHLOROCYCLOPENTADIENE	21	U	21	LOD	52	LOQ	ug/L	R	Lcs
NAPHTHALENE	0.31	J	1.0	LOD	10	LOQ	ug/L	J	RI

**Sample ID:** FW31042015EQU002 **Collected:** 4/2/2015 9:30:00 AM **Analysis Type:** RES-ACID **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	53	U	53	LOD	84	LOQ	ug/L	UJ	Ms

**Sample ID:** FW31042015EQU002 **Collected:** 4/2/2015 9:30:00 AM **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETOPHENONE	1.9	J	5.3	LOD	11	LOQ	ug/L	J	RI
BENZIDINE	110	U	110	LOD	210	LOQ	ug/L	R	Ms
BENZYL ALCOHOL	3.6	J	1.1	LOD	26	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - USACE Project: FWDA 102012 GW

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Page 14 of 22



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: Prep280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA								
<b>Method:</b>	8270D	<b>Matrix:</b>	AQ						

Sample ID:FW31042015EQU002 Collected:4/2/2015 9:30:00 AM Analysis Type:RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXACHLOROCYCLOPENTADIENE	21	U Q	21	LOD	53	LOQ	ug/L	R	Lcs
NAPHTHALENE	0.37	J	1.1	LOD	11	LOQ	ug/L	J	RI

Sample ID:MW22S042015 Collected:4/2/2015 1:29:00 PM Analysis Type:RES-ACID Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	50	U	50	LOD	80	LOQ	ug/L	UJ	Ms

Sample ID:MW22S042015 Collected:4/2/2015 1:29:00 PM Analysis Type:RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	100	U	100	LOD	200	LOQ	ug/L	R	Ms
HEXACHLOROCYCLOPENTADIENE	20	U Q	20	LOD	50	LOQ	ug/L	R	Lcs

Sample ID:TMW31S042015 Collected:4/2/2015 1:05:00 PM Analysis Type:RES-ACID Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	48	U	48	LOD	76	LOQ	ug/L	UJ	Ms

Sample ID:TMW31S042015 Collected:4/2/2015 1:05:00 PM Analysis Type:RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	96	U Q	96	LOD	190	LOQ	ug/L	R	Ms
DIMETHYL PHTHALATE	0.20	J	0.96	LOD	19	LOQ	ug/L	U	Mb
HEXACHLOROCYCLOPENTADIENE	19	U Q	19	LOD	48	LOQ	ug/L	R	Lcs

Sample ID:TMW33042015 Collected:4/2/2015 11:45:00 AM Analysis Type:RE2 Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
M,P-CRESOL*	1.0	U H	1.0	LOD	20	LOQ	ug/L	R	StoA

\* denotes a non-reportable result

Project Name and Number: 102012 - USACE Project: FWDA 102012 GW

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Page 15 of 22



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: Prep280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA		
<b>Method:</b>	8270D	<b>Matrix:</b>	AQ

Sample ID: TMW33042015      Collected: 4/2/2015 11:45:00 AM      Analysis Type: RE2-ACID      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,6-TETRACHLOROPHENOL*	2.0	U H	2.0	LOD	50	LOQ	ug/L	R	StoA
2,4,5-TRICHLOROPHENOL*	1.0	U H	1.0	LOD	20	LOQ	ug/L	R	StoA
2,4,6-TRICHLOROPHENOL*	1.0	U H	1.0	LOD	20	LOQ	ug/L	R	StoA
2,4-DICHLOROPHENOL*	2.0	U H	2.0	LOD	10	LOQ	ug/L	R	StoA
2,4-DIMETHYLPHENOL*	4.0	U H	4.0	LOD	10	LOQ	ug/L	R	StoA
2,4-DINITROPHENOL*	20	U H	20	LOD	80	LOQ	ug/L	R	StoA
2,6-DICHLOROPHENOL*	4.0	U H	4.0	LOD	10	LOQ	ug/L	R	StoA
2-CHLOROPHENOL*	4.0	U H	4.0	LOD	10	LOQ	ug/L	R	StoA
2-METHYLPHENOL*	4.0	U H	4.0	LOD	10	LOQ	ug/L	R	StoA
2-NITROPHENOL*	1.0	U H	1.0	LOD	20	LOQ	ug/L	R	StoA
4,6-DINITRO-2-METHYLPHENOL*	10	U H	10	LOD	80	LOQ	ug/L	R	StoA
4-CHLORO-3-METHYLPHENOL*	5.0	U H	5.0	LOD	20	LOQ	ug/L	R	StoA
4-NITROPHENOL*	10	U H	10	LOD	50	LOQ	ug/L	R	StoA
BENZOIC ACID*	50	U H	50	LOD	80	LOQ	ug/L	R	StoA
PENTACHLOROPHENOL*	40	U H	40	LOD	80	LOQ	ug/L	R	StoA
PHENOL*	5.0	U H	5.0	LOD	10	LOQ	ug/L	R	StoA

Sample ID: TMW33042015      Collected: 4/2/2015 11:45:00 AM      Analysis Type: RE2-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4,5-TETRACHLOROBENZENE*	2.0	U H	2.0	LOD	10	LOQ	ug/L	R	StoA
1,2,4-TRICHLOROBENZENE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
1,2-DICHLOROBENZENE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
1,2-DIPHENYLHYDRAZINE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
1,3-DICHLOROBENZENE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
1,4-DICHLOROBENZENE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
2,4-DINITROTOLUENE*	4.0	U H	4.0	LOD	20	LOQ	ug/L	R	StoA
2,6-DINITROTOLUENE*	4.0	U H	4.0	LOD	20	LOQ	ug/L	R	StoA
2-CHLORONAPHTHALENE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
2-METHYLNAPHTHALENE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
2-NITROANILINE*	4.0	U H	4.0	LOD	50	LOQ	ug/L	R	StoA
3,3'-DICHLOROBENZIDINE*	10	U H	10	LOD	50	LOQ	ug/L	R	StoA

\* denotes a non-reportable result

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5/18/2015 4:09:02 PM

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Page 16 of 22



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: Prep280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA		
<b>Method:</b>	8270D	<b>Matrix:</b>	AQ

Sample ID: TMW33042015      Collected: 4/2/2015 11:45:00 AM      Analysis Type: RE2-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3-NITROANILINE*	2.0	U H	2.0	LOD	50	LOQ	ug/L	R	StoA
4-BROMOPHENYL-PHENYLEETHER*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
4-CHLOROANILINE*	5.0	U H	5.0	LOD	25	LOQ	ug/L	R	StoA
4-CHLOROPHENYL-PHENYLEETHER*	4.0	U H	4.0	LOD	10	LOQ	ug/L	R	StoA
4-NITROANILINE*	4.0	U H	4.0	LOD	50	LOQ	ug/L	R	StoA
ACENAPHTHENE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
ACENAPHTHYLENE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
ACETOPHENONE*	5.0	U H	5.0	LOD	10	LOQ	ug/L	R	StoA
ANTHRACENE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
BENZALDEHYDE*	2.0	U H	2.0	LOD	10	LOQ	ug/L	R	Lcs, StoA
BENZIDINE*	100	U H	100	LOD	200	LOQ	ug/L	R	Lcs, StoA
BENZO(A)ANTHRACENE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
BENZO(A)PYRENE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
BENZO(B)FLUORANTHENE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
BENZO(G,H,I)PERYLENE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
BENZO(K)FLUORANTHENE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
BENZYL ALCOHOL*	1.0	U H	1.0	LOD	25	LOQ	ug/L	R	StoA
BIS(2-CHLOROETHOXY)METHANE*	4.0	U H	4.0	LOD	10	LOQ	ug/L	R	StoA
BIS(2-CHLOROETHYL) ETHER*	1.0	U H	1.0	LOD	20	LOQ	ug/L	R	StoA
BIS(2-CHLOROISOPROPYL)ETHER*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
BIS(2-ETHYLHEXYL) PHTHALATE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
Butyl Benzyl Phthlate*	4.0	U H	4.0	LOD	20	LOQ	ug/L	R	StoA
CARBAZOLE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
CHRYSENE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
DIBENZ(A,H)ANTHRACENE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
DIBENZOFURAN*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
DIETHYL PHTHALATE*	1.0	U H	1.0	LOD	20	LOQ	ug/L	R	StoA
DIMETHYL PHTHALATE*	1.0	U H	1.0	LOD	20	LOQ	ug/L	R	StoA
DI-N-BUTYL PHTHALATE*	4.0	U H	4.0	LOD	20	LOQ	ug/L	R	StoA
DI-N-OCTYL PHTHALATE*	1.0	U H	1.0	LOD	20	LOQ	ug/L	R	StoA
FLUORANTHENE*	1.0	U H	1.0	LOD	20	LOQ	ug/L	R	StoA
FLUORENE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA

\* denotes a non-reportable result

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5/18/2015 4:09:02 PM

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Page 17 of 22



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: Prep280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA	<b>Method:</b>	8270D	<b>Matrix:</b>	AQ
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4/2/2015 11:45:00  
**Sample ID:** TMW33042015      **Collected:** AM      **Analysis Type:** RE2-BASE/NEUTRAL      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXACHLOROENZENE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
HEXACHLOROBUTADIENE*	10	U H	10	LOD	30	LOQ	ug/L	R	StoA
HEXACHLOROCYCLOPENTADIENE*	20	U H	20	LOD	50	LOQ	ug/L	R	Lcs, Lcs, StoA
HEXACHLOROETHANE*	4.0	U H	4.0	LOD	10	LOQ	ug/L	R	StoA
INDENO(1,2,3-CD)PYRENE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
ISOPHORONE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
NAPHTHALENE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
NITROBENZENE*	2.0	U H	2.0	LOD	20	LOQ	ug/L	R	StoA
N-NITROSODIMETHYLAMINE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
N-NITROSO-DI-N-PROPYLAMINE*	1.0	U H	1.0	LOD	20	LOQ	ug/L	R	StoA
N-NITROSODIPHENYLAMINE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
PHENANTHRENE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA
PYRENE*	1.0	U H	1.0	LOD	10	LOQ	ug/L	R	StoA

4/2/2015 11:45:00  
**Sample ID:** TMW33042015      **Collected:** AM      **Analysis Type:** RES-ACID      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	50	U	50	LOD	80	LOQ	ug/L	UJ	Ms

4/2/2015 11:45:00  
**Sample ID:** TMW33042015      **Collected:** AM      **Analysis Type:** RES-BASE/NEUTRAL      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIPHENYLHYDRAZINE	0.28	J	1.0	LOD	10	LOQ	ug/L	U	Mb
BENZIDINE	100	U Q	100	LOD	200	LOQ	ug/L	R	Ms
HEXACHLOROCYCLOPENTADIENE	20	U	20	LOD	50	LOQ	ug/L	R	Lcs

4/2/2015 10:00:00  
**Sample ID:** TMW44042015EQU003      **Collected:** AM      **Analysis Type:** RES-ACID      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	13	J	50	LOD	80	LOQ	ug/L	J	RI, Ms

\* denotes a non-reportable result

Project Name and Number: 102012 - USACE Project: FWDA 102012 GW

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Page 18 of 22





## Data Qualifier Summary

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: Prep280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA
<b>Method:</b>	8270D
<b>Matrix:</b>	AQ

Sample ID: TMW44042015EQU003      Collected: 4/2/2015 10:00:00 AM      Analysis Type: RES-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETOPHENONE	2.7	J	5.0	LOD	10	LOQ	ug/L	J	RI
BENZIDINE	100	U	100	LOD	200	LOQ	ug/L	R	Ms
BENZYL ALCOHOL	7.3	J	1.0	LOD	25	LOQ	ug/L	J	RI
HEXACHLOROCYCLOPENTADIENE	20	U Q	20	LOD	50	LOQ	ug/L	R	Lcs
ISOPHORONE	0.28	J	1.0	LOD	10	LOQ	ug/L	U	Mb

Sample ID: TMW46042015      Collected: 4/2/2015 12:18:00 PM      Analysis Type: RES-ACID      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	50	U	50	LOD	81	LOQ	ug/L	UJ	Ms

Sample ID: TMW46042015      Collected: 4/2/2015 12:18:00 PM      Analysis Type: RES-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	100	U Q	100	LOD	200	LOQ	ug/L	R	Ms
DIMETHYL PHTHALATE	0.24	J	1.0	LOD	20	LOQ	ug/L	U	Mb
HEXACHLOROCYCLOPENTADIENE	20	U Q	20	LOD	50	LOQ	ug/L	R	Lcs

<b>Method Category:</b>	SVOA
<b>Method:</b>	8330B
<b>Matrix:</b>	AQ

Sample ID: FW042015EQU001      Collected: 4/2/2015 10:15:00 AM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.16	J	0.17	LOD	0.45	LOQ	ug/L	J	RI, ProfJudg

Sample ID: TMW31S042015      Collected: 4/2/2015 1:05:00 PM      Analysis Type: RE2      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITROBENZENE	0.23	J	0.16	LOD	0.43	LOQ	ug/L	J	RI, ProfJudg

\* denotes a non-reportable result

Project Name and Number: 102012 - USACE Project: FWDA 102012 GW

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Page 19 of 22



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: Prep280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA	
<b>Method:</b>	8330B	<b>Matrix:</b> AQ

Sample ID:TMW40S042015 Collected:4/2/2015 8:50:00 AM Analysis Type:DL Dilution: 100

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	1200	Q D	18	LOD	23	LOQ	ug/L	J	ProfJudg

Sample ID:TMW40S042015 Collected:4/2/2015 8:50:00 AM Analysis Type:RE2 Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3,5-TRINITROBENZENE	2.2	J Q	0.47	LOD	1.2	LOQ	ug/L	J	ProfJudg
1,3-DINITROBENZENE	0.18	U Q	0.18	LOD	0.47	LOQ	ug/L	UJ	ProfJudg
2,4,6-TRINITROTOLUENE	0.18	U Q	0.18	LOD	0.47	LOQ	ug/L	UJ	ProfJudg
3-NITROTOLUENE	0.78	J Q	0.18	LOD	0.47	LOQ	ug/L	J	ProfJudg

Sample ID:TMW40S042015 Collected:4/2/2015 8:50:00 AM Analysis Type:RES Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROTOLUENE	0.18	U Q	0.18	LOD	0.47	LOQ	ug/L	R	Surr, ProfJudg
2,6-DINITROTOLUENE	0.18	U Q	0.18	LOD	0.23	LOQ	ug/L	R	Surr, ProfJudg
2-AMINO-4,6-DINITROTOLUENE	2.0	Q	0.18	LOD	0.23	LOQ	ug/L	J	Surr, ProfJudg
2-NITROTOLUENE	0.18	U Q	0.18	LOD	0.47	LOQ	ug/L	R	Surr, ProfJudg
4-AMINO-2,6-DINITROTOLUENE	1.3	Q M	0.18	LOD	0.23	LOQ	ug/L	J	Surr, ProfJudg
4-NITROTOLUENE	0.47	U Q	0.47	LOD	1.2	LOQ	ug/L	R	Surr, ProfJudg
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	0.18	U Q	0.18	LOD	0.28	LOQ	ug/L	R	Surr, ProfJudg
NITROBENZENE	2.6	Q J M	0.18	LOD	0.47	LOQ	ug/L	J	Surr, ProfJudg
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	22	Q M J	0.18	LOD	0.47	LOQ	ug/L	J	Surr, ProfJudg

<b>Method Category:</b>	VOA	
<b>Method:</b>	8260B	<b>Matrix:</b> AQ

Sample ID:FW042015EQU001 Collected:4/2/2015 10:15:00 AM Analysis Type:RES Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.34	J	0.80	LOD	5.0	LOQ	ug/L	U	Mb
NAPHTHALENE	0.36	J	0.80	LOD	1.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - USACE Project: FWDA 102012 GW

5/18/2015 4:09:02 PM

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Page 20 of 22



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: Prep280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	VOA	
<b>Method:</b>	8260B	<b>Matrix:</b> AQ

**Sample ID:**FW31042015EQU002 **Collected:**4/2/2015 9:30:00 AM **Analysis Type:**RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.9	J	6.4	LOD	10	LOQ	ug/L	J	RI

**Sample ID:**MW22S042015 **Collected:**4/2/2015 1:29:00 PM **Analysis Type:**RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.68	J	0.40	LOD	1.0	LOQ	ug/L	J	RI
1,2-DICHLOROETHANE	0.68	J	0.40	LOD	1.0	LOQ	ug/L	J	RI

**Sample ID:**TB-02-042015 **Collected:**4/2/2015 8:00:00 AM **Analysis Type:**RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.33	J	0.80	LOD	5.0	LOQ	ug/L	U	Mb

**Sample ID:**TMW33042015 **Collected:**4/2/2015 11:45:00 AM **Analysis Type:**RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	3.0	J	6.4	LOD	10	LOQ	ug/L	J	RI

**Sample ID:**TMW40S042015 **Collected:**4/2/2015 8:50:00 AM **Analysis Type:**RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.66	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
METHYLENE CHLORIDE	0.72	J	0.80	LOD	5.0	LOQ	ug/L	U	Tb

**Sample ID:**TMW44042015EQU003 **Collected:**4/2/2015 10:00:00 AM **Analysis Type:**RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.3	J	6.4	LOD	10	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - USACE Project: FWDA 102012 GW

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Page 21 of 22



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: Prep280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

### Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
Eb	Equipment Blank Contamination
Lcs	Laboratory Control Precision
Lcs	Laboratory Control Spike Lower Estimation
Lcs	Laboratory Control Spike Lower Rejection
Mb	Method Blank Contamination
Ms	Matrix Spike Lower Estimation
Ms	Matrix Spike Lower Rejection
Ms	Matrix Spike Precision
Ms	Matrix Spike Upper Estimation
ProfJudg	Professional Judgment
RI	Reporting Limit Trace Value
StoA	Sampling to Analysis Rejection
Surr	Surrogate/Tracer Recovery Lower Estimation
Surr	Surrogate/Tracer Recovery Lower Rejection
Tb	Trip Blank Contamination

\* denotes a non-reportable result

**Project Name and Number: 102012 - USACE Project: FWDA 102012 GW**

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Page 22 of 22



## Data Review Sample Summary Report by Analysis Method

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<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Lab Reporting Batch: 280-67316-1</b>						
<b>Method: 6010C</b>						
BGMW01042015	280-67316-7	AQ	N	3005A	4/2/2015 1:12:00 PM	S2AVE
BGMW01042015	280-67316-7	AQ	N	3010A	4/2/2015 1:12:00 PM	S2AVE
BGMW02042015	280-67316-8	AQ	N	3005A	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015	280-67316-8	AQ	N	3010A	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015MS	280-67316-8MS	AQ	MS	3005A	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015MS	280-67316-8MS	AQ	MS	3010A	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015MSD	280-67316-8MSD	AQ	MSD	3005A	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015MSD	280-67316-8MSD	AQ	MSD	3010A	4/2/2015 9:20:00 AM	S2AVE
FW042015EQU001	280-67316-10	AQ	EB	3005A	4/2/2015 10:15:00 AM	S2AVE
FW042015EQU001	280-67316-10	AQ	EB	3010A	4/2/2015 10:15:00 AM	S2AVE
FW31042015EQU002	280-67316-3	AQ	EB	3005A	4/2/2015 9:30:00 AM	S2AVE
FW31042015EQU002	280-67316-3	AQ	EB	3010A	4/2/2015 9:30:00 AM	S2AVE
FW35042015	280-67316-14	AQ	N	3005A	4/2/2015 8:50:00 AM	S2AVE
FW35042015	280-67316-14	AQ	N	3010A	4/2/2015 8:50:00 AM	S2AVE
TMW31S042015	280-67316-2	AQ	N	3005A	4/2/2015 1:05:00 PM	S2AVE
TMW31S042015	280-67316-2	AQ	N	3010A	4/2/2015 1:05:00 PM	S2AVE
TMW33042015	280-67316-9	AQ	N	3005A	4/2/2015 11:45:00 AM	S2AVE
TMW33042015	280-67316-9	AQ	N	3010A	4/2/2015 11:45:00 AM	S2AVE
TMW40S042015	280-67316-6	AQ	N	3005A	4/2/2015 8:50:00 AM	S2AVE
TMW44042015EQU003	280-67316-4	AQ	EB	3005A	4/2/2015 10:00:00 AM	S2AVE
TMW44042015EQU003	280-67316-4	AQ	EB	3010A	4/2/2015 10:00:00 AM	S2AVE
TMW46042015	280-67316-1	AQ	N	3005A	4/2/2015 12:18:00 PM	S2AVE



## Data Review Sample Summary Report by Analysis Method

Reviewed By:

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Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 6010C</b>						
TMW46042015	280-67316-1	AQ	N	3010A	4/2/2015 12:18:00 PM	S2AVE
<b>Method: 6020A</b>						
BGMW01042015	280-67316-7	AQ	N	3005A	4/2/2015 1:12:00 PM	S2AVE
BGMW01042015	280-67316-7	AQ	N	3020A	4/2/2015 1:12:00 PM	S2AVE
BGMW02042015	280-67316-8	AQ	N	3005A	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015	280-67316-8	AQ	N	3020A	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015MS	280-67316-8MS	AQ	MS	3005A	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015MS	280-67316-8MS	AQ	MS	3020A	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015MSD	280-67316-8MSD	AQ	MSD	3005A	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015MSD	280-67316-8MSD	AQ	MSD	3020A	4/2/2015 9:20:00 AM	S2AVE
FW042015EQU001	280-67316-10	AQ	EB	3005A	4/2/2015 10:15:00 AM	S2AVE
FW042015EQU001	280-67316-10	AQ	EB	3020A	4/2/2015 10:15:00 AM	S2AVE
FW31042015EQU002	280-67316-3	AQ	EB	3005A	4/2/2015 9:30:00 AM	S2AVE
FW31042015EQU002	280-67316-3	AQ	EB	3020A	4/2/2015 9:30:00 AM	S2AVE
FW35042015	280-67316-14	AQ	N	3005A	4/2/2015 8:50:00 AM	S2AVE
FW35042015	280-67316-14	AQ	N	3020A	4/2/2015 8:50:00 AM	S2AVE
TMW31S042015	280-67316-2	AQ	N	3005A	4/2/2015 1:05:00 PM	S2AVE
TMW31S042015	280-67316-2	AQ	N	3020A	4/2/2015 1:05:00 PM	S2AVE
TMW33042015	280-67316-9	AQ	N	3005A	4/2/2015 11:45:00 AM	S2AVE
TMW33042015	280-67316-9	AQ	N	3020A	4/2/2015 11:45:00 AM	S2AVE
TMW40S042015	280-67316-6	AQ	N	3005A	4/2/2015 8:50:00 AM	S2AVE
TMW44042015EQU003	280-67316-4	AQ	EB	3005A	4/2/2015 10:00:00 AM	S2AVE
TMW44042015EQU003	280-67316-4	AQ	EB	3020A	4/2/2015 10:00:00 AM	S2AVE
TMW46042015	280-67316-1	AQ	N	3005A	4/2/2015 12:18:00 PM	S2AVE

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Page 2 of 7



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<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 6020A</b>						
TMW46042015	280-67316-1	AQ	N	3020A	4/2/2015 12:18:00 PM	S2AVE
<b>Method: 6860</b>						
BGMW01042015	280-67316-7	AQ	N	METHOD	4/2/2015 1:12:00 PM	S2AVE
BGMW02042015	280-67316-8	AQ	N	METHOD	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015MS	280-67316-8MS	AQ	MS	METHOD	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015MSD	280-67316-8MSD	AQ	MSD	METHOD	4/2/2015 9:20:00 AM	S2AVE
FW042015EQU001	280-67316-10	AQ	EB	METHOD	4/2/2015 10:15:00 AM	S2AVE
MW02S042015	280-67316-13	AQ	N	METHOD	4/2/2015 9:40:00 AM	S2AVE
MW22S042015	280-67316-5	AQ	N	METHOD	4/2/2015 1:29:00 PM	S2AVE
TMW31S042015	280-67316-2	AQ	N	METHOD	4/2/2015 1:05:00 PM	S2AVE
TMW40S042015	280-67316-6	AQ	N	METHOD	4/2/2015 8:50:00 AM	S2AVE
TMW44042015EQU003	280-67316-4	AQ	EB	METHOD	4/2/2015 10:00:00 AM	S2AVE
TMW46042015	280-67316-1	AQ	N	METHOD	4/2/2015 12:18:00 PM	S2AVE
<b>Method: 7470A</b>						
BGMW01042015	280-67316-7	AQ	N	7470A	4/2/2015 1:12:00 PM	S2AVE
BGMW02042015	280-67316-8	AQ	N	7470A	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015MS	280-67316-8MS	AQ	MS	7470A	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015MSD	280-67316-8MSD	AQ	MSD	7470A	4/2/2015 9:20:00 AM	S2AVE
FW042015EQU001	280-67316-10	AQ	EB	7470A	4/2/2015 10:15:00 AM	S2AVE
FW31042015EQU002	280-67316-3	AQ	EB	7470A	4/2/2015 9:30:00 AM	S2AVE
FW35042015	280-67316-14	AQ	N	7470A	4/2/2015 8:50:00 AM	S2AVE
TMW31S042015	280-67316-2	AQ	N	7470A	4/2/2015 1:05:00 PM	S2AVE
TMW33042015	280-67316-9	AQ	N	7470A	4/2/2015 11:45:00 AM	S2AVE
TMW40S042015	280-67316-6	AQ	N	7470A	4/2/2015 8:50:00 AM	S2AVE

5/18/2015 10:43:23 AM

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Page 3 of 7



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<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 7470A</b>						
TMW44042015EQU003	280-67316-4	AQ	EB	7470A	4/2/2015 10:00:00 AM	S2AVE
TMW46042015	280-67316-1	AQ	N	7470A	4/2/2015 12:18:00 PM	S2AVE
<b>Method: 8015C DRO</b>						
FW042015EQU001	280-67316-10	AQ	EB	3510C	4/2/2015 10:15:00 AM	S2AVE
TMW33042015	280-67316-9	AQ	N	3510C	4/2/2015 11:45:00 AM	S2AVE
<b>Method: 8015C GRO</b>						
FW042015EQU001	280-67316-10	AQ	EB	METHOD	4/2/2015 10:15:00 AM	S2AVE
TB-41-042015	280-67316-12	AQ	TB	METHOD	4/2/2015 8:00:00 AM	S2AVE
TMW33042015	280-67316-9	AQ	N	METHOD	4/2/2015 11:45:00 AM	S2AVE
<b>Method: 8081A</b>						
BGMW01042015	280-67316-7	AQ	N	3510C	4/2/2015 1:12:00 PM	S2AVE
BGMW02042015	280-67316-8	AQ	N	3510C	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015MS	280-67316-8MS	AQ	MS	3510C	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015MSD	280-67316-8MSD	AQ	MSD	3510C	4/2/2015 9:20:00 AM	S2AVE
FW042015EQU001	280-67316-10	AQ	EB	3510C	4/2/2015 10:15:00 AM	S2AVE
FW31042015EQU002	280-67316-3	AQ	EB	3510C	4/2/2015 9:30:00 AM	S2AVE
TMW31S042015	280-67316-2	AQ	N	3510C	4/2/2015 1:05:00 PM	S2AVE
TMW44042015EQU003	280-67316-4	AQ	EB	3510C	4/2/2015 10:00:00 AM	S2AVE
TMW46042015	280-67316-1	AQ	N	3510C	4/2/2015 12:18:00 PM	S2AVE
<b>Method: 8260B</b>						
BGMW01042015	280-67316-7	AQ	N	5030	4/2/2015 1:12:00 PM	S2AVE
BGMW02042015	280-67316-8	AQ	N	5030	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015MS	280-67316-8MS	AQ	MS	5030	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015MSD	280-67316-8MSD	AQ	MSD	5030	4/2/2015 9:20:00 AM	S2AVE

5/18/2015 10:43:23 AM

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Page 4 of 7





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<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 8260B</b>						
FW042015EQU001	280-67316-10	AQ	EB	5030	4/2/2015 10:15:00 AM	S2AVE
FW31042015EQU002	280-67316-3	AQ	EB	5030	4/2/2015 9:30:00 AM	S2AVE
MW22S042015	280-67316-5	AQ	N	5030	4/2/2015 1:29:00 PM	S2AVE
TB-02-042015	280-67316-11	AQ	TB	5030	4/2/2015 8:00:00 AM	S2AVE
TMW31S042015	280-67316-2	AQ	N	5030	4/2/2015 1:05:00 PM	S2AVE
TMW33042015	280-67316-9	AQ	N	5030	4/2/2015 11:45:00 AM	S2AVE
TMW40S042015	280-67316-6	AQ	N	5030	4/2/2015 8:50:00 AM	S2AVE
TMW44042015EQU003	280-67316-4	AQ	EB	5030	4/2/2015 10:00:00 AM	S2AVE
TMW46042015	280-67316-1	AQ	N	5030	4/2/2015 12:18:00 PM	S2AVE
<b>Method: 8270D</b>						
BGMW01042015	280-67316-7	AQ	N	3520C	4/2/2015 1:12:00 PM	S2AVE
BGMW02042015	280-67316-8	AQ	N	3520C	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015MS	280-67316-8MS	AQ	MS	3520C	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015MSD	280-67316-8MSD	AQ	MSD	3520C	4/2/2015 9:20:00 AM	S2AVE
FW042015EQU001	280-67316-10	AQ	EB	3520C	4/2/2015 10:15:00 AM	S2AVE
FW31042015EQU002	280-67316-3	AQ	EB	3520C	4/2/2015 9:30:00 AM	S2AVE
MW22S042015	280-67316-5	AQ	N	3520C	4/2/2015 1:29:00 PM	S2AVE
TMW31S042015	280-67316-2	AQ	N	3520C	4/2/2015 1:05:00 PM	S2AVE
TMW33042015	280-67316-9	AQ	N	3520C	4/2/2015 11:45:00 AM	S2AVE
TMW44042015EQU003	280-67316-4	AQ	EB	3520C	4/2/2015 10:00:00 AM	S2AVE
TMW46042015	280-67316-1	AQ	N	3520C	4/2/2015 12:18:00 PM	S2AVE
<b>Method: 8330B</b>						
BGMW01042015	280-67316-7	AQ	N	3535	4/2/2015 1:12:00 PM	S2AVE
BGMW02042015	280-67316-8	AQ	N	3535	4/2/2015 9:20:00 AM	S2AVE

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Page 5 of 7



## Data Review Sample Summary Report by Analysis Method

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<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 8330B</b>						
BGMW02042015MS	280-67316-8MS	AQ	MS	3535	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015MSD	280-67316-8MSD	AQ	MSD	3535	4/2/2015 9:20:00 AM	S2AVE
FW042015EQU001	280-67316-10	AQ	EB	3535	4/2/2015 10:15:00 AM	S2AVE
FW31042015EQU002	280-67316-3	AQ	EB	3535	4/2/2015 9:30:00 AM	S2AVE
TMW31S042015	280-67316-2	AQ	N	3535	4/2/2015 1:05:00 PM	S2AVE
TMW40S042015	280-67316-6	AQ	N	3535	4/2/2015 8:50:00 AM	S2AVE
TMW44042015EQU003	280-67316-4	AQ	EB	3535	4/2/2015 10:00:00 AM	S2AVE
TMW46042015	280-67316-1	AQ	N	3535	4/2/2015 12:18:00 PM	S2AVE
<b>Method: 9056</b>						
BGMW01042015	280-67316-7	AQ	N	METHOD	4/2/2015 1:12:00 PM	S2AVE
BGMW02042015	280-67316-8	AQ	N	METHOD	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015DUP	280-67316-8DUP	AQ	DUP	METHOD	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015MS	280-67316-8MS	AQ	MS	METHOD	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015MSD	280-67316-8MSD	AQ	MSD	METHOD	4/2/2015 9:20:00 AM	S2AVE
FW042015EQU001	280-67316-10	AQ	EB	METHOD	4/2/2015 10:15:00 AM	S2AVE
FW31042015EQU002	280-67316-3	AQ	EB	METHOD	4/2/2015 9:30:00 AM	S2AVE
FW35042015	280-67316-14	AQ	N	METHOD	4/2/2015 8:50:00 AM	S2AVE
FW35042015DUP	280-67316-14DUP	AQ	DUP	METHOD	4/2/2015 8:50:00 AM	S2AVE
FW35042015MS	280-67316-14MS	AQ	MS	METHOD	4/2/2015 8:50:00 AM	S2AVE
FW35042015MSD	280-67316-14MSD	AQ	MSD	METHOD	4/2/2015 8:50:00 AM	S2AVE
TMW31S042015	280-67316-2	AQ	N	METHOD	4/2/2015 1:05:00 PM	S2AVE
TMW33042015	280-67316-9	AQ	N	METHOD	4/2/2015 11:45:00 AM	S2AVE
TMW44042015EQU003	280-67316-4	AQ	EB	METHOD	4/2/2015 10:00:00 AM	S2AVE
TMW46042015	280-67316-1	AQ	N	METHOD	4/2/2015 12:18:00 PM	S2AVE

5/18/2015 10:43:23 AM

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Page 6 of 7



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
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### *Validation Label Legend*

<i>Label Code</i>	<i>Label Description</i>	<i>EPA Level</i>
S1VE	Stage_1_Validation_Electronic	N/A
S1VM	Stage_1_Validation_Manual	N/A
S1VEM	Stage_1_Validation_Electronic_and_Manual	N/A
S2AVE	Stage_2A_Validation_Electronic	Level 3 w/o calibration
S2AVM	Stage_2A_Validation_Manual	Level 3 w/o calibration
S2AVEM	Stage_2A_Validation_Electronic_and_Manual	Level 3 w/o calibration
S2BVE	Stage_2B_Validation_Electronic	Level 3 with calibration
S2BVM	Stage_2B_Validation_Manual	Level 3 with calibration
S2BVEM	Stage_2B_Validation_Electronic_and_Manual	Level 3 with calibration
S3VE	Stage_3_Validation_Electronic	Level 4
S3VM	Stage_3_Validation_Manual	Level 4
S3VEM	Stage_3_Validation_Electronic_and_Manual	Level 4
S4VE	Stage_4_Validation_Electronic	Level 4
S4VM	Stage_4_Validation_Manual	Level 4
S4VEM	Stage_4_Validation_Electronic_and_Manual	Level 4
NV	Not_Validated	N/A



## Data Review Summary

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: 280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<i>Validation Area</i>	<i>Note</i>
Technical Holding Times	SR
Temperature	A
Initial Calibration	N
Continuing Calibration/Initial Calibration Verification	N
Method Blanks	SR
Surrogate/Tracer Spikes	SR
Matrix Spike/Matrix Spike Duplicates	SR
Laboratory Duplicates	A
Laboratory Replicates	N
Laboratory Control Samples	SR
Compound Quantitation	SR
Field Duplicates	N
Field Triplicates	N
Field Blanks	SR

A = Acceptable, N = Not provided/applicable, SR = See report

The contents of this report reflect findings made by ADR during Automated Data Review, manual applied qualifiers are not considered. Please refer to the Overall Qualifier Summary report for manual qualifiers.

## ***Equipment Rinsate Blank Outlier Report***

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: Prep280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

**No Data Review Qualifiers Applied.**

## QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: 280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

Method: 8270D		Preparation Method: 3520C			
Matrix: AQ					
<i>Sample ID</i>	<i>Type</i>	<i>Actual</i>	<i>Criteria</i>	<i>Units</i>	<i>Flag</i>
TMW33042015 (RE2)	Sampling To Extraction	9.00	7.00	DAYS	J (all detects) UJ (all non-detects)

Project Name and Number: 102012 - FWDA 102012

5/18/2015 10:44:06 AM

ADR version 1.9.0.325

Page 1 of 1

## Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: 280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method: 8270D</b>							
<b>Matrix: AQ</b>							
<b>QC Sample ID (Associated Samples)</b>	<b>Compound</b>	<b>LCS %R</b>	<b>LCSD %R</b>	<b>%R Limits</b>	<b>RPD (Limits)</b>	<b>Affected Compounds</b>	<b>Flag</b>
LCS 280-271191/2-A (BGMW01042015 BGMW02042015 FW042015EQU001 FW31042015EQU002 MW22S042015 TMW31S042015 TMW33042015 TMW44042015EQU003 TMW46042015)	HEXACHLOROCYCLOPENTADIEN	7	-	50.00-130.00	-	HEXACHLOROCYCLOPENTADIE	J (all detects) UJ (all non-detects)
<b>Method: 8015C DRO</b>							
<b>Matrix: AQ</b>							
<b>QC Sample ID (Associated Samples)</b>	<b>Compound</b>	<b>LCS %R</b>	<b>LCSD %R</b>	<b>%R Limits</b>	<b>RPD (Limits)</b>	<b>Affected Compounds</b>	<b>Flag</b>
LCSD 280-271425/23-A (FW042015EQU001 TMW33042015)	DIESEL RANGE ORGANICS	-	67	70.00-130.00	-	DIESEL RANGE ORGANICS	J (all detects) UJ (all non-detects)
<b>Method: 8270D</b>							
<b>Matrix: AQ</b>							
<b>QC Sample ID (Associated Samples)</b>	<b>Compound</b>	<b>LCS %R</b>	<b>LCSD %R</b>	<b>%R Limits</b>	<b>RPD (Limits)</b>	<b>Affected Compounds</b>	<b>Flag</b>
LCS 280-272314/2-A LCSD 280-272314/3-A (TMW33042015)	BENZALDEHYDE BENZIDINE HEXACHLOROCYCLOPENTADIEN	57 - 5	- - 10	70.00-130.00 10.00-110.00 50.00-130.00	- 44 (30.00) 74 (30.00)	BENZALDEHYDE BENZIDINE HEXACHLOROCYCLOPENTADIE	J (all detects) UJ (all non-detects)

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 10:44:39 AM

ADR version 1.9.0.325

Page 1 of 1

## Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: 280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

**Method: 6010C**  
**Matrix: AQ**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
BGMW02042015MS (DIS) BGMW02042015MSD (DIS) (BGMW01042015 BGMW02042015 FW042015EQU001 FW31042015EQU002 FW35042015 TMW31S042015 TMW33042015 TMW40S042015 TMW44042015EQU003 TMW46042015)	CALCIUM SODIUM	162 580	- 148	80.00-120.00 80.00-120.00	- -	CALCIUM SODIUM	J (all detects)
BGMW02042015MS (TOT) BGMW02042015MSD (TOT) (BGMW01042015 BGMW02042015 FW042015EQU001 FW31042015EQU002 FW35042015 TMW31S042015 TMW33042015 TMW44042015EQU003 TMW46042015)	SODIUM	67	224	80.00-120.00	-	SODIUM	J(all detects) UJ(all non-detects)

**Method: 8270D**  
**Matrix: AQ**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
BGMW02042015MS BGMW02042015MSD (BGMW01042015 BGMW02042015 FW042015EQU001 FW31042015EQU002 MW22S042015 TMW31S042015 TMW33042015 TMW44042015EQU003 TMW46042015)	BENZIDINE BENZOIC ACID	0 -	0 -	10.00-110.00 10.00-125.00	- 39 (30.00)	BENZIDINE BENZOIC ACID	J(all detects) UJ(all non-detects)

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 10:44:30 AM

ADR version 1.9.0.325

Page 1 of 2



## Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: 280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

**Method:** 6860  
**Matrix:** AQ

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
BGMW02042015MS BGMW02042015MSD (BGMW01042015 BGMW02042015 FW042015EQU001 MW02S042015 MW22S042015 TMW31S042015 TMW40S042015 TMW44042015EQU003 TMW46042015)	PERCHLORATE	60	76	80.00-120.00	-	PERCHLORATE	J(all detects) UJ(all non-detects)

## Method Blank Outlier Report

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: 280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

Method: 6010C Matrix: AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-271149/1-A	4/9/2015 3:38:00 PM	SODIUM	252 ug/L	BGMW01042015 BGMW02042015 FW042015EQU001 FW31042015EQU002 FW35042015 TMW31S042015 TMW33042015 TMW40S042015 TMW44042015EQU003 TMW46042015
MB 280-271161/1-A	4/8/2015 2:57:00 AM	MAGNESIUM	18.3 ug/L	BGMW01042015 BGMW02042015 FW042015EQU001 FW31042015EQU002 FW35042015 TMW31S042015 TMW33042015 TMW44042015EQU003 TMW46042015

*The following samples and their listed target analytes were qualified due to contamination reported in this blank*

Sample ID	Analyte	Reported Result	Modified Final Result
FW042015EQU001(RE3/DIS)	SODIUM	120 ug/L	120U ug/L
FW042015EQU001(RES/TOT)	MAGNESIUM	23 ug/L	23U ug/L
FW31042015EQU002(RES/TOT)	MAGNESIUM	76 ug/L	76U ug/L
TMW44042015EQU003(RE3/DIS)	SODIUM	370 ug/L	370U ug/L
TMW44042015EQU003(RES/TOT)	MAGNESIUM	28 ug/L	28U ug/L

Method: 6020A Matrix: AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-271162/1-A	4/10/2015 2:56:00 AM	THALLIUM	0.0660 ug/L	BGMW01042015 BGMW02042015 FW042015EQU001 FW31042015EQU002 FW35042015 TMW31S042015 TMW33042015 TMW44042015EQU003 TMW46042015

*The following samples and their listed target analytes were qualified due to contamination reported in this blank*

Sample ID	Analyte	Reported Result	Modified Final Result
BGMW02042015(RES/TOT)	THALLIUM	0.066 ug/L	0.066U ug/L
FW35042015(RES/TOT)	THALLIUM	0.15 ug/L	0.15U ug/L
TMW31S042015(RES/TOT)	THALLIUM	0.27 ug/L	0.27U ug/L
TMW33042015(RES/TOT)	THALLIUM	0.18 ug/L	0.18U ug/L
TMW46042015(RES/TOT)	THALLIUM	0.13 ug/L	0.13U ug/L

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 10:44:14 AM

ADR version 1.9.0.325

Page 1 of 2

## Method Blank Outlier Report

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: 280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

Method: 8260B				
Matrix: AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-271782/6	4/9/2015 8:14:00 AM	1,2,3-TRICHLOROBENZENE METHYLENE CHLORIDE	0.235 ug/L 0.460 ug/L	FW042015EQU001 TB-02-042015

*The following samples and their listed target analytes were qualified due to contamination reported in this blank*

Sample ID	Analyte	Reported Result	Modified Final Result
FW042015EQU001(RES)	METHYLENE CHLORIDE	0.34 ug/L	0.34U ug/L
TB-02-042015(RES)	METHYLENE CHLORIDE	0.33 ug/L	0.33U ug/L

Method: 8270D				
Matrix: AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-271191/1-A	4/9/2015 1:08:00 PM	1,2-DIPHENYLHYDRAZINE ACETOPHENONE Benz[ <i>a</i> ]anthracene BENZYL ALCOHOL DIETHYL PHTHALATE DIMETHYL PHTHALATE FLUORANTHENE ISOPHORONE N-NITROSODIPHENYLAMINE PHENANTHRENE	0.355 ug/L 0.271 ug/L 0.388 ug/L 0.252 ug/L 0.464 ug/L 0.722 ug/L 0.279 ug/L 0.300 ug/L 0.480 ug/L 0.341 ug/L	BGMW01042015 BGMW02042015 FW042015EQU001 FW31042015EQU002 MW22S042015 TMW31S042015 TMW33042015 TMW44042015EQU003 TMW46042015
MB 280-272314/1-A	4/17/2015 5:08:00 PM	PHENANTHRENE	0.308 ug/L	TMW33042015

*The following samples and their listed target analytes were qualified due to contamination reported in this blank*

Sample ID	Analyte	Reported Result	Modified Final Result
BGMW01042015(RES)	DIMETHYL PHTHALATE	0.43 ug/L	0.43U ug/L
TMW31S042015(RES)	DIMETHYL PHTHALATE	0.20 ug/L	0.20U ug/L
TMW33042015(RES)	1,2-DIPHENYLHYDRAZINE	0.28 ug/L	0.28U ug/L
TMW44042015EQU003(RES)	ISOPHORONE	0.28 ug/L	0.28U ug/L
TMW46042015(RES)	DIMETHYL PHTHALATE	0.24 ug/L	0.24U ug/L

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 10:44:14 AM

ADR version 1.9.0.325

Page 2 of 2

## Reporting Limit Outliers

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: 280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method:</b> 6010C
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
BGMW01042015	ALUMINUM	J	58	300	LOQ	ug/L	J (all detects)
	IRON	J	57	100	LOQ	ug/L	
	POTASSIUM	J	540	3000	LOQ	ug/L	
BGMW02042015	ALUMINUM	J	130	300	LOQ	ug/L	J (all detects)
	IRON	J	55	100	LOQ	ug/L	
	POTASSIUM	J	670	3000	LOQ	ug/L	
FW042015EQU001	ALUMINUM	J	61	300	LOQ	ug/L	J (all detects)
	CALCIUM	J	47	1000	LOQ	ug/L	
	IRON	J	40	100	LOQ	ug/L	
	MAGNESIUM	J	11	500	LOQ	ug/L	
	SODIUM	J	120	5000	LOQ	ug/L	
FW31042015EQU002	ALUMINUM	J	230	300	LOQ	ug/L	J (all detects)
	CALCIUM	J	67	1000	LOQ	ug/L	
	MAGNESIUM	J	76	500	LOQ	ug/L	
	SODIUM	J	1900	5000	LOQ	ug/L	
FW35042015	POTASSIUM	J	720	3000	LOQ	ug/L	J (all detects)
TMW31S042015	POTASSIUM	J	2200	3000	LOQ	ug/L	J (all detects)
TMW33042015	POTASSIUM	J	1200	3000	LOQ	ug/L	J (all detects)
TMW40S042015	POTASSIUM	J	1800	3000	LOQ	ug/L	J (all detects)
TMW44042015EQU003	ALUMINUM	J	76	300	LOQ	ug/L	J (all detects)
	CALCIUM	J	150	1000	LOQ	ug/L	
	IRON	J	53	100	LOQ	ug/L	
	MAGNESIUM	J	28	500	LOQ	ug/L	
	SODIUM	J	370	5000	LOQ	ug/L	
TMW46042015	POTASSIUM	J	450	3000	LOQ	ug/L	J (all detects)

<b>Method:</b> 6020A
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
BGMW01042015	ARSENIC	J	0.73	5.0	LOQ	ug/L	J (all detects)
	COBALT	J	0.29	1.0	LOQ	ug/L	
	NICKEL	J	2.1	3.0	LOQ	ug/L	
	VANADIUM	J	1.7	6.0	LOQ	ug/L	
BGMW02042015	ARSENIC	J	0.79	5.0	LOQ	ug/L	J (all detects)
	COBALT	J	0.071	1.0	LOQ	ug/L	
	COPPER	J	0.79	2.0	LOQ	ug/L	
	LEAD	J	0.18	3.0	LOQ	ug/L	
	NICKEL	J	0.57	3.0	LOQ	ug/L	
	SILVER	J	0.036	5.0	LOQ	ug/L	
	THALLIUM	J	0.066	1.0	LOQ	ug/L	
	ZINC	J	2.1	20	LOQ	ug/L	
FW042015EQU001	BARIUM	J	1.4	3.0	LOQ	ug/L	J (all detects)
	COPPER	J	0.61	2.0	LOQ	ug/L	
	MANGANESE	J	1.6	3.5	LOQ	ug/L	
	NICKEL	J	0.55	3.0	LOQ	ug/L	

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 10:44:47 AM

ADR version 1.9.0.325

Page 1 of 4

## Reporting Limit Outliers

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: 280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

Method: 6020A							
Matrix: AQ							
SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
FW31042015EQU002	CHROMIUM	J Q	4.2	10	LOQ	ug/L	J (all detects)
	COBALT	J	0.10	1.0	LOQ	ug/L	
	LEAD	J	0.26	3.0	LOQ	ug/L	
	MANGANESE	J	0.34	3.5	LOQ	ug/L	
	ZINC	J	2.6	20	LOQ	ug/L	
FW35042015	ARSENIC	J	2.5	5.0	LOQ	ug/L	J (all detects)
	COBALT	J	0.70	1.0	LOQ	ug/L	
	NICKEL	J	1.4	3.0	LOQ	ug/L	
	SELENIUM	J	1.1	5.0	LOQ	ug/L	
	SILVER	J	0.14	5.0	LOQ	ug/L	
	THALLIUM	J	0.15	1.0	LOQ	ug/L	
	VANADIUM	J	1.9	6.0	LOQ	ug/L	
ZINC	J	4.6	20	LOQ	ug/L		
TMW31S042015	ARSENIC	J	0.67	5.0	LOQ	ug/L	J (all detects)
	BERYLLIUM	J	0.51	1.0	LOQ	ug/L	
	CHROMIUM	J	6.9	10	LOQ	ug/L	
	SILVER	J	0.10	5.0	LOQ	ug/L	
	THALLIUM	J	0.069	1.0	LOQ	ug/L	
ZINC	J	18	20	LOQ	ug/L		
TMW33042015	ANTIMONY	J	0.46	6.0	LOQ	ug/L	J (all detects)
	ARSENIC	J	0.93	5.0	LOQ	ug/L	
	BERYLLIUM	J	0.28	1.0	LOQ	ug/L	
	CHROMIUM	J Q	3.9	10	LOQ	ug/L	
	COBALT	J	0.18	1.0	LOQ	ug/L	
	COPPER	J	1.5	2.0	LOQ	ug/L	
	LEAD	J	0.81	3.0	LOQ	ug/L	
	NICKEL	J	1.5	3.0	LOQ	ug/L	
	SELENIUM	J	0.82	5.0	LOQ	ug/L	
	SILVER	J	0.055	5.0	LOQ	ug/L	
	THALLIUM	J	0.14	1.0	LOQ	ug/L	
	VANADIUM	J	3.4	6.0	LOQ	ug/L	
	ZINC	J	2.0	20	LOQ	ug/L	
TMW40S042015	CHROMIUM	J	7.1	10	LOQ	ug/L	J (all detects)
	THALLIUM	J	0.066	1.0	LOQ	ug/L	
TMW44042015EQU003	BARIUM	J	1.6	3.0	LOQ	ug/L	J (all detects)
	CHROMIUM	J Q	0.92	10	LOQ	ug/L	
	MANGANESE	J	2.7	3.5	LOQ	ug/L	
	NICKEL	J	1.1	3.0	LOQ	ug/L	
	ZINC	J	2.2	20	LOQ	ug/L	
TMW46042015	ANTIMONY	J	1.4	6.0	LOQ	ug/L	J (all detects)
	ARSENIC	J	0.50	5.0	LOQ	ug/L	
	BERYLLIUM	J	0.11	1.0	LOQ	ug/L	
	CHROMIUM	J Q	2.4	10	LOQ	ug/L	
	COBALT	J	0.10	1.0	LOQ	ug/L	
	COPPER	J	1.3	2.0	LOQ	ug/L	
	LEAD	J	2.0	3.0	LOQ	ug/L	
	MANGANESE	J	0.31	3.5	LOQ	ug/L	
	NICKEL	J	1.8	3.0	LOQ	ug/L	
	SILVER	J	0.045	5.0	LOQ	ug/L	
	THALLIUM	J	0.079	1.0	LOQ	ug/L	
	VANADIUM	J	2.3	6.0	LOQ	ug/L	
	ZINC	J	15	20	LOQ	ug/L	

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 10:44:47 AM

ADR version 1.9.0.325

Page 2 of 4

## Reporting Limit Outliers

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: 280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

**Method:** 6860**Matrix:** AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
FW042015EQU001	PERCHLORATE	J	0.0086	0.050	LOQ	ug/L	J (all detects)
TMW44042015EQU003	PERCHLORATE	J	0.011	0.050	LOQ	ug/L	J (all detects)

**Method:** 8015C DRO**Matrix:** AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
FW042015EQU001	DIESEL RANGE ORGANICS	J M	0.093	0.24	LOQ	mg/L	J (all detects)
TMW33042015	DIESEL RANGE ORGANICS	J M	0.079	0.25	LOQ	mg/L	J (all detects)

**Method:** 8260B**Matrix:** AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
FW042015EQU001	METHYLENE CHLORIDE	J	0.34	5.0	LOQ	ug/L	J (all detects)
	NAPHTHALENE	J	0.36	1.0	LOQ	ug/L	
FW31042015EQU002	ACETONE	J	8.9	10	LOQ	ug/L	J (all detects)
MW22S042015	1,1-DICHLOROETHANE	J	0.68	1.0	LOQ	ug/L	J (all detects)
	1,2-DICHLOROETHANE	J	0.68	1.0	LOQ	ug/L	
TB-02-042015	METHYLENE CHLORIDE	J	0.33	5.0	LOQ	ug/L	J (all detects)
TMW33042015	ACETONE	J	3.0	10	LOQ	ug/L	J (all detects)
TMW40S042015	CHLOROFORM	J	0.66	1.0	LOQ	ug/L	J (all detects)
	METHYLENE CHLORIDE	J	0.72	5.0	LOQ	ug/L	
TMW44042015EQU003	ACETONE	J	8.3	10	LOQ	ug/L	J (all detects)

**Method:** 8270D**Matrix:** AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
BGMW01042015	DIMETHYL PHTHALATE	J	0.43	21	LOQ	ug/L	J (all detects)
FW042015EQU001	ACETOPHENONE	J	2.2	10	LOQ	ug/L	J (all detects)
	BENZYL ALCOHOL	J	4.9	26	LOQ	ug/L	
	NAPHTHALENE	J	0.31	10	LOQ	ug/L	
FW31042015EQU002	ACETOPHENONE	J	1.9	11	LOQ	ug/L	J (all detects)
	BENZYL ALCOHOL	J	3.6	26	LOQ	ug/L	
	NAPHTHALENE	J	0.37	11	LOQ	ug/L	
TMW31S042015	DIMETHYL PHTHALATE	J	0.20	19	LOQ	ug/L	J (all detects)
TMW33042015	1,2-DIPHENYLHYDRAZINE	J	0.28	10	LOQ	ug/L	J (all detects)

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 10:44:47 AM

ADR version 1.9.0.325

Page 3 of 4

## Reporting Limit Outliers

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: 280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

**Method:** 8270D**Matrix:** AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW44042015EQU003	ACETOPHENONE	J	2.7	10	LOQ	ug/L	J (all detects)
	BENZOIC ACID	J	13	80	LOQ	ug/L	
	BENZYL ALCOHOL	J	7.3	25	LOQ	ug/L	
	ISOPHORONE	J	0.28	10	LOQ	ug/L	
TMW46042015	DIMETHYL PHTHALATE	J	0.24	20	LOQ	ug/L	J (all detects)

**Method:** 8330B**Matrix:** AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
FW042015EQU001	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	J	0.16	0.45	LOQ	ug/L	J (all detects)
TMW31S042015	NITROBENZENE	J	0.23	0.43	LOQ	ug/L	J (all detects)

**Method:** 9056**Matrix:** AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
FW35042015	NITRATE	J	0.099	0.50	LOQ	mg/L	J (all detects)
TMW33042015	NITRATE	J D	0.22	1.0	LOQ	mg/L	J (all detects)

## Surrogate Outlier Report

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: 280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method:</b> 8081A
<b>Matrix:</b> AQ

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
TMW46042015	DECACHLOROBIPHENYL	29	30.00-135.00	All Target Analytes	J(all detects) UJ(all non-detects)

<b>Method:</b> 8270D
<b>Matrix:</b> AQ

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
TMW31S042015	Terphenyl-d14	36	50.00-135.00	No Affected Compounds	
TMW33042015	Terphenyl-d14	38	50.00-135.00	No Affected Compounds	
TMW46042015	Terphenyl-d14	38	50.00-135.00	No Affected Compounds	

<b>Method:</b> 8330B
<b>Matrix:</b> AQ

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
TMW40S042015	1,2-DINITROBENZENE	0	75.00-118.00	All Target Analytes	J(all detects) R(all non-detects)



## Trip Blank Outlier Report

Lab Reporting Batch ID: 280-67316-1

Laboratory: TA DEN

EDD Filename: 280-67316-1

eQAPP Name: FtWingate\_Primary\_120405

Method: 8260B				
Matrix: AQ				
Trip Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
TB-02-042015(RES)	4/2/2015 8:00:00 AM	METHYLENE CHLORIDE	0.33 ug/L	BGMW01042015 BGMW02042015 FW35042015 MW02S042015 MW22S042015 TMW31S042015 TMW33042015 TMW40S042015 TMW46042015

*The following samples and their listed target analytes were qualified due to contamination reported in this blank*

Sample ID	Analyte	Reported Result	Modified Final Result
TMW40S042015(RES)	METHYLENE CHLORIDE	0.72 ug/L	0.72U ug/L

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 10:47:05 AM

ADR version 1.9.0.325

Page 1 of 1

**CASE NARRATIVE**

**Client: Sundance Consulting, Inc.**  
**Project: Fort Wingate, New Mexico**  
**Report Number: 280-67316-2**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

**Sample Receipt**

The following report contains the analytical results for nine water samples received April 3, 2015, according to documented sample acceptance procedures. The samples were received at temperatures of 0.5°C, 3.0°C, 4.1°C, 0.3°C, 3.1°C, 2.0°C, 0.2°C, 0.3°C, 2.0°C, 1.4°C and 2.1°C.

Some sample IDs on the chain-of-custody end with 042014. All sample IDs on the container labels end with 042015. In accordance with the client's instruction, the samples' IDs were logged per the container labels.

Additional samples/analyses requested on the chain-of-custody are reported under separate cover (280-67316-1).

No other anomalies were encountered during sample receipt.

**GC/MS Semivolatiles - 8270D**

Samples TMW46042015 (280-67316-1), TMW31S042015 (280-67316-2), FW31042015EQU002 (280-67316-3), TMW44042015EQU003 (280-67316-4), MW22S042015 (280-67316-5), BGMW01042015 (280-67316-7), BGMW02042015 (280-67316-8), TMW33042015 (280-67316-9) and FW042015EQU001 (280-67316-10) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 04/04/2015 and analyzed on 04/09/2015.

Please note the Caprolactam data are reported under separate cover, as the laboratory does not hold DOD ELAP certification for this compound. The laboratory does not maintain quarterly QC requirements for precision, accuracy and detections.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



## Field QC Assignments and Associated Samples

**EDD File Name:** 280-67316-2

**eQapp Name:** FtWingate\_Primary\_120405

	Associated Samples	Sample Collection Date
<b>Field QC</b> FW042015EQU001 <b>QC Type:</b> EB	BGMW01042015	4/2/2015 1:12:00 PM
	BGMW02042015	4/2/2015 9:20:00 AM
	MW22S042015	4/2/2015 1:29:00 PM
	TMW31S042015	4/2/2015 1:05:00 PM
	TMW33042015	4/2/2015 11:45:00 AM
	TMW46042015	4/2/2015 12:18:00 PM
<b>Field QC</b> FW31042015EQU002 <b>QC Type:</b> EB	BGMW01042015	4/2/2015 1:12:00 PM
	BGMW02042015	4/2/2015 9:20:00 AM
	MW22S042015	4/2/2015 1:29:00 PM
	TMW31S042015	4/2/2015 1:05:00 PM
	TMW33042015	4/2/2015 11:45:00 AM
	TMW46042015	4/2/2015 12:18:00 PM
<b>Field QC</b> TMW44042015EQU003 <b>QC Type:</b> EB	BGMW01042015	4/2/2015 1:12:00 PM
	BGMW02042015	4/2/2015 9:20:00 AM
	MW22S042015	4/2/2015 1:29:00 PM
	TMW31S042015	4/2/2015 1:05:00 PM
	TMW33042015	4/2/2015 11:45:00 AM
	TMW46042015	4/2/2015 12:18:00 PM



## ***Data Qualifier Summary***

Lab Reporting Batch ID: 280-67316-2

Laboratory: TA DEN

EDD Filename: 280-67316-2

eQAPP Name: FtWingate\_Primary\_120405

**No Data Review Qualifiers Applied.**



## Data Review Summary

Lab Reporting Batch ID: 280-67316-2

Laboratory: TA DEN

EDD Filename: 280-67316-2

eQAPP Name: FtWingate\_Primary\_120405

<i>Validation Area</i>	<i>Note</i>
Technical Holding Times	A
Temperature	A
Initial Calibration	N
Continuing Calibration/Initial Calibration Verification	N
Method Blanks	A
Surrogate/Tracer Spikes	SR
Matrix Spike/Matrix Spike Duplicates	A
Laboratory Duplicates	N
Laboratory Replicates	N
Laboratory Control Samples	A
Compound Quantitation	A
Field Duplicates	N
Field Triplicates	N
Field Blanks	A

A = Acceptable, N = Not provided/applicable, SR = See report

The contents of this report reflect findings made by ADR during Automated Data Review, manual applied qualifiers are not considered. Please refer to the Overall Qualifier Summary report for manual qualifiers.



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Lab Reporting Batch: 280-67316-2</b>						
<b>Method: 8270D</b>						
BGMW01042015	280-67316-7	AQ	N	3520C	4/2/2015 1:12:00 PM	S2AVE
BGMW02042015	280-67316-8	AQ	N	3520C	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015MS	280-67316-8MS	AQ	MS	3520C	4/2/2015 9:20:00 AM	S2AVE
BGMW02042015MSD	280-67316-8MSD	AQ	MSD	3520C	4/2/2015 9:20:00 AM	S2AVE
FW042015EQU001	280-67316-10	AQ	EB	3520C	4/2/2015 10:15:00 AM	S2AVE
FW31042015EQU002	280-67316-3	AQ	EB	3520C	4/2/2015 9:30:00 AM	S2AVE
MW22S042015	280-67316-5	AQ	N	3520C	4/2/2015 1:29:00 PM	S2AVE
TMW31S042015	280-67316-2	AQ	N	3520C	4/2/2015 1:05:00 PM	S2AVE
TMW33042015	280-67316-9	AQ	N	3520C	4/2/2015 11:45:00 AM	S2AVE
TMW44042015EQU003	280-67316-4	AQ	EB	3520C	4/2/2015 10:00:00 AM	S2AVE
TMW46042015	280-67316-1	AQ	N	3520C	4/2/2015 12:18:00 PM	S2AVE



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
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### *Validation Label Legend*

<i>Label Code</i>	<i>Label Description</i>	<i>EPA Level</i>
S1VE	Stage_1_Validation_Electronic	N/A
S1VM	Stage_1_Validation_Manual	N/A
S1VEM	Stage_1_Validation_Electronic_and_Manual	N/A
S2AVE	Stage_2A_Validation_Electronic	Level 3 w/o calibration
S2AVM	Stage_2A_Validation_Manual	Level 3 w/o calibration
S2AVEM	Stage_2A_Validation_Electronic_and_Manual	Level 3 w/o calibration
S2BVE	Stage_2B_Validation_Electronic	Level 3 with calibration
S2BVM	Stage_2B_Validation_Manual	Level 3 with calibration
S2BVEM	Stage_2B_Validation_Electronic_and_Manual	Level 3 with calibration
S3VE	Stage_3_Validation_Electronic	Level 4
S3VM	Stage_3_Validation_Manual	Level 4
S3VEM	Stage_3_Validation_Electronic_and_Manual	Level 4
S4VE	Stage_4_Validation_Electronic	Level 4
S4VM	Stage_4_Validation_Manual	Level 4
S4VEM	Stage_4_Validation_Electronic_and_Manual	Level 4
NV	Not_Validated	N/A

## Surrogate Outlier Report

Lab Reporting Batch ID: 280-67316-2

Laboratory: TA DEN

EDD Filename: 280-67316-2

eQAPP Name: FtWingate\_Primary\_120405

**Method:** 8270D**Matrix:** AQ

<b>Sample ID (Analysis Type)</b>	<b>Surrogate</b>	<b>Sample % Recovery</b>	<b>% Recovery Limits</b>	<b>Affected Compounds</b>	<b>Flag</b>
TMW31S042015	Terphenyl-d14	36	50.00-135.00	No Affected Compounds	
TMW33042015	Terphenyl-d14	38	50.00-135.00	No Affected Compounds	
TMW46042015	Terphenyl-d14	38	50.00-135.00	No Affected Compounds	

**Project Name and Number: 102012 - FWDA 102012 GW**

5/15/2015 9:40:48 AM

ADR version 1.9.0.325

Page 1 of 1



**CASE NARRATIVE**

**Client: Sundance Consulting, Inc.**  
**Project: Fort Wingate, New Mexico**  
**Report Number: 280-67366-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

**Sample Receipt**

The following report contains the analytical results for eleven water samples received April 4, 2015, according to documented sample acceptance procedures. The samples were received at temperatures of 0.9°C, 0.3°C, 4.8°C, 1.5°C, 1.2°C and 1.8°C.

Several sample IDs on the chain-of-custody end with 042014; however, the sample IDs on the container labels end with 042015. In accordance with the client's instructions, the samples' IDs were logged per the container labels.

The chain-of-custody (COC) lists the collection dates as 4/2/15 for samples TB-03-042015 (280-67366-3) and TB-42-042015 (280-67366-7), but the container labels list the collection dates as 4/3/15. The collection dates were logged per the container labels. The client was notified on April 7, 2015.

One of six hydrochloric acid preserved VOA vials submitted for sample DTW34042015 (280-67366-5) was received containing a bubble greater than 6mm in diameter. Whenever possible, the laboratory will use the vials without bubbles for analysis. The client was notified on April 7, 2015.

One of six 1L amber bottles submitted for sample MW20042015 (280-67366-6) was received broken. Sufficient volume remains for the requested analyses. The client was notified on April 7, 2015.

The chain-of-custody (COC) lists the collection time as 1230 for sample TMW40S042015 (280-67366-11), but the container labels list the collection time as 1000. The collection time was logged per the COC. The client was notified on April 7, 2015.

Please note the Caprolactam data are reported under separate cover (280-67366-2), as the laboratory does not hold DOD ELAP certification for this compound.

No other anomalies were encountered during sample receipt.

**GC/MS Volatiles - 8260B**

Samples TMW21042015 (280-67366-1), TMW29042015 (280-67366-2), TB-03-042015 (280-67366-3), TMW34042015 (280-67366-4), DTW34042015 (280-67366-5), MW20042015 (280-67366-6), MW03042015 (280-67366-8) and TMW35042015 (280-67366-9) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/07/2015 and 04/08/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

MS/MSD analyses for analytical batch 280-271563 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**GC/MS Semivolatiles - 8270D**

Samples MW20042015 (280-67366-6) and TMW35042015 (280-67366-9) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 04/06/2015 and analyzed on 04/09/2015.

Please note the Caprolactam data are reported under separate cover (280-67366-2), as the laboratory does not hold DOD ELAP certification for this compound.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

A deviation from the Standard Operating Procedure (SOP) occurred. The details are as follows:  
The samples were extracted per SW-846 3520C for 18 hours at a pH of 1-2 and 18 hours at a pH of 11-12; however, the laboratory's SOP requires the samples be extracted for 24 hours at each pH range. The laboratory's SOP is in the process of being revised for these changes.

Surrogate Terphenyl-d14 was recovered below the QC control limits in sample MW20042015 (280-67366-6). This anomaly is due to obvious matrix interference; therefore, corrective action is deemed unnecessary. The associated data have been flagged "Q" in accordance with the DOD QSM.

The LCS/LCSD associated with prep batch 280-271326 exhibited a percent recovery and RPD data above the QC control limits for Hexachlorocyclopentadiene. This is an indicator that data may be biased high. As no detectable concentrations are present in the associated samples, corrective action is deemed unnecessary. The associated data have been flagged "Q" in accordance with the DOD QSM.

MS/MSD analyses for prep batch 280-271326 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Gasoline Range Organics - 8015C**

Samples TMW34042015 (280-67366-4), DTW34042015 (280-67366-5), MW20042015 (280-67366-6), TB-42-042015 (280-67366-7), MW03042015 (280-67366-8) and TMW35042015 (280-67366-9) were analyzed for gasoline range organics in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 04/09/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Samples TMW34042015 (280-67366-4), DTW34042015 (280-67366-5), MW20042015 (280-67366-6), MW03042015 (280-67366-8) and TMW35042015 (280-67366-9) were received at the laboratory with a pH value >2. [The samples were analyzed within 7 days as recommended in SW846 for unpreserved samples; therefore, there should be no bias to the reported results.](#)

MS/MSD analyses for analytical batch 280-271833 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Diesel Range Organics - 8015C**

Samples TMW34042015 (280-67366-4), DTW34042015 (280-67366-5), MW20042015 (280-67366-6), MW03042015 (280-67366-8) and TMW35042015 (280-67366-9) were analyzed for Diesel Range Organics in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/07/2015 and analyzed on 04/10/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

MS/MSD analyses for prep batch 280-271425 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Organochlorine Pesticides - 8081A**

Samples MW20042015 (280-67366-6), TMW35042015 (280-67366-9), MW22S042015 (280-67366-10) and TMW40S042015 (280-67366-11) were analyzed for chlorinated pesticides in accordance with EPA SW-846 Method 8081A. The samples were prepared on 04/06/2015 and analyzed on 04/08/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Samples MW22S042015 (280-67366-10) and TMW40S042015 (280-67366-11) formed emulsions during the extraction procedure. The emulsions were broken up using centrifuge and/or pour backs.

Surrogate Decachlorobiphenyl was recovered below the QC control limits in samples MW22S042015 (280-67366-10) and TMW40S042015 (280-67366-11). These anomalies are due to obvious matrix interferences; therefore, corrective action is deemed unnecessary. The associated data have been flagged "Q" in accordance with the DOD QSM.

MS/MSD analyses for prep batch 280-271389 were not requested.

The initial calibration curve analyzed in batch 280-271615 was outside acceptance criteria for Toxaphene and Technical Chlordane. The calibration for Endosulfan II is within criteria on both columns; however, a different curve fit was used for quantitation for the back column. The incorrect calibration was used to quantify these compounds in Chrome. The calibration reported in the laboratory's LIM system is correct. The samples showed no visible Toxaphene or Chlordane pattern and as such are reported as ND. Endosulfan II is reported from the front column, which is ND for all samples and in control for all QC. Toxaphene was not fully integrated within the incorrect calibration and Chlordane was calibrated using a single concentration. Toxaphene is biased high in the reported CCVs and samples due to it being fully integrated.

The Continuing Calibration Verification (CCV) standard associated with analytical batch 280-271615 exhibited a %Difference (%D) value out of range, biased high, for gamma-Chlordane on the front column. As no detectable concentration of gamma-Chlordane is present in the associated samples, the data have been reported from the back column which was in control.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Explosives - 8330B**

Samples TMW21042015 (280-67366-1), TMW29042015 (280-67366-2), MW20042015 (280-67366-6) and MW03042015 (280-67366-8) were analyzed for explosives in accordance with EPA SW-846 Method 8330B. The samples were prepared on 04/08/2015 and analyzed on 04/11/2015.

TestAmerica Denver's practice for the reporting of dual column data in packages requiring forms and/or raw data is to report the surrogates from both columns, and the preferred result for any given target analyte from the analyst selected column. The preferred results for target analytes and surrogates are reported as PRIMARY on the Sample Datasheets.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Samples TMW21042015 (280-67366-1) and TMW29042015 (280-67366-2) required filtration to reduce matrix interference.

A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows:

The cartridges were eluted with 0.1% Acetic Acid in ACN instead of ACN to increase Tetryl recovery. This deviation was performed with QA and supervisor approval. The SOP is currently under revision to capture this change.

MS/MSD analyses for prep batch 280-271623 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Perchlorate - 6860**

Samples TMW21042015 (280-67366-1), TMW29042015 (280-67366-2), TMW34042015 (280-67366-4), DTW34042015 (280-67366-5), MW20042015 (280-67366-6), MW03042015 (280-67366-8) and TMW35042015 (280-67366-9) were analyzed for Perchlorate in accordance with SW846 6860. The samples were analyzed on 04/14/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

The MS/MSD associated with analytical batch 280-272464 was performed on sample TMW35042015 (280-67366-9). The MS/MSD exhibited a spike compound recovery outside the QC control limits for Perchlorate. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample has been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Total Metals - 6010C**

Samples TMW21042015 (280-67366-1), TMW29042015 (280-67366-2), TMW34042015 (280-67366-4), DTW34042015 (280-67366-5), MW20042015 (280-67366-6), MW03042015 (280-67366-8) and TMW35042015 (280-67366-9) were analyzed for Total Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 04/07/2015 and analyzed on 04/08/2015 and 04/09/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high concentrations of target analytes, samples TMW21042015 (280-67366-1), TMW29042015 (280-67366-2), TMW34042015 (280-67366-4), DTW34042015 (280-67366-5), MW20042015 (280-67366-6), MW03042015 (280-67366-8) and TMW35042015 (280-67366-9) had to be analyzed at dilutions. The reporting limits and method detection limits have been adjusted relative to the dilutions required.

The MS/MSD associated with prep batch 280-271220 was performed on sample TMW21042015 (280-67366-1). The MS/MSD spike compound recoveries and RPD data could not be reliably calculated for Aluminum, Iron and Sodium because the sample concentrations were greater than four times the spike amounts. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample have been flagged "J" in accordance with the DOD QSM.

The post digestion spike (PDS) and serial dilution (SD) associated with prep batch 280-271220 was performed on sample TMW21042015 (280-67366-1). The PDS exhibited percent recoveries outside the control limits for Aluminum and Iron; however, the PDS performed on this sample was in control.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Dissolved Metals - 6010C**

Samples TMW21042015 (280-67366-1), TMW29042015 (280-67366-2), TMW34042015 (280-67366-4), DTW34042015 (280-67366-5), MW20042015 (280-67366-6), MW03042015 (280-67366-8) and TMW35042015 (280-67366-9) were analyzed for Dissolved Metals in accordance with EPA SW-846 Method 6010C. The samples were prepared on 04/07/2015 and analyzed on 04/08/2015 and 04/09/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high concentrations of target analytes, samples TMW21042015 (280-67366-1), TMW29042015 (280-67366-2), TMW34042015 (280-67366-4),

DTW34042015 (280-67366-5), MW20042015 (280-67366-6), MW03042015 (280-67366-8) and TMW35042015 (280-67366-9) had to be analyzed at dilutions. The reporting limits and method detection limits have been adjusted relative to the dilutions required.

The MS/MSD associated with prep batch 280-271210 was performed on sample TMW21042015 (280-67366-1). The MS/MSD spike compound recoveries and RPD data could not be reliably calculated for Aluminum, Iron and Sodium because the sample concentrations were greater than four times the spike amounts. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample have been flagged "J" in accordance with the DOD QSM.

The post digestion spike (PDS) and serial dilution (SD) associated with prep batch 280-271210 was performed on sample TMW21042015 (280-67366-1). The PDS exhibited percent recoveries outside the control limits for Aluminum and Sodium; however, the PDS performed on this sample was in control.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Total Metals - 6020A**

Samples TMW21042015 (280-67366-1), TMW29042015 (280-67366-2), TMW34042015 (280-67366-4), DTW34042015 (280-67366-5), MW20042015 (280-67366-6), MW03042015 (280-67366-8) and TMW35042015 (280-67366-9) were analyzed for total metals (ICPMS) in accordance with SW846 6020A. The samples were prepared on 04/07/2015 and analyzed on 04/08/2015, 04/09/2015 and 04/10/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

The MS/MSD associated with prep batch 280-271215 was performed on sample TMW29042015 (280-67366-2). The MS/MSD exhibited spike compound recoveries outside the QC control limits for Antimony. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample have been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Dissolved Metals - 6020A**

Samples TMW21042015 (280-67366-1), TMW29042015 (280-67366-2), TMW34042015 (280-67366-4), DTW34042015 (280-67366-5), MW20042015 (280-67366-6), MW03042015 (280-67366-8) and TMW35042015 (280-67366-9) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 04/07/2015 and analyzed on 04/10/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

The ICSA solution associated with analytical batch 280-272121 was above DOD QSM Version 4.2 criteria of less than the LOD for Cadmium and Chromium. The laboratory has confirmed with the vendor that these elements are trace impurities in the ICSA solution; therefore, no corrective action was needed. The associated data have been flagged "Q" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Total Mercury - 7470A**

Samples TMW21042015 (280-67366-1), TMW29042015 (280-67366-2), TMW34042015 (280-67366-4), DTW34042015 (280-67366-5), MW20042015 (280-67366-6), MW03042015 (280-67366-8) and TMW35042015 (280-67366-9) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 04/09/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Dissolved Mercury - 7470A**

Samples TMW21042015 (280-67366-1), TMW29042015 (280-67366-2), TMW34042015 (280-67366-4), DTW34042015 (280-67366-5), MW20042015 (280-67366-6), MW03042015 (280-67366-8) and TMW35042015 (280-67366-9) were analyzed for dissolved mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 04/09/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

MS/MSD analyses for prep batch 280-271236 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Nitrate & Nitrite - 9056**

Samples TMW21042015 (280-67366-1), TMW29042015 (280-67366-2), TMW34042015 (280-67366-4), DTW34042015 (280-67366-5), MW20042015 (280-67366-6), MW03042015 (280-67366-8) and TMW35042015 (280-67366-9) were analyzed for anions (48 hours) in accordance with EPA SW-846 Method 9056. The samples were analyzed on 04/04/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high concentrations of target analytes and/or matrix interference, samples TMW34042015 (280-67366-4), DTW34042015 (280-67366-5), MW20042015 (280-67366-6) and TMW35042015 (280-67366-9) had to be analyzed at dilutions. The reporting limits and method detection limits have been adjusted relative to the dilutions required.

Nitrate as N was detected in method blank MB 280-271181/13 at a level that was less than one half the reporting limit; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



## Field QC Assignments and Associated Samples

**EDD File Name:** 280-67366-1

**eQapp Name:** FtWingate\_Primary\_120405

	Associated Samples	Sample Collection Date
<b>Field QC</b> DTW34042015 <b>QC Type:</b> FD	TMW34042015	4/3/2015 11:30:00 AM
<b>Field QC</b> TB-03-042015 <b>QC Type:</b> TB	DTW34042015	4/3/2015 11:30:00 AM
	MW03042015	4/3/2015 12:40:00 PM
	MW20042015	4/3/2015 9:20:00 AM
	MW22S042015	4/3/2015 12:30:00 PM
	TMW21042015	4/3/2015 11:26:00 AM
	TMW29042015	4/3/2015 9:35:00 AM
	TMW34042015	4/3/2015 11:30:00 AM
	TMW35042015	4/3/2015 9:20:00 AM
	TMW40S042015	4/3/2015 12:30:00 PM
<b>Field QC</b> TB-42-042015 <b>QC Type:</b> TB	DTW34042015	4/3/2015 11:30:00 AM
	MW03042015	4/3/2015 12:40:00 PM
	MW20042015	4/3/2015 9:20:00 AM
	MW22S042015	4/3/2015 12:30:00 PM
	TMW21042015	4/3/2015 11:26:00 AM
	TMW29042015	4/3/2015 9:35:00 AM
	TMW34042015	4/3/2015 11:30:00 AM
	TMW35042015	4/3/2015 9:20:00 AM
	TMW40S042015	4/3/2015 12:30:00 PM



## History of Manual Changes to Automated Data Review Qualifiers

Changed by: Doug Scott

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> DTW34042015								
<b>SODIUM</b>	6010C	RE2/DIS	1400000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 9:03
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/DIS	1400000	ug/L	Matrix Spike Lower Rejection	J		5/18/2015 9:03
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	1400000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 9:02
Reason for change:	4X rule							
<b>Field Sample ID:</b> MW03042015								
<b>SODIUM</b>	6010C	RE2/DIS	1200000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 9:03
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/DIS	1200000	ug/L	Matrix Spike Lower Rejection	J		5/18/2015 9:03
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	1200000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 9:02
Reason for change:	4X rule							
<b>Field Sample ID:</b> MW20042015								
<b>SODIUM</b>	6010C	RE2/DIS	4200000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 9:03
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/DIS	4200000	ug/L	Matrix Spike Lower Rejection	J		5/18/2015 9:03
Reason for change:	4X rule							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID: MW20042015</b>								
<b>SODIUM</b>	6010C	RE2/TOT	4400000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 9:02
Reason for change:	4X rule							
<b>Field Sample ID: TMW21042015</b>								
<b>SODIUM</b>	6010C	RE2/DIS	680000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 9:03
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/DIS	680000	ug/L	Matrix Spike Lower Rejection	J		5/18/2015 9:03
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	630000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 9:02
Reason for change:	4X rule							
<b>Field Sample ID: TMW29042015</b>								
<b>SODIUM</b>	6010C	RE2/DIS	620000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 9:03
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/DIS	620000	ug/L	Matrix Spike Lower Rejection	J		5/18/2015 9:03
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	620000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 9:02
Reason for change:	4X rule							
<b>Field Sample ID: TMW34042015</b>								
<b>SODIUM</b>	6010C	RE2/DIS	1500000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 9:03
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/DIS	1500000	ug/L	Matrix Spike Lower Rejection	J		5/18/2015 9:03
Reason for change:	4X rule							



Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW34042015								
<b>SODIUM</b>	6010C	RE2/TOT	1400000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 9:02
Reason for change:	4X rule							
<b>Field Sample ID:</b> TMW35042015								
<b>SODIUM</b>	6010C	RE2/DIS	1300000	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 9:03
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/DIS	1300000	ug/L	Matrix Spike Lower Rejection	J		5/18/2015 9:03
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	1300000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 9:02
Reason for change:	4X rule							



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67366-1

Laboratory: TA DEN

EDD Filename: 280-67366-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS									
<b>Method:</b>	6010C			<b>Matrix:</b> AQ						

Sample ID:DTW34042015		4/3/2015 11:30:00 Collected:AM			Analysis Type:RES/DIS			Dilution: 1		
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code	
POTASSIUM	1100	J	250	LOD	3000	LOQ	ug/L	J	RI	

Sample ID:DTW34042015		4/3/2015 11:30:00 Collected:AM			Analysis Type:RES/TOT			Dilution: 1		
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code	
POTASSIUM	1200	J	250	LOD	3000	LOQ	ug/L	J	RI	

Sample ID:MW03042015		4/3/2015 12:40:00 Collected:PM			Analysis Type:RE3/TOT			Dilution: 1		
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code	
IRON	51	J	30	LOD	100	LOQ	ug/L	J	RI, Ms	

Sample ID:MW03042015		4/3/2015 12:40:00 Collected:PM			Analysis Type:RES/DIS			Dilution: 1		
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code	
POTASSIUM	780	J	250	LOD	3000	LOQ	ug/L	J	RI	

Sample ID:MW03042015		4/3/2015 12:40:00 Collected:PM			Analysis Type:RES/TOT			Dilution: 1		
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code	
POTASSIUM	800	J	250	LOD	3000	LOQ	ug/L	J	RI	

Sample ID:MW20042015		4/3/2015 9:20:00 AM Collected:			Analysis Type:RE3/TOT			Dilution: 1		
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code	
IRON	24	J	30	LOD	100	LOQ	ug/L	J	RI, Ms	

Sample ID:MW20042015		4/3/2015 9:20:00 AM Collected:			Analysis Type:RES/DIS			Dilution: 1		
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code	
POTASSIUM	2500	J	250	LOD	3000	LOQ	ug/L	J	RI	

Sample ID:MW20042015		4/3/2015 9:20:00 AM Collected:			Analysis Type:RES/TOT			Dilution: 1		
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code	
POTASSIUM	2900	J	250	LOD	3000	LOQ	ug/L	J	RI	

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 9:12:32 AM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 1 of 13



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67366-1

Laboratory: TA DEN

EDD Filename: 280-67366-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS									
<b>Method:</b>	6010C			<b>Matrix:</b> AQ						

<b>Sample ID:</b> TMW21042015		<b>Collected:</b> AM			<b>Analysis Type:</b> RE2/DIS			<b>Dilution:</b> 2		
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>	
IRON	13000	D J	60	LOD	200	LOQ	ug/L	J	Ms	

<b>Sample ID:</b> TMW21042015		<b>Collected:</b> AM			<b>Analysis Type:</b> RE2/TOT			<b>Dilution:</b> 2		
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>	
IRON	17000	D J	60	LOD	200	LOQ	ug/L	J	Ms	

<b>Sample ID:</b> TMW21042015		<b>Collected:</b> AM			<b>Analysis Type:</b> RES/DIS			<b>Dilution:</b> 1		
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>	
ALUMINUM	17000	J	31	LOD	300	LOQ	ug/L	J	Ms	

<b>Sample ID:</b> TMW21042015		<b>Collected:</b> AM			<b>Analysis Type:</b> RES/TOT			<b>Dilution:</b> 1		
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>	
ALUMINUM	24000	J	31	LOD	300	LOQ	ug/L	J	Ms	

<b>Sample ID:</b> TMW29042015		<b>Collected:</b> 4/3/2015 9:35:00 AM			<b>Analysis Type:</b> RE3/DIS			<b>Dilution:</b> 1		
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>	
IRON	110		30	LOD	100	LOQ	ug/L	J	Ms	

<b>Sample ID:</b> TMW29042015		<b>Collected:</b> 4/3/2015 9:35:00 AM			<b>Analysis Type:</b> RE3/TOT			<b>Dilution:</b> 1		
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>	
IRON	3900		30	LOD	100	LOQ	ug/L	J	Ms	

<b>Sample ID:</b> TMW29042015		<b>Collected:</b> 4/3/2015 9:35:00 AM			<b>Analysis Type:</b> RES/DIS			<b>Dilution:</b> 1		
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>	
ALUMINUM	180	J	31	LOD	300	LOQ	ug/L	J	RI, Ms	
POTASSIUM	1300	J	250	LOD	3000	LOQ	ug/L	J	RI	

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 9:12:32 AM

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Page 2 of 13



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67366-1

Laboratory: TA DEN

EDD Filename: 280-67366-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6010C	<b>Matrix:</b>	AQ						

Sample ID:TMW29042015 Collected:4/3/2015 9:35:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	6400		31	LOD	300	LOQ	ug/L	J	Ms
POTASSIUM	2500	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW34042015 Collected:4/3/2015 11:30:00 AM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1100	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW34042015 Collected:4/3/2015 11:30:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1100	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW35042015 Collected:4/3/2015 9:20:00 AM Analysis Type:RE3/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	54	J	30	LOD	100	LOQ	ug/L	J	RI, Ms

Sample ID:TMW35042015 Collected:4/3/2015 9:20:00 AM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	810	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW35042015 Collected:4/3/2015 9:20:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	880	J	250	LOD	3000	LOQ	ug/L	J	RI

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID:DTW34042015 Collected:4/3/2015 11:30:00 AM Analysis Type:RE2/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	0.85	J	1.5	LOD	2.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 9:12:32 AM

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Page 3 of 13



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67366-1

Laboratory: TA DEN

EDD Filename: 280-67366-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID:DTW34042015      4/3/2015 11:30:00      Collected:AM      Analysis Type:RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.47	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.094	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	0.62	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	0.66	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	1.0	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID:DTW34042015      4/3/2015 11:30:00      Collected:AM      Analysis Type:RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.60	U	0.60	LOD	6.0	LOQ	ug/L	UJ	Ms
COBALT	0.24	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
LEAD	0.22	J	0.50	LOD	3.0	LOQ	ug/L	J	RI, Fd
NICKEL	0.62	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
THALLIUM	0.20	U	0.20	LOD	1.0	LOQ	ug/L	UJ	Fd
VANADIUM	1.3	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	2.4	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID:MW03042015      4/3/2015 12:40:00      Collected:PM      Analysis Type:RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.38	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.11	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	0.91	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	0.72	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	0.92	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	4.7	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID:MW03042015      4/3/2015 12:40:00      Collected:PM      Analysis Type:RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.60	U	0.60	LOD	6.0	LOQ	ug/L	UJ	Ms
ARSENIC	0.37	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.10	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	0.69	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	0.50	J	0.90	LOD	3.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 9:12:32 AM

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Page 4 of 13



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67366-1

Laboratory: TA DEN

EDD Filename: 280-67366-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: MW03042015		Collected: 4/3/2015 12:40:00 PM			Analysis Type: RES/TOT			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	1.6	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	5.4	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: MW20042015		Collected: 4/3/2015 9:20:00 AM			Analysis Type: RES/DIS			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.42	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
SILVER	0.038	J	0.10	LOD	5.0	LOQ	ug/L	J	RI

Sample ID: MW20042015		Collected: 4/3/2015 9:20:00 AM			Analysis Type: RES/TOT			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.60	U	0.60	LOD	6.0	LOQ	ug/L	UJ	Ms
SILVER	0.047	J	0.10	LOD	5.0	LOQ	ug/L	J	RI

Sample ID: TMW21042015		Collected: 4/3/2015 11:26:00 AM			Analysis Type: RES/DIS			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.6	J	0.60	LOD	6.0	LOQ	ug/L	J	RI
ARSENIC	4.0	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
BERYLLIUM	0.92	J	0.24	LOD	1.0	LOQ	ug/L	J	RI
CHROMIUM	9.4	J Q	1.5	LOD	10	LOQ	ug/L	J	RI
SELENIUM	3.0	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
SILVER	0.18	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.22	J	0.20	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: TMW21042015		Collected: 4/3/2015 11:26:00 AM			Analysis Type: RES/TOT			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.3	J	0.60	LOD	6.0	LOQ	ug/L	J	RI, Ms
SELENIUM	3.2	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
SILVER	0.26	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.29	J	0.20	LOD	1.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 9:12:32 AM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 5 of 13



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67366-1

Laboratory: TA DEN

EDD Filename: 280-67366-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: TMW29042015 Collected: 4/3/2015 9:35:00 AM Analysis Type: RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.62	J	0.60	LOD	6.0	LOQ	ug/L	J	RI
ARSENIC	1.4	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	0.85	J Q	1.5	LOD	10	LOQ	ug/L	J	RI
COBALT	0.090	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	0.79	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	1.0	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	5.4	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	2.8	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW29042015 Collected: 4/3/2015 9:35:00 AM Analysis Type: RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.41	J	0.60	LOD	6.0	LOQ	ug/L	J	RI, Ms
ARSENIC	2.1	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
BERYLLIUM	0.41	J	0.24	LOD	1.0	LOQ	ug/L	J	RI
CHROMIUM	7.1	J	1.5	LOD	10	LOQ	ug/L	J	RI
LEAD	2.4	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
SILVER	0.080	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.083	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
ZINC	14	J	6.0	LOD	20	LOQ	ug/L	J	RI

4/3/2015 11:30:00  
Sample ID: TMW34042015 Collected: AM Analysis Type: RE2/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	0.97	J	1.5	LOD	2.0	LOQ	ug/L	J	RI

4/3/2015 11:30:00  
Sample ID: TMW34042015 Collected: AM Analysis Type: RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	0.75	J Q	1.5	LOD	10	LOQ	ug/L	J	RI
COBALT	0.16	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	0.74	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	0.62	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SILVER	0.034	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.060	J	0.20	LOD	1.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 9:12:32 AM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 6 of 13



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67366-1

Laboratory: TA DEN

EDD Filename: 280-67366-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: TMW34042015      Collected: 4/3/2015 11:30:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	1.3	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID: TMW34042015      Collected: 4/3/2015 11:30:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.60	U	0.60	LOD	6.0	LOQ	ug/L	UJ	Ms
COBALT	0.18	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
LEAD	0.50	U	0.50	LOD	3.0	LOQ	ug/L	UJ	Fd
NICKEL	0.50	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
THALLIUM	0.092	J	0.20	LOD	1.0	LOQ	ug/L	J	RI, Fd
VANADIUM	1.5	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	3.5	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW35042015      Collected: 4/3/2015 9:20:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.62	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.12	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	1.2	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	0.95	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SILVER	0.038	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
VANADIUM	1.9	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID: TMW35042015      Collected: 4/3/2015 9:20:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.60	U	0.60	LOD	6.0	LOQ	ug/L	UJ	Ms
ARSENIC	0.65	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.15	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	1.1	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	0.76	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	2.4	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 9:12:32 AM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 7 of 13





## Data Qualifier Summary

Lab Reporting Batch ID: 280-67366-1

Laboratory: TA DEN

EDD Filename: 280-67366-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA
<b>Method:</b>	6860
<b>Matrix:</b>	AQ

<b>Sample ID:</b> DTW34042015		<b>Collected:</b> AM		<b>4/3/2015 11:30:00</b>		<b>Analysis Type:</b> RES		<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
PERCHLORATE	0.30		0.020	LOD	0.050	LOQ	ug/L	J	Ms

<b>Sample ID:</b> MW03042015		<b>Collected:</b> PM		<b>4/3/2015 12:40:00</b>		<b>Analysis Type:</b> RES		<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
PERCHLORATE	0.0073	J M	0.020	LOD	0.050	LOQ	ug/L	J	RI, Ms

<b>Sample ID:</b> MW20042015		<b>Collected:</b> 4/3/2015 9:20:00 AM		<b>Analysis Type:</b> RES		<b>Dilution:</b> 1			
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
PERCHLORATE	0.31		0.020	LOD	0.050	LOQ	ug/L	J	Ms

<b>Sample ID:</b> TMW21042015		<b>Collected:</b> AM		<b>4/3/2015 11:26:00</b>		<b>Analysis Type:</b> RES		<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
PERCHLORATE	0.0083	J	0.020	LOD	0.050	LOQ	ug/L	J	RI, Ms

<b>Sample ID:</b> TMW29042015		<b>Collected:</b> 4/3/2015 9:35:00 AM		<b>Analysis Type:</b> RES		<b>Dilution:</b> 1			
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
PERCHLORATE	0.092		0.020	LOD	0.050	LOQ	ug/L	J	Ms

<b>Sample ID:</b> TMW34042015		<b>Collected:</b> AM		<b>4/3/2015 11:30:00</b>		<b>Analysis Type:</b> RES		<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
PERCHLORATE	0.30		0.020	LOD	0.050	LOQ	ug/L	J	Ms

<b>Sample ID:</b> TMW35042015		<b>Collected:</b> 4/3/2015 9:20:00 AM		<b>Analysis Type:</b> RES		<b>Dilution:</b> 1			
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
PERCHLORATE	0.061	J	0.020	LOD	0.050	LOQ	ug/L	J	Ms

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 9:12:32 AM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 8 of 13



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67366-1

Laboratory: TA DEN

EDD Filename: 280-67366-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA									
<b>Method:</b>	8015C DRO			<b>Matrix:</b> AQ						

<b>Sample ID:</b> DTW34042015		<b>Collected:</b> 4/3/2015 11:30:00 AM			<b>Analysis Type:</b> RE2			<b>Dilution:</b> 1		
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>	
DIESEL RANGE ORGANICS	0.065	J M	0.10	LOD	0.25	LOQ	mg/L	J	RI, Lcs, Fd	

<b>Sample ID:</b> MW03042015		<b>Collected:</b> 4/3/2015 12:40:00 PM			<b>Analysis Type:</b> RE2			<b>Dilution:</b> 1		
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>	
DIESEL RANGE ORGANICS	0.055	J M	0.098	LOD	0.24	LOQ	mg/L	J	RI, Lcs	

<b>Sample ID:</b> MW20042015		<b>Collected:</b> 4/3/2015 9:20:00 AM			<b>Analysis Type:</b> RE2			<b>Dilution:</b> 1		
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>	
DIESEL RANGE ORGANICS	0.077	J M	0.099	LOD	0.25	LOQ	mg/L	J	RI, Lcs	

<b>Sample ID:</b> TMW34042015		<b>Collected:</b> 4/3/2015 11:30:00 AM			<b>Analysis Type:</b> RE2			<b>Dilution:</b> 1		
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>	
DIESEL RANGE ORGANICS	0.15	J M	0.10	LOD	0.25	LOQ	mg/L	J	RI, Lcs, Fd	

<b>Sample ID:</b> TMW35042015		<b>Collected:</b> 4/3/2015 9:20:00 AM			<b>Analysis Type:</b> RE2			<b>Dilution:</b> 1		
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>	
DIESEL RANGE ORGANICS	0.069	J M	0.11	LOD	0.27	LOQ	mg/L	J	RI, Lcs	

<b>Method Category:</b>	SVOA									
<b>Method:</b>	8081A			<b>Matrix:</b> AQ						

<b>Sample ID:</b> MW22S042015		<b>Collected:</b> 4/3/2015 12:30:00 PM			<b>Analysis Type:</b> RES			<b>Dilution:</b> 1		
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>	
4,4'-DDD	0.022	U Q	0.022	LOD	0.056	LOQ	ug/L	UJ	Surr	
4,4'-DDE	0.022	U Q	0.022	LOD	0.056	LOQ	ug/L	UJ	Surr	
4,4'-DDT	0.022	U Q	0.022	LOD	0.056	LOQ	ug/L	UJ	Surr	
ALDRIN	0.022	U Q	0.022	LOD	0.056	LOQ	ug/L	UJ	Surr	
ALPHA-BHC	0.022	U Q	0.022	LOD	0.056	LOQ	ug/L	UJ	Surr	
ALPHA-CHLORDANE	0.022	U Q	0.022	LOD	0.056	LOQ	ug/L	UJ	Surr	
BETA-BHC	0.022	U Q	0.022	LOD	0.056	LOQ	ug/L	UJ	Surr	

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 9:12:32 AM

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Page 9 of 13



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67366-1

Laboratory: TA DEN

EDD Filename: 280-67366-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA	<b>Method:</b>	8081A	<b>Matrix:</b>	AQ
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Sample ID: MW22S042015      Collected: 4/3/2015 12:30:00 PM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.022	U Q	0.022	LOD	0.056	LOQ	ug/L	UJ	Surr
DIELDRIN	0.022	U Q	0.022	LOD	0.056	LOQ	ug/L	UJ	Surr
ENDOSULFAN I	0.022	U Q	0.022	LOD	0.056	LOQ	ug/L	UJ	Surr
ENDOSULFAN II	0.022	U Q	0.022	LOD	0.056	LOQ	ug/L	UJ	Surr
ENDOSULFAN SULFATE	0.022	U Q	0.022	LOD	0.056	LOQ	ug/L	UJ	Surr
ENDRIN	0.022	U Q	0.022	LOD	0.056	LOQ	ug/L	UJ	Surr
ENDRIN ALDEHYDE	0.022	U Q	0.022	LOD	0.056	LOQ	ug/L	UJ	Surr
ENDRIN KETONE	0.022	U Q	0.022	LOD	0.056	LOQ	ug/L	UJ	Surr
GAMMA-BHC	0.022	U Q	0.022	LOD	0.056	LOQ	ug/L	UJ	Surr
GAMMA-CHLORDANE	0.022	U Q	0.022	LOD	0.056	LOQ	ug/L	UJ	Surr
HEPTACHLOR	0.022	U Q	0.022	LOD	0.056	LOQ	ug/L	UJ	Surr
HEPTACHLOR EPOXIDE	0.022	U Q	0.022	LOD	0.056	LOQ	ug/L	UJ	Surr
METHOXYCHLOR	0.022	U Q	0.022	LOD	0.11	LOQ	ug/L	UJ	Surr
TOXAPHENE	0.90	U Q	0.90	LOD	5.6	LOQ	ug/L	UJ	Surr

Sample ID: TMW40S042015      Collected: 4/3/2015 12:30:00 PM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.023	U Q	0.023	LOD	0.058	LOQ	ug/L	UJ	Surr
4,4'-DDE	0.023	U Q	0.023	LOD	0.058	LOQ	ug/L	UJ	Surr
4,4'-DDT	0.023	U Q	0.023	LOD	0.058	LOQ	ug/L	UJ	Surr
ALDRIN	0.023	U Q	0.023	LOD	0.058	LOQ	ug/L	UJ	Surr
ALPHA-BHC	0.023	U Q	0.023	LOD	0.058	LOQ	ug/L	UJ	Surr
ALPHA-CHLORDANE	0.023	U Q	0.023	LOD	0.058	LOQ	ug/L	UJ	Surr
BETA-BHC	0.023	U Q	0.023	LOD	0.058	LOQ	ug/L	UJ	Surr
DELTA-BHC	0.023	U Q	0.023	LOD	0.058	LOQ	ug/L	UJ	Surr
DIELDRIN	0.023	U Q	0.023	LOD	0.058	LOQ	ug/L	UJ	Surr
ENDOSULFAN I	0.023	U Q	0.023	LOD	0.058	LOQ	ug/L	UJ	Surr
ENDOSULFAN II	0.023	U Q	0.023	LOD	0.058	LOQ	ug/L	UJ	Surr
ENDOSULFAN SULFATE	0.023	U Q	0.023	LOD	0.058	LOQ	ug/L	UJ	Surr
ENDRIN	0.023	U Q	0.023	LOD	0.058	LOQ	ug/L	UJ	Surr
ENDRIN ALDEHYDE	0.023	U Q	0.023	LOD	0.058	LOQ	ug/L	UJ	Surr
ENDRIN KETONE	0.023	U Q	0.023	LOD	0.058	LOQ	ug/L	UJ	Surr
GAMMA-BHC	0.023	U Q	0.023	LOD	0.058	LOQ	ug/L	UJ	Surr

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 9:12:32 AM

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Page 10 of 13



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67366-1

Laboratory: TA DEN

EDD Filename: 280-67366-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA								
<b>Method:</b>	8081A	<b>Matrix:</b>	AQ						

Sample ID: TMW40S042015      Collected: 4/3/2015 12:30:00 PM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GAMMA-CHLORDANE	0.023	U Q	0.023	LOD	0.058	LOQ	ug/L	UJ	Surr
HEPTACHLOR	0.023	U Q	0.023	LOD	0.058	LOQ	ug/L	UJ	Surr
HEPTACHLOR EPOXIDE	0.023	U Q	0.023	LOD	0.058	LOQ	ug/L	UJ	Surr
METHOXYCHLOR	0.023	U Q	0.023	LOD	0.12	LOQ	ug/L	UJ	Surr
TOXAPHENE	0.93	U Q	0.93	LOD	5.8	LOQ	ug/L	UJ	Surr

<b>Method Category:</b>	SVOA								
<b>Method:</b>	8270D	<b>Matrix:</b>	AQ						

Sample ID: MW20042015      Collected: 4/3/2015 9:20:00 AM      Analysis Type: RES-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXACHLOROCYCLOPENTADIENE	20	U Q	20	LOD	49	LOQ	ug/L	UJ	Lcs, Lcs

Sample ID: TMW35042015      Collected: 4/3/2015 9:20:00 AM      Analysis Type: RES-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXACHLOROCYCLOPENTADIENE	20	U	20	LOD	51	LOQ	ug/L	UJ	Lcs, Lcs

<b>Method Category:</b>	VOA								
<b>Method:</b>	8260B	<b>Matrix:</b>	AQ						

Sample ID: DTW34042015      Collected: 4/3/2015 11:30:00 AM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	1.9	J	6.4	LOD	10	LOQ	ug/L	J	RI, Fd

Sample ID: MW20042015      Collected: 4/3/2015 9:20:00 AM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	1.9	J	6.4	LOD	10	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 9:12:32 AM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 11 of 13



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67366-1

Laboratory: TA DEN

EDD Filename: 280-67366-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	VOA
<b>Method:</b>	8260B
<b>Matrix:</b>	AQ

Sample ID: TMW34042015      Collected: 4/3/2015 11:30:00 AM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	6.4	U	6.4	LOD	10	LOQ	ug/L	UJ	Fd

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 9:12:32 AM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 12 of 13



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67366-1

Laboratory: TA DEN

EDD Filename: 280-67366-1

eQAPP Name: FtWingate\_Primary\_120405

### Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
Fd	Field Duplicate Precision
Lcs	Laboratory Control Precision
Lcs	Laboratory Control Spike Lower Estimation
Mb	Method Blank Contamination
Ms	Matrix Spike Lower Estimation
Ms	Matrix Spike Lower Rejection
Ms	Matrix Spike Upper Estimation
RI	Reporting Limit Trace Value
Surr	Surrogate/Tracer Recovery Lower Estimation

\* denotes a non-reportable result

**Project Name and Number: 102012 - FWDA 102012 GW**

5/18/2015 9:12:32 AM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 13 of 13



## Data Review Summary

Lab Reporting Batch ID: 280-67366-1

Laboratory: TA DEN

EDD Filename: 280-67366-1

eQAPP Name: FtWingate\_Primary\_120405

<i>Validation Area</i>	<i>Note</i>
Technical Holding Times	A
Temperature	A
Initial Calibration	N
Continuing Calibration/Initial Calibration Verification	N
Method Blanks	SR
Surrogate/Tracer Spikes	SR
Matrix Spike/Matrix Spike Duplicates	SR
Laboratory Duplicates	A
Laboratory Replicates	N
Laboratory Control Samples	SR
Compound Quantitation	SR
Field Duplicates	SR
Field Triplicates	N
Field Blanks	A

A = Acceptable, N = Not provided/applicable, SR = See report

The contents of this report reflect findings made by ADR during Automated Data Review, manual applied qualifiers are not considered. Please refer to the Overall Qualifier Summary report for manual qualifiers.

## Field Duplicate RPD Report

Lab Reporting Batch ID: 280-67366-1

Laboratory: TA DEN

EDD Filename: 280-67366-1

eQAPP Name: FtWingate\_Primary\_120405

**Method:** 6010C**Matrix:** AQ

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	TMW34042015 (DIS)	DTW34042015 (DIS)			
CALCIUM	120000	110000	9	50.00	No Qualifiers Applied
MAGNESIUM	25000	24000	4	50.00	
POTASSIUM	1100	1100	0	50.00	
SODIUM	1500000	1400000	7	50.00	

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	TMW34042015 (TOT)	DTW34042015 (TOT)			
CALCIUM	110000	110000	0	50.00	No Qualifiers Applied
MAGNESIUM	24000	24000	0	50.00	
POTASSIUM	1100	1200	9	50.00	
SODIUM	1400000	1400000	0	50.00	

**Method:** 6020A**Matrix:** AQ

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	TMW34042015 (DIS)	DTW34042015 (DIS)			
ARSENIC	5.0 U	0.47	200	50.00	No Qualifiers Applied
BARIUM	13	12	8	50.00	
CHROMIUM	0.75	10 U Q	200	50.00	
COBALT	0.16	0.094	52	50.00	
COPPER	0.74	0.62	18	50.00	
MANGANESE	120	130	8	50.00	
NICKEL	0.62	0.66	6	50.00	
SELENIUM	120	120	0	50.00	
SILVER	0.034	5.0 U	200	50.00	
THALLIUM	0.060	1.0 U	200	50.00	
VANADIUM	1.3	1.0	26	50.00	

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	TMW34042015 (TOT)	DTW34042015 (TOT)			
BARIUM	11	12	9	50.00	No Qualifiers Applied
COBALT	0.18	0.24	29	50.00	
COPPER	0.97	0.85	13	50.00	
MANGANESE	150	210	33	50.00	
NICKEL	0.50	0.62	21	50.00	
SELENIUM	110	110	0	50.00	
VANADIUM	1.5	1.3	14	50.00	
ZINC	3.5	2.4	37	50.00	
LEAD	3.0 U	0.22	200	50.00	J(all detects)
THALLIUM	0.092	1.0 U	200	50.00	UJ(all non-detects)

**Method:** 6860**Matrix:** AQ

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	TMW34042015	DTW34042015			
PERCHLORATE	0.30	0.30	0	50.00	No Qualifiers Applied

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 9:08:34 AM

ADR version 1.9.0.325

Page 1 of 2



## Field Duplicate RPD Report

Lab Reporting Batch ID: 280-67366-1

Laboratory: TA DEN

EDD Filename: 280-67366-1

eQAPP Name: FtWingate\_Primary\_120405

**Method:** 8015C DRO**Matrix:** AQ

Analyte	Concentration (mg/L)		Sample RPD	eQAPP RPD	Flag
	TMW34042015	DTW34042015			
DIESEL RANGE ORGANICS	0.15	0.065	79	50.00	J(all detects) UJ(all non-detects)

**Method:** 8260B**Matrix:** AQ

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	TMW34042015	DTW34042015			
ACETONE	10 U	1.9	200	50.00	J(all detects) UJ(all non-detects)

**Method:** 9056**Matrix:** AQ

Analyte	Concentration (mg/L)		Sample RPD	eQAPP RPD	Flag
	TMW34042015	DTW34042015			
NITRATE	58	60	3	50.00	No Qualifiers Applied

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 9:08:34 AM

ADR version 1.9.0.325

Page 2 of 2

## Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-67366-1

Laboratory: TA DEN

EDD Filename: 280-67366-1

eQAPP Name: FtWingate\_Primary\_120405

**Method: 8270D**  
**Matrix: AQ**

<b>QC Sample ID (Associated Samples)</b>	<b>Compound</b>	<b>LCS %R</b>	<b>LCSD %R</b>	<b>%R Limits</b>	<b>RPD (Limits)</b>	<b>Affected Compounds</b>	<b>Flag</b>
LCS 280-271326/2-A LCSD 280-271326/3-A (MW20042015 TMW35042015)	HEXACHLOROCYCLOPENTADIEN	19	9	50.00-130.00	74 (30.00)	HEXACHLOROCYCLOPENTADIE	J (all detects) UJ (all non-detects)

**Method: 8015C DRO**  
**Matrix: AQ**

<b>QC Sample ID (Associated Samples)</b>	<b>Compound</b>	<b>LCS %R</b>	<b>LCSD %R</b>	<b>%R Limits</b>	<b>RPD (Limits)</b>	<b>Affected Compounds</b>	<b>Flag</b>
LCSD 280-271425/23-A (DTW34042015 MW03042015 MW20042015 TMW34042015 TMW35042015)	DIESEL RANGE ORGANICS	-	67	70.00-130.00	-	DIESEL RANGE ORGANICS	J (all detects) UJ (all non-detects)

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 9:07:20 AM

ADR version 1.9.0.325

Page 1 of 1

## Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-67366-1

Laboratory: TA DEN

EDD Filename: 280-67366-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method: 6010C</b>							
<b>Matrix: AQ</b>							
<b>QC Sample ID (Associated Samples)</b>	<b>Compound</b>	<b>MS %R</b>	<b>MSD %R</b>	<b>%R Limits</b>	<b>RPD (Limits)</b>	<b>Affected Compounds</b>	<b>Flag</b>
TMW21042015MS (DIS) TMW21042015MSD (DIS) (DTW34042015 MW03042015 MW20042015 TMW21042015 TMW29042015 TMW34042015 TMW35042015)	ALUMINUM IRON	668 305	614 323	80.00-120.00 80.00-120.00	- -	ALUMINUM IRON	J (all detects)
TMW21042015MS (DIS) TMW21042015MSD (DIS) (DTW34042015 MW03042015 MW20042015 TMW21042015 TMW29042015 TMW34042015 TMW35042015)	SODIUM	23	46	80.00-120.00	-	SODIUM	J(all detects) R(all non-detects)
<b>Method: 6020A</b>							
<b>Matrix: AQ</b>							
<b>QC Sample ID (Associated Samples)</b>	<b>Compound</b>	<b>MS %R</b>	<b>MSD %R</b>	<b>%R Limits</b>	<b>RPD (Limits)</b>	<b>Affected Compounds</b>	<b>Flag</b>
TMW29042015MS (TOT) TMW29042015MSD (TOT) (DTW34042015 MW03042015 MW20042015 TMW21042015 TMW29042015 TMW34042015 TMW35042015)	ANTIMONY	83	80	85.00-115.00	-	ANTIMONY	J(all detects) UJ(all non-detects)
<b>Method: 6010C</b>							
<b>Matrix: AQ</b>							
<b>QC Sample ID (Associated Samples)</b>	<b>Compound</b>	<b>MS %R</b>	<b>MSD %R</b>	<b>%R Limits</b>	<b>RPD (Limits)</b>	<b>Affected Compounds</b>	<b>Flag</b>
TMW21042015MS (TOT) TMW21042015MSD (TOT) (DTW34042015 MW03042015 MW20042015 TMW21042015 TMW29042015 TMW34042015 TMW35042015)	ALUMINUM IRON SODIUM	1249 665 124	1227 691 130	80.00-120.00 80.00-120.00 80.00-120.00	- - -	ALUMINUM IRON SODIUM	J(all detects)

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 9:07:12 AM

ADR version 1.9.0.325

Page 1 of 2

## Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-67366-1

Laboratory: TA DEN

EDD Filename: 280-67366-1

eQAPP Name: FtWingate\_Primary\_120405

**Method: 6860**  
**Matrix: AQ**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
TMW35042015MSD (DTW34042015 MW03042015 MW20042015 TMW21042015 TMW29042015 TMW34042015 TMW35042015)	PERCHLORATE	-	128	80.00-120.00	-	PERCHLORATE	J(all detects)

## Method Blank Outlier Report

Lab Reporting Batch ID: 280-67366-1

Laboratory: TA DEN

EDD Filename: 280-67366-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method: 9056</b>				
<b>Matrix: AQ</b>				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-271181/13	4/4/2015 1:39:00 PM	NITRATE	0.199 mg/L	DTW34042015 MW03042015 MW20042015 TMW21042015 TMW29042015 TMW34042015 TMW35042015

## Reporting Limit Outliers

Lab Reporting Batch ID: 280-67366-1

Laboratory: TA DEN

EDD Filename: 280-67366-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method:</b> 6010C
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DTW34042015	POTASSIUM	J	1100	3000	LOQ	ug/L	J (all detects)
MW03042015	IRON	J	51	100	LOQ	ug/L	J (all detects)
	POTASSIUM	J	780	3000	LOQ	ug/L	
MW20042015	IRON	J	24	100	LOQ	ug/L	J (all detects)
	POTASSIUM	J	2500	3000	LOQ	ug/L	
TMW29042015	ALUMINUM	J	180	300	LOQ	ug/L	J (all detects)
	POTASSIUM	J	1300	3000	LOQ	ug/L	
TMW34042015	POTASSIUM	J	1100	3000	LOQ	ug/L	J (all detects)
TMW35042015	IRON	J	54	100	LOQ	ug/L	J (all detects)
	POTASSIUM	J	810	3000	LOQ	ug/L	

<b>Method:</b> 6020A
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DTW34042015	ARSENIC	J	0.47	5.0	LOQ	ug/L	J (all detects)
	COBALT	J	0.094	1.0	LOQ	ug/L	
	COPPER	J	0.85	2.0	LOQ	ug/L	
	LEAD	J	0.22	3.0	LOQ	ug/L	
	NICKEL	J	0.66	3.0	LOQ	ug/L	
	VANADIUM	J	1.0	6.0	LOQ	ug/L	
	ZINC	J	2.4	20	LOQ	ug/L	
MW03042015	ARSENIC	J	0.38	5.0	LOQ	ug/L	J (all detects)
	COBALT	J	0.11	1.0	LOQ	ug/L	
	COPPER	J	0.91	2.0	LOQ	ug/L	
	NICKEL	J	0.72	3.0	LOQ	ug/L	
	VANADIUM	J	0.92	6.0	LOQ	ug/L	
	ZINC	J	4.7	20	LOQ	ug/L	
MW20042015	ARSENIC	J	0.42	5.0	LOQ	ug/L	J (all detects)
	SILVER	J	0.038	5.0	LOQ	ug/L	
TMW21042015	ANTIMONY	J	1.6	6.0	LOQ	ug/L	J (all detects)
	ARSENIC	J	4.0	5.0	LOQ	ug/L	
	BERYLLIUM	J	0.92	1.0	LOQ	ug/L	
	CHROMIUM	J Q	9.4	10	LOQ	ug/L	
	SELENIUM	J	3.0	5.0	LOQ	ug/L	
	SILVER	J	0.18	5.0	LOQ	ug/L	
	THALLIUM	J	0.22	1.0	LOQ	ug/L	

## Reporting Limit Outliers

Lab Reporting Batch ID: 280-67366-1

Laboratory: TA DEN

EDD Filename: 280-67366-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method: 6020A</b>							
<b>Matrix: AQ</b>							
<b>SampleID</b>	<b>Analyte</b>	<b>Lab Qual</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>RL Type</b>	<b>Units</b>	<b>Flag</b>
TMW29042015	ANTIMONY	J	0.62	6.0	LOQ	ug/L	J (all detects)
	ARSENIC	J	1.4	5.0	LOQ	ug/L	
	BERYLLIUM	J	0.41	1.0	LOQ	ug/L	
	CHROMIUM	J Q	0.85	10	LOQ	ug/L	
	COBALT	J	0.090	1.0	LOQ	ug/L	
	COPPER	J	0.79	2.0	LOQ	ug/L	
	LEAD	J	2.4	3.0	LOQ	ug/L	
	NICKEL	J	1.0	3.0	LOQ	ug/L	
	SILVER	J	0.080	5.0	LOQ	ug/L	
	THALLIUM	J	0.083	1.0	LOQ	ug/L	
	VANADIUM	J	5.4	6.0	LOQ	ug/L	
ZINC	J	2.8	20	LOQ	ug/L		
TMW34042015	CHROMIUM	J Q	0.75	10	LOQ	ug/L	J (all detects)
	COBALT	J	0.16	1.0	LOQ	ug/L	
	COPPER	J	0.97	2.0	LOQ	ug/L	
	NICKEL	J	0.62	3.0	LOQ	ug/L	
	SILVER	J	0.034	5.0	LOQ	ug/L	
	THALLIUM	J	0.060	1.0	LOQ	ug/L	
	VANADIUM	J	1.3	6.0	LOQ	ug/L	
ZINC	J	3.5	20	LOQ	ug/L		
TMW35042015	ARSENIC	J	0.62	5.0	LOQ	ug/L	J (all detects)
	COBALT	J	0.12	1.0	LOQ	ug/L	
	COPPER	J	1.2	2.0	LOQ	ug/L	
	NICKEL	J	0.95	3.0	LOQ	ug/L	
	SILVER	J	0.038	5.0	LOQ	ug/L	
	VANADIUM	J	1.9	6.0	LOQ	ug/L	

<b>Method: 6860</b>							
<b>Matrix: AQ</b>							
<b>SampleID</b>	<b>Analyte</b>	<b>Lab Qual</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>RL Type</b>	<b>Units</b>	<b>Flag</b>
MW03042015	PERCHLORATE	J M	0.0073	0.050	LOQ	ug/L	J (all detects)
TMW21042015	PERCHLORATE	J	0.0083	0.050	LOQ	ug/L	J (all detects)

<b>Method: 8015C DRO</b>							
<b>Matrix: AQ</b>							
<b>SampleID</b>	<b>Analyte</b>	<b>Lab Qual</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>RL Type</b>	<b>Units</b>	<b>Flag</b>
DTW34042015	DIESEL RANGE ORGANICS	J M	0.065	0.25	LOQ	mg/L	J (all detects)
MW03042015	DIESEL RANGE ORGANICS	J M	0.055	0.24	LOQ	mg/L	J (all detects)
MW20042015	DIESEL RANGE ORGANICS	J M	0.077	0.25	LOQ	mg/L	J (all detects)
TMW34042015	DIESEL RANGE ORGANICS	J M	0.15	0.25	LOQ	mg/L	J (all detects)
TMW35042015	DIESEL RANGE ORGANICS	J M	0.069	0.27	LOQ	mg/L	J (all detects)

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 9:07:28 AM

ADR version 1.9.0.325

Page 2 of 3

## Reporting Limit Outliers

Lab Reporting Batch ID: 280-67366-1

Laboratory: TA DEN

EDD Filename: 280-67366-1

eQAPP Name: FtWingate\_Primary\_120405

**Method:** 8260B  
**Matrix:** AQ

<i>SampleID</i>	<i>Analyte</i>	<i>Lab Qual</i>	<i>Result</i>	<i>Reporting Limit</i>	<i>RL Type</i>	<i>Units</i>	<i>Flag</i>
DTW34042015	ACETONE	J	1.9	10	LOQ	ug/L	J (all detects)
MW20042015	ACETONE	J	1.9	10	LOQ	ug/L	J (all detects)





## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Lab Reporting Batch: 280-67366-1</b>						
<b>Method: 6010C</b>						
DTW34042015	280-67366-5	AQ	FD	3005A	4/3/2015 11:30:00 AM	S2AVE
DTW34042015	280-67366-5	AQ	FD	3010A	4/3/2015 11:30:00 AM	S2AVE
MW03042015	280-67366-8	AQ	N	3005A	4/3/2015 12:40:00 PM	S2AVE
MW03042015	280-67366-8	AQ	N	3010A	4/3/2015 12:40:00 PM	S2AVE
MW20042015	280-67366-6	AQ	N	3005A	4/3/2015 9:20:00 AM	S2AVE
MW20042015	280-67366-6	AQ	N	3010A	4/3/2015 9:20:00 AM	S2AVE
TMW21042015	280-67366-1	AQ	N	3005A	4/3/2015 11:26:00 AM	S2AVE
TMW21042015	280-67366-1	AQ	N	3010A	4/3/2015 11:26:00 AM	S2AVE
TMW21042015MS	280-67366-1MS	AQ	MS	3005A	4/3/2015 11:26:00 AM	S2AVE
TMW21042015MS	280-67366-1MS	AQ	MS	3010A	4/3/2015 11:26:00 AM	S2AVE
TMW21042015MSD	280-67366-1MSD	AQ	MSD	3005A	4/3/2015 11:26:00 AM	S2AVE
TMW21042015MSD	280-67366-1MSD	AQ	MSD	3010A	4/3/2015 11:26:00 AM	S2AVE
TMW29042015	280-67366-2	AQ	N	3005A	4/3/2015 9:35:00 AM	S2AVE
TMW29042015	280-67366-2	AQ	N	3010A	4/3/2015 9:35:00 AM	S2AVE
TMW34042015	280-67366-4	AQ	N	3005A	4/3/2015 11:30:00 AM	S2AVE
TMW34042015	280-67366-4	AQ	N	3010A	4/3/2015 11:30:00 AM	S2AVE
TMW35042015	280-67366-9	AQ	N	3005A	4/3/2015 9:20:00 AM	S2AVE
TMW35042015	280-67366-9	AQ	N	3010A	4/3/2015 9:20:00 AM	S2AVE

**Method: 6020A**

DTW34042015	280-67366-5	AQ	FD	3020A	4/3/2015 11:30:00 AM	S2AVE
DTW34042015	280-67366-5	AQ	FD	3005A	4/3/2015 11:30:00 AM	S2AVE
MW03042015	280-67366-8	AQ	N	3020A	4/3/2015 12:40:00 PM	S2AVE
MW03042015	280-67366-8	AQ	N	3005A	4/3/2015 12:40:00 PM	S2AVE

5/18/2015 9:09:21 AM

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Page 1 of 6



## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 6020A</b>						
MW20042015	280-67366-6	AQ	N	3020A	4/3/2015 9:20:00 AM	S2AVE
MW20042015	280-67366-6	AQ	N	3005A	4/3/2015 9:20:00 AM	S2AVE
TMW21042015	280-67366-1	AQ	N	3020A	4/3/2015 11:26:00 AM	S2AVE
TMW21042015	280-67366-1	AQ	N	3005A	4/3/2015 11:26:00 AM	S2AVE
TMW29042015	280-67366-2	AQ	N	3020A	4/3/2015 9:35:00 AM	S2AVE
TMW29042015	280-67366-2	AQ	N	3005A	4/3/2015 9:35:00 AM	S2AVE
TMW29042015MS	280-67366-2MS	AQ	MS	3020A	4/3/2015 9:35:00 AM	S2AVE
TMW29042015MS	280-67366-2MS	AQ	MS	3005A	4/3/2015 9:35:00 AM	S2AVE
TMW29042015MSD	280-67366-2MSD	AQ	MSD	3020A	4/3/2015 9:35:00 AM	S2AVE
TMW29042015MSD	280-67366-2MSD	AQ	MSD	3005A	4/3/2015 9:35:00 AM	S2AVE
TMW34042015	280-67366-4	AQ	N	3020A	4/3/2015 11:30:00 AM	S2AVE
TMW34042015	280-67366-4	AQ	N	3005A	4/3/2015 11:30:00 AM	S2AVE
TMW35042015	280-67366-9	AQ	N	3020A	4/3/2015 9:20:00 AM	S2AVE
TMW35042015	280-67366-9	AQ	N	3005A	4/3/2015 9:20:00 AM	S2AVE
<b>Method: 6860</b>						
DTW34042015	280-67366-5	AQ	FD	METHOD	4/3/2015 11:30:00 AM	S2AVE
MW03042015	280-67366-8	AQ	N	METHOD	4/3/2015 12:40:00 PM	S2AVE
MW20042015	280-67366-6	AQ	N	METHOD	4/3/2015 9:20:00 AM	S2AVE
TMW21042015	280-67366-1	AQ	N	METHOD	4/3/2015 11:26:00 AM	S2AVE
TMW29042015	280-67366-2	AQ	N	METHOD	4/3/2015 9:35:00 AM	S2AVE
TMW34042015	280-67366-4	AQ	N	METHOD	4/3/2015 11:30:00 AM	S2AVE
TMW35042015	280-67366-9	AQ	N	METHOD	4/3/2015 9:20:00 AM	S2AVE
TMW35042015MS	280-67366-9MS	AQ	MS	METHOD	4/3/2015 9:20:00 AM	S2AVE
TMW35042015MSD	280-67366-9MSD	AQ	MSD	METHOD	4/3/2015 9:20:00 AM	S2AVE

5/18/2015 9:09:21 AM

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Page 2 of 6



## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 7470A</b>						
DTW34042015	280-67366-5	AQ	FD	7470A	4/3/2015 11:30:00 AM	S2AVE
MW03042015	280-67366-8	AQ	N	7470A	4/3/2015 12:40:00 PM	S2AVE
MW20042015	280-67366-6	AQ	N	7470A	4/3/2015 9:20:00 AM	S2AVE
TMW21042015	280-67366-1	AQ	N	7470A	4/3/2015 11:26:00 AM	S2AVE
TMW29042015	280-67366-2	AQ	N	7470A	4/3/2015 9:35:00 AM	S2AVE
TMW34042015	280-67366-4	AQ	N	7470A	4/3/2015 11:30:00 AM	S2AVE
TMW35042015	280-67366-9	AQ	N	7470A	4/3/2015 9:20:00 AM	S2AVE
TMW35042015MS	280-67366-9MS	AQ	MS	7470A	4/3/2015 9:20:00 AM	S2AVE
TMW35042015MSD	280-67366-9MSD	AQ	MSD	7470A	4/3/2015 9:20:00 AM	S2AVE
<b>Method: 8015C DRO</b>						
DTW34042015	280-67366-5	AQ	FD	3510C	4/3/2015 11:30:00 AM	S2AVE
MW03042015	280-67366-8	AQ	N	3510C	4/3/2015 12:40:00 PM	S2AVE
MW20042015	280-67366-6	AQ	N	3510C	4/3/2015 9:20:00 AM	S2AVE
TMW34042015	280-67366-4	AQ	N	3510C	4/3/2015 11:30:00 AM	S2AVE
TMW35042015	280-67366-9	AQ	N	3510C	4/3/2015 9:20:00 AM	S2AVE
<b>Method: 8015C GRO</b>						
DTW34042015	280-67366-5	AQ	FD	METHOD	4/3/2015 11:30:00 AM	S2AVE
MW03042015	280-67366-8	AQ	N	METHOD	4/3/2015 12:40:00 PM	S2AVE
MW20042015	280-67366-6	AQ	N	METHOD	4/3/2015 9:20:00 AM	S2AVE
TB-42-042015	280-67366-7	AQ	TB	METHOD	4/3/2015 8:00:00 AM	S2AVE
TMW34042015	280-67366-4	AQ	N	METHOD	4/3/2015 11:30:00 AM	S2AVE
TMW35042015	280-67366-9	AQ	N	METHOD	4/3/2015 9:20:00 AM	S2AVE
<b>Method: 8081A</b>						
MW20042015	280-67366-6	AQ	N	3510C	4/3/2015 9:20:00 AM	S2AVE

5/18/2015 9:09:21 AM

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Page 3 of 6



## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 8081A</b>						
MW22S042015	280-67366-10	AQ	N	3510C	4/3/2015 12:30:00 PM	S2AVE
TMW35042015	280-67366-9	AQ	N	3510C	4/3/2015 9:20:00 AM	S2AVE
TMW40S042015	280-67366-11	AQ	N	3510C	4/3/2015 12:30:00 PM	S2AVE
<b>Method: 8260B</b>						
DTW34042015	280-67366-5	AQ	FD	5030	4/3/2015 11:30:00 AM	S2AVE
MW03042015	280-67366-8	AQ	N	5030	4/3/2015 12:40:00 PM	S2AVE
MW20042015	280-67366-6	AQ	N	5030	4/3/2015 9:20:00 AM	S2AVE
TB-03-042015	280-67366-3	AQ	TB	5030	4/3/2015 8:00:00 AM	S2AVE
TMW21042015	280-67366-1	AQ	N	5030	4/3/2015 11:26:00 AM	S2AVE
TMW29042015	280-67366-2	AQ	N	5030	4/3/2015 9:35:00 AM	S2AVE
TMW34042015	280-67366-4	AQ	N	5030	4/3/2015 11:30:00 AM	S2AVE
TMW35042015	280-67366-9	AQ	N	5030	4/3/2015 9:20:00 AM	S2AVE
<b>Method: 8270D</b>						
MW20042015	280-67366-6	AQ	N	3520C	4/3/2015 9:20:00 AM	S2AVE
TMW35042015	280-67366-9	AQ	N	3520C	4/3/2015 9:20:00 AM	S2AVE
<b>Method: 8330B</b>						
MW03042015	280-67366-8	AQ	N	3535	4/3/2015 12:40:00 PM	S2AVE
MW20042015	280-67366-6	AQ	N	3535	4/3/2015 9:20:00 AM	S2AVE
TMW21042015	280-67366-1	AQ	N	3535	4/3/2015 11:26:00 AM	S2AVE
TMW29042015	280-67366-2	AQ	N	3535	4/3/2015 9:35:00 AM	S2AVE
<b>Method: 9056</b>						
DTW34042015	280-67366-5	AQ	FD	METHOD	4/3/2015 11:30:00 AM	S2AVE
MW03042015	280-67366-8	AQ	N	METHOD	4/3/2015 12:40:00 PM	S2AVE
MW03042015DUP	280-67366-8DUP	AQ	DUP	METHOD	4/3/2015 12:40:00 PM	S2AVE



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 9056</b>						
MW03042015MS	280-67366-8MS	AQ	MS	METHOD	4/3/2015 12:40:00 PM	S2AVE
MW03042015MSD	280-67366-8MSD	AQ	MSD	METHOD	4/3/2015 12:40:00 PM	S2AVE
MW20042015	280-67366-6	AQ	N	METHOD	4/3/2015 9:20:00 AM	S2AVE
TMW21042015	280-67366-1	AQ	N	METHOD	4/3/2015 11:26:00 AM	S2AVE
TMW29042015	280-67366-2	AQ	N	METHOD	4/3/2015 9:35:00 AM	S2AVE
TMW34042015	280-67366-4	AQ	N	METHOD	4/3/2015 11:30:00 AM	S2AVE
TMW35042015	280-67366-9	AQ	N	METHOD	4/3/2015 9:20:00 AM	S2AVE



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
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### *Validation Label Legend*

<i>Label Code</i>	<i>Label Description</i>	<i>EPA Level</i>
S1VE	Stage_1_Validation_Electronic	N/A
S1VM	Stage_1_Validation_Manual	N/A
S1VEM	Stage_1_Validation_Electronic_and_Manual	N/A
S2AVE	Stage_2A_Validation_Electronic	Level 3 w/o calibration
S2AVM	Stage_2A_Validation_Manual	Level 3 w/o calibration
S2AVEM	Stage_2A_Validation_Electronic_and_Manual	Level 3 w/o calibration
S2BVE	Stage_2B_Validation_Electronic	Level 3 with calibration
S2BVM	Stage_2B_Validation_Manual	Level 3 with calibration
S2BVEM	Stage_2B_Validation_Electronic_and_Manual	Level 3 with calibration
S3VE	Stage_3_Validation_Electronic	Level 4
S3VM	Stage_3_Validation_Manual	Level 4
S3VEM	Stage_3_Validation_Electronic_and_Manual	Level 4
S4VE	Stage_4_Validation_Electronic	Level 4
S4VM	Stage_4_Validation_Manual	Level 4
S4VEM	Stage_4_Validation_Electronic_and_Manual	Level 4
NV	Not_Validated	N/A

## Surrogate Outlier Report

Lab Reporting Batch ID: 280-67366-1

Laboratory: TA DEN

EDD Filename: 280-67366-1

eQAPP Name: FtWingate\_Primary\_120405

**Method:** 8081A  
**Matrix:** AQ

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
MW22S042015	DECACHLOROBIPHENYL	20	30.00-135.00	All Target Analytes	J(all detects) UJ(all non-detects)
TMW40S042015	DECACHLOROBIPHENYL	25	30.00-135.00	All Target Analytes	J(all detects) UJ(all non-detects)

**Method:** 8270D  
**Matrix:** AQ

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
MW20042015	Terphenyl-d14	33	50.00-135.00	No Affected Compounds	

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 9:07:04 AM

ADR version 1.9.0.325

Page 1 of 1



## ***Data Qualifier Summary***

Lab Reporting Batch ID: 280-67366-2

Laboratory: TA DEN

EDD Filename: 280-67366-2

eQAPP Name: FtWingate\_Primary\_120405

**No Data Review Qualifiers Applied.**





## Data Review Summary

Lab Reporting Batch ID: 280-67366-2

Laboratory: TA DEN

EDD Filename: 280-67366-2

eQAPP Name: FtWingate\_Primary\_120405

<i>Validation Area</i>	<i>Note</i>
Technical Holding Times	A
Temperature	A
Initial Calibration	N
Continuing Calibration/Initial Calibration Verification	N
Method Blanks	A
Surrogate/Tracer Spikes	SR
Matrix Spike/Matrix Spike Duplicates	N
Laboratory Duplicates	N
Laboratory Replicates	N
Laboratory Control Samples	A
Compound Quantitation	A
Field Duplicates	N
Field Triplicates	N
Field Blanks	N

A = Acceptable, N = Not provided/applicable, SR = See report

The contents of this report reflect findings made by ADR during Automated Data Review, manual applied qualifiers are not considered. Please refer to the Overall Qualifier Summary report for manual qualifiers.



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
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**Lab Reporting Batch: 280-67366-2**

**Method: 8270D**

MW20042015	280-67366-6	AQ	N	3520C	4/3/2015 9:20:00 AM	S2AVE
TMW35042015	280-67366-9	AQ	N	3520C	4/3/2015 9:20:00 AM	S2AVE



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
-------------------------	----------------------	---------------	--------------------	---------------------------	------------------------	------------------------

### *Validation Label Legend*

<i>Label Code</i>	<i>Label Description</i>	<i>EPA Level</i>
S1VE	Stage_1_Validation_Electronic	N/A
S1VM	Stage_1_Validation_Manual	N/A
S1VEM	Stage_1_Validation_Electronic_and_Manual	N/A
S2AVE	Stage_2A_Validation_Electronic	Level 3 w/o calibration
S2AVM	Stage_2A_Validation_Manual	Level 3 w/o calibration
S2AVEM	Stage_2A_Validation_Electronic_and_Manual	Level 3 w/o calibration
S2BVE	Stage_2B_Validation_Electronic	Level 3 with calibration
S2BVM	Stage_2B_Validation_Manual	Level 3 with calibration
S2BVEM	Stage_2B_Validation_Electronic_and_Manual	Level 3 with calibration
S3VE	Stage_3_Validation_Electronic	Level 4
S3VM	Stage_3_Validation_Manual	Level 4
S3VEM	Stage_3_Validation_Electronic_and_Manual	Level 4
S4VE	Stage_4_Validation_Electronic	Level 4
S4VM	Stage_4_Validation_Manual	Level 4
S4VEM	Stage_4_Validation_Electronic_and_Manual	Level 4
NV	Not_Validated	N/A

## Surrogate Outlier Report

Lab Reporting Batch ID: 280-67366-2

Laboratory: TA DEN

EDD Filename: 280-67366-2

eQAPP Name: FtWingate\_Primary\_120405

**Method:** 8270D**Matrix:** AQ

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
TMW35042015	Terphenyl-d14	33	50.00-135.00	No Affected Compounds	

**Project Name and Number: 102012 - FWDA 102012 GW**

5/15/2015 9:30:25 AM

ADR version 1.9.0.325

Page 1 of 1

**CASE NARRATIVE**

**Client: Sundance Consulting, Inc.**  
**Project: Fort Wingate, New Mexico**  
**Report Number: 280-67438-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

**Sample Receipt**

The following report contains the analytical results for eleven water samples received April 7, 2015, according to documented sample acceptance procedures. The samples were received at temperatures of 3.5°C, 4.3°C, 4.3°C, 2.6°C, 5.5°C, 2.4°C, 0.4°C, 0.4°C, 0.3°C, 5.1°C and 3.6°C.

The chain-of-custody ends the IDS with 042014 for samples TB-04-042015 (280-67438-5) and TB-43-042015 (280-67438-6), but the container labels end the IDs with 042015. In accordance with the client's instructions, the IDs are logged per the container labels.

One of four 1L amber bottles was received broken for sample DMW24042015 (280-67438-8). Sufficient volume remains for analysis. The client was notified on April 7, 2015.

In accordance with the client's instructions, Perchlorate analysis for sample TMW40S042015 (280-67438-11) was cancelled. Perchlorate analysis for this sample is being reported under separate cover (280-67316-1).

Relinquished By information is missing from the last page of the chain-of-custody. The client was notified on April 7, 2015.

Additional samples/analyses requested on the chain-of-custody are reported under separate cover (280-67438-1).

Please note the Caprolactam data are reported under separate cover (280-67438-2), as the laboratory does not hold DOD ELAP certification for this compound.

No other anomalies were encountered during sample receipt.

**GC/MS Volatiles - 8260B**

Samples TMW31D042015 (280-67438-1), TMW39D042015 (280-67438-2), TMW48042015 (280-67438-3), DTW39D042015 (280-67438-4), TB-04-042015 (280-67438-5), MW24042015 (280-67438-7), DMW24042015 (280-67438-8) and MW22D042015 (280-67438-9) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/10/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Surrogate Dibromofluoromethane was recovered above the QC control limits in sample TB-04-042015 (280-67438-5). As the sample does not contain any detectable concentrations for constituents associated with this surrogate, corrective action is deemed unnecessary. The associated data have been flagged "Q" in accordance with the DOD QSM.

Methylene Chloride was detected in method blank MB 280-272203/6 at a level that was less than one half the reporting limit; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**GC/MS Semivolatiles - 8270D**

Samples TMW31D042015 (280-67438-1), TMW39D042015 (280-67438-2), TMW48042015 (280-67438-3), DTW39D042015 (280-67438-4), MW24042015 (280-67438-7), DMW24042015 (280-67438-8) and MW22D042015 (280-67438-9) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 04/09/2015 and analyzed on 04/17/2015 and 04/18/2015.

Please note the Caprolactam data are reported under separate cover (280-67438-2), as the laboratory does not hold DOD ELAP certification for this compound.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

A deviation from the Standard Operating Procedure (SOP) occurred. The details are as follows:

The samples were extracted per SW-846 3520C for 18 hours at a pH of 1-2 and 18 hours at a pH of 11-12; however, the laboratory's SOP requires the samples be extracted for 24 hours at each pH range. The laboratory's SOP is in the process of being revised for these changes.

The MS/MSD associated with prep batch 280-271917 was performed on sample MW22D042015 (280-67438-9). The MS/MSD exhibited spike compound recoveries outside the QC control limits for several analytes. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample have been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Gasoline Range Organics - 8015C**

Samples TB-43-042015 (280-67438-6) and MW22D042015 (280-67438-9) were analyzed for gasoline range organics in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 04/10/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Diesel Range Organics - 8015C**

Samples MW22D042015 (280-67438-9) and MW22S042015 (280-67438-10) were analyzed for Diesel Range Organics in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/09/2015 and analyzed on 04/16/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Sample MW22S042015 (280-67438-10) formed emulsions during the extraction procedure. The emulsions were broken up using a combination of pour backs and centrifuge.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Organochlorine Pesticides - 8081A**

Samples TMW31D042015 (280-67438-1), TMW39D042015 (280-67438-2), TMW48042015 (280-67438-3), DTW39D042015 (280-67438-4), MW24042015 (280-67438-7), DMW24042015 (280-67438-8) and MW22D042015 (280-67438-9) were analyzed for chlorinated pesticides in accordance with EPA SW-846 Method 8081A. The samples were prepared on 04/10/2015 and analyzed on 04/14/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Samples MB 280-272174/1-A and LCS 280-272174/2-A required a Mercury clean-up to reduce matrix interference caused by sulfur.

The MS/MSD associated with prep batch 280-272174 was performed on sample MW22D042015 (280-67438-9). The MS/MSD exhibited a spike compound recovery outside the QC control limits for Toxaphene. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample has been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Explosives - 8330B**

Samples TMW31D042015 (280-67438-1), TMW39D042015 (280-67438-2), TMW48042015 (280-67438-3), DTW39D042015 (280-67438-4), MW24042015 (280-67438-7), DMW24042015 (280-67438-8) and MW22D042015 (280-67438-9) were analyzed for explosives in accordance with EPA SW-846 Method 8330B. The samples were prepared on 04/08/2015 and analyzed on 04/11/2015 and 04/14/2015.

TestAmerica Denver's practice for the reporting of dual column data in packages requiring forms and/or raw data is to report the surrogates from both columns, and the preferred result for any given target analyte from the analyst selected column. The preferred results for target analytes and surrogates are reported as PRIMARY on the Sample Datasheets.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows:

The cartridges were eluted with 0.1% Acetic Acid in ACN instead of ACN to increase Tetryl recovery. This deviation was performed with QA and supervisor approval. The SOP is currently under revision to capture this change.

o-Nitrotoluene was detected in method blank MB 280-271623/1-A at a level that was less than one half the reporting limit on the back column; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

The MS/MSD associated with prep batch 280-271623 was performed on sample MW22D042015 (280-67438-9). The MS/MSD exhibited a spike compound recovery and RPD data outside the QC control limits for HMX. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample has been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Perchlorate - 6860**

Samples TMW31D042015 (280-67438-1), TMW39D042015 (280-67438-2), TMW48042015 (280-67438-3), DTW39D042015 (280-67438-4), MW24042015 (280-67438-7), DMW24042015 (280-67438-8) and MW22D042015 (280-67438-9) were analyzed for Perchlorate in accordance with SW846 6860. The samples were analyzed on 04/14/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high concentrations of target analytes and/or analytes present above the calibration curve, samples TMW31D042015 (280-67438-1), TMW39D042015 (280-67438-2), TMW48042015 (280-67438-3) and DTW39D042015 (280-67438-4) had to be analyzed at dilutions. The reporting limits and method detection limits have been adjusted relative to the dilutions required.

The MS/MSD associated with analytical batch 280-272596 was performed on sample MW22D042015 (280-67438-9). The MS/MSD spike compound recoveries and RPD data could not be reliably calculated for Perchlorate because the sample concentration was greater than four times the spike amounts. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample has been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Total Metals - 6010C**

Samples TMW31D042015 (280-67438-1), TMW39D042015 (280-67438-2), TMW48042015 (280-67438-3), DTW39D042015 (280-67438-4), MW24042015 (280-67438-7), DMW24042015 (280-67438-8), MW22D042015 (280-67438-9) and MW22S042015 (280-67438-10) were analyzed for Total Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 04/08/2015 and analyzed on 04/08/2015 and 04/09/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Sodium was detected in method blank MB 280-271533/1-A at a level that was less than one half the reporting limit; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

The MS/MSD associated with prep batch 280-271533 was performed on sample MW22D042015 (280-67438-9). The MS/MSD spike compound recoveries and RPD data could not be reliably calculated for Sodium because the sample concentration was greater than four times the spike amounts. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample has been flagged "J" in accordance with the DOD QSM.

The post digestion spike (PDS) and serial dilution (SD) associated with prep batch 280-271533 was performed on sample MW22D042015 (280-67438-9). The PDS exhibited a percent recovery outside the control limits for Sodium; however, the SD performed on this sample was in control.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Dissolved Metals - 6010C**

Samples TMW31D042015 (280-67438-1), TMW39D042015 (280-67438-2), TMW48042015 (280-67438-3), DTW39D042015 (280-67438-4), MW24042015 (280-67438-7), DMW24042015 (280-67438-8) and MW22D042015 (280-67438-9) were analyzed for Dissolved Metals in accordance with EPA SW-846 Method 6010C. The samples were prepared on 04/08/2015 and analyzed on 04/08/2015 and 04/09/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

The dissolved Calcium and Magnesium results for sample TMW39D042015 (280-67438-2) are greater than the corresponding total metals results. The results were confirmed using the ICPMS digestion.

Sodium was detected in method blank MB 280-271527/1-A at a level that was less than one half the reporting limit; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

The MS/MSD associated with prep batch 280-271527 was performed on sample MW22D042015 (280-67438-9). The MS/MSD spike compound recoveries and RPD data could not be reliably calculated for Sodium because the sample concentration was greater than four times the spike amounts. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore,

corrective action is deemed unnecessary. The associated data in the parent sample has been flagged "J" in accordance with the DOD QSM.

The post digestion spike (PDS) and serial dilution (SD) associated with prep batch 280-271527 was performed on sample MW22D042015 (280-67438-9). The PDS and SD exhibited percent recoveries outside the control limits for Sodium. In addition, the SD exhibited percent recoveries outside the control limits for Calcium and Magnesium; however, the PDS performed on this sample was in control. The associated Sodium data in the parent sample has been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Total Metals - 6020A**

Samples TMW31D042015 (280-67438-1), TMW39D042015 (280-67438-2), TMW48042015 (280-67438-3), DTW39D042015 (280-67438-4), MW24042015 (280-67438-7), DMW24042015 (280-67438-8), MW22D042015 (280-67438-9) and MW22S042015 (280-67438-10) were analyzed for total metals (ICPMS) in accordance with SW846 6020A. The samples were prepared on 04/08/2015 and analyzed on 04/16/2015 and 04/17/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Thallium was detected in method blank MB 280-271530/1-A at a level that was less than one half the reporting limit; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

The ICSA solution associated with analytical batch 280-273341 was above DOD QSM Version 4.2 criteria of less than the LOD for Chromium. The laboratory has confirmed with the vendor that this element is a trace impurity in the ICSA solution; therefore, no corrective action was needed. The associated data have been flagged "Q" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Dissolved Metals - 6020A**

Samples TMW31D042015 (280-67438-1), TMW39D042015 (280-67438-2), TMW48042015 (280-67438-3), DTW39D042015 (280-67438-4), MW24042015 (280-67438-7), DMW24042015 (280-67438-8) and MW22D042015 (280-67438-9) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 04/08/2015 and analyzed on 04/10/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

The dissolved Zinc result for samples MW22D042015 (280-67438-9), MW22D042015 (280-67438-9 MS) and MW22D042015 (280-67438-9 MSD) is greater than the corresponding total metals results. The results were confirmed using the ICP digestion.

The MS/MSD associated with prep batch 280-271525 was performed on sample MW22D042015 (280-67438-9). The MS/MSD exhibited spike compound recoveries outside the QC control limits for Zinc. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample has been flagged "J" in accordance with the DOD QSM.

The ICSA solution associated with analytical batch 280-272116 was above DOD QSM Version 4.2 criteria of less than the LOD for Cadmium. The laboratory has confirmed with the vendor that this element is a trace impurity in the ICSA solution; therefore, no corrective action was needed. The associated data have been flagged "Q" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Total Mercury - 7470A**

Samples TMW31D042015 (280-67438-1), TMW39D042015 (280-67438-2), TMW48042015 (280-67438-3), DTW39D042015 (280-67438-4), MW24042015 (280-67438-7), DMW24042015 (280-67438-8), MW22D042015 (280-67438-9) and MW22S042015 (280-67438-10) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 04/14/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Dissolved Mercury - 7470A**

Samples TMW31D042015 (280-67438-1), TMW39D042015 (280-67438-2), TMW48042015 (280-67438-3), DTW39D042015 (280-67438-4), MW24042015 (280-67438-7), DMW24042015 (280-67438-8) and MW22D042015 (280-67438-9) were analyzed for dissolved mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 04/13/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



**Nitrate & Nitrite - 9056**

Samples TMW31D042015 (280-67438-1), TMW39D042015 (280-67438-2), TMW48042015 (280-67438-3), DTW39D042015 (280-67438-4), MW24042015 (280-67438-7), DMW24042015 (280-67438-8), MW22D042015 (280-67438-9) and TMW40S042015 (280-67438-11) were analyzed for anions (48 hours) in accordance with EPA SW-846 Method 9056. The samples were analyzed on 04/07/2015 and 04/08/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high concentrations of target analytes, samples TMW31D042015 (280-67438-1), TMW48042015 (280-67438-3), MW22D042015 (280-67438-9) and TMW40S042015 (280-67438-11) had to be analyzed at dilutions. The reporting limits and method detection limit have been adjusted relative to the dilutions required.

The MS/MSD associated with analytical batch 280-271402 was performed on sample MW22D042015 (280-67438-9). The MS/MSD exhibited spike compound recoveries outside the QC control limits for Nitrite as N. The acceptable LCS/LCSD analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample has been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



## Field QC Assignments and Associated Samples

**EDD File Name:** 280-67438-1  
**eQapp Name:** FtWingate\_Primary\_120405

Associated Samples	Sample Collection Date
<b>Field QC</b> DMW24042015 <b>QC Type:</b> FD	
MW24042015	4/6/2015 12:40:00 PM
<b>Field QC</b> DTW39D042015 <b>QC Type:</b> FD	
TMW39D042015	4/6/2015 9:40:00 AM
<b>Field QC</b> TB-04-042015 <b>QC Type:</b> TB	
DMW24042015	4/6/2015 12:40:00 PM
DTW39D042015	4/6/2015 9:40:00 AM
MW22D042015	4/6/2015 10:30:00 AM
MW22S042015	4/6/2015 9:30:00 AM
MW24042015	4/6/2015 12:40:00 PM
TMW31D042015	4/6/2015 12:15:00 PM
TMW39D042015	4/6/2015 9:40:00 AM
TMW40S042015	4/6/2015 8:30:00 AM
TMW48042015	4/6/2015 11:06:00 AM
<b>Field QC</b> TB-43-042015 <b>QC Type:</b> TB	
DMW24042015	4/6/2015 12:40:00 PM
DTW39D042015	4/6/2015 9:40:00 AM
MW22D042015	4/6/2015 10:30:00 AM
MW22S042015	4/6/2015 9:30:00 AM
MW24042015	4/6/2015 12:40:00 PM
TMW31D042015	4/6/2015 12:15:00 PM
TMW39D042015	4/6/2015 9:40:00 AM
TMW40S042015	4/6/2015 8:30:00 AM
TMW48042015	4/6/2015 11:06:00 AM



## History of Manual Changes to Automated Data Review Qualifiers

Changed by: Doug Scott

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> DMW24042015								
<b>3,3'-DICHLOROBENZIDINE</b>	8270D	RES	10	ug/L	Matrix Spike Lower Rejection		R	5/18/2015 8:24
Reason for change:	0% recovery							
<b>BENZIDINE</b>	8270D	RES	100	ug/L	Matrix Spike Lower Rejection		R	5/18/2015 8:25
Reason for change:	0% recovery							
<b>PERCHLORATE</b>	6860	RES	0.020	ug/L	Matrix Spike Lower Estimation	UJ		5/18/2015 8:31
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/DIS	270000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 8:33
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	260000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 8:32
Reason for change:	4X rule							
<b>Field Sample ID:</b> DTW39D042015								
<b>3,3'-DICHLOROBENZIDINE</b>	8270D	RES	9.7	ug/L	Matrix Spike Lower Rejection		R	5/18/2015 8:24
Reason for change:	0% recovery							
<b>BENZIDINE</b>	8270D	RES	97	ug/L	Matrix Spike Lower Rejection		R	5/18/2015 8:25
Reason for change:	0% recovery							
<b>PERCHLORATE</b>	6860	RES	32	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 8:31
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/DIS	610000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 8:33
Reason for change:	4X rule							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> DTW39D042015								
<b>SODIUM</b>	6010C	RE2/TOT	730000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 8:32
Reason for change:	4X rule							
<b>Field Sample ID:</b> MW22D042015								
<b>3,3'-DICHLOROBENZIDINE</b>	8270D	RES	10	ug/L	Matrix Spike Lower Rejection		R	5/18/2015 8:24
Reason for change:	0% recovery							
<b>BENZIDINE</b>	8270D	RES	100	ug/L	Matrix Spike Lower Rejection		R	5/18/2015 8:25
Reason for change:	0% recovery							
<b>PERCHLORATE</b>	6860	RES	0.45	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 8:31
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/DIS	1100000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 8:33
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	1100000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 8:32
Reason for change:	4X rule							
<b>Field Sample ID:</b> MW22S042015								
<b>SODIUM</b>	6010C	RE2/TOT	900000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 8:32
Reason for change:	4X rule							
<b>Field Sample ID:</b> MW24042015								
<b>3,3'-DICHLOROBENZIDINE</b>	8270D	RES	10	ug/L	Matrix Spike Lower Rejection		R	5/18/2015 8:24
Reason for change:	0% recovery							
<b>BENZIDINE</b>	8270D	RES	100	ug/L	Matrix Spike Lower Rejection		R	5/18/2015 8:25
Reason for change:	0% recovery							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> MW24042015								
<b>PERCHLORATE</b>	6860	RES	0.020	ug/L	Matrix Spike Lower Estimation	UJ		5/18/2015 8:31
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/DIS	260000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 8:33
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	260000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 8:32
Reason for change:	4X rule							
<b>Field Sample ID:</b> TMW31D042015								
<b>3,3'-DICHLOROBENZIDINE</b>	8270D	RES	9.5	ug/L	Matrix Spike Lower Rejection		R	5/18/2015 8:24
Reason for change:	0% recovery							
<b>BENZIDINE</b>	8270D	RES	95	ug/L	Matrix Spike Lower Rejection		R	5/18/2015 8:25
Reason for change:	0% recovery							
<b>PERCHLORATE</b>	6860	RES	1300	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 8:31
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/DIS	560000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 8:33
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	570000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 8:32
Reason for change:	4X rule							
<b>Field Sample ID:</b> TMW39D042015								
<b>3,3'-DICHLOROBENZIDINE</b>	8270D	RES	11	ug/L	Matrix Spike Lower Rejection		R	5/18/2015 8:24
Reason for change:	0% recovery							
<b>BENZIDINE</b>	8270D	RES	110	ug/L	Matrix Spike Lower Rejection		R	5/18/2015 8:25
Reason for change:	0% recovery							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW39D042015								
<b>PERCHLORATE</b>	6860	RES	34	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 8:31
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/DIS	600000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 8:33
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	720000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 8:32
Reason for change:	4X rule							
<b>Field Sample ID:</b> TMW48042015								
<b>3,3'-DICHLOROBENZIDINE</b>	8270D	RES	11	ug/L	Matrix Spike Lower Rejection		R	5/18/2015 8:24
Reason for change:	0% recovery							
<b>BENZIDINE</b>	8270D	RES	110	ug/L	Matrix Spike Lower Rejection		R	5/18/2015 8:25
Reason for change:	0% recovery							
<b>PERCHLORATE</b>	6860	RES	1200	ug/L	Matrix Spike Lower Estimation	J		5/18/2015 8:31
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/DIS	550000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 8:33
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	590000	ug/L	Matrix Spike Upper Estimation	J		5/18/2015 8:32
Reason for change:	4X rule							



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67438-1

Laboratory: TA DEN

EDD Filename: 280-67438-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	GENCHEM	
<b>Method:</b>	9056	<b>Matrix:</b> AQ

Sample ID: DMW24042015      Collected: 4/6/2015 12:40:00 PM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRITE	0.10	U	0.10	LOD	0.50	LOQ	mg/L	UJ	Ms

Sample ID: DTW39D042015      Collected: 4/6/2015 9:40:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRITE	0.10	U	0.10	LOD	0.50	LOQ	mg/L	UJ	Ms

Sample ID: MW22D042015      Collected: 4/6/2015 10:30:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRITE	0.10	U J	0.10	LOD	0.50	LOQ	mg/L	UJ	Ms

Sample ID: MW24042015      Collected: 4/6/2015 12:40:00 PM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRITE	0.10	U	0.10	LOD	0.50	LOQ	mg/L	UJ	Ms

Sample ID: TMW31D042015      Collected: 4/6/2015 12:15:00 PM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRITE	0.10	U	0.10	LOD	0.50	LOQ	mg/L	UJ	Ms

Sample ID: TMW39D042015      Collected: 4/6/2015 9:40:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRITE	0.10	U	0.10	LOD	0.50	LOQ	mg/L	UJ	Ms

Sample ID: TMW40S042015      Collected: 4/6/2015 8:30:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRITE	2.2		0.10	LOD	0.50	LOQ	mg/L	J	Ms

Sample ID: TMW48042015      Collected: 4/6/2015 11:06:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRITE	0.10	U	0.10	LOD	0.50	LOQ	mg/L	UJ	Ms

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67438-1

Laboratory: TA DEN

EDD Filename: 280-67438-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	GENCHEM	
<b>Method:</b>	9056	<b>Matrix:</b> AQ

<b>Method Category:</b>	METALS	
<b>Method:</b>	6010C	<b>Matrix:</b> AQ

<b>Sample ID:</b> DMW24042015		<b>Collected:</b> 4/6/2015 12:40:00 PM		<b>Analysis Type:</b> RES/DIS				<b>Dilution:</b> 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	790	J	250	LOD	3000	LOQ	ug/L	J	RI

<b>Sample ID:</b> DMW24042015		<b>Collected:</b> 4/6/2015 12:40:00 PM		<b>Analysis Type:</b> RES/TOT				<b>Dilution:</b> 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	21	J	31	LOD	300	LOQ	ug/L	J	RI
POTASSIUM	740	J	250	LOD	3000	LOQ	ug/L	J	RI

<b>Sample ID:</b> DTW39D042015		<b>Collected:</b> 4/6/2015 9:40:00 AM		<b>Analysis Type:</b> RES/DIS				<b>Dilution:</b> 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	19	J	31	LOD	300	LOQ	ug/L	J	RI, Fd
IRON	34	J	30	LOD	100	LOQ	ug/L	J	RI, Fd
POTASSIUM	1400	J	250	LOD	3000	LOQ	ug/L	J	RI

<b>Sample ID:</b> DTW39D042015		<b>Collected:</b> 4/6/2015 9:40:00 AM		<b>Analysis Type:</b> RES/TOT				<b>Dilution:</b> 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1100	J	250	LOD	3000	LOQ	ug/L	J	RI

<b>Sample ID:</b> MW22D042015		<b>Collected:</b> 4/6/2015 10:30:00 AM		<b>Analysis Type:</b> RES/DIS				<b>Dilution:</b> 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	460	J	250	LOD	3000	LOQ	ug/L	J	RI

<b>Sample ID:</b> MW22D042015		<b>Collected:</b> 4/6/2015 10:30:00 AM		<b>Analysis Type:</b> RES/TOT				<b>Dilution:</b> 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	450	J	250	LOD	3000	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 8:45:35 AM

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Page 2 of 13





## Data Qualifier Summary

Lab Reporting Batch ID: 280-67438-1

Laboratory: TA DEN

EDD Filename: 280-67438-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6010C	<b>Matrix:</b>	AQ						

Sample ID: MW22S042015      Collected: 4/6/2015 9:30:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1900	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID: MW24042015      Collected: 4/6/2015 12:40:00 PM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	790	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID: MW24042015      Collected: 4/6/2015 12:40:00 PM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	23	J	31	LOD	300	LOQ	ug/L	J	RI
POTASSIUM	810	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID: TMW31D042015      Collected: 4/6/2015 12:15:00 PM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1200	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID: TMW31D042015      Collected: 4/6/2015 12:15:00 PM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1100	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID: TMW39D042015      Collected: 4/6/2015 9:40:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	31	U	31	LOD	300	LOQ	ug/L	UJ	Fd
IRON	30	U	30	LOD	100	LOQ	ug/L	UJ	Fd
POTASSIUM	1400	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID: TMW39D042015      Collected: 4/6/2015 9:40:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1200	J	250	LOD	3000	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 8:45:35 AM

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Page 3 of 13



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67438-1

Laboratory: TA DEN

EDD Filename: 280-67438-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6010C	<b>Matrix:</b>	AQ						

Sample ID: TMW48042015      Collected: 4/6/2015 11:06:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1100	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID: TMW48042015      Collected: 4/6/2015 11:06:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1300	J	250	LOD	3000	LOQ	ug/L	J	RI

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: DMW24042015      Collected: 4/6/2015 12:40:00 PM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.60	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.065	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
VANADIUM	1.0	U	1.0	LOD	6.0	LOQ	ug/L	UJ	Fd
ZINC	6.0	U	6.0	LOD	20	LOQ	ug/L	UJ	Ms, Fd

Sample ID: DMW24042015      Collected: 4/6/2015 12:40:00 PM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.81	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.066	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
VANADIUM	0.67	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	2.8	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: DTW39D042015      Collected: 4/6/2015 9:40:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.60	U	0.60	LOD	6.0	LOQ	ug/L	UJ	Fd
ARSENIC	1.0	U	1.0	LOD	5.0	LOQ	ug/L	UJ	Fd
SELENIUM	4.4	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
VANADIUM	3.2	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	2.1	J	6.0	LOD	20	LOQ	ug/L	J	RI, Ms, Fd

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 8:45:35 AM

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Page 4 of 13



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67438-1

Laboratory: TA DEN

EDD Filename: 280-67438-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>		AQ					

Sample ID: MW22D042015      Collected: 4/6/2015 10:30:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.45	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.19	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	0.91	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	1.2	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	120	J	6.0	LOD	20	LOQ	ug/L	J	Ms

Sample ID: MW22D042015      Collected: 4/6/2015 10:30:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	0.13	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	1.1	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	0.72	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
THALLIUM	0.062	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb
VANADIUM	0.94	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	10	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: MW22S042015      Collected: 4/6/2015 9:30:00 AM      Analysis Type: RE2/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	6.1	J Q	1.5	LOD	10	LOQ	ug/L	J	RI

Sample ID: MW22S042015      Collected: 4/6/2015 9:30:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.64	J	0.60	LOD	6.0	LOQ	ug/L	J	RI
ARSENIC	3.5	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
BERYLLIUM	0.96	J	0.24	LOD	1.0	LOQ	ug/L	J	RI
SILVER	0.22	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.22	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb

Sample ID: MW24042015      Collected: 4/6/2015 12:40:00 PM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.65	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.056	J	0.10	LOD	1.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 8:45:35 AM

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Page 5 of 13



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67438-1

Laboratory: TA DEN

EDD Filename: 280-67438-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

4/6/2015 12:40:00									
Sample ID: MW24042015			Collected: PM			Analysis Type: RES/DIS		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	0.56	J	1.0	LOD	6.0	LOQ	ug/L	J	RI, Fd
ZINC	4.3	J	6.0	LOD	20	LOQ	ug/L	J	RI, Ms, Fd

4/6/2015 12:40:00									
Sample ID: MW24042015			Collected: PM			Analysis Type: RES/TOT		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.53	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
LEAD	0.38	J	0.50	LOD	3.0	LOQ	ug/L	J	RI

4/6/2015 12:15:00									
Sample ID: TMW31D042015			Collected: PM			Analysis Type: RE2/DIS		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	1.2	J	1.5	LOD	2.0	LOQ	ug/L	J	RI

4/6/2015 12:15:00									
Sample ID: TMW31D042015			Collected: PM			Analysis Type: RES/DIS		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.8	J	0.60	LOD	6.0	LOQ	ug/L	J	RI
ARSENIC	0.46	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.10	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
MANGANESE	2.6	J	0.90	LOD	3.5	LOQ	ug/L	J	RI
NICKEL	0.51	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SILVER	0.034	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.12	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
VANADIUM	5.6	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	19	J	6.0	LOD	20	LOQ	ug/L	J	RI, Ms

4/6/2015 12:15:00									
Sample ID: TMW31D042015			Collected: PM			Analysis Type: RES/TOT		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.40	J	0.60	LOD	6.0	LOQ	ug/L	J	RI
ARSENIC	0.51	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.064	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	1.5	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	0.31	J	0.90	LOD	3.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 8:45:35 AM

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Page 6 of 13



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67438-1

Laboratory: TA DEN

EDD Filename: 280-67438-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: TMW31D042015      Collected: 4/6/2015 12:15:00 PM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.075	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb
VANADIUM	5.8	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	19	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW39D042015      Collected: 4/6/2015 9:40:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.62	J	0.60	LOD	6.0	LOQ	ug/L	J	RI, Fd
ARSENIC	0.33	J	1.0	LOD	5.0	LOQ	ug/L	J	RI, Fd
SELENIUM	4.8	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
VANADIUM	3.1	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	6.0	U	6.0	LOD	20	LOQ	ug/L	UJ	Ms, Fd

Sample ID: TMW39D042015      Collected: 4/6/2015 9:40:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	0.58	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID: TMW48042015      Collected: 4/6/2015 11:06:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.72	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
NICKEL	0.64	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	5.7	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	11	J	6.0	LOD	20	LOQ	ug/L	J	RI, Ms

Sample ID: TMW48042015      Collected: 4/6/2015 11:06:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.74	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COPPER	0.96	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	0.59	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	3.2	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	12	J	6.0	LOD	20	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 8:45:35 AM

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Page 7 of 13



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67438-1

Laboratory: TA DEN

EDD Filename: 280-67438-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA								
<b>Method:</b>	6860	<b>Matrix:</b>	AQ						

**Sample ID:**DTW39D042015      **Collected:**4/6/2015 9:40:00 AM      **Analysis Type:**RES      **Dilution:** 50

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	32	D	1.0	LOD	2.5	LOQ	ug/L	J	Ms

**Sample ID:**MW22D042015      **Collected:**4/6/2015 10:30:00 AM      **Analysis Type:**RES      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	0.45	J	0.020	LOD	0.050	LOQ	ug/L	J	Ms

**Sample ID:**TMW31D042015      **Collected:**4/6/2015 12:15:00 PM      **Analysis Type:**RES      **Dilution:** 2000

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	1300	D	40	LOD	100	LOQ	ug/L	J	Ms

**Sample ID:**TMW39D042015      **Collected:**4/6/2015 9:40:00 AM      **Analysis Type:**RES      **Dilution:** 50

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	34	D	1.0	LOD	2.5	LOQ	ug/L	J	Ms

**Sample ID:**TMW48042015      **Collected:**4/6/2015 11:06:00 AM      **Analysis Type:**RES      **Dilution:** 2000

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	1200	D	40	LOD	100	LOQ	ug/L	J	Ms

<b>Method Category:</b>	SVOA								
<b>Method:</b>	8015C DRO	<b>Matrix:</b>	AQ						

**Sample ID:**MW22D042015      **Collected:**4/6/2015 10:30:00 AM      **Analysis Type:**RE2      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIESEL RANGE ORGANICS	0.044	J M	0.098	LOD	0.25	LOQ	mg/L	J	RI

**Sample ID:**MW22S042015      **Collected:**4/6/2015 9:30:00 AM      **Analysis Type:**RES      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIESEL RANGE ORGANICS	0.25	J M	0.11	LOD	0.27	LOQ	mg/L	J	RI

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Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 8:45:35 AM

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Page 8 of 13



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67438-1

Laboratory: TA DEN

EDD Filename: 280-67438-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA
<b>Method:</b>	8081A
<b>Matrix:</b>	AQ

Sample ID:DMW24042015		4/6/2015 12:40:00			Collected:PM			Analysis Type:RES		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
TOXAPHENE	0.83	U	0.83	LOD	5.2	LOQ	ug/L	UJ	Ms		

Sample ID:DTW39D042015		4/6/2015 9:40:00 AM			Collected:AM			Analysis Type:RES		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
TOXAPHENE	0.89	U	0.89	LOD	5.5	LOQ	ug/L	UJ	Ms		

Sample ID:MW22D042015		4/6/2015 10:30:00			Collected:AM			Analysis Type:RES		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
TOXAPHENE	0.84	U J	0.84	LOD	5.2	LOQ	ug/L	UJ	Ms		

Sample ID:MW24042015		4/6/2015 12:40:00			Collected:PM			Analysis Type:RES		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
TOXAPHENE	0.81	U	0.81	LOD	5.1	LOQ	ug/L	UJ	Ms		

Sample ID:TMW31D042015		4/6/2015 12:15:00			Collected:PM			Analysis Type:RES		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
TOXAPHENE	0.88	U	0.88	LOD	5.5	LOQ	ug/L	UJ	Ms		

Sample ID:TMW39D042015		4/6/2015 9:40:00 AM			Collected:AM			Analysis Type:RES		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
TOXAPHENE	0.89	U	0.89	LOD	5.5	LOQ	ug/L	UJ	Ms		

Sample ID:TMW48042015		4/6/2015 11:06:00			Collected:AM			Analysis Type:RES		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
TOXAPHENE	0.89	U	0.89	LOD	5.6	LOQ	ug/L	UJ	Ms		

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Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 8:45:35 AM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 9 of 13



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67438-1

Laboratory: TA DEN

EDD Filename: 280-67438-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA
<b>Method:</b>	8270D
<b>Matrix:</b>	AQ

Sample ID: DMW24042015      Collected: 4/6/2015 12:40:00 PM      Analysis Type: RES-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	10	U	10	LOD	51	LOQ	ug/L	R	Ms, Ms
3-NITROANILINE	2.0	U	2.0	LOD	51	LOQ	ug/L	UJ	Ms
4-NITROANILINE	4.1	U	4.1	LOD	51	LOQ	ug/L	UJ	Ms
BENZALDEHYDE	2.0	U	2.0	LOD	10	LOQ	ug/L	UJ	Ms
BENZIDINE	100	U	100	LOD	200	LOQ	ug/L	R	Ms, Ms

Sample ID: DTW39D042015      Collected: 4/6/2015 9:40:00 AM      Analysis Type: RES-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	9.7	U	9.7	LOD	49	LOQ	ug/L	R	Ms, Ms
3-NITROANILINE	1.9	U	1.9	LOD	49	LOQ	ug/L	UJ	Ms
4-NITROANILINE	3.9	U	3.9	LOD	49	LOQ	ug/L	UJ	Ms
BENZALDEHYDE	1.9	U	1.9	LOD	9.7	LOQ	ug/L	UJ	Ms
BENZIDINE	97	U	97	LOD	190	LOQ	ug/L	R	Ms, Ms

Sample ID: MW22D042015      Collected: 4/6/2015 10:30:00 AM      Analysis Type: RES-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	10	U J	10	LOD	51	LOQ	ug/L	R	Ms, Ms
3-NITROANILINE	2.0	U J	2.0	LOD	51	LOQ	ug/L	UJ	Ms
4-NITROANILINE	4.1	U J	4.1	LOD	51	LOQ	ug/L	UJ	Ms
BENZALDEHYDE	2.0	U	2.0	LOD	10	LOQ	ug/L	UJ	Ms
BENZIDINE	100	U J	100	LOD	200	LOQ	ug/L	R	Ms, Ms

Sample ID: MW24042015      Collected: 4/6/2015 12:40:00 PM      Analysis Type: RES-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	10	U	10	LOD	50	LOQ	ug/L	R	Ms, Ms
3-NITROANILINE	2.0	U	2.0	LOD	50	LOQ	ug/L	UJ	Ms
4-NITROANILINE	4.0	U	4.0	LOD	50	LOQ	ug/L	UJ	Ms
BENZALDEHYDE	2.0	U	2.0	LOD	10	LOQ	ug/L	UJ	Ms
BENZIDINE	100	U	100	LOD	200	LOQ	ug/L	R	Ms, Ms

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 8:45:35 AM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 10 of 13





## Data Qualifier Summary

Lab Reporting Batch ID: 280-67438-1

Laboratory: TA DEN

EDD Filename: 280-67438-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA									
<b>Method:</b>	8270D			<b>Matrix:</b> AQ						

Sample ID: TMW31D042015      Collected: 4/6/2015 12:15:00 PM      Analysis Type: RES-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIPHENYLHYDRAZINE	0.37	J	0.95	LOD	9.5	LOQ	ug/L	J	RI
3,3'-DICHLOROBENZIDINE	9.5	U	9.5	LOD	48	LOQ	ug/L	R	Ms, Ms
3-NITROANILINE	1.9	U	1.9	LOD	48	LOQ	ug/L	UJ	Ms
4-NITROANILINE	3.8	U	3.8	LOD	48	LOQ	ug/L	UJ	Ms
ACENAPHTHENE	0.31	J	0.95	LOD	9.5	LOQ	ug/L	J	RI
Benz[a]anthracene	0.46	J	0.95	LOD	9.5	LOQ	ug/L	J	RI
BENZALDEHYDE	1.9	U	1.9	LOD	9.5	LOQ	ug/L	UJ	Ms
BENZIDINE	95	U	95	LOD	190	LOQ	ug/L	R	Ms, Ms
DIBENZOFURAN	0.34	J	0.95	LOD	9.5	LOQ	ug/L	J	RI
DIETHYL PHTHALATE	0.55	J	0.95	LOD	19	LOQ	ug/L	J	RI
FLUORANTHENE	0.36	J	0.95	LOD	19	LOQ	ug/L	J	RI
FLUORENE	0.37	J	0.95	LOD	9.5	LOQ	ug/L	J	RI
N-NITROSODIPHENYLAMINE	0.73	J	0.95	LOD	9.5	LOQ	ug/L	J	RI
PHENANTHRENE	0.44	J	0.95	LOD	9.5	LOQ	ug/L	J	RI
PYRENE	0.38	J	0.95	LOD	9.5	LOQ	ug/L	J	RI

Sample ID: TMW39D042015      Collected: 4/6/2015 9:40:00 AM      Analysis Type: RES-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	11	U	11	LOD	56	LOQ	ug/L	R	Ms, Ms
3-NITROANILINE	2.2	U	2.2	LOD	56	LOQ	ug/L	UJ	Ms
4-NITROANILINE	4.5	U	4.5	LOD	56	LOQ	ug/L	UJ	Ms
BENZALDEHYDE	2.2	U	2.2	LOD	11	LOQ	ug/L	UJ	Ms
BENZIDINE	110	U	110	LOD	220	LOQ	ug/L	R	Ms, Ms

Sample ID: TMW48042015      Collected: 4/6/2015 11:06:00 AM      Analysis Type: RES-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	11	U	11	LOD	56	LOQ	ug/L	R	Ms, Ms
3-NITROANILINE	2.2	U	2.2	LOD	56	LOQ	ug/L	UJ	Ms
4-NITROANILINE	4.5	U	4.5	LOD	56	LOQ	ug/L	UJ	Ms
BENZALDEHYDE	2.2	U	2.2	LOD	11	LOQ	ug/L	UJ	Ms
BENZIDINE	110	U	110	LOD	220	LOQ	ug/L	R	Ms, Ms

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 8:45:35 AM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 11 of 13



## *Data Qualifier Summary*

Lab Reporting Batch ID: 280-67438-1

EDD Filename: 280-67438-1

Laboratory: TA DEN

eQAPP Name: FtWingate\_Primary\_120405

\* denotes a non-reportable result

**Project Name and Number: 102012 - FWDA 102012 GW**

5/18/2015 8:45:35 AM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 12 of 13



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67438-1

Laboratory: TA DEN

EDD Filename: 280-67438-1

eQAPP Name: FtWingate\_Primary\_120405

### Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
Fd	Field Duplicate Precision
Mb	Method Blank Contamination
Ms	Matrix Spike Lower Estimation
Ms	Matrix Spike Lower Rejection
Ms	Matrix Spike Upper Estimation
RI	Reporting Limit Trace Value
Surr	Surrogate/Tracer Recovery Upper Estimation

\* denotes a non-reportable result

**Project Name and Number: 102012 - FWDA 102012 GW**

5/18/2015 8:45:35 AM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 13 of 13



## Data Review Summary

Lab Reporting Batch ID: 280-67438-1

Laboratory: TA DEN

EDD Filename: 280-67438-1

eQAPP Name: FtWingate\_Primary\_120405

<i>Validation Area</i>	<i>Note</i>
Technical Holding Times	A
Temperature	A
Initial Calibration	N
Continuing Calibration/Initial Calibration Verification	N
Method Blanks	SR
Surrogate/Tracer Spikes	SR
Matrix Spike/Matrix Spike Duplicates	SR
Laboratory Duplicates	A
Laboratory Replicates	N
Laboratory Control Samples	A
Compound Quantitation	SR
Field Duplicates	SR
Field Triplicates	N
Field Blanks	A

A = Acceptable, N = Not provided/applicable, SR = See report

The contents of this report reflect findings made by ADR during Automated Data Review, manual applied qualifiers are not considered. Please refer to the Overall Qualifier Summary report for manual qualifiers.

## Field Duplicate RPD Report

Lab Reporting Batch ID: 280-67438-1

Laboratory: TA DEN

EDD Filename: 280-67438-1

eQAPP Name: FtWingate\_Primary\_120405

Method: 6010C

Matrix: AQ

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	MW24042015 (DIS)	DMW24042015 (DIS)			
CALCIUM	32000	30000	6	50.00	No Qualifiers Applied
IRON	1900	1900	0	50.00	
MAGNESIUM	11000	11000	0	50.00	
POTASSIUM	790	790	0	50.00	
SODIUM	260000	270000	4	50.00	

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	MW24042015 (TOT)	DMW24042015 (TOT)			
ALUMINUM	23	21	9	50.00	No Qualifiers Applied
CALCIUM	30000	31000	3	50.00	
IRON	1900	1800	5	50.00	
MAGNESIUM	11000	10000	10	50.00	
POTASSIUM	810	740	9	50.00	
SODIUM	260000	260000	0	50.00	

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	TMW39D042015 (DIS)	DTW39D042015 (DIS)			
CALCIUM	55000	53000	4	50.00	No Qualifiers Applied
MAGNESIUM	9400	9300	1	50.00	
POTASSIUM	1400	1400	0	50.00	
SODIUM	600000	610000	2	50.00	
ALUMINUM	300 U	19	200	50.00	J(all detects) UJ(all non-detects)
IRON	100 U	34	200	50.00	

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	TMW39D042015 (TOT)	DTW39D042015 (TOT)			
CALCIUM	19000	19000	0	50.00	No Qualifiers Applied
MAGNESIUM	2200	2200	0	50.00	
POTASSIUM	1200	1100	9	50.00	
SODIUM	720000	730000	1	50.00	

Method: 6020A

Matrix: AQ

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	MW24042015 (DIS)	DMW24042015 (DIS)			
ARSENIC	0.65	0.60	8	50.00	No Qualifiers Applied
BARIUM	290	290	0	50.00	
COBALT	0.056	0.065	15	50.00	
MANGANESE	450	440	2	50.00	
VANADIUM	0.56	6.0 U	200	50.00	J(all detects) UJ(all non-detects)
ZINC	4.3	20 U	200	50.00	

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	MW24042015 (TOT)	DMW24042015 (TOT)			

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 8:40:33 AM

ADR version 1.9.0.325

Page 1 of 2

## Field Duplicate RPD Report

Lab Reporting Batch ID: 280-67438-1

Laboratory: TA DEN

EDD Filename: 280-67438-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method: 6020A</b>					
<b>Matrix: AQ</b>					
ARSENIC	0.53	0.81	42	50.00	No Qualifiers Applied
BARIUM	290	290	0	50.00	
COBALT	1.0 U	0.066	200	50.00	
LEAD	0.38	3.0 U	200	50.00	
MANGANESE	470	470	0	50.00	
VANADIUM	6.0 U	0.67	200	50.00	
ZINC	20 U	2.8	200	50.00	

<b>Analyte</b>	<b>Concentration (ug/L)</b>		<b>Sample RPD</b>	<b>eQAPP RPD</b>	<b>Flag</b>
	<b>TMW39D042015 (DIS)</b>	<b>DTW39D042015 (DIS)</b>			
BARIUM	11	11	0	50.00	No Qualifiers Applied
MANGANESE	11	12	9	50.00	
SELENIUM	4.8	4.4	9	50.00	
VANADIUM	3.1	3.2	3	50.00	
ANTIMONY	0.62	6.0 U	200	50.00	J(all detects) UJ(all non-detects)
ARSENIC	0.33	5.0 U	200	50.00	
ZINC	20 U	2.1	200	50.00	

<b>Analyte</b>	<b>Concentration (ug/L)</b>		<b>Sample RPD</b>	<b>eQAPP RPD</b>	<b>Flag</b>
	<b>TMW39D042015 (TOT)</b>	<b>DTW39D042015 (TOT)</b>			
BARIUM	9.4	7.2	27	50.00	No Qualifiers Applied
MANGANESE	58	55	5	50.00	
VANADIUM	0.58	6.0 U	200	50.00	

<b>Method: 6860</b>					
<b>Matrix: AQ</b>					

<b>Analyte</b>	<b>Concentration (ug/L)</b>		<b>Sample RPD</b>	<b>eQAPP RPD</b>	<b>Flag</b>
	<b>TMW39D042015</b>	<b>DTW39D042015</b>			
PERCHLORATE	34	32	6	50.00	No Qualifiers Applied

<b>Method: 9056</b>					
<b>Matrix: AQ</b>					

<b>Analyte</b>	<b>Concentration (mg/L)</b>		<b>Sample RPD</b>	<b>eQAPP RPD</b>	<b>Flag</b>
	<b>TMW39D042015</b>	<b>DTW39D042015</b>			
NITRATE	0.86	0.87	1	50.00	No Qualifiers Applied

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 8:40:33 AM

ADR version 1.9.0.325

Page 2 of 2

## Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-67438-1

Laboratory: TA DEN

EDD Filename: 280-67438-1

eQAPP Name: FtWingate\_Primary\_120405

**Method: 9056**  
**Matrix: AQ**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
MW22D042015MS MW22D042015MSD (DMW24042015 DTW39D042015 MW22D042015 MW24042015 TMW31D042015 TMW39D042015 TMW40S042015 TMW48042015)	NITRITE	74	77	80.00-120.00	-	NITRITE	J (all detects) UJ (all non-detects)

**Method: 6020A**  
**Matrix: AQ**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
MW22D042015MS (DIS) MW22D042015MSD (DIS) (DMW24042015 DTW39D042015 MW22D042015 MW24042015 TMW31D042015 TMW39D042015 TMW48042015)	ZINC	57	63	83.00-122.00	-	ZINC	J (all detects) UJ (all non-detects)

**Method: 6010C**  
**Matrix: AQ**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
MW22D042015MS (DIS) (DMW24042015 DTW39D042015 MW22D042015 MW24042015 TMW31D042015 TMW39D042015 TMW48042015)	SODIUM	159	-	80.00-120.00	-	SODIUM	J (all detects)
MW22D042015MS (TOT) (DMW24042015 DTW39D042015 MW22D042015 MW22S042015 MW24042015 TMW31D042015 TMW39D042015 TMW48042015)	SODIUM	237	-	80.00-120.00	-	SODIUM	J (all detects)

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 8:38:17 AM

ADR version 1.9.0.325

Page 1 of 3

## Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-67438-1

Laboratory: TA DEN

EDD Filename: 280-67438-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method: 8330B</b>							
<b>Matrix: AQ</b>							
<b>QC Sample ID (Associated Samples)</b>	<b>Compound</b>	<b>MS %R</b>	<b>MSD %R</b>	<b>%R Limits</b>	<b>RPD (Limits)</b>	<b>Affected Compounds</b>	<b>Flag</b>
MW22D042015MSD (DMW24042015 DTW39D042015 MW22D042015 MW24042015 TMW31D042015 TMW39D042015 TMW48042015)	Octahydro-1,3,5,7-tetranitro-1,3,5,7-	-	139	80.00-115.00	-	Octahydro-1,3,5,7-tetranitro-1,3,5,7-	J(all detects)
<b>Method: 8270D</b>							
<b>Matrix: AQ</b>							
<b>QC Sample ID (Associated Samples)</b>	<b>Compound</b>	<b>MS %R</b>	<b>MSD %R</b>	<b>%R Limits</b>	<b>RPD (Limits)</b>	<b>Affected Compounds</b>	<b>Flag</b>
MW22D042015MS MW22D042015MSD (DMW24042015 DTW39D042015 MW22D042015 MW24042015 TMW31D042015 TMW39D042015 TMW48042015)	NITROBENZENE	197	189	45.00-110.00	-	NITROBENZENE	J(all detects)
MW22D042015MS MW22D042015MSD (DMW24042015 DTW39D042015 MW22D042015 MW24042015 TMW31D042015 TMW39D042015 TMW48042015)	3,3'-DICHLOROBENZIDINE 3-NITROANILINE 4-NITROANILINE BENZALDEHYDE BENZIDINE	0 12 11 68 0	0 13 11 59 0	20.00-110.00 20.00-125.00 35.00-120.00 70.00-130.00 10.00-110.00	- - - - -	3,3'-DICHLOROBENZIDINE 3-NITROANILINE 4-NITROANILINE BENZALDEHYDE BENZIDINE	J(all detects) UJ(all non-detects)
<b>Method: 8081A</b>							
<b>Matrix: AQ</b>							
<b>QC Sample ID (Associated Samples)</b>	<b>Compound</b>	<b>MS %R</b>	<b>MSD %R</b>	<b>%R Limits</b>	<b>RPD (Limits)</b>	<b>Affected Compounds</b>	<b>Flag</b>
MW22D042015MSD (DMW24042015 DTW39D042015 MW22D042015 MW24042015 TMW31D042015 TMW39D042015 TMW48042015)	TOXAPHENE	-	61	63.00-142.00	-	TOXAPHENE	J(all detects) UJ(all non-detects)

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 8:38:17 AM

ADR version 1.9.0.325

Page 2 of 3



## Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-67438-1

Laboratory: TA DEN

EDD Filename: 280-67438-1

eQAPP Name: FtWingate\_Primary\_120405

**Method: 6860**  
**Matrix: AQ**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
MW22D042015MS MW22D042015MSD (DMW24042015 DTW39D042015 MW22D042015 MW24042015 TMW31D042015 TMW39D042015 TMW48042015)	PERCHLORATE	123	50	80.00-120.00	-	PERCHLORATE	J(all detects) UJ(all non-detects)

## Method Blank Outlier Report

Lab Reporting Batch ID: 280-67438-1

Laboratory: TA DEN

EDD Filename: 280-67438-1

eQAPP Name: FtWingate\_Primary\_120405

Method: 6010C Matrix: AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-271527/1-A	4/9/2015 1:39:00 PM	SODIUM	247 ug/L	DMW24042015 DTW39D042015 MW22D042015 MW24042015 TMW31D042015 TMW39D042015 TMW48042015
MB 280-271533/1-A	4/9/2015 2:37:00 PM	SODIUM	212 ug/L	DMW24042015 DTW39D042015 MW22D042015 MW22S042015 MW24042015 TMW31D042015 TMW39D042015 TMW48042015

Method: 6020A Matrix: AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-271530/1-A	4/16/2015 1:11:00 AM	THALLIUM	0.0750 ug/L	DMW24042015 DTW39D042015 MW22D042015 MW22S042015 MW24042015 TMW31D042015 TMW39D042015 TMW48042015

*The following samples and their listed target analytes were qualified due to contamination reported in this blank*

Sample ID	Analyte	Reported Result	Modified Final Result
MW22D042015(RES/TOT)	THALLIUM	0.062 ug/L	0.062U ug/L
MW22S042015(RES/TOT)	THALLIUM	0.22 ug/L	0.22U ug/L
TMW31D042015(RES/TOT)	THALLIUM	0.075 ug/L	0.075U ug/L

Method: 8260B Matrix: AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-272203/6	4/10/2015 6:51:00 PM	METHYLENE CHLORIDE	0.484 ug/L	DMW24042015 DTW39D042015 MW22D042015 MW24042015 TB-04-042015 TMW31D042015 TMW39D042015 TMW48042015

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 8:38:02 AM

ADR version 1.9.0.325

Page 1 of 1

## Reporting Limit Outliers

Lab Reporting Batch ID: 280-67438-1

Laboratory: TA DEN

EDD Filename: 280-67438-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method:</b> 6010C
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DMW24042015	ALUMINUM POTASSIUM	J	21	300	LOQ	ug/L	J (all detects)
		J	790	3000	LOQ	ug/L	
DTW39D042015	ALUMINUM IRON POTASSIUM	J	19	300	LOQ	ug/L	J (all detects)
		J	34	100	LOQ	ug/L	
		J	1400	3000	LOQ	ug/L	
MW22D042015	POTASSIUM	J	460	3000	LOQ	ug/L	J (all detects)
MW22S042015	POTASSIUM	J	1900	3000	LOQ	ug/L	J (all detects)
MW24042015	ALUMINUM POTASSIUM	J	23	300	LOQ	ug/L	J (all detects)
		J	790	3000	LOQ	ug/L	
TMW31D042015	POTASSIUM	J	1200	3000	LOQ	ug/L	J (all detects)
TMW39D042015	POTASSIUM	J	1400	3000	LOQ	ug/L	J (all detects)
TMW48042015	POTASSIUM	J	1100	3000	LOQ	ug/L	J (all detects)

<b>Method:</b> 6020A
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DMW24042015	ARSENIC COBALT VANADIUM ZINC	J	0.60	5.0	LOQ	ug/L	J (all detects)
		J	0.065	1.0	LOQ	ug/L	
		J	0.67	6.0	LOQ	ug/L	
		J	2.8	20	LOQ	ug/L	
DTW39D042015	SELENIUM VANADIUM ZINC	J	4.4	5.0	LOQ	ug/L	J (all detects)
		J	3.2	6.0	LOQ	ug/L	
		J	2.1	20	LOQ	ug/L	
MW22D042015	ARSENIC COBALT COPPER NICKEL THALLIUM VANADIUM ZINC	J	0.45	5.0	LOQ	ug/L	J (all detects)
		J	0.19	1.0	LOQ	ug/L	
		J	1.1	2.0	LOQ	ug/L	
		J	0.91	3.0	LOQ	ug/L	
		J	0.062	1.0	LOQ	ug/L	
		J	1.2	6.0	LOQ	ug/L	
MW22S042015	ANTIMONY ARSENIC BERYLLIUM CHROMIUM SILVER THALLIUM	J	0.64	6.0	LOQ	ug/L	J (all detects)
		J	3.5	5.0	LOQ	ug/L	
		J	0.96	1.0	LOQ	ug/L	
		J Q	6.1	10	LOQ	ug/L	
		J	0.22	5.0	LOQ	ug/L	
		J	0.22	1.0	LOQ	ug/L	
MW24042015	ARSENIC COBALT LEAD VANADIUM ZINC	J	0.65	5.0	LOQ	ug/L	J (all detects)
		J	0.056	1.0	LOQ	ug/L	
		J	0.38	3.0	LOQ	ug/L	
		J	0.56	6.0	LOQ	ug/L	
		J	4.3	20	LOQ	ug/L	

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 8:38:25 AM

ADR version 1.9.0.325

Page 1 of 2

## Reporting Limit Outliers

Lab Reporting Batch ID: 280-67438-1

Laboratory: TA DEN

EDD Filename: 280-67438-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method:</b> 6020A
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW31D042015	ANTIMONY	J	1.8	6.0	LOQ	ug/L	J (all detects)
	ARSENIC	J	0.46	5.0	LOQ	ug/L	
	COBALT	J	0.10	1.0	LOQ	ug/L	
	COPPER	J	1.2	2.0	LOQ	ug/L	
	MANGANESE	J	2.6	3.5	LOQ	ug/L	
	NICKEL	J	0.51	3.0	LOQ	ug/L	
	SILVER	J	0.034	5.0	LOQ	ug/L	
	THALLIUM	J	0.12	1.0	LOQ	ug/L	
	VANADIUM	J	5.6	6.0	LOQ	ug/L	
ZINC	J	19	20	LOQ	ug/L		
TMW39D042015	ANTIMONY	J	0.62	6.0	LOQ	ug/L	J (all detects)
	ARSENIC	J	0.33	5.0	LOQ	ug/L	
	SELENIUM	J	4.8	5.0	LOQ	ug/L	
	VANADIUM	J	3.1	6.0	LOQ	ug/L	
TMW48042015	ARSENIC	J	0.72	5.0	LOQ	ug/L	J (all detects)
	COPPER	J	0.96	2.0	LOQ	ug/L	
	NICKEL	J	0.64	3.0	LOQ	ug/L	
	VANADIUM	J	5.7	6.0	LOQ	ug/L	
	ZINC	J	11	20	LOQ	ug/L	

<b>Method:</b> 8015C DRO
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
MW22D042015	DIESEL RANGE ORGANICS	J M	0.044	0.25	LOQ	mg/L	J (all detects)
MW22S042015	DIESEL RANGE ORGANICS	J M	0.25	0.27	LOQ	mg/L	J (all detects)

<b>Method:</b> 8270D
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW31D042015	1,2-DIPHENYLHYDRAZINE	J	0.37	9.5	LOQ	ug/L	J (all detects)
	ACENAPHTHENE	J	0.31	9.5	LOQ	ug/L	
	Benz[a]anthracene	J	0.46	9.5	LOQ	ug/L	
	DIBENZOFURAN	J	0.34	9.5	LOQ	ug/L	
	DIETHYL PHTHALATE	J	0.55	19	LOQ	ug/L	
	FLUORANTHENE	J	0.36	19	LOQ	ug/L	
	FLUORENE	J	0.37	9.5	LOQ	ug/L	
	N-NITROSODIPHENYLAMINE	J	0.73	9.5	LOQ	ug/L	
	PHENANTHRENE	J	0.44	9.5	LOQ	ug/L	
	PYRENE	J	0.38	9.5	LOQ	ug/L	

Project Name and Number: 102012 - FWDA 102012 GW

5/18/2015 8:38:25 AM

ADR version 1.9.0.325

Page 2 of 2



## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Lab Reporting Batch: 280-67438-1</b>						
<b>Method: 6010C</b>						
DMW24042015	280-67438-8	AQ	FD	3005A	4/6/2015 12:40:00 PM	S2AVE
DMW24042015	280-67438-8	AQ	FD	3010A	4/6/2015 12:40:00 PM	S2AVE
DTW39D042015	280-67438-4	AQ	FD	3005A	4/6/2015 9:40:00 AM	S2AVE
DTW39D042015	280-67438-4	AQ	FD	3010A	4/6/2015 9:40:00 AM	S2AVE
MW22D042015	280-67438-9	AQ	N	3005A	4/6/2015 10:30:00 AM	S2AVE
MW22D042015	280-67438-9	AQ	N	3010A	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MS	280-67438-9MS	AQ	MS	3005A	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MS	280-67438-9MS	AQ	MS	3010A	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MSD	280-67438-9MSD	AQ	MSD	3005A	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MSD	280-67438-9MSD	AQ	MSD	3010A	4/6/2015 10:30:00 AM	S2AVE
MW22S042015	280-67438-10	AQ	N	3010A	4/6/2015 9:30:00 AM	S2AVE
MW24042015	280-67438-7	AQ	N	3005A	4/6/2015 12:40:00 PM	S2AVE
MW24042015	280-67438-7	AQ	N	3010A	4/6/2015 12:40:00 PM	S2AVE
TMW31D042015	280-67438-1	AQ	N	3005A	4/6/2015 12:15:00 PM	S2AVE
TMW31D042015	280-67438-1	AQ	N	3010A	4/6/2015 12:15:00 PM	S2AVE
TMW39D042015	280-67438-2	AQ	N	3005A	4/6/2015 9:40:00 AM	S2AVE
TMW39D042015	280-67438-2	AQ	N	3010A	4/6/2015 9:40:00 AM	S2AVE
TMW48042015	280-67438-3	AQ	N	3005A	4/6/2015 11:06:00 AM	S2AVE
TMW48042015	280-67438-3	AQ	N	3010A	4/6/2015 11:06:00 AM	S2AVE
<b>Method: 6020A</b>						
DMW24042015	280-67438-8	AQ	FD	3005A	4/6/2015 12:40:00 PM	S2AVE
DMW24042015	280-67438-8	AQ	FD	3020A	4/6/2015 12:40:00 PM	S2AVE
DTW39D042015	280-67438-4	AQ	FD	3005A	4/6/2015 9:40:00 AM	S2AVE

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Page 1 of 7



## Data Review Sample Summary Report by Analysis Method

Reviewed By:

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<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 6020A</b>						
DTW39D042015	280-67438-4	AQ	FD	3020A	4/6/2015 9:40:00 AM	S2AVE
MW22D042015	280-67438-9	AQ	N	3005A	4/6/2015 10:30:00 AM	S2AVE
MW22D042015	280-67438-9	AQ	N	3020A	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MS	280-67438-9MS	AQ	MS	3005A	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MS	280-67438-9MS	AQ	MS	3020A	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MSD	280-67438-9MSD	AQ	MSD	3005A	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MSD	280-67438-9MSD	AQ	MSD	3020A	4/6/2015 10:30:00 AM	S2AVE
MW22S042015	280-67438-10	AQ	N	3020A	4/6/2015 9:30:00 AM	S2AVE
MW24042015	280-67438-7	AQ	N	3005A	4/6/2015 12:40:00 PM	S2AVE
MW24042015	280-67438-7	AQ	N	3020A	4/6/2015 12:40:00 PM	S2AVE
TMW31D042015	280-67438-1	AQ	N	3005A	4/6/2015 12:15:00 PM	S2AVE
TMW31D042015	280-67438-1	AQ	N	3020A	4/6/2015 12:15:00 PM	S2AVE
TMW39D042015	280-67438-2	AQ	N	3005A	4/6/2015 9:40:00 AM	S2AVE
TMW39D042015	280-67438-2	AQ	N	3020A	4/6/2015 9:40:00 AM	S2AVE
TMW48042015	280-67438-3	AQ	N	3005A	4/6/2015 11:06:00 AM	S2AVE
TMW48042015	280-67438-3	AQ	N	3020A	4/6/2015 11:06:00 AM	S2AVE
<b>Method: 6860</b>						
DMW24042015	280-67438-8	AQ	FD	METHOD	4/6/2015 12:40:00 PM	S2AVE
DTW39D042015	280-67438-4	AQ	FD	METHOD	4/6/2015 9:40:00 AM	S2AVE
MW22D042015	280-67438-9	AQ	N	METHOD	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MS	280-67438-9MS	AQ	MS	METHOD	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MSD	280-67438-9MSD	AQ	MSD	METHOD	4/6/2015 10:30:00 AM	S2AVE
MW24042015	280-67438-7	AQ	N	METHOD	4/6/2015 12:40:00 PM	S2AVE
TMW31D042015	280-67438-1	AQ	N	METHOD	4/6/2015 12:15:00 PM	S2AVE

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Page 2 of 7



## Data Review Sample Summary Report by Analysis Method

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<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 6860</b>						
TMW39D042015	280-67438-2	AQ	N	METHOD	4/6/2015 9:40:00 AM	S2AVE
TMW48042015	280-67438-3	AQ	N	METHOD	4/6/2015 11:06:00 AM	S2AVE
<b>Method: 7470A</b>						
DMW24042015	280-67438-8	AQ	FD	7470A	4/6/2015 12:40:00 PM	S2AVE
DTW39D042015	280-67438-4	AQ	FD	7470A	4/6/2015 9:40:00 AM	S2AVE
MW22D042015	280-67438-9	AQ	N	7470A	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MS	280-67438-9MS	AQ	MS	7470A	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MSD	280-67438-9MSD	AQ	MSD	7470A	4/6/2015 10:30:00 AM	S2AVE
MW22S042015	280-67438-10	AQ	N	7470A	4/6/2015 9:30:00 AM	S2AVE
MW24042015	280-67438-7	AQ	N	7470A	4/6/2015 12:40:00 PM	S2AVE
TMW31D042015	280-67438-1	AQ	N	7470A	4/6/2015 12:15:00 PM	S2AVE
TMW39D042015	280-67438-2	AQ	N	7470A	4/6/2015 9:40:00 AM	S2AVE
TMW48042015	280-67438-3	AQ	N	7470A	4/6/2015 11:06:00 AM	S2AVE
<b>Method: 8015C DRO</b>						
MW22D042015	280-67438-9	AQ	N	3510C	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MS	280-67438-9MS	AQ	MS	3510C	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MSD	280-67438-9MSD	AQ	MSD	3510C	4/6/2015 10:30:00 AM	S2AVE
MW22S042015	280-67438-10	AQ	N	3510C	4/6/2015 9:30:00 AM	S2AVE
<b>Method: 8015C GRO</b>						
MW22D042015	280-67438-9	AQ	N	METHOD	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MS	280-67438-9MS	AQ	MS	METHOD	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MSD	280-67438-9MSD	AQ	MSD	METHOD	4/6/2015 10:30:00 AM	S2AVE
TB-43-042015	280-67438-6	AQ	TB	METHOD	4/6/2015 8:00:00 AM	S2AVE



## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 8081A</b>						
DMW24042015	280-67438-8	AQ	FD	3510C	4/6/2015 12:40:00 PM	S2AVE
DTW39D042015	280-67438-4	AQ	FD	3510C	4/6/2015 9:40:00 AM	S2AVE
MW22D042015	280-67438-9	AQ	N	3510C	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MS	280-67438-9MS	AQ	MS	3510C	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MSD	280-67438-9MSD	AQ	MSD	3510C	4/6/2015 10:30:00 AM	S2AVE
MW24042015	280-67438-7	AQ	N	3510C	4/6/2015 12:40:00 PM	S2AVE
TMW31D042015	280-67438-1	AQ	N	3510C	4/6/2015 12:15:00 PM	S2AVE
TMW39D042015	280-67438-2	AQ	N	3510C	4/6/2015 9:40:00 AM	S2AVE
TMW48042015	280-67438-3	AQ	N	3510C	4/6/2015 11:06:00 AM	S2AVE
<b>Method: 8260B</b>						
DMW24042015	280-67438-8	AQ	FD	5030	4/6/2015 12:40:00 PM	S2AVE
DTW39D042015	280-67438-4	AQ	FD	5030	4/6/2015 9:40:00 AM	S2AVE
MW22D042015	280-67438-9	AQ	N	5030	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MS	280-67438-9MS	AQ	MS	5030	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MSD	280-67438-9MSD	AQ	MSD	5030	4/6/2015 10:30:00 AM	S2AVE
MW24042015	280-67438-7	AQ	N	5030	4/6/2015 12:40:00 PM	S2AVE
TB-04-042015	280-67438-5	AQ	TB	5030	4/6/2015 8:00:00 AM	S2AVE
TMW31D042015	280-67438-1	AQ	N	5030	4/6/2015 12:15:00 PM	S2AVE
TMW39D042015	280-67438-2	AQ	N	5030	4/6/2015 9:40:00 AM	S2AVE
TMW48042015	280-67438-3	AQ	N	5030	4/6/2015 11:06:00 AM	S2AVE
<b>Method: 8270D</b>						
DMW24042015	280-67438-8	AQ	FD	3520C	4/6/2015 12:40:00 PM	S2AVE
DTW39D042015	280-67438-4	AQ	FD	3520C	4/6/2015 9:40:00 AM	S2AVE
MW22D042015	280-67438-9	AQ	N	3520C	4/6/2015 10:30:00 AM	S2AVE

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Page 4 of 7





## Data Review Sample Summary Report by Analysis Method

Reviewed By:

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Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 8270D</b>						
MW22D042015MS	280-67438-9MS	AQ	MS	3520C	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MSD	280-67438-9MSD	AQ	MSD	3520C	4/6/2015 10:30:00 AM	S2AVE
MW24042015	280-67438-7	AQ	N	3520C	4/6/2015 12:40:00 PM	S2AVE
TMW31D042015	280-67438-1	AQ	N	3520C	4/6/2015 12:15:00 PM	S2AVE
TMW39D042015	280-67438-2	AQ	N	3520C	4/6/2015 9:40:00 AM	S2AVE
TMW48042015	280-67438-3	AQ	N	3520C	4/6/2015 11:06:00 AM	S2AVE
<b>Method: 8330B</b>						
DMW24042015	280-67438-8	AQ	FD	3535	4/6/2015 12:40:00 PM	S2AVE
DTW39D042015	280-67438-4	AQ	FD	3535	4/6/2015 9:40:00 AM	S2AVE
MW22D042015	280-67438-9	AQ	N	3535	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MS	280-67438-9MS	AQ	MS	3535	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MSD	280-67438-9MSD	AQ	MSD	3535	4/6/2015 10:30:00 AM	S2AVE
MW24042015	280-67438-7	AQ	N	3535	4/6/2015 12:40:00 PM	S2AVE
TMW31D042015	280-67438-1	AQ	N	3535	4/6/2015 12:15:00 PM	S2AVE
TMW39D042015	280-67438-2	AQ	N	3535	4/6/2015 9:40:00 AM	S2AVE
TMW48042015	280-67438-3	AQ	N	3535	4/6/2015 11:06:00 AM	S2AVE
<b>Method: 9056</b>						
DMW24042015	280-67438-8	AQ	FD	METHOD	4/6/2015 12:40:00 PM	S2AVE
DTW39D042015	280-67438-4	AQ	FD	METHOD	4/6/2015 9:40:00 AM	S2AVE
MW22D042015	280-67438-9	AQ	N	METHOD	4/6/2015 10:30:00 AM	S2AVE
MW22D042015DUP	280-67438-9DUP	AQ	DUP	METHOD	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MS	280-67438-9MS	AQ	MS	METHOD	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MSD	280-67438-9MSD	AQ	MSD	METHOD	4/6/2015 10:30:00 AM	S2AVE
MW24042015	280-67438-7	AQ	N	METHOD	4/6/2015 12:40:00 PM	S2AVE

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Page 5 of 7



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 9056</b>						
TMW31D042015	280-67438-1	AQ	N	METHOD	4/6/2015 12:15:00 PM	S2AVE
TMW39D042015	280-67438-2	AQ	N	METHOD	4/6/2015 9:40:00 AM	S2AVE
TMW40S042015	280-67438-11	AQ	N	METHOD	4/6/2015 8:30:00 AM	S2AVE
TMW48042015	280-67438-3	AQ	N	METHOD	4/6/2015 11:06:00 AM	S2AVE



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
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### *Validation Label Legend*

<i>Label Code</i>	<i>Label Description</i>	<i>EPA Level</i>
S1VE	Stage_1_Validation_Electronic	N/A
S1VM	Stage_1_Validation_Manual	N/A
S1VEM	Stage_1_Validation_Electronic_and_Manual	N/A
S2AVE	Stage_2A_Validation_Electronic	Level 3 w/o calibration
S2AVM	Stage_2A_Validation_Manual	Level 3 w/o calibration
S2AVEM	Stage_2A_Validation_Electronic_and_Manual	Level 3 w/o calibration
S2BVE	Stage_2B_Validation_Electronic	Level 3 with calibration
S2BVM	Stage_2B_Validation_Manual	Level 3 with calibration
S2BVEM	Stage_2B_Validation_Electronic_and_Manual	Level 3 with calibration
S3VE	Stage_3_Validation_Electronic	Level 4
S3VM	Stage_3_Validation_Manual	Level 4
S3VEM	Stage_3_Validation_Electronic_and_Manual	Level 4
S4VE	Stage_4_Validation_Electronic	Level 4
S4VM	Stage_4_Validation_Manual	Level 4
S4VEM	Stage_4_Validation_Electronic_and_Manual	Level 4
NV	Not_Validated	N/A

## Surrogate Outlier Report

Lab Reporting Batch ID: 280-67438-1

Laboratory: TA DEN

EDD Filename: 280-67438-1

eQAPP Name: FtWingate\_Primary\_120405

**Method:** 8260B**Matrix:** AQ

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
TB-04-042015	DIBROMOFLUOROMETHANE	116	85.00-115.00	All Target Analytes	J (all detects)

**Project Name and Number: 102012 - FWDA 102012 GW**

5/18/2015 8:38:10 AM

ADR version 1.9.0.325

Page 1 of 1

**CASE NARRATIVE**

**Client: Sundance Consulting, Inc.**  
**Project: Fort Wingate, New Mexico**  
**Report Number: 280-67438-2**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

**Sample Receipt**

The following report contains the analytical results for seven water samples received April 7, 2015, according to documented sample acceptance procedures. The samples were received at temperatures of 3.5°C, 4.3°C, 4.3°C, 2.6°C, 5.5°C, 2.4°C, 0.4°C, 0.4°C, 0.3°C, 5.1°C and 3.6°C.

One of four 1L amber bottles was received broken for sample DMW24042015 (280-67438-8). Sufficient volume remains for analysis. The client was notified on April 7, 2015.

Relinquished By information is missing from the last page of the chain-of-custody. The client was notified on April 7, 2015.

Additional samples/analyses requested on the chain-of-custody are reported under separate cover (280-67438-1).

No other anomalies were encountered during sample receipt.

**GC/MS Semivolatiles - 8270D**

Samples TMW31D042015 (280-67438-1), TMW39D042015 (280-67438-2), TMW48042015 (280-67438-3), DTW39D042015 (280-67438-4), MW24042015 (280-67438-7), DMW24042015 (280-67438-8) and MW22D042015 (280-67438-9) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 04/09/2015 and analyzed on 04/17/2015 and 04/18/2015.

Please note the Caprolactam data are reported under separate cover, as the laboratory does not hold DOD ELAP certification for this compound. The laboratory does not maintain quarterly QC requirements for precision, accuracy and detections.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



## Field QC Assignments and Associated Samples

**EDD File Name:** 280-67438-2  
**eQapp Name:** FtWingate\_Primary\_120405

	Associated Samples	Sample Collection Date
<b>Field QC</b> DMW24042015 <b>QC Type:</b> FD	MW24042015	4/6/2015 12:40:00 PM
<b>Field QC</b> DTW39D042015 <b>QC Type:</b> FD	TMW39D042015	4/6/2015 9:40:00 AM



## ***Data Qualifier Summary***

Lab Reporting Batch ID: 280-67438-2

Laboratory: TA DEN

EDD Filename: 280-67438-2

eQAPP Name: FtWingate\_Primary\_120405

**No Data Review Qualifiers Applied.**



## Data Review Summary

Lab Reporting Batch ID: 280-67438-2

Laboratory: TA DEN

EDD Filename: 280-67438-2

eQAPP Name: FtWingate\_Primary\_120405

<i>Validation Area</i>	<i>Note</i>
Technical Holding Times	A
Temperature	A
Initial Calibration	N
Continuing Calibration/Initial Calibration Verification	N
Method Blanks	A
Surrogate/Tracer Spikes	A
Matrix Spike/Matrix Spike Duplicates	A
Laboratory Duplicates	N
Laboratory Replicates	N
Laboratory Control Samples	A
Compound Quantitation	A
Field Duplicates	A
Field Triplicates	N
Field Blanks	N

A = Acceptable, N = Not provided/applicable, SR = See report

The contents of this report reflect findings made by ADR during Automated Data Review, manual applied qualifiers are not considered. Please refer to the Overall Qualifier Summary report for manual qualifiers.





## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Lab Reporting Batch: 280-67438-2</b>						
<b>Method: 8270D</b>						
DMW24042015	280-67438-8	AQ	FD	3520C	4/6/2015 12:40:00 PM	S2AVE
DTW39D042015	280-67438-4	AQ	FD	3520C	4/6/2015 9:40:00 AM	S2AVE
MW22D042015	280-67438-9	AQ	N	3520C	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MS	280-67438-9MS	AQ	MS	3520C	4/6/2015 10:30:00 AM	S2AVE
MW22D042015MSD	280-67438-9MSD	AQ	MSD	3520C	4/6/2015 10:30:00 AM	S2AVE
MW24042015	280-67438-7	AQ	N	3520C	4/6/2015 12:40:00 PM	S2AVE
TMW31D042015	280-67438-1	AQ	N	3520C	4/6/2015 12:15:00 PM	S2AVE
TMW39D042015	280-67438-2	AQ	N	3520C	4/6/2015 9:40:00 AM	S2AVE
TMW48042015	280-67438-3	AQ	N	3520C	4/6/2015 11:06:00 AM	S2AVE



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
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### *Validation Label Legend*

<i>Label Code</i>	<i>Label Description</i>	<i>EPA Level</i>
S1VE	Stage_1_Validation_Electronic	N/A
S1VM	Stage_1_Validation_Manual	N/A
S1VEM	Stage_1_Validation_Electronic_and_Manual	N/A
S2AVE	Stage_2A_Validation_Electronic	Level 3 w/o calibration
S2AVM	Stage_2A_Validation_Manual	Level 3 w/o calibration
S2AVEM	Stage_2A_Validation_Electronic_and_Manual	Level 3 w/o calibration
S2BVE	Stage_2B_Validation_Electronic	Level 3 with calibration
S2BVM	Stage_2B_Validation_Manual	Level 3 with calibration
S2BVEM	Stage_2B_Validation_Electronic_and_Manual	Level 3 with calibration
S3VE	Stage_3_Validation_Electronic	Level 4
S3VM	Stage_3_Validation_Manual	Level 4
S3VEM	Stage_3_Validation_Electronic_and_Manual	Level 4
S4VE	Stage_4_Validation_Electronic	Level 4
S4VM	Stage_4_Validation_Manual	Level 4
S4VEM	Stage_4_Validation_Electronic_and_Manual	Level 4
NV	Not_Validated	N/A

**CASE NARRATIVE**

**Client: Sundance Consulting, Inc.**  
**Project: Fort Wingate, New Mexico**  
**Report Number: 280-67484-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

**Sample Receipt**

The following report contains the analytical results for eleven water samples received April 8, 2015, according to documented sample acceptance procedures. The samples were received at temperatures of 2.5°C, 0.3°C, 4.8°C, 0.3°C, 3.5°C, 1.3°C and 1.0°C.

Please note the Caprolactam data are reported under separate cover (280-67484-2), as the laboratory does not hold DOD ELAP certification for this compound.

No other anomalies were encountered during sample receipt.

**GC/MS Volatiles - 8260B**

Samples TMW28042015 (280-67484-1), TMW27042015 (280-67484-2), TMW25042015 (280-67484-3), TB-05-042015 (280-67484-4), MW23042015 (280-67484-5), DMW23042015 (280-67484-6), DTW26042015 (280-67484-7), TMW10042015 (280-67484-8), TMW01042015 (280-67484-9), TMW26042015 (280-67484-10) and TMW17042015 (280-67484-11) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/10/2015 and 04/11/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Surrogate Dibromofluoromethane was recovered above the QC control limits in sample TB-05-042015 (280-67484-4). This is an indicator that data may be biased high. As the sample does not contain any detectable concentrations for constituents associated with this surrogate, corrective action is deemed unnecessary. The associated data have been flagged "Q" in accordance with the DOD QSM.

Methylene Chloride was detected in method blank MB 280-272203/6 at a level that was less than one half the reporting limit; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**GC/MS Semivolatiles - 8270D**

Samples MW23042015 (280-67484-5) and DMW23042015 (280-67484-6) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 04/09/2015 and 04/20/2015 and analyzed on 04/18/2015 and 04/25/2015.

Please note the Caprolactam data are reported under separate cover (280-67484-2), as the laboratory does not hold DOD ELAP certification for this compound.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

A deviation from the Standard Operating Procedure (SOP) occurred. The details are as follows:

The samples were extracted per SW-846 3520C for 18 hours at a pH of 1-2 and 18 hours at a pH of 11-12; however, the laboratory's SOP requires the samples be extracted for 24 hours at each pH range. The laboratory's SOP is in the process of being revised for these changes.

Due to a low surrogate recovery, sample DMW23042015 (280-67484-6) was re-extracted out of the prescribed hold time and reanalyzed. To be compliant with the client's instructions on previous samples performed/extracted past hold time, both sets of data have been reported. Please note that the sample results should be considered estimated.

Surrogate Terphenyl-d14 was recovered below the QC control limits in sample DMW23042015 (280-67484-6). This is an indicator that data may be biased low. Upon re-extraction past hold time and reanalysis, surrogate recoveries were 100% in control. To be compliant with the client's instructions on previous samples performed/extracted past hold time, both sets of data have been reported. The associated data have been flagged "Q" in accordance with the DOD QSM.

The LCS/LCSD associated with prep batch 280-273624 exhibited a percent recovery below the QC control limits for 2,3,4,6-Tetrachlorophenol. The recovery is within marginal exceedance limits (69-111%); therefore, corrective action was not performed. The associated data have been flagged "Q" in accordance with the DOD QSM.

The MS/MSD associated with prep batch 280-271917 was performed on sample MW23042015 (280-67484-5). The MS/MSD exhibited spike compound recoveries outside the QC control limits for 3,3'-Dichlorobenzidine, Benzaldehyde and Benzidine. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample have been flagged "J" in accordance with the DOD QSM.

MS/MSD analyses for prep batch 280-273624 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Organochlorine Pesticides - 8081A**

Samples MW23042015 (280-67484-5) and DMW23042015 (280-67484-6) were analyzed for chlorinated pesticides in accordance with EPA SW-846 Method 8081A. The samples were prepared on 04/13/2015 and analyzed on 04/15/2015.

TestAmerica Denver's practice for the reporting of dual column data in packages requiring forms and/or raw data is to report the surrogates from both columns, and the preferred result for any given target analyte from the analyst selected column. The preferred results for target analytes and surrogates are reported as PRIMARY on the Sample Datasheets.

Samples MB 280-272509/1-A and LCS 280-272509/2-A required a mercury clean-up to reduce matrix interference caused by sulfur.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

The MS/MSD associated with prep batch 280-272509 was performed on sample MW23042015 (280-67484-5). The MS/MSD exhibited a spike compound recovery outside the QC control limits for Toxaphene. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample has been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Explosives - 8330B**

Samples TMW25042015 (280-67484-3), MW23042015 (280-67484-5), DMW23042015 (280-67484-6), DTW26042015 (280-67484-7), TMW10042015 (280-67484-8), TMW01042015 (280-67484-9) and TMW26042015 (280-67484-10) were analyzed for explosives in accordance with EPA SW-846 Method 8330B. The samples were prepared on 04/13/2015 and analyzed on 04/15/2015 and 04/16/2015.

TestAmerica Denver's practice for the reporting of dual column data in packages requiring forms and/or raw data is to report the surrogates from both columns, and the preferred result for any given target analyte from the analyst selected column. The preferred results for target analytes and surrogates are reported as PRIMARY on the Sample Datasheets.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Perchlorate - 6860**

Samples TMW27042015 (280-67484-2), MW23042015 (280-67484-5), DMW23042015 (280-67484-6), DTW26042015 (280-67484-7), TMW10042015 (280-67484-8), TMW01042015 (280-67484-9), TMW26042015 (280-67484-10) and TMW17042015 (280-67484-11) were analyzed for Perchlorate in accordance with SW846 6860. The samples were analyzed on 04/17/2015 and 04/20/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high concentrations of target analytes and/or analytes present above the calibration curve, sample TMW01042015 (280-67484-9) had to be analyzed at a dilution. The reporting limits and method detection limits have been adjusted relative to the dilution required.

MS/MSD analyses for analytical batch 280-273667 were not requested.

The closing Continuing Calibration Blank (CCB) associated with analytical batch 280-273667 did not contain enough volume in the vial; therefore, the internal standard (IS) recovery was low. A new CCB was re-injected two times after to show the instrument is in control. Results were within control limits for the IS and non-detect for Perchlorate.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Total Metals - 6010C**

Samples TMW28042015 (280-67484-1), TMW27042015 (280-67484-2), TMW25042015 (280-67484-3), MW23042015 (280-67484-5), DMW23042015 (280-67484-6), DTW26042015 (280-67484-7), TMW10042015 (280-67484-8), TMW01042015 (280-67484-9), TMW26042015 (280-67484-10) and TMW17042015 (280-67484-11) were analyzed for Total Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 04/09/2015 and analyzed on 04/09/2015 and 04/10/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to matrix interference, samples TMW28042015 (280-67484-1), TMW27042015 (280-67484-2), TMW25042015 (280-67484-3), MW23042015 (280-67484-5), DMW23042015 (280-67484-6), DTW26042015 (280-67484-7), TMW10042015 (280-67484-8), TMW01042015 (280-67484-9), TMW26042015 (280-67484-10) and TMW17042015 (280-67484-11) had to be analyzed at dilutions. The reporting limits and method detection limits have been adjusted relative to the dilutions required.

The MS/MSD associated with prep batch 280-271734 was performed on sample MW23042015 (280-67484-5). The MS/MSD exhibited spike compound recoveries outside the control limits for Aluminum. In addition, the MS/MSD spike compound recoveries and RPD data could not be reliably calculated for Sodium because the sample concentration was greater than four times the spike amounts. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample have been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Dissolved Metals - 6010C**

Samples TMW28042015 (280-67484-1), TMW27042015 (280-67484-2), TMW25042015 (280-67484-3), MW23042015 (280-67484-5), DMW23042015 (280-67484-6), DTW26042015 (280-67484-7), TMW10042015 (280-67484-8), TMW01042015 (280-67484-9), TMW26042015 (280-67484-10) and TMW17042015 (280-67484-11) were analyzed for Dissolved Metals in accordance with EPA SW-846 Method 6010C. The samples were prepared on 04/09/2015 and analyzed on 04/13/2015, 04/25/2015 and 04/29/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

The MS/MSD associated with prep batch 280-271723 was performed on sample MW23042015 (280-67484-5). The MS/MSD spike compound recoveries and RPD data could not be reliably calculated for Sodium because the sample concentration was greater than four times the spike amounts. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample has been flagged "J" in accordance with the DOD QSM.

The post digestion spike (PDS) and serial dilution (SD) associated with prep batch 280-271723 was performed on sample MW23042015 (280-67484-5). The PDS exhibited a percent recovery outside the control limits for Sodium; however, the SD performed on this sample was in control. In addition, the SD exhibited percent recoveries outside the control limits for Calcium and Magnesium; however, the PDS performed on this sample was in control.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Total Metals - 6020A**

Samples TMW28042015 (280-67484-1), TMW27042015 (280-67484-2), TMW25042015 (280-67484-3), MW23042015 (280-67484-5), DMW23042015 (280-67484-6), DTW26042015 (280-67484-7), TMW10042015 (280-67484-8), TMW01042015 (280-67484-9), TMW26042015 (280-67484-10) and TMW17042015 (280-67484-11) were analyzed for total metals (ICPMS) in accordance with SW846 6020A. The samples were prepared on 04/09/2015 and analyzed on 04/10/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Silver was detected in method blank MB 280-271732/1-A at a level that was less than one half the reporting limit; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

The MS/MSD associated with prep batch 280-271732 was performed on sample MW23042015 (280-67484-5). The MS/MSD spike compound recoveries and RPD data could not be reliably calculated for Barium because the sample concentration was greater than four times the spike amounts. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample has been flagged "J" in accordance with the DOD QSM.

The ICSA solution associated with analytical batch 280-272121 was above DOD QSM Version 4.2 criteria of less than the LOD for Cadmium and Chromium. The laboratory has confirmed with the vendor that these elements are trace impurities in the ICSA solution; therefore, no corrective action was needed. The associated data have been flagged "Q" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Dissolved Metals - 6020A**

Samples TMW28042015 (280-67484-1), TMW27042015 (280-67484-2), TMW25042015 (280-67484-3), MW23042015 (280-67484-5), DMW23042015 (280-67484-6), DTW26042015 (280-67484-7), TMW10042015 (280-67484-8), TMW01042015 (280-67484-9), TMW26042015 (280-67484-10) and TMW17042015 (280-67484-11) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 04/09/2015 and analyzed on 04/10/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Selenium was detected in method blank MB 280-271721/1-A at a level that was less than one half the reporting limit; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Total Mercury - 7470A**

Samples TMW28042015 (280-67484-1), TMW27042015 (280-67484-2), TMW25042015 (280-67484-3), MW23042015 (280-67484-5), DMW23042015 (280-67484-6), DTW26042015 (280-67484-7), TMW10042015 (280-67484-8), TMW01042015 (280-67484-9), TMW26042015 (280-67484-10) and TMW17042015 (280-67484-11) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 04/15/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Dissolved Mercury - 7470A**

Samples TMW28042015 (280-67484-1), TMW27042015 (280-67484-2), TMW25042015 (280-67484-3), MW23042015 (280-67484-5), DMW23042015 (280-67484-6), DTW26042015 (280-67484-7), TMW10042015 (280-67484-8), TMW01042015 (280-67484-9), TMW26042015 (280-67484-10) and TMW17042015 (280-67484-11) were analyzed for dissolved mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 04/13/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Nitrate & Nitrite - 9056**

Samples TMW25042015 (280-67484-3), MW23042015 (280-67484-5), DMW23042015 (280-67484-6), DTW26042015 (280-67484-7), TMW10042015 (280-67484-8), TMW01042015 (280-67484-9), TMW26042015 (280-67484-10) and TMW17042015 (280-67484-11) were analyzed for anions (48 hours) in accordance with EPA SW-846 Method 9056. The samples were analyzed on 04/08/2015 and 04/09/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Due to a failed CCV in the original in hold analysis, sample DMW23042015 (280-67484-6) was reanalyzed past holding time for Nitrite. Please note that the sample results should be considered estimated.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to matrix interference, sample TMW10042015 (280-67484-8) had to be analyzed at a dilution. The reporting limits and method detection limits have been adjusted relative to the dilution required.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



## Field QC Assignments and Associated Samples

**EDD File Name:** 280-67484-1

**eQapp Name:** FtWingate\_Primary\_120405

	Associated Samples	Sample Collection Date
<b>Field QC</b> DMW23042015 <b>QC Type:</b> FD	MW23042015	4/7/2015 9:40:00 AM
<b>Field QC</b> DTW26042015 <b>QC Type:</b> FD	TMW26042015	4/7/2015 1:55:00 PM
<b>Field QC</b> TB-05-042015 <b>QC Type:</b> TB	DMW23042015	4/7/2015 9:40:00 AM
	DTW26042015	4/7/2015 1:55:00 PM
	MW23042015	4/7/2015 9:40:00 AM
	TMW01042015	4/7/2015 9:05:00 AM
	TMW10042015	4/7/2015 11:40:00 AM
	TMW17042015	4/7/2015 1:50:00 PM
	TMW25042015	4/7/2015 9:50:00 AM
	TMW26042015	4/7/2015 1:55:00 PM
	TMW27042015	4/7/2015 8:50:00 AM
	TMW28042015	4/7/2015 11:50:00 AM



## History of Manual Changes to Automated Data Review Qualifiers

Changed by: Doug Scott

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> DMW23042015								
<b>1,2,4,5-TETRACHLOROBENZENE</b>	8270D	RE2	2.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change: rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.								
<b>1,2,4-TRICHLOROBENZENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change: rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.								
<b>1,2-DICHLOROBENZENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change: rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.								
<b>1,2-DIPHENYLHYDRAZINE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change: rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.								
<b>1,3-DICHLOROBENZENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change: rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.								
<b>1,4-DICHLOROBENZENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change: rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.								
<b>2,3,4,6-TETRACHLOROPHENOL</b>	8270D	RE2	2.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change: rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.								
<b>2,4,5-TRICHLOROPHENOL</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change: rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.								
<b>2,4,6-TRICHLOROPHENOL</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change: rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.								
<b>2,4-DICHLOROPHENOL</b>	8270D	RE2	2.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change: rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.								



Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> DMW23042015								
<b>2,4-DIMETHYLPHENOL</b>	8270D	RE2	4.1	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.							
<b>2,4-DINITROPHENOL</b>	8270D	RE2	20	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.							
<b>2,4-DINITROTOLUENE</b>	8270D	RE2	4.1	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.							
<b>2,6-DICHLOROPHENOL</b>	8270D	RE2	4.1	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.							
<b>2,6-DINITROTOLUENE</b>	8270D	RE2	4.1	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.							
<b>2-CHLORONAPHTHALENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.							
<b>2-CHLOROPHENOL</b>	8270D	RE2	4.1	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.							
<b>2-METHYLNAPHTHALENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.							
<b>2-METHYLPHENOL</b>	8270D	RE2	4.1	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.							
<b>2-NITROANILINE</b>	8270D	RE2	4.1	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.							
<b>2-NITROPHENOL</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> DMW23042015								
<b>3,3'-DICHLOROBENZIDINE</b>	8270D	RE2	10	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>3-NITROANILINE</b>	8270D	RE2	2.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>4,6-DINITRO-2-METHYLPHENOL</b>	8270D	RE2	10	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>4-BROMOPHENYL PHENYL ETHER</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>4-CHLORO-3-METHYLPHENOL</b>	8270D	RE2	5.1	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>4-CHLOROANILINE</b>	8270D	RE2	5.1	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>4-CHLOROPHENYL-PHENYLETHER</b>	8270D	RE2	4.1	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>4-NITROANILINE</b>	8270D	RE2	4.1	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>4-NITROPHENOL</b>	8270D	RE2	10	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>ACENAPHTHENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>ACENAPHTHYLENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> DMW23042015								
<b>ACETOPHENONE</b>	8270D	RE2	5.1	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>ANTHRACENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>BARIUM</b>	6020A	RES/TOT	150	ug/L	Matrix Spike Lower Estimation	J		5/15/2015 13:50
Reason for change:	4X rule							
<b>Benz[a]anthracene</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>BENZALDEHYDE</b>	8270D	RE2	2.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>BENZIDINE</b>	8270D	RE2	100	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>BENZO(A)PYRENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>BENZO(B)FLUORANTHENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>BENZO(G,H,I)PERYLENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>BENZO(K)FLUORANTHENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>BENZOIC ACID</b>	8270D	RE2	51	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> DMW23042015								
<b>BENZYL ALCOHOL</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>BIS(2-CHLOROETHOXY)METHANE</b>	8270D	RE2	4.1	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>BIS(2-CHLOROETHYL) ETHER</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>BIS(2-CHLOROISOPROPYL) ETHER</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>BIS(2-ETHYLHEXYL) PHTHALATE</b>	8270D	RE2	0.77	ug/L	Sampling to Extraction Rejection		J	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>Butyl Benzyl Phthlate</b>	8270D	RE2	4.1	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>CARBAZOLE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>CHRYSENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>DIBENZ(A,H)ANTHRACENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>DIBENZOFURAN</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>Dibutyl phthalate</b>	8270D	RE2	4.1	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> DMW23042015								
<b>DIETHYL PHTHALATE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>DIMETHYL PHTHALATE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>DI-N-OCTYL PHTHALATE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>FLUORANTHENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>FLUORENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>HEXACHLOROBENZENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>HEXACHLOROBUTADIENE</b>	8270D	RE2	10	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>HEXACHLOROCYCLOPENTADIENE</b>	8270D	RE2	20	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>HEXACHLOROETHANE</b>	8270D	RE2	4.1	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>Indeno[1,2,3-cd]pyrene</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							
<b>ISOPHORONE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using th eoringinal sample, marginal low terphyl d14 only, no flags needed.							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> DMW23042015								
<b>M,P-CRESOL</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.							
<b>NAPHTHALENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.							
<b>NITROBENZENE</b>	8270D	RE2	2.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.							
<b>N-NITROSODIMETHYLAMINE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.							
<b>N-NITROSO-DI-N-PROPYLAMINE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.							
<b>N-NITROSODIPHENYLAMINE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.							
<b>PENTACHLOROPHENOL</b>	8270D	RE2	41	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.							
<b>PHENANTHRENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.							
<b>PHENOL</b>	8270D	RE2	5.1	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.							
<b>PYRENE</b>	8270D	RE2	1.0	ug/L	Sampling to Extraction Rejection		R	5/15/2015 13:43
Reason for change:	rejecting the over hold, using the original sample, marginal low terphyl d14 only, no flags needed.							
<b>SODIUM</b>	6010C	RE2/TOT	480000	ug/L	Matrix Spike Upper Estimation	J		5/15/2015 13:49
Reason for change:	4X rule							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> DTW26042015								
<b>BARIUM</b>	6020A	RES/TOT	22	ug/L	Matrix Spike Lower Estimation	J		5/15/2015 13:50
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	930000	ug/L	Matrix Spike Upper Estimation	J		5/15/2015 13:49
Reason for change:	4X rule							
<b>Field Sample ID:</b> MW23042015								
<b>BARIUM</b>	6020A	RES/TOT	160	ug/L	Matrix Spike Lower Estimation	J		5/15/2015 13:50
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	480000	ug/L	Matrix Spike Upper Estimation	J		5/15/2015 13:49
Reason for change:	4X rule							
<b>Field Sample ID:</b> TMW01042015								
<b>BARIUM</b>	6020A	RES/TOT	14	ug/L	Matrix Spike Lower Estimation	J		5/15/2015 13:50
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	580000	ug/L	Matrix Spike Upper Estimation	J		5/15/2015 13:49
Reason for change:	4X rule							
<b>Field Sample ID:</b> TMW10042015								
<b>BARIUM</b>	6020A	RES/TOT	18	ug/L	Matrix Spike Lower Estimation	J		5/15/2015 13:50
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	1800000	ug/L	Matrix Spike Upper Estimation	J		5/15/2015 13:49
Reason for change:	4X rule							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW17042015								
<b>BARIUM</b>	6020A	RES/TOT	19	ug/L	Matrix Spike Lower Estimation	J		5/15/2015 13:50
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	510000	ug/L	Matrix Spike Upper Estimation	J		5/15/2015 13:49
Reason for change:	4X rule							
<b>Field Sample ID:</b> TMW25042015								
<b>BARIUM</b>	6020A	RES/TOT	15	ug/L	Matrix Spike Lower Estimation	J		5/15/2015 13:50
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	830000	ug/L	Matrix Spike Upper Estimation	J		5/15/2015 13:49
Reason for change:	4X rule							
<b>Field Sample ID:</b> TMW26042015								
<b>BARIUM</b>	6020A	RES/TOT	22	ug/L	Matrix Spike Lower Estimation	J		5/15/2015 13:50
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	770000	ug/L	Matrix Spike Upper Estimation	J		5/15/2015 13:49
Reason for change:	4X rule							
<b>Field Sample ID:</b> TMW27042015								
<b>BARIUM</b>	6020A	RES/TOT	120	ug/L	Matrix Spike Lower Estimation	J		5/15/2015 13:50
Reason for change:	4X rule							
<b>SODIUM</b>	6010C	RE2/TOT	390000	ug/L	Matrix Spike Upper Estimation	J		5/15/2015 13:49
Reason for change:	4X rule							



Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW28042015								
<b>BARIUM</b> Reason for change: 4X rule	6020A	RES/TOT	79	ug/L	Matrix Spike Lower Estimation	J		5/15/2015 13:50
<b>SODIUM</b> Reason for change: 4X rule	6010C	RE2/TOT	430000	ug/L	Matrix Spike Upper Estimation	J		5/15/2015 13:49



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	GENCHEM								
<b>Method:</b>	9056	<b>Matrix:</b>	AQ						

Sample ID:DMW23042015 Collected:4/7/2015 9:40:00 AM Analysis Type:RE2/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRITE	0.10	U H	0.10	LOD	0.50	LOQ	mg/L	UJ	StoA

4/7/2015 11:40:00  
Sample ID:TMW10042015 Collected:AM Analysis Type:RES/TOT Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE	0.17	J D	0.20	LOD	1.0	LOQ	mg/L	J	RI

Sample ID:TMW25042015 Collected:4/7/2015 9:50:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE	0.45	J	0.10	LOD	0.50	LOQ	mg/L	J	RI

<b>Method Category:</b>	METALS								
<b>Method:</b>	6010C	<b>Matrix:</b>	AQ						

Sample ID:DMW23042015 Collected:4/7/2015 9:40:00 AM Analysis Type:RE2/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	47	J	30	LOD	100	LOQ	ug/L	J	RI, Fd

Sample ID:DMW23042015 Collected:4/7/2015 9:40:00 AM Analysis Type:RE3/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	460000		250	LOD	5000	LOQ	ug/L	J	Ms

Sample ID:DMW23042015 Collected:4/7/2015 9:40:00 AM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	68	J	31	LOD	300	LOQ	ug/L	J	RI, Fd
POTASSIUM	1600	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:DMW23042015 Collected:4/7/2015 9:40:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	1500		31	LOD	300	LOQ	ug/L	J	Ms

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 2:01:31 PM

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Page 1 of 15



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6010C	<b>Matrix:</b>	AQ						

Sample ID: DMW23042015 Collected: 4/7/2015 9:40:00 AM Analysis Type: RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1700	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID: DTW26042015 Collected: 4/7/2015 1:55:00 PM Analysis Type: RE3/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	810000		250	LOD	5000	LOQ	ug/L	J	Ms

Sample ID: DTW26042015 Collected: 4/7/2015 1:55:00 PM Analysis Type: RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	680	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID: DTW26042015 Collected: 4/7/2015 1:55:00 PM Analysis Type: RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	330		31	LOD	300	LOQ	ug/L	J	Ms
POTASSIUM	700	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID: MW23042015 Collected: 4/7/2015 9:40:00 AM Analysis Type: RE2/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	470000	J	250	LOD	5000	LOQ	ug/L	J	Ms

Sample ID: MW23042015 Collected: 4/7/2015 9:40:00 AM Analysis Type: RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	31	U	31	LOD	300	LOQ	ug/L	UJ	Fd
IRON	30	U	30	LOD	100	LOQ	ug/L	UJ	Fd
POTASSIUM	1500	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID: MW23042015 Collected: 4/7/2015 9:40:00 AM Analysis Type: RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	1800	J	31	LOD	300	LOQ	ug/L	J	Ms
POTASSIUM	1800	J	250	LOD	3000	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 2:01:31 PM

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Page 2 of 15



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6010C	<b>Matrix:</b>	AQ						

Sample ID:TMW01042015 Collected:4/7/2015 9:05:00 AM Analysis Type:RE3/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	550000		250	LOD	5000	LOQ	ug/L	J	Ms

Sample ID:TMW01042015 Collected:4/7/2015 9:05:00 AM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	670	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW01042015 Collected:4/7/2015 9:05:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	510	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW10042015 Collected:4/7/2015 11:40:00 AM Analysis Type:RE3/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	1800000		250	LOD	5000	LOQ	ug/L	J	Ms

Sample ID:TMW10042015 Collected:4/7/2015 11:40:00 AM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1300	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW10042015 Collected:4/7/2015 11:40:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1100	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW17042015 Collected:4/7/2015 1:50:00 PM Analysis Type:RE2/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	32	J	30	LOD	100	LOQ	ug/L	J	RI

Sample ID:TMW17042015 Collected:4/7/2015 1:50:00 PM Analysis Type:RE3/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	400000		250	LOD	5000	LOQ	ug/L	J	Ms

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 2:01:31 PM

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Page 3 of 15



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6010C	<b>Matrix:</b>	AQ						

Sample ID:TMW17042015 Collected:4/7/2015 1:50:00 PM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	110	J	31	LOD	300	LOQ	ug/L	J	RI
POTASSIUM	1100	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW17042015 Collected:4/7/2015 1:50:00 PM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	510		31	LOD	300	LOQ	ug/L	J	Ms
POTASSIUM	990	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW25042015 Collected:4/7/2015 9:50:00 AM Analysis Type:RE2/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	830000		250	LOD	5000	LOQ	ug/L	J	Ms

Sample ID:TMW25042015 Collected:4/7/2015 9:50:00 AM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	590	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW25042015 Collected:4/7/2015 9:50:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	300		31	LOD	300	LOQ	ug/L	J	Ms
POTASSIUM	640	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW26042015 Collected:4/7/2015 1:55:00 PM Analysis Type:RE3/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	870000		250	LOD	5000	LOQ	ug/L	J	Ms

Sample ID:TMW26042015 Collected:4/7/2015 1:55:00 PM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	750	J	250	LOD	3000	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 2:01:31 PM

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Page 4 of 15



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6010C	<b>Matrix:</b>	AQ						

Sample ID:TMW26042015 Collected:4/7/2015 1:55:00 PM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	250	J	31	LOD	300	LOQ	ug/L	J	RI, Ms
POTASSIUM	680	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW27042015 Collected:4/7/2015 8:50:00 AM Analysis Type:RE2/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	340000		250	LOD	5000	LOQ	ug/L	J	Ms

Sample ID:TMW27042015 Collected:4/7/2015 8:50:00 AM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	650	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW27042015 Collected:4/7/2015 8:50:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	650	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW28042015 Collected:4/7/2015 11:50:00 AM Analysis Type:RE2/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	340000		250	LOD	5000	LOQ	ug/L	J	Ms

Sample ID:TMW28042015 Collected:4/7/2015 11:50:00 AM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1500	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW28042015 Collected:4/7/2015 11:50:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1300	J	250	LOD	3000	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 2:01:31 PM

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Page 5 of 15



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID:DMW23042015 Collected:4/7/2015 9:40:00 AM Analysis Type:RE2/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	2.0	U	2.0	LOD	5.0	LOQ	ug/L	UJ	Fd

Sample ID:DMW23042015 Collected:4/7/2015 9:40:00 AM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	1.1	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.99	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	1.2	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	2.2	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SILVER	0.033	J	0.10	LOD	5.0	LOQ	ug/L	J	RI, Fd
THALLIUM	0.059	J	0.20	LOD	1.0	LOQ	ug/L	J	RI, Fd
ZINC	6.0	U	6.0	LOD	20	LOQ	ug/L	UJ	Fd

Sample ID:DMW23042015 Collected:4/7/2015 9:40:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	1.2	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
BERYLLIUM	0.15	J	0.24	LOD	1.0	LOQ	ug/L	J	RI
CHROMIUM	2.0	J Q	1.5	LOD	10	LOQ	ug/L	J	RI
COPPER	1.4	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
LEAD	0.73	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
SELENIUM	0.86	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
SILVER	0.26	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.090	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
ZINC	4.0	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID:DTW26042015 Collected:4/7/2015 1:55:00 PM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	1.3	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.24	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	1.7	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	1.8	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	3.5	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	2.4	J	6.0	LOD	20	LOQ	ug/L	J	RI, Fd

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 2:01:31 PM

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Page 6 of 15



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID:DTW26042015

Collected:4/7/2015 1:55:00 PM Analysis Type:RES/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	1.2	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.38	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	2.5	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SELENIUM	0.75	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
VANADIUM	3.9	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID:MW23042015

Collected:4/7/2015 9:40:00 AM Analysis Type:RES/DIS

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.94	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COPPER	1.3	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
SELENIUM	1.4	J	2.0	LOD	5.0	LOQ	ug/L	UJ	Mb, Fd
SILVER	0.10	U	0.10	LOD	5.0	LOQ	ug/L	UJ	Fd
THALLIUM	0.20	U	0.20	LOD	1.0	LOQ	ug/L	UJ	Fd
ZINC	3.9	J	6.0	LOD	20	LOQ	ug/L	J	RI, Fd

Sample ID:MW23042015

Collected:4/7/2015 9:40:00 AM Analysis Type:RES/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	1.3	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	2.7	J Q	1.5	LOD	10	LOQ	ug/L	J	RI
COPPER	1.8	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
LEAD	0.81	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
SILVER	0.48	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
ZINC	4.8	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID:TMW01042015

Collected:4/7/2015 9:05:00 AM Analysis Type:RES/DIS

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.88	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	0.52	J	1.5	LOD	10	LOQ	ug/L	J	RI
NICKEL	0.36	J	0.90	LOD	3.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

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Page 7 of 15





## Data Qualifier Summary

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID:TMW01042015 Collected:4/7/2015 9:05:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.87	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	0.54	J Q	1.5	LOD	10	LOQ	ug/L	J	RI
NICKEL	0.31	J	0.90	LOD	3.0	LOQ	ug/L	J	RI

4/7/2015 11:40:00  
Sample ID:TMW10042015 Collected:AM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.75	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
NICKEL	1.0	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	2.6	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

4/7/2015 11:40:00  
Sample ID:TMW10042015 Collected:AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.65	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
NICKEL	0.89	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SELENIUM	1.1	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
VANADIUM	2.4	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID:TMW17042015 Collected:4/7/2015 1:50:00 PM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	0.23	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
NICKEL	1.0	J	0.90	LOD	3.0	LOQ	ug/L	J	RI

Sample ID:TMW17042015 Collected:4/7/2015 1:50:00 PM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.37	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	1.0	J Q	1.5	LOD	10	LOQ	ug/L	J	RI
COBALT	0.17	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
LEAD	2.0	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
NICKEL	1.8	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SELENIUM	1.2	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
SILVER	0.40	J	0.10	LOD	5.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 2:01:31 PM

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Page 8 of 15



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID:TMW17042015 Collected:4/7/2015 1:50:00 PM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	1.2	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID:TMW25042015 Collected:4/7/2015 9:50:00 AM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.70	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.060	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	0.84	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	0.90	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SELENIUM	1.8	J	2.0	LOD	5.0	LOQ	ug/L	U	Mb
VANADIUM	3.7	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID:TMW25042015 Collected:4/7/2015 9:50:00 AM Analysis Type:RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.83	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.46	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	0.65	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
LEAD	0.18	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
NICKEL	1.2	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	4.3	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	5.4	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID:TMW26042015 Collected:4/7/2015 1:55:00 PM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	1.4	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.28	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	1.8	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	2.2	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	3.4	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	6.0	U	6.0	LOD	20	LOQ	ug/L	UJ	Fd

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

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Page 9 of 15



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

Method Category: METALS

Method: 6020A

Matrix: AQ

Sample ID: TMW26042015

Collected: 4/7/2015 1:55:00 PM Analysis Type: RES/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	1.3	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.35	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	2.1	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SELENIUM	1.2	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
VANADIUM	3.4	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	2.6	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW27042015

Collected: 4/7/2015 8:50:00 AM Analysis Type: RES/DIS

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.40	J	0.60	LOD	6.0	LOQ	ug/L	J	RI
COBALT	0.17	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	0.62	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SELENIUM	1.2	J	2.0	LOD	5.0	LOQ	ug/L	U	Mb
SILVER	0.073	J	0.10	LOD	5.0	LOQ	ug/L	J	RI

Sample ID: TMW27042015

Collected: 4/7/2015 8:50:00 AM Analysis Type: RES/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.47	J	0.60	LOD	6.0	LOQ	ug/L	J	RI
COBALT	0.16	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	0.68	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
ZINC	5.6	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW28042015

Collected: 4/7/2015 11:50:00 AM Analysis Type: RES/DIS

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.2	J	0.60	LOD	6.0	LOQ	ug/L	J	RI
COBALT	0.15	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	0.53	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SELENIUM	1.6	J	2.0	LOD	5.0	LOQ	ug/L	U	Mb
SILVER	0.058	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.14	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
VANADIUM	0.51	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

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Page 10 of 15



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: TMW28042015      Collected: 4/7/2015 11:50:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.2	J	0.60	LOD	6.0	LOQ	ug/L	J	RI
COBALT	0.15	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	0.54	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SILVER	0.050	J	0.10	LOD	5.0	LOQ	ug/L	U	Mb
THALLIUM	0.13	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
VANADIUM	0.66	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	3.3	J	6.0	LOD	20	LOQ	ug/L	J	RI

<b>Method Category:</b>	SVOA								
<b>Method:</b>	8081A	<b>Matrix:</b>	AQ						

Sample ID: DMW23042015      Collected: 4/7/2015 9:40:00 AM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOXAPHENE	0.80	U	0.80	LOD	5.0	LOQ	ug/L	UJ	Ms

Sample ID: MW23042015      Collected: 4/7/2015 9:40:00 AM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOXAPHENE	0.78	U J	0.78	LOD	4.9	LOQ	ug/L	UJ	Ms

<b>Method Category:</b>	SVOA								
<b>Method:</b>	8270D	<b>Matrix:</b>	AQ						

Sample ID: DMW23042015      Collected: 4/7/2015 9:40:00 AM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
M,P-CRESOL	0.32	J	0.97	LOD	19	LOQ	ug/L	J	RI, Fd

Sample ID: DMW23042015      Collected: 4/7/2015 9:40:00 AM      Analysis Type: RES-ACID      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,6-TRICHLOROPHENOL	0.33	J	0.97	LOD	19	LOQ	ug/L	J	RI, Fd

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 2:01:31 PM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 11 of 15



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

Method Category: SVOA

Method: 8270D

Matrix: AQ

Sample ID: DMW23042015

Collected: 4/7/2015 9:40:00 AM Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLORO BENZENE	0.35	J	0.97	LOD	9.7	LOQ	ug/L	J	RI, Fd
1,2-DICHLORO BENZENE	0.28	J	0.97	LOD	9.7	LOQ	ug/L	J	RI, Fd
1,2-DIPHENYLHYDRAZINE	0.35	J	0.97	LOD	9.7	LOQ	ug/L	J	RI, Fd
1,3-DICHLORO BENZENE	0.30	J	0.97	LOD	9.7	LOQ	ug/L	J	RI, Fd
1,4-DICHLORO BENZENE	0.37	J	0.97	LOD	9.7	LOQ	ug/L	J	RI, Fd
2-CHLORONAPHTHALENE	0.39	J	0.97	LOD	9.7	LOQ	ug/L	J	RI, Fd
2-METHYLNAPHTHALENE	0.37	J	0.97	LOD	9.7	LOQ	ug/L	J	RI, Fd
3,3'-DICHLORO BENZIDINE	9.7	U	9.7	LOD	48	LOQ	ug/L	UJ	Ms
ACENAPHTHENE	0.38	J Q	0.97	LOD	9.7	LOQ	ug/L	J	RI, Fd
ACETOPHENONE	0.41	J	4.8	LOD	9.7	LOQ	ug/L	J	RI, Fd
BENZALDEHYDE	1.9	U	1.9	LOD	9.7	LOQ	ug/L	UJ	Ms, Ms
BENZIDINE	97	U Q	97	LOD	190	LOQ	ug/L	UJ	Ms
BENZYL ALCOHOL	0.31	J	0.97	LOD	24	LOQ	ug/L	J	RI, Fd
BIS(2-CHLOROISOPROPYL) ETHER	0.33	J	0.97	LOD	9.7	LOQ	ug/L	J	RI, Fd
BIS(2-ETHYLHEXYL) PHTHALATE	0.74	J	0.97	LOD	9.7	LOQ	ug/L	J	RI, Fd
DIBENZOFURAN	0.39	J	0.97	LOD	9.7	LOQ	ug/L	J	RI, Fd
DIETHYL PHTHALATE	0.43	J	0.97	LOD	19	LOQ	ug/L	J	RI, Fd
FLUORANTHENE	0.32	J Q	0.97	LOD	19	LOQ	ug/L	J	RI, Fd
FLUORENE	0.34	J Q	0.97	LOD	9.7	LOQ	ug/L	J	RI, Fd
NAPHTHALENE	0.39	J Q	0.97	LOD	9.7	LOQ	ug/L	J	RI, Fd
N-NITROSODIMETHYLAMINE	0.33	J	0.97	LOD	9.7	LOQ	ug/L	J	RI, Fd
N-NITROSODIPHENYLAMINE	0.65	J	0.97	LOD	9.7	LOQ	ug/L	J	RI, Fd
PHENANTHRENE	0.37	J Q	0.97	LOD	9.7	LOQ	ug/L	J	RI, Fd

Sample ID: MW23042015

Collected: 4/7/2015 9:40:00 AM Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
M,P-CRESOL	1.0	U	1.0	LOD	20	LOQ	ug/L	UJ	Fd

Sample ID: MW23042015

Collected: 4/7/2015 9:40:00 AM Analysis Type: RES-ACID

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,6-TRICHLOROPHENOL	1.0	U	1.0	LOD	20	LOQ	ug/L	UJ	Fd

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 2:01:31 PM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 12 of 15



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA	
<b>Method:</b>	8270D	<b>Matrix:</b> AQ

Sample ID: MW23042015

Collected: 4/7/2015 9:40:00 AM Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROENZENE	1.0	U	1.0	LOD	10	LOQ	ug/L	UJ	Fd
1,2-DICHLOROENZENE	1.0	U	1.0	LOD	10	LOQ	ug/L	UJ	Fd
1,2-DIPHENYLHYDRAZINE	1.0	U	1.0	LOD	10	LOQ	ug/L	UJ	Fd
1,3-DICHLOROENZENE	1.0	U	1.0	LOD	10	LOQ	ug/L	UJ	Fd
1,4-DICHLOROENZENE	1.0	U	1.0	LOD	10	LOQ	ug/L	UJ	Fd
2-CHLORONAPHTHALENE	1.0	U	1.0	LOD	10	LOQ	ug/L	UJ	Fd
2-METHYLNAPHTHALENE	1.0	U	1.0	LOD	10	LOQ	ug/L	UJ	Fd
3,3'-DICHLOROENZIDINE	10	U J	10	LOD	50	LOQ	ug/L	UJ	Ms
ACENAPHTHENE	1.0	U	1.0	LOD	10	LOQ	ug/L	UJ	Fd
ACETOPHENONE	5.0	U	5.0	LOD	10	LOQ	ug/L	UJ	Fd
BENZALDEHYDE	2.0	U J	2.0	LOD	10	LOQ	ug/L	UJ	Ms, Ms
BENZIDINE	100	U J	100	LOD	200	LOQ	ug/L	UJ	Ms
BENZYL ALCOHOL	1.0	U	1.0	LOD	25	LOQ	ug/L	UJ	Fd
BIS(2-CHLOROISOPROPYL) ETHER	1.0	U	1.0	LOD	10	LOQ	ug/L	UJ	Fd
BIS(2-ETHYLHEXYL) PHTHALATE	1.0	U	1.0	LOD	10	LOQ	ug/L	UJ	Fd
DIBENZOFURAN	1.0	U	1.0	LOD	10	LOQ	ug/L	UJ	Fd
DIETHYL PHTHALATE	1.0	U	1.0	LOD	20	LOQ	ug/L	UJ	Fd
FLUORANTHENE	1.0	U	1.0	LOD	20	LOQ	ug/L	UJ	Fd
FLUORENE	1.0	U	1.0	LOD	10	LOQ	ug/L	UJ	Fd
NAPHTHALENE	1.0	U	1.0	LOD	10	LOQ	ug/L	UJ	Fd
N-NITROSODIMETHYLAMINE	1.0	U	1.0	LOD	10	LOQ	ug/L	UJ	Fd
N-NITROSODIPHENYLAMINE	1.0	U	1.0	LOD	10	LOQ	ug/L	UJ	Fd
PHENANTHRENE	1.0	U	1.0	LOD	10	LOQ	ug/L	UJ	Fd

<b>Method Category:</b>	SVOA	
<b>Method:</b>	8330B	<b>Matrix:</b> AQ

Sample ID: DMW23042015

Collected: 4/7/2015 9:40:00 AM Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-NITROTOLUENE	0.13	J M	0.17	LOD	0.44	LOQ	ug/L	J	RI, Fd

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 2:01:31 PM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 13 of 15



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA
<b>Method:</b>	8330B
<b>Matrix:</b>	AQ

Sample ID: MW23042015

Collected: 4/7/2015 9:40:00 AM Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-NITROTOLUENE	0.16	U	0.16	LOD	0.43	LOQ	ug/L	UJ	Fd

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 2:01:31 PM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 14 of 15



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

### Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
Fd	Field Duplicate Precision
Lcs	Laboratory Control Spike Lower Estimation
Mb	Method Blank Contamination
Ms	Matrix Spike Lower Estimation
Ms	Matrix Spike Precision
Ms	Matrix Spike Upper Estimation
RI	Reporting Limit Trace Value
StoA	Sampling to Analysis Estimation
StoE	Sampling to Extraction Estimation
StoE	Sampling to Extraction Rejection
Surr	Surrogate/Tracer Recovery Lower Estimation
Surr	Surrogate/Tracer Recovery Upper Estimation

\* denotes a non-reportable result

**Project Name and Number: 102012 - FWDA 102012 GW**

5/15/2015 2:01:31 PM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 15 of 15





## Data Review Summary

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

<i>Validation Area</i>	<i>Note</i>
Technical Holding Times	SR
Temperature	A
Initial Calibration	N
Continuing Calibration/Initial Calibration Verification	N
Method Blanks	SR
Surrogate/Tracer Spikes	SR
Matrix Spike/Matrix Spike Duplicates	SR
Laboratory Duplicates	A
Laboratory Replicates	N
Laboratory Control Samples	SR
Compound Quantitation	SR
Field Duplicates	SR
Field Triplicates	N
Field Blanks	A

A = Acceptable, N = Not provided/applicable, SR = See report

The contents of this report reflect findings made by ADR during Automated Data Review, manual applied qualifiers are not considered. Please refer to the Overall Qualifier Summary report for manual qualifiers.

## Field Duplicate RPD Report

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

Method: 6010C

Matrix: AQ

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	MW23042015 (DIS)	DMW23042015 (DIS)			
CALCIUM	11000	10000	10	50.00	No Qualifiers Applied
MAGNESIUM	4700	4500	4	50.00	
POTASSIUM	1500	1600	6	50.00	
SODIUM	470000	460000	2	50.00	
ALUMINUM	300 U	68	200	50.00	J(all detects) UJ(all non-detects)
IRON	100 U	47	200	50.00	

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	MW23042015 (TOT)	DMW23042015 (TOT)			
ALUMINUM	1800	1500	18	50.00	No Qualifiers Applied
CALCIUM	11000	11000	0	50.00	
IRON	1000	810	21	50.00	
MAGNESIUM	5300	5300	0	50.00	
POTASSIUM	1800	1700	6	50.00	
SODIUM	480000	480000	0	50.00	

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	TMW26042015 (DIS)	DTW26042015 (DIS)			
CALCIUM	19000	18000	5	50.00	No Qualifiers Applied
MAGNESIUM	7500	7100	5	50.00	
POTASSIUM	750	680	10	50.00	
SODIUM	870000	810000	7	50.00	

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	TMW26042015 (TOT)	DTW26042015 (TOT)			
ALUMINUM	250	330	28	50.00	No Qualifiers Applied
CALCIUM	16000	17000	6	50.00	
IRON	120	180	40	50.00	
MAGNESIUM	6800	7400	8	50.00	
POTASSIUM	680	700	3	50.00	
SODIUM	770000	930000	19	50.00	

Method: 6020A

Matrix: AQ

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	MW23042015 (DIS)	DMW23042015 (DIS)			
ARSENIC	0.94	1.1	16	50.00	No Qualifiers Applied
BARIUM	130	130	0	50.00	
COBALT	1.1	0.99	11	50.00	
COPPER	1.3	1.2	8	50.00	
MANGANESE	82	78	5	50.00	
NICKEL	3.1	2.2	34	50.00	
VANADIUM	6.7	7.5	11	50.00	
SELENIUM	1.4	5.0 U	200	50.00	J(all detects) UJ(all non-detects)
SILVER	5.0 U	0.033	200	50.00	
THALLIUM	1.0 U	0.059	200	50.00	
ZINC	3.9	20 U	200	50.00	

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 1:56:34 PM

ADR version 1.9.0.325

Page 1 of 3

## Field Duplicate RPD Report

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

Method: 6020A

Matrix: AQ

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	MW23042015 (TOT)	DMW23042015 (TOT)			
ARSENIC	1.3	1.2	8	50.00	No Qualifiers Applied
BARIUM	160	150	6	50.00	
BERYLLIUM	1.0 U	0.15	200	50.00	
CHROMIUM	2.7	2.0	30	50.00	
COBALT	1.4	1.4	0	50.00	
COPPER	1.8	1.4	25	50.00	
LEAD	0.81	0.73	10	50.00	
MANGANESE	100	95	5	50.00	
NICKEL	3.5	3.5	0	50.00	
SELENIUM	5.0 U	0.86	200	50.00	
SILVER	0.48	0.26	59	50.00	
THALLIUM	1.0 U	0.090	200	50.00	
VANADIUM	7.3	6.9	6	50.00	
ZINC	4.8	4.0	18	50.00	

  

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	TMW26042015 (DIS)	DTW26042015 (DIS)			
ARSENIC	1.4	1.3	7	50.00	No Qualifiers Applied
BARIUM	18	18	0	50.00	
COBALT	0.28	0.24	15	50.00	
COPPER	1.8	1.7	6	50.00	
MANGANESE	120	110	9	50.00	
NICKEL	2.2	1.8	20	50.00	
VANADIUM	3.4	3.5	3	50.00	
ZINC	20 U	2.4	200	50.00	

  

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	TMW26042015 (TOT)	DTW26042015 (TOT)			
ARSENIC	1.3	1.2	8	50.00	No Qualifiers Applied
BARIUM	22	22	0	50.00	
COBALT	0.35	0.38	8	50.00	
COPPER	2.3	2.2	4	50.00	
MANGANESE	110	120	9	50.00	
NICKEL	2.1	2.5	17	50.00	
SELENIUM	1.2	0.75	46	50.00	
VANADIUM	3.4	3.9	14	50.00	
ZINC	2.6	20 U	200	50.00	

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 1:56:34 PM

ADR version 1.9.0.325

Page 2 of 3

## Field Duplicate RPD Report

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

**Method:** 8270D**Matrix:** AQ

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	MW23042015	DMW23042015			
1,2,4-TRICHLOROBENZENE	10 U	0.35	200	50.00	J(all detects) UJ(all non-detects)
1,2-DICHLOROBENZENE	10 U	0.28	200	50.00	
1,2-DIPHENYLHYDRAZINE	10 U	0.35	200	50.00	
1,3-DICHLOROBENZENE	10 U	0.30	200	50.00	
1,4-DICHLOROBENZENE	10 U	0.37	200	50.00	
2,4,6-TRICHLOROPHENOL	20 U	0.33	200	50.00	
2-CHLORONAPHTHALENE	10 U	0.39	200	50.00	
2-METHYLNAPHTHALENE	10 U	0.37	200	50.00	
ACENAPHTHENE	10 U	0.38	200	50.00	
ACETOPHENONE	10 U	0.41	200	50.00	
BENZYL ALCOHOL	25 U	0.31	200	50.00	
BIS(2-CHLOROISOPROPYL) ETHER	10 U	0.33	200	50.00	
BIS(2-ETHYLHEXYL) PHTHALATE	10 U	0.74	200	50.00	
DIBENZOFURAN	10 U	0.39	200	50.00	
DIETHYL PHTHALATE	20 U	0.43	200	50.00	
FLUORANTHENE	20 U	0.32	200	50.00	
FLUORENE	10 U	0.34	200	50.00	
M,P-CRESOL	20 U	0.32	200	50.00	
NAPHTHALENE	10 U	0.39	200	50.00	
N-NITROSODIMETHYLAMINE	10 U	0.33	200	50.00	
N-NITROSODIPHENYLAMINE	10 U	0.65	200	50.00	
PHENANTHRENE	10 U	0.37	200	50.00	

**Method:** 8330B**Matrix:** AQ

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	MW23042015	DMW23042015			
2-NITROTOLUENE	0.43 U	0.13	200	50.00	J(all detects) UJ(all non-detects)

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 1:56:34 PM

ADR version 1.9.0.325

Page 3 of 3

## QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: 280-67484-1  
 EDD Filename: 280-67484-1

Laboratory: TA DEN  
 eQAPP Name: FtWingate\_Primary\_120405

Method: 8270D		Preparation Method: 3520C			
Matrix: AQ					
Sample ID	Type	Actual	Criteria	Units	Flag
DMW23042015 (RE2)	Sampling To Extraction	13.00	7.00	DAYS	J (all detects) UJ (all non-detects)

Method: 9056		Preparation Method: 3520C			
Matrix: AQ					
Sample ID	Type	Actual	Criteria	Units	Flag
DMW23042015 (RE2/TOT)	Sampling To Analysis	48.75	48.00	HOURS	J(all detects)
MW23042015MS (RE2/TOT)		48.25	48.00	HOURS	UJ(all non-detects)
MW23042015MSD (RE2/TOT)		48.50	48.00	HOURS	

## Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

**Method:** 8270D**Matrix:** AQ

<b>QC Sample ID (Associated Samples)</b>	<b>Compound</b>	<b>LCS %R</b>	<b>LCSD %R</b>	<b>%R Limits</b>	<b>RPD (Limits)</b>	<b>Affected Compounds</b>	<b>Flag</b>
LCS 280-273624/2-A LCSD 280-273624/3-A (DMW23042015)	BENZALDEHYDE HEXACHLOROCYCLOPENTADIEN	65 18	66 24	70.00-130.00 50.00-130.00	- -	BENZALDEHYDE HEXACHLOROCYCLOPENTADIE	J (all detects) UJ (all non-detects)

**Project Name and Number: 102012 - FWDA 102012 GW**

5/15/2015 1:55:19 PM

ADR version 1.9.0.325

Page 1 of 1

## Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method: 6010C</b>							
<b>Matrix: AQ</b>							
<b>QC Sample ID (Associated Samples)</b>	<b>Compound</b>	<b>MS %R</b>	<b>MSD %R</b>	<b>%R Limits</b>	<b>RPD (Limits)</b>	<b>Affected Compounds</b>	<b>Flag</b>
MW23042015MS (DIS) MW23042015MSD (DIS) (DMW23042015 DTW26042015 MW23042015 TMW01042015 TMW10042015 TMW17042015 TMW25042015 TMW26042015 TMW27042015 TMW28042015)	SODIUM	58	73	80.00-120.00	-	SODIUM	J (all detects) UJ (all non-detects)
<b>Method: 6020A</b>							
<b>Matrix: AQ</b>							
<b>QC Sample ID (Associated Samples)</b>	<b>Compound</b>	<b>MS %R</b>	<b>MSD %R</b>	<b>%R Limits</b>	<b>RPD (Limits)</b>	<b>Affected Compounds</b>	<b>Flag</b>
MW23042015MS (TOT) MW23042015MSD (TOT) (DMW23042015 DTW26042015 MW23042015 TMW01042015 TMW10042015 TMW17042015 TMW25042015 TMW26042015 TMW27042015 TMW28042015)	BARIUM	67	77	85.00-118.00	-	BARIUM	J (all detects) UJ (all non-detects)
<b>Method: 6010C</b>							
<b>Matrix: AQ</b>							
<b>QC Sample ID (Associated Samples)</b>	<b>Compound</b>	<b>MS %R</b>	<b>MSD %R</b>	<b>%R Limits</b>	<b>RPD (Limits)</b>	<b>Affected Compounds</b>	<b>Flag</b>
MW23042015MS (TOT) MW23042015MSD (TOT) (DMW23042015 DTW26042015 MW23042015 TMW01042015 TMW10042015 TMW17042015 TMW25042015 TMW26042015 TMW27042015 TMW28042015)	ALUMINUM SODIUM	181 203	175 310	80.00-120.00 80.00-120.00	- -	ALUMINUM SODIUM	J (all detects)

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 1:55:11 PM

ADR version 1.9.0.325

Page 1 of 2

## Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method: 8270D</b>							
<b>Matrix: AQ</b>							
<b>QC Sample ID (Associated Samples)</b>	<b>Compound</b>	<b>MS %R</b>	<b>MSD %R</b>	<b>%R Limits</b>	<b>RPD (Limits)</b>	<b>Affected Compounds</b>	<b>Flag</b>
MW23042015MS MW23042015MSD (DMW23042015 MW23042015)	3,3'-DICHLOROBENZIDINE BENZALDEHYDE BENZIDINE	9 49 0	8 32 0	20.00-110.00 70.00-130.00 10.00-110.00	- 37 (30.00) -	3,3'-DICHLOROBENZIDINE BENZALDEHYDE BENZIDINE	J(all detects) UJ(all non-detects)

<b>Method: 8081A</b>							
<b>Matrix: AQ</b>							
<b>QC Sample ID (Associated Samples)</b>	<b>Compound</b>	<b>MS %R</b>	<b>MSD %R</b>	<b>%R Limits</b>	<b>RPD (Limits)</b>	<b>Affected Compounds</b>	<b>Flag</b>
MW23042015MS (DMW23042015 MW23042015)	TOXAPHENE	59	-	63.00-142.00	-	TOXAPHENE	J(all detects) UJ(all non-detects)

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 1:55:11 PM

ADR version 1.9.0.325

Page 2 of 2



## Method Blank Outlier Report

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

Method: 6020A Matrix: AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-271721/1-A	4/10/2015 8:33:00 AM	SELENIUM	0.965 ug/L	DMW23042015 DTW26042015 MW23042015 TMW01042015 TMW10042015 TMW17042015 TMW25042015 TMW26042015 TMW27042015 TMW28042015
MB 280-271732/1-A	4/10/2015 7:13:00 AM	SILVER	0.0380 ug/L	DMW23042015 DTW26042015 MW23042015 TMW01042015 TMW10042015 TMW17042015 TMW25042015 TMW26042015 TMW27042015 TMW28042015

*The following samples and their listed target analytes were qualified due to contamination reported in this blank*

Sample ID	Analyte	Reported Result	Modified Final Result
MW23042015(RES/DIS)	SELENIUM	1.4 ug/L	1.4U ug/L
TMW25042015(RES/DIS)	SELENIUM	1.8 ug/L	1.8U ug/L
TMW27042015(RES/DIS)	SELENIUM	1.2 ug/L	1.2U ug/L
TMW28042015(RES/DIS)	SELENIUM	1.6 ug/L	1.6U ug/L
TMW28042015(RES/TOT)	SILVER	0.050 ug/L	0.050U ug/L

Method: 8260B Matrix: AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-272203/6	4/10/2015 6:51:00 PM	METHYLENE CHLORIDE	0.484 ug/L	DMW23042015 DTW26042015 MW23042015 TB-05-042015 TMW01042015 TMW10042015 TMW17042015 TMW25042015 TMW26042015 TMW27042015 TMW28042015

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 1:54:55 PM

ADR version 1.9.0.325

Page 1 of 1

## Reporting Limit Outliers

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method:</b> 6010C
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DMW23042015	ALUMINUM	J	68	300	LOQ	ug/L	J (all detects)
	IRON	J	47	100	LOQ	ug/L	
	POTASSIUM	J	1600	3000	LOQ	ug/L	
DTW26042015	POTASSIUM	J	680	3000	LOQ	ug/L	J (all detects)
MW23042015	POTASSIUM	J	1500	3000	LOQ	ug/L	J (all detects)
TMW01042015	POTASSIUM	J	670	3000	LOQ	ug/L	J (all detects)
TMW10042015	POTASSIUM	J	1300	3000	LOQ	ug/L	J (all detects)
TMW17042015	ALUMINUM	J	110	300	LOQ	ug/L	J (all detects)
	IRON	J	32	100	LOQ	ug/L	
	POTASSIUM	J	1100	3000	LOQ	ug/L	
TMW25042015	POTASSIUM	J	590	3000	LOQ	ug/L	J (all detects)
TMW26042015	ALUMINUM	J	250	300	LOQ	ug/L	J (all detects)
	POTASSIUM	J	750	3000	LOQ	ug/L	
TMW27042015	POTASSIUM	J	650	3000	LOQ	ug/L	J (all detects)
TMW28042015	POTASSIUM	J	1500	3000	LOQ	ug/L	J (all detects)

<b>Method:</b> 6020A
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DMW23042015	ARSENIC	J	1.1	5.0	LOQ	ug/L	J (all detects)
	BERYLLIUM	J	0.15	1.0	LOQ	ug/L	
	CHROMIUM	J Q	2.0	10	LOQ	ug/L	
	COBALT	J	0.99	1.0	LOQ	ug/L	
	COPPER	J	1.2	2.0	LOQ	ug/L	
	LEAD	J	0.73	3.0	LOQ	ug/L	
	NICKEL	J	2.2	3.0	LOQ	ug/L	
	SELENIUM	J	0.86	5.0	LOQ	ug/L	
	SILVER	J	0.033	5.0	LOQ	ug/L	
	THALLIUM	J	0.059	1.0	LOQ	ug/L	
	ZINC	J	4.0	20	LOQ	ug/L	
DTW26042015	ARSENIC	J	1.3	5.0	LOQ	ug/L	J (all detects)
	COBALT	J	0.24	1.0	LOQ	ug/L	
	COPPER	J	1.7	2.0	LOQ	ug/L	
	NICKEL	J	1.8	3.0	LOQ	ug/L	
	SELENIUM	J	0.75	5.0	LOQ	ug/L	
	VANADIUM	J	3.5	6.0	LOQ	ug/L	
	ZINC	J	2.4	20	LOQ	ug/L	
MW23042015	ARSENIC	J	0.94	5.0	LOQ	ug/L	J (all detects)
	CHROMIUM	J Q	2.7	10	LOQ	ug/L	
	COPPER	J	1.3	2.0	LOQ	ug/L	
	LEAD	J	0.81	3.0	LOQ	ug/L	
	SELENIUM	J	1.4	5.0	LOQ	ug/L	
	SILVER	J	0.48	5.0	LOQ	ug/L	
	ZINC	J	3.9	20	LOQ	ug/L	

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 1:55:27 PM

ADR version 1.9.0.325

Page 1 of 3

## Reporting Limit Outliers

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

Method: 6020A							
Matrix: AQ							
SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW01042015	ARSENIC	J	0.88	5.0	LOQ	ug/L	J (all detects)
	CHROMIUM	J	0.52	10	LOQ	ug/L	
	NICKEL	J	0.36	3.0	LOQ	ug/L	
TMW10042015	ARSENIC	J	0.75	5.0	LOQ	ug/L	J (all detects)
	NICKEL	J	1.0	3.0	LOQ	ug/L	
	SELENIUM	J	1.1	5.0	LOQ	ug/L	
	VANADIUM	J	2.6	6.0	LOQ	ug/L	
TMW17042015	ARSENIC	J	0.37	5.0	LOQ	ug/L	J (all detects)
	CHROMIUM	J Q	1.0	10	LOQ	ug/L	
	COBALT	J	0.17	1.0	LOQ	ug/L	
	LEAD	J	0.23	3.0	LOQ	ug/L	
	NICKEL	J	1.0	3.0	LOQ	ug/L	
	SELENIUM	J	1.2	5.0	LOQ	ug/L	
	SILVER	J	0.40	5.0	LOQ	ug/L	
	VANADIUM	J	1.2	6.0	LOQ	ug/L	
TMW25042015	ARSENIC	J	0.70	5.0	LOQ	ug/L	J (all detects)
	COBALT	J	0.060	1.0	LOQ	ug/L	
	COPPER	J	0.84	2.0	LOQ	ug/L	
	LEAD	J	0.18	3.0	LOQ	ug/L	
	NICKEL	J	0.90	3.0	LOQ	ug/L	
	SELENIUM	J	1.8	5.0	LOQ	ug/L	
	VANADIUM	J	3.7	6.0	LOQ	ug/L	
	ZINC	J	5.4	20	LOQ	ug/L	
TMW26042015	ARSENIC	J	1.4	5.0	LOQ	ug/L	J (all detects)
	COBALT	J	0.28	1.0	LOQ	ug/L	
	COPPER	J	1.8	2.0	LOQ	ug/L	
	NICKEL	J	2.2	3.0	LOQ	ug/L	
	SELENIUM	J	1.2	5.0	LOQ	ug/L	
	VANADIUM	J	3.4	6.0	LOQ	ug/L	
	ZINC	J	2.6	20	LOQ	ug/L	
TMW27042015	ANTIMONY	J	0.40	6.0	LOQ	ug/L	J (all detects)
	COBALT	J	0.17	1.0	LOQ	ug/L	
	NICKEL	J	0.62	3.0	LOQ	ug/L	
	SELENIUM	J	1.2	5.0	LOQ	ug/L	
	SILVER	J	0.073	5.0	LOQ	ug/L	
	ZINC	J	5.6	20	LOQ	ug/L	
TMW28042015	ANTIMONY	J	1.2	6.0	LOQ	ug/L	J (all detects)
	COBALT	J	0.15	1.0	LOQ	ug/L	
	NICKEL	J	0.53	3.0	LOQ	ug/L	
	SELENIUM	J	1.6	5.0	LOQ	ug/L	
	SILVER	J	0.058	5.0	LOQ	ug/L	
	THALLIUM	J	0.14	1.0	LOQ	ug/L	
	VANADIUM	J	0.51	6.0	LOQ	ug/L	
	ZINC	J	3.3	20	LOQ	ug/L	

## Reporting Limit Outliers

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method:</b> 8270D
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DMW23042015	1,2,4-TRICHLORO BENZENE	J	0.35	9.7	LOQ	ug/L	J (all detects)
	1,2-DICHLORO BENZENE	J	0.28	9.7	LOQ	ug/L	
	1,2-DIPHENYLHYDRAZINE	J	0.35	9.7	LOQ	ug/L	
	1,3-DICHLORO BENZENE	J	0.30	9.7	LOQ	ug/L	
	1,4-DICHLORO BENZENE	J	0.37	9.7	LOQ	ug/L	
	2,4,6-TRICHLOROPHENOL	J	0.33	19	LOQ	ug/L	
	2-CHLORONAPHTHALENE	J	0.39	9.7	LOQ	ug/L	
	2-METHYLNAPHTHALENE	J	0.37	9.7	LOQ	ug/L	
	ACENAPHTHENE	J Q	0.38	9.7	LOQ	ug/L	
	ACETOPHENONE	J	0.41	9.7	LOQ	ug/L	
	BENZYL ALCOHOL	J	0.31	24	LOQ	ug/L	
	BIS(2-CHLOROISOPROPYL) ETHER	J	0.33	9.7	LOQ	ug/L	
	BIS(2-ETHYLHEXYL) PHTHALATE	J H	0.77	10	LOQ	ug/L	
	DIBENZOFURAN	J	0.39	9.7	LOQ	ug/L	
	DIETHYL PHTHALATE	J	0.43	19	LOQ	ug/L	
	FLUORANTHENE	J Q	0.32	19	LOQ	ug/L	
	FLUORENE	J Q	0.34	9.7	LOQ	ug/L	
	M,P-CRESOL	J	0.32	19	LOQ	ug/L	
	NAPHTHALENE	J Q	0.39	9.7	LOQ	ug/L	
	N-NITROSODIMETHYLAMINE	J	0.33	9.7	LOQ	ug/L	
N-NITROSODIPHENYLAMINE	J	0.65	9.7	LOQ	ug/L		
PHENANTHRENE	J Q	0.37	9.7	LOQ	ug/L		

<b>Method:</b> 8330B
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DMW23042015	2-NITROTOLUENE	J M	0.13	0.44	LOQ	ug/L	J (all detects)

<b>Method:</b> 9056
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW10042015	NITRATE	J D	0.17	1.0	LOQ	mg/L	J (all detects)
TMW25042015	NITRATE	J	0.45	0.50	LOQ	mg/L	J (all detects)



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Lab Reporting Batch: 280-67484-1</b>						
<b>Method: 6010C</b>						
DMW23042015	280-67484-6	AQ	FD	3005A	4/7/2015 9:40:00 AM	S2AVE
DMW23042015	280-67484-6	AQ	FD	3010A	4/7/2015 9:40:00 AM	S2AVE
DTW26042015	280-67484-7	AQ	FD	3005A	4/7/2015 1:55:00 PM	S2AVE
DTW26042015	280-67484-7	AQ	FD	3010A	4/7/2015 1:55:00 PM	S2AVE
MW23042015	280-67484-5	AQ	N	3005A	4/7/2015 9:40:00 AM	S2AVE
MW23042015	280-67484-5	AQ	N	3010A	4/7/2015 9:40:00 AM	S2AVE
MW23042015MS	280-67484-5MS	AQ	MS	3005A	4/7/2015 9:40:00 AM	S2AVE
MW23042015MS	280-67484-5MS	AQ	MS	3010A	4/7/2015 9:40:00 AM	S2AVE
MW23042015MSD	280-67484-5MSD	AQ	MSD	3005A	4/7/2015 9:40:00 AM	S2AVE
MW23042015MSD	280-67484-5MSD	AQ	MSD	3010A	4/7/2015 9:40:00 AM	S2AVE
TMW01042015	280-67484-9	AQ	N	3005A	4/7/2015 9:05:00 AM	S2AVE
TMW01042015	280-67484-9	AQ	N	3010A	4/7/2015 9:05:00 AM	S2AVE
TMW10042015	280-67484-8	AQ	N	3005A	4/7/2015 11:40:00 AM	S2AVE
TMW10042015	280-67484-8	AQ	N	3010A	4/7/2015 11:40:00 AM	S2AVE
TMW17042015	280-67484-11	AQ	N	3005A	4/7/2015 1:50:00 PM	S2AVE
TMW17042015	280-67484-11	AQ	N	3010A	4/7/2015 1:50:00 PM	S2AVE
TMW25042015	280-67484-3	AQ	N	3005A	4/7/2015 9:50:00 AM	S2AVE
TMW25042015	280-67484-3	AQ	N	3010A	4/7/2015 9:50:00 AM	S2AVE
TMW26042015	280-67484-10	AQ	N	3005A	4/7/2015 1:55:00 PM	S2AVE
TMW26042015	280-67484-10	AQ	N	3010A	4/7/2015 1:55:00 PM	S2AVE
TMW27042015	280-67484-2	AQ	N	3005A	4/7/2015 8:50:00 AM	S2AVE
TMW27042015	280-67484-2	AQ	N	3010A	4/7/2015 8:50:00 AM	S2AVE



## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 6010C</b>						
TMW28042015	280-67484-1	AQ	N	3005A	4/7/2015 11:50:00 AM	S2AVE
TMW28042015	280-67484-1	AQ	N	3010A	4/7/2015 11:50:00 AM	S2AVE
<b>Method: 6020A</b>						
DMW23042015	280-67484-6	AQ	FD	3005A	4/7/2015 9:40:00 AM	S2AVE
DMW23042015	280-67484-6	AQ	FD	3020A	4/7/2015 9:40:00 AM	S2AVE
DTW26042015	280-67484-7	AQ	FD	3005A	4/7/2015 1:55:00 PM	S2AVE
DTW26042015	280-67484-7	AQ	FD	3020A	4/7/2015 1:55:00 PM	S2AVE
MW23042015	280-67484-5	AQ	N	3005A	4/7/2015 9:40:00 AM	S2AVE
MW23042015	280-67484-5	AQ	N	3020A	4/7/2015 9:40:00 AM	S2AVE
MW23042015MS	280-67484-5MS	AQ	MS	3005A	4/7/2015 9:40:00 AM	S2AVE
MW23042015MS	280-67484-5MS	AQ	MS	3020A	4/7/2015 9:40:00 AM	S2AVE
MW23042015MSD	280-67484-5MSD	AQ	MSD	3005A	4/7/2015 9:40:00 AM	S2AVE
MW23042015MSD	280-67484-5MSD	AQ	MSD	3020A	4/7/2015 9:40:00 AM	S2AVE
TMW01042015	280-67484-9	AQ	N	3005A	4/7/2015 9:05:00 AM	S2AVE
TMW01042015	280-67484-9	AQ	N	3020A	4/7/2015 9:05:00 AM	S2AVE
TMW10042015	280-67484-8	AQ	N	3005A	4/7/2015 11:40:00 AM	S2AVE
TMW10042015	280-67484-8	AQ	N	3020A	4/7/2015 11:40:00 AM	S2AVE
TMW17042015	280-67484-11	AQ	N	3005A	4/7/2015 1:50:00 PM	S2AVE
TMW17042015	280-67484-11	AQ	N	3020A	4/7/2015 1:50:00 PM	S2AVE
TMW25042015	280-67484-3	AQ	N	3005A	4/7/2015 9:50:00 AM	S2AVE
TMW25042015	280-67484-3	AQ	N	3020A	4/7/2015 9:50:00 AM	S2AVE
TMW26042015	280-67484-10	AQ	N	3005A	4/7/2015 1:55:00 PM	S2AVE
TMW26042015	280-67484-10	AQ	N	3020A	4/7/2015 1:55:00 PM	S2AVE
TMW27042015	280-67484-2	AQ	N	3005A	4/7/2015 8:50:00 AM	S2AVE

5/15/2015 1:57:49 PM

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Page 2 of 7



## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 6020A</b>						
TMW27042015	280-67484-2	AQ	N	3020A	4/7/2015 8:50:00 AM	S2AVE
TMW28042015	280-67484-1	AQ	N	3005A	4/7/2015 11:50:00 AM	S2AVE
TMW28042015	280-67484-1	AQ	N	3020A	4/7/2015 11:50:00 AM	S2AVE
<b>Method: 6860</b>						
DMW23042015	280-67484-6	AQ	FD	METHOD	4/7/2015 9:40:00 AM	S2AVE
DTW26042015	280-67484-7	AQ	FD	METHOD	4/7/2015 1:55:00 PM	S2AVE
MW23042015	280-67484-5	AQ	N	METHOD	4/7/2015 9:40:00 AM	S2AVE
MW23042015MS	280-67484-5MS	AQ	MS	METHOD	4/7/2015 9:40:00 AM	S2AVE
MW23042015MSD	280-67484-5MSD	AQ	MSD	METHOD	4/7/2015 9:40:00 AM	S2AVE
TMW01042015	280-67484-9	AQ	N	METHOD	4/7/2015 9:05:00 AM	S2AVE
TMW10042015	280-67484-8	AQ	N	METHOD	4/7/2015 11:40:00 AM	S2AVE
TMW17042015	280-67484-11	AQ	N	METHOD	4/7/2015 1:50:00 PM	S2AVE
TMW26042015	280-67484-10	AQ	N	METHOD	4/7/2015 1:55:00 PM	S2AVE
TMW27042015	280-67484-2	AQ	N	METHOD	4/7/2015 8:50:00 AM	S2AVE
<b>Method: 7470A</b>						
DMW23042015	280-67484-6	AQ	FD	7470A	4/7/2015 9:40:00 AM	S2AVE
DTW26042015	280-67484-7	AQ	FD	7470A	4/7/2015 1:55:00 PM	S2AVE
MW23042015	280-67484-5	AQ	N	7470A	4/7/2015 9:40:00 AM	S2AVE
MW23042015MS	280-67484-5MS	AQ	MS	7470A	4/7/2015 9:40:00 AM	S2AVE
MW23042015MSD	280-67484-5MSD	AQ	MSD	7470A	4/7/2015 9:40:00 AM	S2AVE
TMW01042015	280-67484-9	AQ	N	7470A	4/7/2015 9:05:00 AM	S2AVE
TMW10042015	280-67484-8	AQ	N	7470A	4/7/2015 11:40:00 AM	S2AVE
TMW17042015	280-67484-11	AQ	N	7470A	4/7/2015 1:50:00 PM	S2AVE
TMW25042015	280-67484-3	AQ	N	7470A	4/7/2015 9:50:00 AM	S2AVE



## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 7470A</b>						
TMW26042015	280-67484-10	AQ	N	7470A	4/7/2015 1:55:00 PM	S2AVE
TMW27042015	280-67484-2	AQ	N	7470A	4/7/2015 8:50:00 AM	S2AVE
TMW28042015	280-67484-1	AQ	N	7470A	4/7/2015 11:50:00 AM	S2AVE
<b>Method: 8081A</b>						
DMW23042015	280-67484-6	AQ	FD	3510C	4/7/2015 9:40:00 AM	S2AVE
MW23042015	280-67484-5	AQ	N	3510C	4/7/2015 9:40:00 AM	S2AVE
MW23042015MS	280-67484-5MS	AQ	MS	3510C	4/7/2015 9:40:00 AM	S2AVE
MW23042015MSD	280-67484-5MSD	AQ	MSD	3510C	4/7/2015 9:40:00 AM	S2AVE
<b>Method: 8260B</b>						
DMW23042015	280-67484-6	AQ	FD	5030	4/7/2015 9:40:00 AM	S2AVE
DTW26042015	280-67484-7	AQ	FD	5030	4/7/2015 1:55:00 PM	S2AVE
MW23042015	280-67484-5	AQ	N	5030	4/7/2015 9:40:00 AM	S2AVE
MW23042015MS	280-67484-5MS	AQ	MS	5030	4/7/2015 9:40:00 AM	S2AVE
MW23042015MSD	280-67484-5MSD	AQ	MSD	5030	4/7/2015 9:40:00 AM	S2AVE
TB-05-042015	280-67484-4	AQ	TB	5030	4/7/2015 8:00:00 AM	S2AVE
TMW01042015	280-67484-9	AQ	N	5030	4/7/2015 9:05:00 AM	S2AVE
TMW10042015	280-67484-8	AQ	N	5030	4/7/2015 11:40:00 AM	S2AVE
TMW17042015	280-67484-11	AQ	N	5030	4/7/2015 1:50:00 PM	S2AVE
TMW25042015	280-67484-3	AQ	N	5030	4/7/2015 9:50:00 AM	S2AVE
TMW26042015	280-67484-10	AQ	N	5030	4/7/2015 1:55:00 PM	S2AVE
TMW27042015	280-67484-2	AQ	N	5030	4/7/2015 8:50:00 AM	S2AVE
TMW28042015	280-67484-1	AQ	N	5030	4/7/2015 11:50:00 AM	S2AVE
<b>Method: 8270D</b>						
DMW23042015	280-67484-6	AQ	FD	3520C	4/7/2015 9:40:00 AM	S2AVE

5/15/2015 1:57:49 PM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 4 of 7





## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 8270D</b>						
MW23042015	280-67484-5	AQ	N	3520C	4/7/2015 9:40:00 AM	S2AVE
MW23042015MS	280-67484-5MS	AQ	MS	3520C	4/7/2015 9:40:00 AM	S2AVE
MW23042015MSD	280-67484-5MSD	AQ	MSD	3520C	4/7/2015 9:40:00 AM	S2AVE
<b>Method: 8330B</b>						
DMW23042015	280-67484-6	AQ	FD	3535	4/7/2015 9:40:00 AM	S2AVE
DTW26042015	280-67484-7	AQ	FD	3535	4/7/2015 1:55:00 PM	S2AVE
MW23042015	280-67484-5	AQ	N	3535	4/7/2015 9:40:00 AM	S2AVE
MW23042015MS	280-67484-5MS	AQ	MS	3535	4/7/2015 9:40:00 AM	S2AVE
MW23042015MSD	280-67484-5MSD	AQ	MSD	3535	4/7/2015 9:40:00 AM	S2AVE
TMW01042015	280-67484-9	AQ	N	3535	4/7/2015 9:05:00 AM	S2AVE
TMW10042015	280-67484-8	AQ	N	3535	4/7/2015 11:40:00 AM	S2AVE
TMW25042015	280-67484-3	AQ	N	3535	4/7/2015 9:50:00 AM	S2AVE
TMW26042015	280-67484-10	AQ	N	3535	4/7/2015 1:55:00 PM	S2AVE
<b>Method: 9056</b>						
DMW23042015	280-67484-6	AQ	FD	METHOD	4/7/2015 9:40:00 AM	S2AVE
DTW26042015	280-67484-7	AQ	FD	METHOD	4/7/2015 1:55:00 PM	S2AVE
MW23042015	280-67484-5	AQ	N	METHOD	4/7/2015 9:40:00 AM	S2AVE
MW23042015DUP	280-67484-5DUP	AQ	DUP	METHOD	4/7/2015 9:40:00 AM	S2AVE
MW23042015MS	280-67484-5MS	AQ	MS	METHOD	4/7/2015 9:40:00 AM	S2AVE
MW23042015MSD	280-67484-5MSD	AQ	MSD	METHOD	4/7/2015 9:40:00 AM	S2AVE
TMW01042015	280-67484-9	AQ	N	METHOD	4/7/2015 9:05:00 AM	S2AVE
TMW10042015	280-67484-8	AQ	N	METHOD	4/7/2015 11:40:00 AM	S2AVE
TMW17042015	280-67484-11	AQ	N	METHOD	4/7/2015 1:50:00 PM	S2AVE
TMW25042015	280-67484-3	AQ	N	METHOD	4/7/2015 9:50:00 AM	S2AVE

5/15/2015 1:57:49 PM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 5 of 7



## *Data Review Sample Summary Report by Analysis Method*

**Reviewed By:**

**Approved By:**

**Laboratory: TA DEN**

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 9056</b>						
TMW26042015	280-67484-10	AQ	N	METHOD	4/7/2015 1:55:00 PM	S2AVE



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
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### *Validation Label Legend*

<i>Label Code</i>	<i>Label Description</i>	<i>EPA Level</i>
S1VE	Stage_1_Validation_Electronic	N/A
S1VM	Stage_1_Validation_Manual	N/A
S1VEM	Stage_1_Validation_Electronic_and_Manual	N/A
S2AVE	Stage_2A_Validation_Electronic	Level 3 w/o calibration
S2AVM	Stage_2A_Validation_Manual	Level 3 w/o calibration
S2AVEM	Stage_2A_Validation_Electronic_and_Manual	Level 3 w/o calibration
S2BVE	Stage_2B_Validation_Electronic	Level 3 with calibration
S2BVM	Stage_2B_Validation_Manual	Level 3 with calibration
S2BVEM	Stage_2B_Validation_Electronic_and_Manual	Level 3 with calibration
S3VE	Stage_3_Validation_Electronic	Level 4
S3VM	Stage_3_Validation_Manual	Level 4
S3VEM	Stage_3_Validation_Electronic_and_Manual	Level 4
S4VE	Stage_4_Validation_Electronic	Level 4
S4VM	Stage_4_Validation_Manual	Level 4
S4VEM	Stage_4_Validation_Electronic_and_Manual	Level 4
NV	Not_Validated	N/A

## Surrogate Outlier Report

Lab Reporting Batch ID: 280-67484-1

Laboratory: TA DEN

EDD Filename: 280-67484-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method:</b>	8260B
<b>Matrix:</b>	AQ

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
TB-05-042015	DIBROMOFLUOROMETHANE	116	85.00-115.00	All Target Analytes	J(all detects)

<b>Method:</b>	8270D
<b>Matrix:</b>	AQ

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
DMW23042015	Terphenyl-d14	43	50.00-135.00	No Affected Compounds	

**CASE NARRATIVE**

**Client: Sundance Consulting, Inc.**  
**Project: Fort Wingate, New Mexico**  
**Report Number: 280-67484-2**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

**Sample Receipt**

The following report contains the analytical results for two water samples received April 8, 2015, according to documented sample acceptance procedures. The samples were received at temperatures of 2.5°C, 0.3°C, 4.8°C, 0.3°C, 3.5°C, 1.3°C and 1.0°C.

Additional samples/analyses requested on the chain-of-custody are reported under separate cover (280-67484-1).

No other anomalies were encountered during sample receipt.

**GC/MS Semivolatiles - 8270D**

Samples MW23042015 (280-67484-5) and DMW23042015 (280-67484-6) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 04/09/2015 and analyzed on 04/18/2015.

Please note the Caprolactam data are reported under separate cover, as the laboratory does not hold DOD ELAP certification for this compound. The laboratory does not maintain quarterly QC requirements for precision, accuracy and detections.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



## Field QC Assignments and Associated Samples

**EDD File Name:** 280-67484-2  
**eQapp Name:** FtWingate\_Primary\_120405

	Associated Samples	Sample Collection Date
<b>Field QC</b> DMW23042015 <b>QC Type:</b> FD	MW23042015	4/7/2015 9:40:00 AM



## ***Data Qualifier Summary***

Lab Reporting Batch ID: 280-67484-2

Laboratory: TA DEN

EDD Filename: 280-67484-2

eQAPP Name: FtWingate\_Primary\_120405

**No Data Review Qualifiers Applied.**



## Data Review Summary

Lab Reporting Batch ID: 280-67484-2

Laboratory: TA DEN

EDD Filename: 280-67484-2

eQAPP Name: FtWingate\_Primary\_120405

<i>Validation Area</i>	<i>Note</i>
Technical Holding Times	A
Temperature	A
Initial Calibration	N
Continuing Calibration/Initial Calibration Verification	N
Method Blanks	A
Surrogate/Tracer Spikes	SR
Matrix Spike/Matrix Spike Duplicates	A
Laboratory Duplicates	N
Laboratory Replicates	N
Laboratory Control Samples	A
Compound Quantitation	A
Field Duplicates	A
Field Triplicates	N
Field Blanks	N

A = Acceptable, N = Not provided/applicable, SR = See report

The contents of this report reflect findings made by ADR during Automated Data Review, manual applied qualifiers are not considered. Please refer to the Overall Qualifier Summary report for manual qualifiers.





## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Lab Reporting Batch: 280-67484-2</b>						
<b>Method: 8270D</b>						
DMW23042015	280-67484-6	AQ	FD	3520C	4/7/2015 9:40:00 AM	S2AVE
MW23042015	280-67484-5	AQ	N	3520C	4/7/2015 9:40:00 AM	S2AVE
MW23042015MS	280-67484-5MS	AQ	MS	3520C	4/7/2015 9:40:00 AM	S2AVE
MW23042015MSD	280-67484-5MSD	AQ	MSD	3520C	4/7/2015 9:40:00 AM	S2AVE



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
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### *Validation Label Legend*

<i>Label Code</i>	<i>Label Description</i>	<i>EPA Level</i>
S1VE	Stage_1_Validation_Electronic	N/A
S1VM	Stage_1_Validation_Manual	N/A
S1VEM	Stage_1_Validation_Electronic_and_Manual	N/A
S2AVE	Stage_2A_Validation_Electronic	Level 3 w/o calibration
S2AVM	Stage_2A_Validation_Manual	Level 3 w/o calibration
S2AVEM	Stage_2A_Validation_Electronic_and_Manual	Level 3 w/o calibration
S2BVE	Stage_2B_Validation_Electronic	Level 3 with calibration
S2BVM	Stage_2B_Validation_Manual	Level 3 with calibration
S2BVEM	Stage_2B_Validation_Electronic_and_Manual	Level 3 with calibration
S3VE	Stage_3_Validation_Electronic	Level 4
S3VM	Stage_3_Validation_Manual	Level 4
S3VEM	Stage_3_Validation_Electronic_and_Manual	Level 4
S4VE	Stage_4_Validation_Electronic	Level 4
S4VM	Stage_4_Validation_Manual	Level 4
S4VEM	Stage_4_Validation_Electronic_and_Manual	Level 4
NV	Not_Validated	N/A

## Surrogate Outlier Report

Lab Reporting Batch ID: 280-67484-2

Laboratory: TA DEN

EDD Filename: 280-67484-2

eQAPP Name: FtWingate\_Primary\_120405

**Method:** 8270D**Matrix:** AQ

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
DMW23042015	Terphenyl-d14	43	50.00-135.00	No Affected Compounds	

**Project Name and Number: 102012 - FWDA 102012 GW**

5/15/2015 9:17:19 AM

ADR version 1.9.0.325

Page 1 of 1

**CASE NARRATIVE**

**Client: Sundance Consulting, Inc.**  
**Project: Fort Wingate, New Mexico**  
**Report Number: 280-67561-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

**Sample Receipt**

The following report contains the analytical results for twelve water samples received April 9, 2015, according to documented sample acceptance procedures. The samples were received at temperatures of 1.3°C, 4.5°C, 3.5°C, 3.6°C, 1.4°C, 1.4°C, 1.6°C and 4.4°C.

Sample TMW18D042015 is listed on the chain-of-custody; however, no sample containers with this ID were received. The laboratory received containers for sample MW18D042015 (280-67561-5) which were not listed on the chain-of-custody. All containers were logged for sample MW18D042015 per the volume received. The client was notified on April 9, 2015.

Please note the Caprolactam data are reported under separate cover (280-67561-2), as the laboratory does not hold DOD ELAP certification for this compound.

No other anomalies were encountered during sample receipt.

**GC/MS Volatiles - 8260B**

Samples TB-06-042015 (280-67561-1), TMW14A042015 (280-67561-3), TMW11042015 (280-67561-4), MW18D042015 (280-67561-5), TMW15042015 (280-67561-7), DTW15042015 (280-67561-8), TMW38042015 (280-67561-9), SMW01042015 (280-67561-10), TMW08042015 (280-67561-11) and TMW24042015 (280-67561-12) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/13/2015 and 04/14/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Sample MW18D042015 (280-67561-5) was received at the laboratory with insufficient preservation measuring a pH of 7. If samples are not preserved to a pH of 2.0 and analyses are performed outside a 7 day holding time, experimental evidence suggests that some aromatic compounds in wastewater samples, notably Benzene, Toluene, and Ethylbenzene are susceptible to biological degradation. The sample was analyzed within 7 days of sample collection.

Surrogates 1,2-Dichloroethane-d4 and/or Dibromofluoromethane were recovered above the QC control limits in samples TMW14A042015 (280-67561-3), TMW11042015 (280-67561-4), DTW15042015 (280-67561-8) and SMW01042015 (280-67561-10). This is an indicator that data may be biased high. As the samples do not contain any detectable concentrations for constituents associated with these surrogates, corrective action is deemed unnecessary. The associated data have been flagged "Q" in accordance with the DOD QSM.

Methylene Chloride was detected in method blank MB 280-272656/6 at a level that was less than one half the reporting limit; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

MS/MSD analyses for analytical batches 280-272493 and 280-272656 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**GC/MS Semivolatiles - 8270D**

Samples TMW14A042015 (280-67561-3), TMW15042015 (280-67561-7), DTW15042015 (280-67561-8), TMW38042015 (280-67561-9) and SMW01042015 (280-67561-10) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 04/10/2015 and analyzed on 04/14/2015.

Please note the Caprolactam data are reported under separate cover (280-67561-2), as the laboratory does not hold DOD ELAP certification for this compound.

A deviation from the Standard Operating Procedure (SOP) occurred. The details are as follows:  
 The samples were extracted per SW-846 3520C for 18 hours at a pH of 1-2 and 18 hours at a pH of 11-12; however, the laboratory's SOP requires the samples be extracted for 24 hours at each pH range. The laboratory's SOP is in the process of being revised for these changes.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

MS/MSD analyses for prep batch 280-272095 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Gasoline Range Organics - 8015C**

Samples TB-44-042015 (280-67561-2), MW18D042015 (280-67561-5) and TMW08042015 (280-67561-11) were analyzed for gasoline range organics in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 04/17/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Samples MW18D042015 (280-67561-5) and TMW08042015 (280-67561-11) were received at the laboratory with a pH value >2. The containers indicate the volumes were preserved with hydrochloric acid. The samples were analyzed within the normal 14 day holding time, but outside a 7 day holding time.

The Gasoline Range Organics concentration reported for sample MW18D042015 (280-67561-5) is due to the presence of discrete peaks.

MS/MSD analyses for analytical batch 280-273239 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Diesel Range Organics - 8015C**

Samples MW18D042015 (280-67561-5) and TMW08042015 (280-67561-11) were analyzed for Diesel Range Organics in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/09/2015 and analyzed on 04/16/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

MS/MSD analyses for prep batch 280-271997 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organochlorine Pesticides - 8081A**

Samples TMW38042015 (280-67561-9), TMW08042015 (280-67561-11) and TMW24042015 (280-67561-12) were analyzed for chlorinated pesticides in accordance with EPA SW-846 Method 8081A. The samples were prepared on 04/10/2015 and analyzed on 04/14/2015.

TestAmerica Denver's practice for the reporting of dual column data in packages requiring forms and/or raw data is to report the surrogates from both columns, and the preferred result for any given target analyte from the analyst selected column. The preferred results for target analytes and surrogates are reported as PRIMARY on the Sample Datasheets.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Samples MB 280-272174/1-A and LCS 280-272174/2-A required a mercury clean-up to reduce matrix interferences caused by sulfur.

MS/MSD analyses for prep batch 280-272174 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Explosives - 8330B**

Samples TMW14A042015 (280-67561-3), TMW11042015 (280-67561-4), MW18D042015 (280-67561-5), TMW15042015 (280-67561-7), DTW15042015 (280-67561-8), TMW38042015 (280-67561-9), SMW01042015 (280-67561-10) and TMW24042015 (280-67561-12) were analyzed for explosives in accordance with EPA SW-846 Method 8330B. The samples were prepared on 04/09/2015 and analyzed on 04/11/2015 and 04/15/2015.

TestAmerica Denver's practice for the reporting of dual column data in packages requiring forms and/or raw data is to report the surrogates from both columns, and the preferred result for any given target analyte from the analyst selected column. The preferred results for target analytes and surrogates are reported as PRIMARY on the Sample Datasheets.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows:

The cartridges were eluted with 0.1% Acetic Acid in ACN instead of ACN to increase Tetryl recovery. This deviation was performed with QA and supervisor approval. The SOP is currently under revision to capture this change.

Sample MW18D042015 (280-67561-5) required filtration to reduce matrix interferences.

Sample TMW24042015 (280-67561-12) went dry on the cartridge while on the vacuum despite repeated attempts to address the

improper seal between the cartridge/cap/line. All together, the time spent dry on the cartridge was less than 4-5 minutes before a proper seal was achieved and the cartridge no longer went dry.

o-Nitrotoluene was detected in method blank MB 280-271968/1-A at a level that was less than one half the reporting limit on the confirmation column; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

MS/MSD analyses for prep batch 280-271968 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Perchlorate - 6860**

Samples TMW11042015 (280-67561-4), MW18D042015 (280-67561-5), TMW15042015 (280-67561-7), DTW15042015 (280-67561-8), TMW38042015 (280-67561-9), SMW01042015 (280-67561-10), TMW08042015 (280-67561-11) and TMW24042015 (280-67561-12) were analyzed for Perchlorate in accordance with SW846 6860. The samples were analyzed on 04/18/2015 and 04/21/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to matrix interference on the internal standard, samples SMW01042015 (280-67561-10), TMW08042015 (280-67561-11) and TMW24042015 (280-67561-12) had to be analyzed at dilutions. The reporting limits and method detection limits have been adjusted relative to the dilutions required.

MS/MSD analyses for analytical batches 280-273223 and 280-273667 were not requested.

The closing Continuing Calibration Blank (CCB) associated with analytical batch 280-273667 did not contain enough volume in the vial; therefore, the internal standard (IS) recovery was low. A new CCB was re-injected two times after to show the instrument is in control. Results were within control limits for the IS and non-detect for Perchlorate.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Total Metals - 6010C**

Samples TMW14A042015 (280-67561-3), TMW11042015 (280-67561-4), MW18D042015 (280-67561-5), TMW15042015 (280-67561-7), DTW15042015 (280-67561-8), TMW38042015 (280-67561-9), SMW01042015 (280-67561-10), TMW08042015 (280-67561-11) and TMW24042015 (280-67561-12) were analyzed for Total Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 04/10/2015 and analyzed on 04/13/2015 and 04/29/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

The MS/MSD associated with prep batch 280-271980 was performed on sample TMW14A042015 (280-67561-3). The MS/MSD spike compound recoveries and RPD data could not be reliably calculated for Sodium because the sample concentration was greater than four times the spike amounts. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample has been flagged "J" in accordance with the DOD QSM.

The post digestion spike (PDS) and serial dilution (SD) associated with prep batch 280-271980 was performed on sample TMW14A042015 (280-67561-3). The PDS exhibited a percent recovery outside the control limits for Sodium; however, the SD performed on this sample was in control. The SD was not calculable and the PDS exhibited a percent recovery outside the control limits for Iron. The associated Iron data in the parent sample has been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Dissolved Metals - 6010C**

Samples TMW14A042015 (280-67561-3), TMW11042015 (280-67561-4), MW18D042015 (280-67561-5), MW22S042015 (280-67561-6), TMW15042015 (280-67561-7), DTW15042015 (280-67561-8), TMW38042015 (280-67561-9), SMW01042015 (280-67561-10), TMW08042015 (280-67561-11) and TMW24042015 (280-67561-12) were analyzed for Dissolved Metals in accordance with EPA SW-846 Method 6010C. The samples were prepared on 04/10/2015 and analyzed on 04/13/2015 and 04/29/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Magnesium and Sodium were detected in method blank MB 280-271976/1-A at levels that were less than one half the reporting limits; therefore, corrective action was deemed unnecessary. The values should be considered estimates, and have been flagged "J" in accordance with the DOD QSM.

The MS/MSD associated with prep batch 280-271976 was performed on sample TMW14A042015 (280-67561-3). The MS/MSD spike compound recoveries and RPD data could not be reliably calculated for Sodium because the sample concentration was greater than four times the spike amounts. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

The post digestion spike (PDS) and serial dilution (SD) associated with prep batch 280-271976 was performed on sample

TMW14A042015 (280-67561-3). The PDS exhibited a percent recovery outside the control limits for Sodium; however, the SD performed on this sample was in control. The SD exhibited a percent recovery outside the control limits for Calcium; however, the PDS performed on this sample was in control. The SD was not calculable and the PDS exhibited a percent recovery outside the control limits for Iron. The associated Iron data in the parent sample has been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Total Metals - 6020A**

Samples TMW14A042015 (280-67561-3), TMW11042015 (280-67561-4), MW18D042015 (280-67561-5), TMW15042015 (280-67561-7), DTW15042015 (280-67561-8), TMW38042015 (280-67561-9), SMW01042015 (280-67561-10), TMW08042015 (280-67561-11) and TMW24042015 (280-67561-12) were analyzed for total metals (ICPMS) in accordance with SW846 6020A. The samples were prepared on 04/10/2015 and analyzed on 04/11/2015, 04/14/2015, 04/15/2015 and 04/16/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Antimony and Thallium were detected in method blank MB 280-271978/1-A at levels that were less than one half the reporting limits; therefore, corrective action was deemed unnecessary. The values should be considered estimates, and have been flagged "J" in accordance with the DOD QSM.

The post digestion spike (PDS) and serial dilution (SD) associated with prep batch 280-271978 was performed on sample TMW11042015 (280-67561-4). The SD exhibited percent recoveries outside the control limits for Barium and Manganese; however, the PDS performed on this sample was in control.

The ICSA solutions associated with analytical batches 280-272815 and 280-272766 were above DOD QSM Version 4.2 criteria of less than the LOD for Cadmium. The laboratory has confirmed with the vendor that this element is a trace impurity in the ICSA solution; therefore, no corrective action was needed. The associated data have been flagged "Q" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Dissolved Metals - 6020A**

Samples TMW14A042015 (280-67561-3), TMW11042015 (280-67561-4), MW18D042015 (280-67561-5), MW22S042015 (280-67561-6), TMW15042015 (280-67561-7), DTW15042015 (280-67561-8), TMW38042015 (280-67561-9), SMW01042015 (280-67561-10), TMW08042015 (280-67561-11) and TMW24042015 (280-67561-12) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 04/10/2015 and analyzed on 04/11/2015 and 04/13/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Thallium was detected in method blank MB 280-271975/1-A at a level that was less than one half the reporting limit; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Total Mercury - 7470A**

Samples TMW14A042015 (280-67561-3), TMW11042015 (280-67561-4), MW18D042015 (280-67561-5), TMW15042015 (280-67561-7), DTW15042015 (280-67561-8), TMW38042015 (280-67561-9), SMW01042015 (280-67561-10), TMW08042015 (280-67561-11) and TMW24042015 (280-67561-12) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 04/14/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

MS/MSD analyses for prep batch 280-272085 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Dissolved Mercury - 7470A**

Samples TMW14A042015 (280-67561-3), TMW11042015 (280-67561-4), MW18D042015 (280-67561-5), MW22S042015 (280-67561-6), TMW15042015 (280-67561-7), DTW15042015 (280-67561-8), TMW38042015 (280-67561-9), SMW01042015 (280-67561-10), TMW08042015 (280-67561-11) and TMW24042015 (280-67561-12) were analyzed for dissolved mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 04/13/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

MS/MSD analyses for prep batch 280-272072 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Nitrate & Nitrite - 9056**

Samples TMW14A042015 (280-67561-3), TMW11042015 (280-67561-4), MW18D042015 (280-67561-5), TMW15042015 (280-67561-7),

DTW15042015 (280-67561-8), TMW38042015 (280-67561-9), SMW01042015 (280-67561-10), TMW08042015 (280-67561-11) and TMW24042015 (280-67561-12) were analyzed for anions (48 hours) in accordance with EPA SW-846 Method 9056. The samples were analyzed on 04/09/2015 and 04/10/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high concentrations of target analytes and/or matrix interference, samples MW18D042015 (280-67561-5), DTW15042015 (280-67561-8) and TMW08042015 (280-67561-11) had to be analyzed at a dilution. The reporting limits and method detection limits have been adjusted relative to the dilution required.

Nitrate as N was detected in method blank MB 280-271866/13 at a level that was less than one half the reporting limit; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.





### Field QC Assignments and Associated Samples

**EDD File Name:** 280-67561-1  
**eQapp Name:** FtWingate\_Primary\_120405

	Associated Samples	Sample Collection Date
<b>Field QC</b> DTW15042015 <b>QC Type:</b> FD		
	TMW15042015	4/8/2015 12:50:00 PM
<b>Field QC</b> TB-06-042015 <b>QC Type:</b> TB		
	DTW15042015	4/8/2015 12:50:00 PM
	MW18D042015	4/8/2015 12:10:00 PM
	MW22S042015	4/8/2015 1:10:00 PM
	SMW01042015	4/8/2015 10:45:00 AM
	TMW08042015	4/8/2015 9:20:00 AM
	TMW11042015	4/8/2015 9:00:00 AM
	TMW14A042015	4/8/2015 10:25:00 AM
	TMW15042015	4/8/2015 12:50:00 PM
	TMW24042015	4/8/2015 1:45:00 PM
	TMW38042015	4/8/2015 10:32:00 AM
<b>Field QC</b> TB-44-042015 <b>QC Type:</b> TB		
	DTW15042015	4/8/2015 12:50:00 PM
	MW18D042015	4/8/2015 12:10:00 PM
	MW22S042015	4/8/2015 1:10:00 PM
	SMW01042015	4/8/2015 10:45:00 AM
	TMW08042015	4/8/2015 9:20:00 AM
	TMW11042015	4/8/2015 9:00:00 AM
	TMW14A042015	4/8/2015 10:25:00 AM
	TMW15042015	4/8/2015 12:50:00 PM
	TMW24042015	4/8/2015 1:45:00 PM
	TMW38042015	4/8/2015 10:32:00 AM



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67561-1

Laboratory: TA DEN

EDD Filename: 280-67561-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	GENCHEM								
<b>Method:</b>	9056	<b>Matrix:</b>	AQ						

Sample ID:DTW15042015      4/8/2015 12:50:00      Collected:PM      Analysis Type:RE2/TOT      Dilution: 50

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE	270	D	5.0	LOD	25	LOQ	mg/L	J	Fd

Sample ID:MW18D042015      4/8/2015 12:10:00      Collected:PM      Analysis Type:RES/TOT      Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE	0.11	J D	0.20	LOD	1.0	LOQ	mg/L	U	Mb

Sample ID:TMW15042015      4/8/2015 12:50:00      Collected:PM      Analysis Type:RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE	8.2		0.10	LOD	0.50	LOQ	mg/L	J	Fd

<b>Method Category:</b>	METALS								
<b>Method:</b>	6010C	<b>Matrix:</b>	AQ						

Sample ID:DTW15042015      4/8/2015 12:50:00      Collected:PM      Analysis Type:RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	46	J	30	LOD	100	LOQ	ug/L	J	RI, Fd
POTASSIUM	730	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:DTW15042015      4/8/2015 12:50:00      Collected:PM      Analysis Type:RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	26	J	31	LOD	300	LOQ	ug/L	J	RI
POTASSIUM	740	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:MW18D042015      4/8/2015 12:10:00      Collected:PM      Analysis Type:RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	49	J	31	LOD	300	LOQ	ug/L	J	RI
IRON	63	J	30	LOD	100	LOQ	ug/L	J	RI
POTASSIUM	1600	J	250	LOD	3000	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 1:16:17 PM

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Page 1 of 12



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67561-1

Laboratory: TA DEN

EDD Filename: 280-67561-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS	<b>Method:</b>	6010C	<b>Matrix:</b>	AQ
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**Sample ID:** MW22S042015      **Collected:** 4/8/2015 1:10:00 PM      **Analysis Type:** RES/DIS      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1300	J	250	LOD	3000	LOQ	ug/L	J	RI

**Sample ID:** SMW01042015      **Collected:** 4/8/2015 10:45:00 AM      **Analysis Type:** RES/DIS      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	87	J	31	LOD	300	LOQ	ug/L	J	RI
IRON	64	J	30	LOD	100	LOQ	ug/L	J	RI
POTASSIUM	630	J	250	LOD	3000	LOQ	ug/L	J	RI

**Sample ID:** SMW01042015      **Collected:** 4/8/2015 10:45:00 AM      **Analysis Type:** RES/TOT      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	20	J	31	LOD	300	LOQ	ug/L	J	RI
POTASSIUM	590	J	250	LOD	3000	LOQ	ug/L	J	RI

**Sample ID:** TMW08042015      **Collected:** 4/8/2015 9:20:00 AM      **Analysis Type:** RES/DIS      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	57	J	30	LOD	100	LOQ	ug/L	J	RI

**Sample ID:** TMW08042015      **Collected:** 4/8/2015 9:20:00 AM      **Analysis Type:** RES/TOT      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	37	J	31	LOD	300	LOQ	ug/L	J	RI

**Sample ID:** TMW11042015      **Collected:** 4/8/2015 9:00:00 AM      **Analysis Type:** RES/DIS      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	83	J	31	LOD	300	LOQ	ug/L	J	RI
IRON	43	J	30	LOD	100	LOQ	ug/L	J	RI
POTASSIUM	770	J	250	LOD	3000	LOQ	ug/L	J	RI

**Sample ID:** TMW11042015      **Collected:** 4/8/2015 9:00:00 AM      **Analysis Type:** RES/TOT      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1100	J	250	LOD	3000	LOQ	ug/L	J	RI

\* denotes a non-reportable result

**Project Name and Number:** 102012 - FWDA 102012 GW



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67561-1

Laboratory: TA DEN

EDD Filename: 280-67561-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS									
<b>Method:</b>	6010C	<b>Matrix:</b>		AQ						

4/8/2015 10:25:00									
Sample ID:TMW14A042015			Collected:AM			Analysis Type:RES/DIS			Dilution: 1
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	26	J	30	LOD	100	LOQ	ug/L	J	RI, ProfJudg
MAGNESIUM	390	J	25	LOD	500	LOQ	ug/L	J	RI
POTASSIUM	780	J	250	LOD	3000	LOQ	ug/L	J	RI

4/8/2015 10:25:00									
Sample ID:TMW14A042015			Collected:AM			Analysis Type:RES/TOT			Dilution: 1
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	19	J	31	LOD	300	LOQ	ug/L	J	RI
IRON	26	J	30	LOD	100	LOQ	ug/L	J	RI, ProfJudg
MAGNESIUM	390	J	25	LOD	500	LOQ	ug/L	J	RI
POTASSIUM	790	J	250	LOD	3000	LOQ	ug/L	J	RI

4/8/2015 12:50:00									
Sample ID:TMW15042015			Collected:PM			Analysis Type:RES/DIS			Dilution: 1
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	30	U	30	LOD	100	LOQ	ug/L	UJ	Fd
POTASSIUM	810	J	250	LOD	3000	LOQ	ug/L	J	RI

4/8/2015 12:50:00									
Sample ID:TMW15042015			Collected:PM			Analysis Type:RES/TOT			Dilution: 1
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	740	J	250	LOD	3000	LOQ	ug/L	J	RI

4/8/2015 1:45:00 PM									
Sample ID:TMW24042015			Collected:4/8/2015 1:45:00 PM			Analysis Type:RES/DIS			Dilution: 1
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	34	J	31	LOD	300	LOQ	ug/L	J	RI
IRON	69	J	30	LOD	100	LOQ	ug/L	J	RI
POTASSIUM	990	J	250	LOD	3000	LOQ	ug/L	J	RI

4/8/2015 1:45:00 PM									
Sample ID:TMW24042015			Collected:4/8/2015 1:45:00 PM			Analysis Type:RES/TOT			Dilution: 1
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	27	J	31	LOD	300	LOQ	ug/L	J	RI
IRON	63	J	30	LOD	100	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 1:16:17 PM

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Page 3 of 12



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67561-1

Laboratory: TA DEN

EDD Filename: 280-67561-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS									
<b>Method:</b>	6010C	<b>Matrix:</b>		AQ						

**Sample ID:** TMW24042015      **Collected:** 4/8/2015 1:45:00 PM      **Analysis Type:** RES/TOT      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	930	J	250	LOD	3000	LOQ	ug/L	J	RI

**Sample ID:** TMW38042015      **Collected:** 4/8/2015 10:32:00 AM      **Analysis Type:** RES/DIS      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	210	J	31	LOD	300	LOQ	ug/L	J	RI
POTASSIUM	1200	J	250	LOD	3000	LOQ	ug/L	J	RI

**Sample ID:** TMW38042015      **Collected:** 4/8/2015 10:32:00 AM      **Analysis Type:** RES/TOT      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1600	J	250	LOD	3000	LOQ	ug/L	J	RI

<b>Method Category:</b>	METALS									
<b>Method:</b>	6020A	<b>Matrix:</b>		AQ						

**Sample ID:** DTW15042015      **Collected:** 4/8/2015 12:50:00 PM      **Analysis Type:** RE2/TOT      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	0.63	J	0.90	LOD	3.5	LOQ	ug/L	J	RI

**Sample ID:** DTW15042015      **Collected:** 4/8/2015 12:50:00 PM      **Analysis Type:** RES/DIS      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	0.93	J	1.5	LOD	10	LOQ	ug/L	J	RI
VANADIUM	1.1	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	7.8	J	6.0	LOD	20	LOQ	ug/L	J	RI

**Sample ID:** DTW15042015      **Collected:** 4/8/2015 12:50:00 PM      **Analysis Type:** RES/TOT      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	1.0	J	1.5	LOD	10	LOQ	ug/L	J	RI
VANADIUM	1.5	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	7.2	J	6.0	LOD	20	LOQ	ug/L	J	RI

\* denotes a non-reportable result

**Project Name and Number:** 102012 - FWDA 102012 GW



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67561-1

Laboratory: TA DEN

EDD Filename: 280-67561-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS									
<b>Method:</b>	6020A			<b>Matrix:</b> AQ						

Sample ID: MW18D042015      Collected: 4/8/2015 12:10:00 PM      Analysis Type: RE3/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.89	J	0.40	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: MW18D042015      Collected: 4/8/2015 12:10:00 PM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.51	J	0.60	LOD	6.0	LOQ	ug/L	J	RI
ARSENIC	0.78	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.97	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	1.3	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
LEAD	0.31	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
SELENIUM	0.74	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
SILVER	0.034	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.089	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb
ZINC	16	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: MW18D042015      Collected: 4/8/2015 12:10:00 PM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.75	J	0.60	LOD	6.0	LOQ	ug/L	U	Mb
SELENIUM	1.1	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
SILVER	0.25	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.28	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb

Sample ID: MW22S042015      Collected: 4/8/2015 1:10:00 PM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.95	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
BERYLLIUM	0.085	J	0.24	LOD	1.0	LOQ	ug/L	J	RI
CHROMIUM	1.3	J	1.5	LOD	10	LOQ	ug/L	J	RI
COBALT	0.66	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
LEAD	1.7	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
NICKEL	1.8	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
THALLIUM	0.087	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb
VANADIUM	3.7	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	7.5	J	6.0	LOD	20	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 1:16:17 PM

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Page 5 of 12



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67561-1

Laboratory: TA DEN

EDD Filename: 280-67561-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: SMW01042015      Collected: 4/8/2015 10:45:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.52	J	0.60	LOD	6.0	LOQ	ug/L	J	RI
ARSENIC	0.89	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.28	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	1.7	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	2.0	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	2.9	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: SMW01042015      Collected: 4/8/2015 10:45:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	1.0	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.30	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	2.5	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	1.6	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID: TMW08042015      Collected: 4/8/2015 9:20:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.37	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.48	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	1.4	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	1.5	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
ZINC	6.5	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW08042015      Collected: 4/8/2015 9:20:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.38	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.32	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	1.4	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SILVER	0.039	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
VANADIUM	1.1	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	15	J	6.0	LOD	20	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 1:16:17 PM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 6 of 12



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67561-1

Laboratory: TA DEN

EDD Filename: 280-67561-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: TMW11042015 Collected: 4/8/2015 9:00:00 AM Analysis Type: RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	1.4	J	1.5	LOD	10	LOQ	ug/L	J	RI
THALLIUM	0.051	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb
VANADIUM	1.6	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	3.1	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW11042015 Collected: 4/8/2015 9:00:00 AM Analysis Type: RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.55	J	0.60	LOD	6.0	LOQ	ug/L	U	Mb
CHROMIUM	2.2	J	1.5	LOD	10	LOQ	ug/L	J	RI
COBALT	0.29	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
LEAD	0.38	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
NICKEL	1.1	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	3.3	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	5.8	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW14A042015 Collected: 4/8/2015 10:25:00 AM Analysis Type: RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.2	J	0.60	LOD	6.0	LOQ	ug/L	J	RI
ARSENIC	0.52	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
SILVER	0.033	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.17	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb

Sample ID: TMW14A042015 Collected: 4/8/2015 10:25:00 AM Analysis Type: RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.0	J	0.60	LOD	6.0	LOQ	ug/L	U	Mb
ARSENIC	0.63	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
NICKEL	0.30	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
THALLIUM	0.12	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 1:16:17 PM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 7 of 12





## Data Qualifier Summary

Lab Reporting Batch ID: 280-67561-1

Laboratory: TA DEN

EDD Filename: 280-67561-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID:TMW15042015		4/8/2015 12:50:00 Collected:PM			Analysis Type:RE2/TOT			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	0.53	J	0.90	LOD	3.5	LOQ	ug/L	J	RI

Sample ID:TMW15042015		4/8/2015 12:50:00 Collected:PM			Analysis Type:RES/DIS			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	0.91	J	1.5	LOD	10	LOQ	ug/L	J	RI
VANADIUM	1.2	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	6.2	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID:TMW15042015		4/8/2015 12:50:00 Collected:PM			Analysis Type:RES/TOT			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	0.92	J	1.5	LOD	10	LOQ	ug/L	J	RI
VANADIUM	1.2	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	6.7	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID:TMW24042015		4/8/2015 1:45:00 PM Collected:			Analysis Type:RES/DIS			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	1.1	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.26	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	0.84	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	1.0	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	2.4	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID:TMW24042015		4/8/2015 1:45:00 PM Collected:			Analysis Type:RES/TOT			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	1.4	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.27	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	0.57	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	1.0	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	1.1	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 1:16:17 PM

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Page 8 of 12



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67561-1

Laboratory: TA DEN

EDD Filename: 280-67561-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: TMW38042015      Collected: 4/8/2015 10:32:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.62	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.12	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
LEAD	0.24	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
NICKEL	0.57	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	1.4	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	4.8	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW38042015      Collected: 4/8/2015 10:32:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	1.0	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	1.6	J	1.5	LOD	10	LOQ	ug/L	J	RI
COBALT	0.66	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
LEAD	1.1	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
NICKEL	1.5	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
THALLIUM	0.071	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb

<b>Method Category:</b>	METALS								
<b>Method:</b>	7470A	<b>Matrix:</b>	AQ						

Sample ID: MW18D042015      Collected: 4/8/2015 12:10:00 PM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.089	J	0.080	LOD	0.20	LOQ	ug/L	J	RI

<b>Method Category:</b>	SVOA								
<b>Method:</b>	6860	<b>Matrix:</b>	AQ						

Sample ID: MW18D042015      Collected: 4/8/2015 12:10:00 PM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	0.0092	J	0.020	LOD	0.050	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 1:16:17 PM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 9 of 12



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67561-1

Laboratory: TA DEN

EDD Filename: 280-67561-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA									
<b>Method:</b>	6860	<b>Matrix:</b>	AQ							

Sample ID: TMW38042015      Collected: 4/8/2015 10:32:00 AM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	0.0060	J	0.020	LOD	0.050	LOQ	ug/L	J	RI

<b>Method Category:</b>	SVOA									
<b>Method:</b>	8015C DRO	<b>Matrix:</b>	AQ							

Sample ID: TMW08042015      Collected: 4/8/2015 9:20:00 AM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIESEL RANGE ORGANICS	0.066	J M	0.10	LOD	0.25	LOQ	mg/L	J	RI

<b>Method Category:</b>	SVOA									
<b>Method:</b>	8015C GRO	<b>Matrix:</b>	AQ							

Sample ID: MW18D042015      Collected: 4/8/2015 12:10:00 PM      Analysis Type: RE2      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GASOLINE RANGE ORGANICS	54	M	20	LOD	25	LOQ	ug/L	J	Preservation, ProfJudg

Sample ID: TMW08042015      Collected: 4/8/2015 9:20:00 AM      Analysis Type: RE2      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GASOLINE RANGE ORGANICS	20	U	20	LOD	25	LOQ	ug/L	UJ	Preservation

<b>Method Category:</b>	SVOA									
<b>Method:</b>	8270D	<b>Matrix:</b>	AQ							

Sample ID: DTW15042015      Collected: 4/8/2015 12:50:00 PM      Analysis Type: RES-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXACHLOROCYCLOPENTADIENE	21	U	21	LOD	53	LOQ	ug/L	UJ	Lcs

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 1:16:18 PM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 10 of 12



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67561-1

Laboratory: TA DEN

EDD Filename: 280-67561-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA
<b>Method:</b>	8270D
<b>Matrix:</b>	AQ

Sample ID: SMW01042015      Collected: 4/8/2015 10:45:00 AM      Analysis Type: RES-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXACHLOROCYCLOPENTADIENE	20	U	20	LOD	51	LOQ	ug/L	UJ	Lcs

Sample ID: TMW14A042015      Collected: 4/8/2015 10:25:00 AM      Analysis Type: RES-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXACHLOROCYCLOPENTADIENE	21	U	21	LOD	52	LOQ	ug/L	UJ	Lcs

Sample ID: TMW15042015      Collected: 4/8/2015 12:50:00 PM      Analysis Type: RES-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXACHLOROCYCLOPENTADIENE	22	U	22	LOD	55	LOQ	ug/L	UJ	Lcs

Sample ID: TMW38042015      Collected: 4/8/2015 10:32:00 AM      Analysis Type: RES-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXACHLOROCYCLOPENTADIENE	22	U	22	LOD	56	LOQ	ug/L	UJ	Lcs

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 1:16:18 PM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 11 of 12



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67561-1

Laboratory: TA DEN

EDD Filename: 280-67561-1

eQAPP Name: FtWingate\_Primary\_120405

### Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
Fd	Field Duplicate Precision
Lcs	Laboratory Control Spike Lower Estimation
Mb	Method Blank Contamination
Ms	Matrix Spike Upper Estimation
Preservation	Preservation
ProfJudg	Professional Judgment
RI	Reporting Limit Trace Value
Surr	Surrogate/Tracer Recovery Upper Estimation

\* denotes a non-reportable result

**Project Name and Number: 102012 - FWDA 102012 GW**

5/15/2015 1:16:18 PM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 12 of 12



## Data Review Summary

Lab Reporting Batch ID: 280-67561-1

Laboratory: TA DEN

EDD Filename: 280-67561-1

eQAPP Name: FtWingate\_Primary\_120405

<i>Validation Area</i>	<i>Note</i>
Technical Holding Times	A
Temperature	A
Initial Calibration	N
Continuing Calibration/Initial Calibration Verification	N
Method Blanks	SR
Surrogate/Tracer Spikes	SR
Matrix Spike/Matrix Spike Duplicates	SR
Laboratory Duplicates	A
Laboratory Replicates	N
Laboratory Control Samples	SR
Compound Quantitation	SR
Field Duplicates	SR
Field Triplicates	N
Field Blanks	A

A = Acceptable, N = Not provided/applicable, SR = See report

The contents of this report reflect findings made by ADR during Automated Data Review, manual applied qualifiers are not considered. Please refer to the Overall Qualifier Summary report for manual qualifiers.

## Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-67561-1

Laboratory: TA DEN

EDD Filename: 280-67561-1

eQAPP Name: FtWingate\_Primary\_120405

**Method: 8270D**  
**Matrix: AQ**

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS 280-272095/2-A (DTW15042015 SMW01042015 TMW14A042015 TMW15042015 TMW38042015)	HEXACHLOROCYCLOPENTADIEN	12	-	50.00-130.00	-	HEXACHLOROCYCLOPENTADIE	J (all detects) UJ (all non-detects)

## Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-67561-1

Laboratory: TA DEN

EDD Filename: 280-67561-1

eQAPP Name: FtWingate\_Primary\_120405

**Method: 6010C**  
**Matrix: AQ**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
TMW14A042015MSD (TOT) DTW15042015 MW18D042015 SMW01042015 TMW08042015 TMW11042015 TMW14A042015 TMW15042015 TMW24042015 TMW38042015	SODIUM	-	121	80.00-120.00	-	SODIUM	J (all detects)



## Method Blank Outlier Report

Lab Reporting Batch ID: 280-67561-1

Laboratory: TA DEN

EDD Filename: 280-67561-1

eQAPP Name: FtWingate\_Primary\_120405

Method: 6010C Matrix: AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-271976/1-A	4/13/2015 7:20:00 PM	MAGNESIUM SODIUM	11.5 ug/L 352 ug/L	DTW15042015 MW18D042015 MW22S042015 SMW01042015 TMW08042015 TMW11042015 TMW14A042015 TMW15042015 TMW24042015 TMW38042015

Method: 6020A Matrix: AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-271975/1-A	4/11/2015 2:53:00 AM	THALLIUM	0.0890 ug/L	DTW15042015 MW18D042015 MW22S042015 SMW01042015 TMW08042015 TMW11042015 TMW14A042015 TMW15042015 TMW24042015 TMW38042015
MB 280-271978/1-A	4/11/2015 1:37:00 AM	ANTIMONY THALLIUM	0.578 ug/L 0.0810 ug/L	DTW15042015 MW18D042015 SMW01042015 TMW08042015 TMW11042015 TMW14A042015 TMW15042015 TMW24042015 TMW38042015

*The following samples and their listed target analytes were qualified due to contamination reported in this blank*

Sample ID	Analyte	Reported Result	Modified Final Result
MW18D042015(RES/DIS)	THALLIUM	0.089 ug/L	0.089U ug/L
MW18D042015(RES/TOT)	ANTIMONY	0.75 ug/L	0.75U ug/L
MW18D042015(RES/TOT)	THALLIUM	0.28 ug/L	0.28U ug/L
MW22S042015(RES/DIS)	THALLIUM	0.087 ug/L	0.087U ug/L
TMW11042015(RES/DIS)	THALLIUM	0.051 ug/L	0.051U ug/L
TMW11042015(RES/TOT)	ANTIMONY	0.55 ug/L	0.55U ug/L
TMW14A042015(RES/DIS)	THALLIUM	0.17 ug/L	0.17U ug/L
TMW14A042015(RES/TOT)	ANTIMONY	1.0 ug/L	1.0U ug/L
TMW14A042015(RES/TOT)	THALLIUM	0.12 ug/L	0.12U ug/L
TMW38042015(RES/TOT)	THALLIUM	0.071 ug/L	0.071U ug/L

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 1:03:44 PM

ADR version 1.9.0.325

Page 1 of 2

## Method Blank Outlier Report

Lab Reporting Batch ID: 280-67561-1

Laboratory: TA DEN

EDD Filename: 280-67561-1

eQAPP Name: FtWingate\_Primary\_120405

Method: 8260B Matrix: AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-272656/6	4/14/2015 7:15:00 PM	METHYLENE CHLORIDE	0.588 ug/L	MW18D042015

Method: 9056 Matrix: AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-271866/13	4/9/2015 4:04:00 PM	NITRATE	0.0516 mg/L	DTW15042015 MW18D042015 SMW01042015 TMW08042015 TMW11042015 TMW14A042015 TMW15042015 TMW24042015 TMW38042015

*The following samples and their listed target analytes were qualified due to contamination reported in this blank*

Sample ID	Analyte	Reported Result	Modified Final Result
MW18D042015(RES/TOT)	NITRATE	0.11 mg/L	0.11U mg/L

## Reporting Limit Outliers

Lab Reporting Batch ID: 280-67561-1

Laboratory: TA DEN

EDD Filename: 280-67561-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method:</b> 6010C
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DTW15042015	ALUMINUM	J	26	300	LOQ	ug/L	J (all detects)
	IRON	J	46	100	LOQ	ug/L	
	POTASSIUM	J	730	3000	LOQ	ug/L	
MW18D042015	ALUMINUM	J	49	300	LOQ	ug/L	J (all detects)
	IRON	J	63	100	LOQ	ug/L	
	POTASSIUM	J	1600	3000	LOQ	ug/L	
MW22S042015	POTASSIUM	J	1300	3000	LOQ	ug/L	J (all detects)
SMW01042015	ALUMINUM	J	87	300	LOQ	ug/L	J (all detects)
	IRON	J	64	100	LOQ	ug/L	
	POTASSIUM	J	630	3000	LOQ	ug/L	
TMW08042015	ALUMINUM	J	37	300	LOQ	ug/L	J (all detects)
	IRON	J	57	100	LOQ	ug/L	
TMW11042015	ALUMINUM	J	83	300	LOQ	ug/L	J (all detects)
	IRON	J	43	100	LOQ	ug/L	
	POTASSIUM	J	770	3000	LOQ	ug/L	
TMW14A042015	ALUMINUM	J	19	300	LOQ	ug/L	J (all detects)
	IRON	J	26	100	LOQ	ug/L	
	MAGNESIUM	J	390	500	LOQ	ug/L	
	POTASSIUM	J	780	3000	LOQ	ug/L	
TMW15042015	POTASSIUM	J	810	3000	LOQ	ug/L	J (all detects)
TMW24042015	ALUMINUM	J	34	300	LOQ	ug/L	J (all detects)
	IRON	J	69	100	LOQ	ug/L	
	POTASSIUM	J	990	3000	LOQ	ug/L	
TMW38042015	ALUMINUM	J	210	300	LOQ	ug/L	J (all detects)
	POTASSIUM	J	1200	3000	LOQ	ug/L	

<b>Method:</b> 6020A
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DTW15042015	CHROMIUM	J	0.93	10	LOQ	ug/L	J (all detects)
	MANGANESE	J	0.63	3.5	LOQ	ug/L	
	VANADIUM	J	1.1	6.0	LOQ	ug/L	
	ZINC	J	7.8	20	LOQ	ug/L	
MW18D042015	ANTIMONY	J	0.51	6.0	LOQ	ug/L	J (all detects)
	ARSENIC	J	0.78	5.0	LOQ	ug/L	
	CADMIUM	J	0.89	1.0	LOQ	ug/L	
	COBALT	J	0.97	1.0	LOQ	ug/L	
	COPPER	J	1.3	2.0	LOQ	ug/L	
	LEAD	J	0.31	3.0	LOQ	ug/L	
	SELENIUM	J	0.74	5.0	LOQ	ug/L	
	SILVER	J	0.034	5.0	LOQ	ug/L	
	THALLIUM	J	0.089	1.0	LOQ	ug/L	
	ZINC	J	16	20	LOQ	ug/L	

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 1:04:15 PM

ADR version 1.9.0.325

Page 1 of 3

## Reporting Limit Outliers

Lab Reporting Batch ID: 280-67561-1

Laboratory: TA DEN

EDD Filename: 280-67561-1

eQAPP Name: FtWingate\_Primary\_120405

Method: 6020A							
Matrix: AQ							
SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
MW22S042015	ARSENIC	J	0.95	5.0	LOQ	ug/L	J (all detects)
	BERYLLIUM	J	0.085	1.0	LOQ	ug/L	
	CHROMIUM	J	1.3	10	LOQ	ug/L	
	COBALT	J	0.66	1.0	LOQ	ug/L	
	LEAD	J	1.7	3.0	LOQ	ug/L	
	NICKEL	J	1.8	3.0	LOQ	ug/L	
	THALLIUM	J	0.087	1.0	LOQ	ug/L	
	VANADIUM	J	3.7	6.0	LOQ	ug/L	
ZINC	J	7.5	20	LOQ	ug/L		
SMW01042015	ANTIMONY	J	0.52	6.0	LOQ	ug/L	J (all detects)
	ARSENIC	J	0.89	5.0	LOQ	ug/L	
	COBALT	J	0.28	1.0	LOQ	ug/L	
	NICKEL	J	1.7	3.0	LOQ	ug/L	
	VANADIUM	J	2.0	6.0	LOQ	ug/L	
	ZINC	J	2.9	20	LOQ	ug/L	
TMW08042015	ARSENIC	J	0.37	5.0	LOQ	ug/L	J (all detects)
	COBALT	J	0.48	1.0	LOQ	ug/L	
	COPPER	J	1.4	2.0	LOQ	ug/L	
	NICKEL	J	1.5	3.0	LOQ	ug/L	
	SILVER	J	0.039	5.0	LOQ	ug/L	
	VANADIUM	J	1.1	6.0	LOQ	ug/L	
	ZINC	J	6.5	20	LOQ	ug/L	
	TMW11042015	ANTIMONY	J	0.55	6.0	LOQ	
CHROMIUM		J	1.4	10	LOQ	ug/L	
COBALT		J	0.29	1.0	LOQ	ug/L	
LEAD		J	0.38	3.0	LOQ	ug/L	
NICKEL		J	1.1	3.0	LOQ	ug/L	
THALLIUM		J	0.051	1.0	LOQ	ug/L	
VANADIUM		J	1.6	6.0	LOQ	ug/L	
ZINC		J	3.1	20	LOQ	ug/L	
TMW14A042015	ANTIMONY	J	1.2	6.0	LOQ	ug/L	J (all detects)
	ARSENIC	J	0.52	5.0	LOQ	ug/L	
	NICKEL	J	0.30	3.0	LOQ	ug/L	
	SILVER	J	0.033	5.0	LOQ	ug/L	
	THALLIUM	J	0.17	1.0	LOQ	ug/L	
TMW15042015	CHROMIUM	J	0.91	10	LOQ	ug/L	J (all detects)
	MANGANESE	J	0.53	3.5	LOQ	ug/L	
	VANADIUM	J	1.2	6.0	LOQ	ug/L	
	ZINC	J	6.2	20	LOQ	ug/L	
TMW24042015	ARSENIC	J	1.1	5.0	LOQ	ug/L	J (all detects)
	COBALT	J	0.26	1.0	LOQ	ug/L	
	COPPER	J	0.57	2.0	LOQ	ug/L	
	NICKEL	J	0.84	3.0	LOQ	ug/L	
	VANADIUM	J	1.0	6.0	LOQ	ug/L	
	ZINC	J	2.4	20	LOQ	ug/L	
TMW38042015	ARSENIC	J	0.62	5.0	LOQ	ug/L	J (all detects)
	CHROMIUM	J	1.6	10	LOQ	ug/L	
	COBALT	J	0.12	1.0	LOQ	ug/L	
	LEAD	J	0.24	3.0	LOQ	ug/L	
	NICKEL	J	0.57	3.0	LOQ	ug/L	
	THALLIUM	J	0.071	1.0	LOQ	ug/L	
	VANADIUM	J	1.4	6.0	LOQ	ug/L	
	ZINC	J	4.8	20	LOQ	ug/L	

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 1:04:15 PM

ADR version 1.9.0.325

Page 2 of 3

## Reporting Limit Outliers

Lab Reporting Batch ID: 280-67561-1

Laboratory: TA DEN

EDD Filename: 280-67561-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method:</b> 6020A							
<b>Matrix:</b> AQ							

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
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<b>Method:</b> 6860							
<b>Matrix:</b> AQ							

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
MW18D042015	PERCHLORATE	J	0.0092	0.050	LOQ	ug/L	J (all detects)
TMW38042015	PERCHLORATE	J	0.0060	0.050	LOQ	ug/L	J (all detects)

<b>Method:</b> 7470A							
<b>Matrix:</b> AQ							

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
MW18D042015	MERCURY	J	0.089	0.20	LOQ	ug/L	J (all detects)

<b>Method:</b> 8015C DRO							
<b>Matrix:</b> AQ							

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW08042015	DIESEL RANGE ORGANICS	J M	0.066	0.25	LOQ	mg/L	J (all detects)

<b>Method:</b> 9056							
<b>Matrix:</b> AQ							

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
MW18D042015	NITRATE	J D	0.11	1.0	LOQ	mg/L	J (all detects)



## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Lab Reporting Batch: 280-67561-1</b>						
<b>Method: 6010C</b>						
DTW15042015	280-67561-8	AQ	FD	3005A	4/8/2015 12:50:00 PM	S2AVE
DTW15042015	280-67561-8	AQ	FD	3010A	4/8/2015 12:50:00 PM	S2AVE
MW18D042015	280-67561-5	AQ	N	3005A	4/8/2015 12:10:00 PM	S2AVE
MW18D042015	280-67561-5	AQ	N	3010A	4/8/2015 12:10:00 PM	S2AVE
MW22S042015	280-67561-6	AQ	N	3005A	4/8/2015 1:10:00 PM	S2AVE
SMW01042015	280-67561-10	AQ	N	3005A	4/8/2015 10:45:00 AM	S2AVE
SMW01042015	280-67561-10	AQ	N	3010A	4/8/2015 10:45:00 AM	S2AVE
TMW08042015	280-67561-11	AQ	N	3005A	4/8/2015 9:20:00 AM	S2AVE
TMW08042015	280-67561-11	AQ	N	3010A	4/8/2015 9:20:00 AM	S2AVE
TMW11042015	280-67561-4	AQ	N	3005A	4/8/2015 9:00:00 AM	S2AVE
TMW11042015	280-67561-4	AQ	N	3010A	4/8/2015 9:00:00 AM	S2AVE
TMW14A042015	280-67561-3	AQ	N	3005A	4/8/2015 10:25:00 AM	S2AVE
TMW14A042015	280-67561-3	AQ	N	3010A	4/8/2015 10:25:00 AM	S2AVE
TMW14A042015MS	280-67561-3MS	AQ	MS	3005A	4/8/2015 10:25:00 AM	S2AVE
TMW14A042015MS	280-67561-3MS	AQ	MS	3010A	4/8/2015 10:25:00 AM	S2AVE
TMW14A042015MSD	280-67561-3MSD	AQ	MSD	3005A	4/8/2015 10:25:00 AM	S2AVE
TMW14A042015MSD	280-67561-3MSD	AQ	MSD	3010A	4/8/2015 10:25:00 AM	S2AVE
TMW15042015	280-67561-7	AQ	N	3005A	4/8/2015 12:50:00 PM	S2AVE
TMW15042015	280-67561-7	AQ	N	3010A	4/8/2015 12:50:00 PM	S2AVE
TMW24042015	280-67561-12	AQ	N	3005A	4/8/2015 1:45:00 PM	S2AVE
TMW24042015	280-67561-12	AQ	N	3010A	4/8/2015 1:45:00 PM	S2AVE
TMW38042015	280-67561-9	AQ	N	3005A	4/8/2015 10:32:00 AM	S2AVE



## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 6010C</b>						
TMW38042015	280-67561-9	AQ	N	3010A	4/8/2015 10:32:00 AM	S2AVE
<b>Method: 6020A</b>						
DTW15042015	280-67561-8	AQ	FD	3005A	4/8/2015 12:50:00 PM	S2AVE
DTW15042015	280-67561-8	AQ	FD	3020A	4/8/2015 12:50:00 PM	S2AVE
MW18D042015	280-67561-5	AQ	N	3005A	4/8/2015 12:10:00 PM	S2AVE
MW18D042015	280-67561-5	AQ	N	3020A	4/8/2015 12:10:00 PM	S2AVE
MW22S042015	280-67561-6	AQ	N	3005A	4/8/2015 1:10:00 PM	S2AVE
SMW01042015	280-67561-10	AQ	N	3005A	4/8/2015 10:45:00 AM	S2AVE
SMW01042015	280-67561-10	AQ	N	3020A	4/8/2015 10:45:00 AM	S2AVE
TMW08042015	280-67561-11	AQ	N	3005A	4/8/2015 9:20:00 AM	S2AVE
TMW08042015	280-67561-11	AQ	N	3020A	4/8/2015 9:20:00 AM	S2AVE
TMW11042015	280-67561-4	AQ	N	3005A	4/8/2015 9:00:00 AM	S2AVE
TMW11042015	280-67561-4	AQ	N	3020A	4/8/2015 9:00:00 AM	S2AVE
TMW11042015MS	280-67561-4MS	AQ	MS	3005A	4/8/2015 9:00:00 AM	S2AVE
TMW11042015MS	280-67561-4MS	AQ	MS	3020A	4/8/2015 9:00:00 AM	S2AVE
TMW11042015MSD	280-67561-4MSD	AQ	MSD	3005A	4/8/2015 9:00:00 AM	S2AVE
TMW11042015MSD	280-67561-4MSD	AQ	MSD	3020A	4/8/2015 9:00:00 AM	S2AVE
TMW14A042015	280-67561-3	AQ	N	3005A	4/8/2015 10:25:00 AM	S2AVE
TMW14A042015	280-67561-3	AQ	N	3020A	4/8/2015 10:25:00 AM	S2AVE
TMW15042015	280-67561-7	AQ	N	3005A	4/8/2015 12:50:00 PM	S2AVE
TMW15042015	280-67561-7	AQ	N	3020A	4/8/2015 12:50:00 PM	S2AVE
TMW24042015	280-67561-12	AQ	N	3005A	4/8/2015 1:45:00 PM	S2AVE
TMW24042015	280-67561-12	AQ	N	3020A	4/8/2015 1:45:00 PM	S2AVE
TMW38042015	280-67561-9	AQ	N	3005A	4/8/2015 10:32:00 AM	S2AVE

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Page 2 of 6



## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 6020A</b>						
TMW38042015	280-67561-9	AQ	N	3020A	4/8/2015 10:32:00 AM	S2AVE
<b>Method: 6860</b>						
DTW15042015	280-67561-8	AQ	FD	METHOD	4/8/2015 12:50:00 PM	S2AVE
MW18D042015	280-67561-5	AQ	N	METHOD	4/8/2015 12:10:00 PM	S2AVE
SMW01042015	280-67561-10	AQ	N	METHOD	4/8/2015 10:45:00 AM	S2AVE
TMW08042015	280-67561-11	AQ	N	METHOD	4/8/2015 9:20:00 AM	S2AVE
TMW11042015	280-67561-4	AQ	N	METHOD	4/8/2015 9:00:00 AM	S2AVE
TMW15042015	280-67561-7	AQ	N	METHOD	4/8/2015 12:50:00 PM	S2AVE
TMW24042015	280-67561-12	AQ	N	METHOD	4/8/2015 1:45:00 PM	S2AVE
TMW38042015	280-67561-9	AQ	N	METHOD	4/8/2015 10:32:00 AM	S2AVE
<b>Method: 7470A</b>						
DTW15042015	280-67561-8	AQ	FD	7470A	4/8/2015 12:50:00 PM	S2AVE
MW18D042015	280-67561-5	AQ	N	7470A	4/8/2015 12:10:00 PM	S2AVE
MW22S042015	280-67561-6	AQ	N	7470A	4/8/2015 1:10:00 PM	S2AVE
SMW01042015	280-67561-10	AQ	N	7470A	4/8/2015 10:45:00 AM	S2AVE
TMW08042015	280-67561-11	AQ	N	7470A	4/8/2015 9:20:00 AM	S2AVE
TMW11042015	280-67561-4	AQ	N	7470A	4/8/2015 9:00:00 AM	S2AVE
TMW14A042015	280-67561-3	AQ	N	7470A	4/8/2015 10:25:00 AM	S2AVE
TMW15042015	280-67561-7	AQ	N	7470A	4/8/2015 12:50:00 PM	S2AVE
TMW24042015	280-67561-12	AQ	N	7470A	4/8/2015 1:45:00 PM	S2AVE
TMW38042015	280-67561-9	AQ	N	7470A	4/8/2015 10:32:00 AM	S2AVE
<b>Method: 8015C DRO</b>						
MW18D042015	280-67561-5	AQ	N	3510C	4/8/2015 12:10:00 PM	S2AVE
TMW08042015	280-67561-11	AQ	N	3510C	4/8/2015 9:20:00 AM	S2AVE

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Page 3 of 6





## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 8015C GRO</b>						
MW18D042015	280-67561-5	AQ	N	METHOD	4/8/2015 12:10:00 PM	S2AVE
TB-44-042015	280-67561-2	AQ	TB	METHOD	4/8/2015 8:00:00 AM	S2AVE
TMW08042015	280-67561-11	AQ	N	METHOD	4/8/2015 9:20:00 AM	S2AVE
<b>Method: 8081A</b>						
TMW08042015	280-67561-11	AQ	N	3510C	4/8/2015 9:20:00 AM	S2AVE
TMW24042015	280-67561-12	AQ	N	3510C	4/8/2015 1:45:00 PM	S2AVE
TMW38042015	280-67561-9	AQ	N	3510C	4/8/2015 10:32:00 AM	S2AVE
<b>Method: 8260B</b>						
DTW15042015	280-67561-8	AQ	FD	5030	4/8/2015 12:50:00 PM	S2AVE
MW18D042015	280-67561-5	AQ	N	5030	4/8/2015 12:10:00 PM	S2AVE
SMW01042015	280-67561-10	AQ	N	5030	4/8/2015 10:45:00 AM	S2AVE
TB-06-042015	280-67561-1	AQ	TB	5030	4/8/2015 8:00:00 AM	S2AVE
TMW08042015	280-67561-11	AQ	N	5030	4/8/2015 9:20:00 AM	S2AVE
TMW11042015	280-67561-4	AQ	N	5030	4/8/2015 9:00:00 AM	S2AVE
TMW14A042015	280-67561-3	AQ	N	5030	4/8/2015 10:25:00 AM	S2AVE
TMW15042015	280-67561-7	AQ	N	5030	4/8/2015 12:50:00 PM	S2AVE
TMW24042015	280-67561-12	AQ	N	5030	4/8/2015 1:45:00 PM	S2AVE
TMW38042015	280-67561-9	AQ	N	5030	4/8/2015 10:32:00 AM	S2AVE
<b>Method: 8270D</b>						
DTW15042015	280-67561-8	AQ	FD	3520C	4/8/2015 12:50:00 PM	S2AVE
SMW01042015	280-67561-10	AQ	N	3520C	4/8/2015 10:45:00 AM	S2AVE
TMW14A042015	280-67561-3	AQ	N	3520C	4/8/2015 10:25:00 AM	S2AVE
TMW15042015	280-67561-7	AQ	N	3520C	4/8/2015 12:50:00 PM	S2AVE
TMW38042015	280-67561-9	AQ	N	3520C	4/8/2015 10:32:00 AM	S2AVE

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Page 4 of 6



## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 8330B</b>						
DTW15042015	280-67561-8	AQ	FD	3535	4/8/2015 12:50:00 PM	S2AVE
MW18D042015	280-67561-5	AQ	N	3535	4/8/2015 12:10:00 PM	S2AVE
SMW01042015	280-67561-10	AQ	N	3535	4/8/2015 10:45:00 AM	S2AVE
TMW11042015	280-67561-4	AQ	N	3535	4/8/2015 9:00:00 AM	S2AVE
TMW14A042015	280-67561-3	AQ	N	3535	4/8/2015 10:25:00 AM	S2AVE
TMW15042015	280-67561-7	AQ	N	3535	4/8/2015 12:50:00 PM	S2AVE
TMW24042015	280-67561-12	AQ	N	3535	4/8/2015 1:45:00 PM	S2AVE
TMW38042015	280-67561-9	AQ	N	3535	4/8/2015 10:32:00 AM	S2AVE
<b>Method: 9056</b>						
DTW15042015	280-67561-8	AQ	FD	METHOD	4/8/2015 12:50:00 PM	S2AVE
MW18D042015	280-67561-5	AQ	N	METHOD	4/8/2015 12:10:00 PM	S2AVE
SMW01042015	280-67561-10	AQ	N	METHOD	4/8/2015 10:45:00 AM	S2AVE
TMW08042015	280-67561-11	AQ	N	METHOD	4/8/2015 9:20:00 AM	S2AVE
TMW11042015	280-67561-4	AQ	N	METHOD	4/8/2015 9:00:00 AM	S2AVE
TMW14A042015	280-67561-3	AQ	N	METHOD	4/8/2015 10:25:00 AM	S2AVE
TMW14A042015DUP	280-67561-3DUP	AQ	DUP	METHOD	4/8/2015 10:25:00 AM	S2AVE
TMW14A042015MS	280-67561-3MS	AQ	MS	METHOD	4/8/2015 10:25:00 AM	S2AVE
TMW14A042015MSD	280-67561-3MSD	AQ	MSD	METHOD	4/8/2015 10:25:00 AM	S2AVE
TMW15042015	280-67561-7	AQ	N	METHOD	4/8/2015 12:50:00 PM	S2AVE
TMW24042015	280-67561-12	AQ	N	METHOD	4/8/2015 1:45:00 PM	S2AVE
TMW38042015	280-67561-9	AQ	N	METHOD	4/8/2015 10:32:00 AM	S2AVE



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
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### *Validation Label Legend*

<i>Label Code</i>	<i>Label Description</i>	<i>EPA Level</i>
S1VE	Stage_1_Validation_Electronic	N/A
S1VM	Stage_1_Validation_Manual	N/A
S1VEM	Stage_1_Validation_Electronic_and_Manual	N/A
S2AVE	Stage_2A_Validation_Electronic	Level 3 w/o calibration
S2AVM	Stage_2A_Validation_Manual	Level 3 w/o calibration
S2AVEM	Stage_2A_Validation_Electronic_and_Manual	Level 3 w/o calibration
S2BVE	Stage_2B_Validation_Electronic	Level 3 with calibration
S2BVM	Stage_2B_Validation_Manual	Level 3 with calibration
S2BVEM	Stage_2B_Validation_Electronic_and_Manual	Level 3 with calibration
S3VE	Stage_3_Validation_Electronic	Level 4
S3VM	Stage_3_Validation_Manual	Level 4
S3VEM	Stage_3_Validation_Electronic_and_Manual	Level 4
S4VE	Stage_4_Validation_Electronic	Level 4
S4VM	Stage_4_Validation_Manual	Level 4
S4VEM	Stage_4_Validation_Electronic_and_Manual	Level 4
NV	Not_Validated	N/A

## Surrogate Outlier Report

Lab Reporting Batch ID: 280-67561-1

Laboratory: TA DEN

EDD Filename: 280-67561-1

eQAPP Name: FtWingate\_Primary\_120405

**Method:** 8260B**Matrix:** AQ

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
<b>DTW15042015</b>	1,2-DICHLOROETHANE-D4 DIBROMOFLUOROMETHANE	123 124	70.00-120.00 85.00-115.00	All Target Analytes	J (all detects)
<b>SMW01042015</b>	DIBROMOFLUOROMETHANE	120	85.00-115.00	All Target Analytes	J(all detects)
<b>TMW11042015</b>	1,2-DICHLOROETHANE-D4 DIBROMOFLUOROMETHANE	124 123	70.00-120.00 85.00-115.00	All Target Analytes	J(all detects)
<b>TMW14A042015</b>	DIBROMOFLUOROMETHANE	117	85.00-115.00	All Target Analytes	J(all detects)

**Project Name and Number: 102012 - FWDA 102012 GW**

5/15/2015 1:03:52 PM

ADR version 1.9.0.325

Page 1 of 1

**CASE NARRATIVE**

**Client: Sundance Consulting, Inc.**  
**Project: Fort Wingate, New Mexico**  
**Report Number: 280-67561-2**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

**Sample Receipt**

The following report contains the analytical results for five water samples received April 9, 2015, according to documented sample acceptance procedures. The samples were received at temperatures of 1.3°C, 4.5°C, 3.5°C, 3.6°C, 1.4°C, 1.4°C, 1.6°C and 4.4°C.

Additional samples/analyses requested on the chain-of-custody are reported under separate cover (280-67561-1).

No other anomalies were encountered during sample receipt.

**GC/MS Semivolatiles - 8270D**

Samples TMW14A042015 (280-67561-3), TMW15042015 (280-67561-7), DTW15042015 (280-67561-8), TMW38042015 (280-67561-9) and SMW01042015 (280-67561-10) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 04/10/2015 and analyzed on 04/14/2015.

Please note the Caprolactam data are reported under separate cover, as the laboratory does not hold DOD ELAP certification for this compound. The laboratory does not maintain quarterly QC requirements for precision, accuracy and detections.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

MS/MSD analyses for prep batch 280-272540 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



## Field QC Assignments and Associated Samples

**EDD File Name:** 280-67561-2  
**eQapp Name:** FtWingate\_Primary\_120405

	<b>Associated Samples</b>	<b>Sample Collection Date</b>
<b>Field QC</b> DTW15042015 <b>QC Type:</b> FD	TMW15042015	4/8/2015 12:50:00 PM



## ***Data Qualifier Summary***

Lab Reporting Batch ID: 280-67561-2

Laboratory: TA DEN

EDD Filename: 280-67561-2

eQAPP Name: FtWingate\_Primary\_120405

**No Data Review Qualifiers Applied.**



## Data Review Summary

Lab Reporting Batch ID: 280-67561-2

Laboratory: TA DEN

EDD Filename: 280-67561-2

eQAPP Name: FtWingate\_Primary\_120405

<i>Validation Area</i>	<i>Note</i>
Technical Holding Times	A
Temperature	A
Initial Calibration	N
Continuing Calibration/Initial Calibration Verification	N
Method Blanks	A
Surrogate/Tracer Spikes	A
Matrix Spike/Matrix Spike Duplicates	N
Laboratory Duplicates	N
Laboratory Replicates	N
Laboratory Control Samples	A
Compound Quantitation	A
Field Duplicates	A
Field Triplicates	N
Field Blanks	N

A = Acceptable, N = Not provided/applicable, SR = See report

The contents of this report reflect findings made by ADR during Automated Data Review, manual applied qualifiers are not considered. Please refer to the Overall Qualifier Summary report for manual qualifiers.





## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Lab Reporting Batch: 280-67561-2</b>						
<b>Method: 8270D</b>						
DTW15042015	280-67561-8	AQ	FD	3520C	4/8/2015 12:50:00 PM	S2AVE
SMW01042015	280-67561-10	AQ	N	3520C	4/8/2015 10:45:00 AM	S2AVE
TMW14A042015	280-67561-3	AQ	N	3520C	4/8/2015 10:25:00 AM	S2AVE
TMW15042015	280-67561-7	AQ	N	3520C	4/8/2015 12:50:00 PM	S2AVE
TMW38042015	280-67561-9	AQ	N	3520C	4/8/2015 10:32:00 AM	S2AVE



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
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### *Validation Label Legend*

<i>Label Code</i>	<i>Label Description</i>	<i>EPA Level</i>
S1VE	Stage_1_Validation_Electronic	N/A
S1VM	Stage_1_Validation_Manual	N/A
S1VEM	Stage_1_Validation_Electronic_and_Manual	N/A
S2AVE	Stage_2A_Validation_Electronic	Level 3 w/o calibration
S2AVM	Stage_2A_Validation_Manual	Level 3 w/o calibration
S2AVEM	Stage_2A_Validation_Electronic_and_Manual	Level 3 w/o calibration
S2BVE	Stage_2B_Validation_Electronic	Level 3 with calibration
S2BVM	Stage_2B_Validation_Manual	Level 3 with calibration
S2BVEM	Stage_2B_Validation_Electronic_and_Manual	Level 3 with calibration
S3VE	Stage_3_Validation_Electronic	Level 4
S3VM	Stage_3_Validation_Manual	Level 4
S3VEM	Stage_3_Validation_Electronic_and_Manual	Level 4
S4VE	Stage_4_Validation_Electronic	Level 4
S4VM	Stage_4_Validation_Manual	Level 4
S4VEM	Stage_4_Validation_Electronic_and_Manual	Level 4
NV	Not_Validated	N/A

**CASE NARRATIVE**  
**Client: Sundance Consulting, Inc.**  
**Project: Fort Wingate, New Mexico**  
**Report Number: 280-67662-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

**Sample Receipt**

The following report contains the analytical results for ten water samples received April 10, 2015, according to documented sample acceptance procedures. The samples were received at temperatures of 1.8°C, 0.3°C, 3.4°C, 3.8°C, 0.3°C, 0.5°C, -0.7°C and 3.5°C.

Sample TMW04042015 (280-67662-2) is marked for both 8270D and 8081A on the chain-of-custody. Two 1L amber bottles were received for this sample, both indicating 8270D analysis. Sufficient volume is available for the two requested analyses. The client was notified on April 13, 2015, and instructed the laboratory to cancel the 8081A analysis for this sample.

Please note the Caprolactam data are reported under separate cover (280-67662-2), as the laboratory does not hold DOD ELAP certification for this compound.

No other anomalies were encountered during sample receipt.

**GC/MS Volatiles - 8260B**

Samples TB-07-042015 (280-67662-1), TMW04042015 (280-67662-2), TMW40D042015 (280-67662-3), TMW49042015 (280-67662-4), TMW32042015 (280-67662-5), TMW02042015 (280-67662-6), TMW03042015 (280-67662-7), TMW45042015 (280-67662-8), TMW13042015 (280-67662-9) and TMW06042015 (280-67662-10) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/14/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

MS/MSD analyses for analytical batch 280-272517 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**GC/MS Semivolatiles - 8270D**

Samples TMW04042015 (280-67662-2), TMW40D042015 (280-67662-3), TMW49042015 (280-67662-4), TMW32042015 (280-67662-5), TMW45042015 (280-67662-8) and TMW06042015 (280-67662-10) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 04/11/2015 and analyzed on 04/18/2015 and 04/23/2015.

Please note the Caprolactam data are reported under separate cover (280-67662-2), as the laboratory does not hold DOD ELAP certification for this compound.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

A deviation from the Standard Operating Procedure (SOP) occurred. The details are as follows:

The samples were extracted per SW-846 3520C for 18 hours at a pH of 1-2 and 18 hours at a pH of 11-12; however, the laboratory's SOP requires the samples be extracted for 24 hours at each pH range. The laboratory's SOP is in the process of being revised for these changes.

Due to analyst oversight, MB 280-272314/1-A and LCS 280-272314/2-A were S-evaporated lower than directed in the SOP. Please note temperature sensitive surrogate/LCS compounds may be affected.

Surrogate Terphenyl-d14 was recovered below the QC control limits in sample TMW04042015 (280-67662-2). This is an indicator that data may be biased low. This anomaly is due to obvious matrix interference; therefore, corrective action is deemed unnecessary. The associated data have been flagged "Q" in accordance with the DOD QSM.

Phenanthrene was detected in method blank MB 280-272314/1-A at a level that was less than one half the reporting limit; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

The LCS/LCSD associated with prep batch 280-272314 exhibited a percent recovery and/or RPD data outside the QC control limits for Benzidine and Hexachlorocyclopentadiene. Benzidine and Hexachlorocyclopentadiene have been identified as poor performing analytes when analyzed using this method; therefore, corrective action was deemed unnecessary. The associated data have been flagged "Q" in accordance with the DOD QSM.

MS/MSD analyses for prep batch 280-272314 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Organochlorine Pesticides - 8081A**

Samples TMW40D042015 (280-67662-3), TMW49042015 (280-67662-4), TMW32042015 (280-67662-5) and TMW45042015 (280-67662-8) were analyzed for chlorinated pesticides in accordance with EPA SW-846 Method 8081A. The samples were prepared on 04/13/2015 and analyzed on 04/15/2015.

TestAmerica Denver's practice for the reporting of dual column data in packages requiring forms and/or raw data is to report the surrogates from both columns, and the preferred result for any given target analyte from the analyst selected column. The preferred results for target analytes and surrogates are reported as PRIMARY on the Sample Datasheets.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Samples MB 280-272509/1-A and LCS 280-272509/2-A required a mercury clean-up to reduce matrix interferences caused by sulfur.

MS/MSD analyses for prep batch 280-272509 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Explosives - 8330B**

Samples TMW04042015 (280-67662-2), TMW40D042015 (280-67662-3), TMW49042015 (280-67662-4), TMW32042015 (280-67662-5), TMW02042015 (280-67662-6), TMW03042015 (280-67662-7), TMW45042015 (280-67662-8) and TMW06042015 (280-67662-10) were analyzed for explosives in accordance with EPA SW-846 Method 8330B. The samples were prepared on 04/13/2015 and analyzed on 04/16/2015.

TestAmerica Denver's practice for the reporting of dual column data in packages requiring forms and/or raw data is to report the surrogates from both columns, and the preferred result for any given target analyte from the analyst selected column. The preferred results for target analytes and surrogates are reported as PRIMARY on the Sample Datasheets.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows:

The cartridges were eluted with 0.1% Acetic Acid in ACN instead of ACN to increase Tetryl recovery. This deviation was performed with QA and supervisor approval. The SOP is currently under revision to capture this change.

After review of chromatograms for samples TMW04042015 (280-67662-2) and TMW03042015 (280-67662-7), it is the opinion of the analyst that the evident matrix interferences may be causing false positive and/or false negative results.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high concentrations of target analytes, matrix interference and/or analytes present above the linear calibration curve, sample TMW03042015 (280-67662-7) had to be analyzed at a dilution. Surrogate recoveries could not be accurately calculated for the diluted analysis because the extract was diluted beyond the ability to reliably quantitate recoveries. The reporting limits and method detection limits have been adjusted relative to the dilution required.

Surrogate 1,2-Dinitrobenzene was recovered above the QC control limits in sample TMW04042015 (280-67662-2). This anomaly is due to obvious matrix interference; therefore, corrective action is deemed unnecessary. The associated data have been flagged "Q" in accordance with the DOD QSM.

The RPD between the primary and confirmation columns exceeded 40% for 1,3,5-Trinitrobenzene, 2,4-Dinitrotoluene, 2-Amino-4,6-dinitrotoluene, 4-Amino-2,6-dinitrotoluene, HMX, o-Nitrotoluene, RDX and Tetryl in sample TMW04042015 (280-67662-2). The RPD between the primary and confirmation columns exceeded 40% for 2-Amino-4,6-dinitrotoluene and 4-Amino-2,6-dinitrotoluene in sample TMW02042015 (280-67662-6). The RPD between the primary and confirmation columns exceeded 40% for 1,2-Dinitrobenzene, 2-Amino-4,6-dinitrotoluene, 4-Amino-2,6-dinitrotoluene and HMX in sample TMW03042015 (280-67662-7). The lower of the two values has been reported, as matrix interference is evident. The results in the analytical report have been flagged with "J" in accordance with the DOD QSM.

2-Amino-4,6-dinitrotoluene was detected in method blank MB 280-272447/1-A at a level that was less than the reporting limit on the confirmation column. The primary column result is ND; therefore, the method blank is ND. As the samples are reporting 2-Amino-4,6-dinitrotoluene from the primary column which was in control, corrective action is deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

MS/MSD analyses for prep batch 280-272447 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Perchlorate - 6860**

Samples TMW04042015 (280-67662-2), TMW40D042015 (280-67662-3), TMW49042015 (280-67662-4), TMW32042015 (280-67662-5), TMW02042015 (280-67662-6), TMW03042015 (280-67662-7), TMW45042015 (280-67662-8) and TMW13042015 (280-67662-9) were analyzed for Perchlorate in accordance with SW846 6860. The samples were analyzed on 04/20/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high concentrations of target analytes and/or analytes present above the calibration curve, samples TMW40D042015 (280-67662-3), TMW49042015 (280-67662-4), TMW32042015 (280-67662-5), TMW02042015 (280-67662-6) and TMW03042015 (280-67662-7) had to be analyzed at dilutions. The reporting limits and method detection limits have been adjusted relative to the dilutions required.

MS/MSD analyses for analytical batch 280-273667 were not requested.

The closing Continuing Calibration Blank (CCB) associated with analytical batch 280-273667 did not contain enough volume in the vial; therefore, the internal standard (IS) recovery was low. A new CCB was re-injected two times after to show the instrument is in control. Results were within control limits for the IS and non-detect for Perchlorate.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Total Metals - 6010C**

Samples TMW04042015 (280-67662-2), TMW40D042015 (280-67662-3), TMW49042015 (280-67662-4), TMW32042015 (280-67662-5), TMW02042015 (280-67662-6), TMW03042015 (280-67662-7), TMW45042015 (280-67662-8), TMW13042015 (280-67662-9) and TMW06042015 (280-67662-10) were analyzed for Total Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 04/14/2015 and analyzed on 04/14/2015, 04/15/2015, 04/16/2015 and 04/17/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high concentrations of target analytes, samples TMW04042015 (280-67662-2), TMW40D042015 (280-67662-3), TMW49042015 (280-67662-4), TMW32042015 (280-67662-5), TMW02042015 (280-67662-6), TMW03042015 (280-67662-7), TMW45042015 (280-67662-8), TMW13042015 (280-67662-9) and TMW06042015 (280-67662-10) had to be analyzed at dilutions. The reporting limits and method detection limits have been adjusted relative to the dilutions required.

The MS/MSD associated with prep batch 280-272256 was performed on sample TMW49042015 (280-67662-4). The MS/MSD spike compound recoveries and RPD data could not be reliably calculated for Sodium because the sample concentration was greater than four times the spike amounts. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample has been flagged "J" in accordance with the DOD QSM.

The post digestion spike (PDS) and serial dilution (SD) associated with prep batch 280-272256 was performed on sample TMW49042015 (280-67662-4). The SD exhibited a percent recovery outside the control limits for Calcium; however, the PDS performed on this sample was in control. The SD was not calculable and the PDS exhibited a percent recovery outside the control limits for Iron. The associated Iron data in the parent sample has been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Dissolved Metals - 6010C**

Samples TMW04042015 (280-67662-2), TMW40D042015 (280-67662-3), TMW49042015 (280-67662-4), TMW32042015 (280-67662-5), TMW02042015 (280-67662-6), TMW03042015 (280-67662-7), TMW45042015 (280-67662-8), TMW13042015 (280-67662-9) and TMW06042015 (280-67662-10) were analyzed for Dissolved Metals in accordance with EPA SW-846 Method 6010C. The samples were prepared on 04/14/2015 and analyzed on 04/16/2015, 04/17/2015 and 04/18/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high concentrations of target analytes, samples TMW04042015 (280-67662-2), TMW40D042015 (280-67662-3), TMW49042015 (280-67662-4), TMW32042015 (280-67662-5), TMW02042015 (280-67662-6), TMW03042015 (280-67662-7), TMW45042015 (280-67662-8), TMW13042015 (280-67662-9) and TMW06042015 (280-67662-10) had to be analyzed at dilutions. The reporting limits and method detection limits have been adjusted relative to the dilutions required.

MS/MSD analyses for prep batch 280-272352 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Total Metals - 6020A**

Samples TMW04042015 (280-67662-2), TMW40D042015 (280-67662-3), TMW49042015 (280-67662-4), TMW32042015 (280-67662-5), TMW02042015 (280-67662-6), TMW03042015 (280-67662-7), TMW45042015 (280-67662-8), TMW13042015 (280-67662-9) and TMW06042015 (280-67662-10) were analyzed for total metals (ICPMS) in accordance with SW846 6020A. The samples were prepared on 04/14/2015 and analyzed on 04/15/2015, 04/17/2015 and 04/28/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Thallium was detected in method blank MB 280-272253/1-A at a level that was less than one half the reporting limit; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Dissolved Metals - 6020A**

Samples TMW04042015 (280-67662-2), TMW40D042015 (280-67662-3), TMW49042015 (280-67662-4), TMW32042015 (280-67662-5), TMW02042015 (280-67662-6), TMW03042015 (280-67662-7), TMW45042015 (280-67662-8), TMW13042015 (280-67662-9) and TMW06042015 (280-67662-10) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 04/14/2015 and analyzed on 04/15/2015 and 04/17/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Manganese was detected in method blank MB 280-272349/1-A at a level that was less than one half the reporting limit; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

MS/MSD analyses for prep batch 280-272349 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Total Mercury - 7470A**

Samples TMW04042015 (280-67662-2), TMW40D042015 (280-67662-3), TMW49042015 (280-67662-4), TMW32042015 (280-67662-5), TMW02042015 (280-67662-6), TMW03042015 (280-67662-7), TMW45042015 (280-67662-8), TMW13042015 (280-67662-9) and TMW06042015 (280-67662-10) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 04/12/2015 and analyzed on 04/14/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

MS/MSD analyses for prep batch 280-272333 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Dissolved Mercury - 7470A**

Samples TMW04042015 (280-67662-2), TMW40D042015 (280-67662-3), TMW49042015 (280-67662-4), TMW32042015 (280-67662-5), TMW02042015 (280-67662-6), TMW03042015 (280-67662-7), TMW45042015 (280-67662-8), TMW13042015 (280-67662-9) and TMW06042015 (280-67662-10) were analyzed for dissolved mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 04/13/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

MS/MSD analyses for prep batch 280-272339 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Nitrate & Nitrite - 9056**

Samples TMW04042015 (280-67662-2), TMW40D042015 (280-67662-3), TMW49042015 (280-67662-4), TMW32042015 (280-67662-5), TMW02042015 (280-67662-6), TMW03042015 (280-67662-7), TMW45042015 (280-67662-8), TMW13042015 (280-67662-9) and TMW06042015 (280-67662-10) were analyzed for anions (48 hours) in accordance with EPA SW-846 Method 9056. The samples were analyzed on 04/10/2015 and 04/11/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high concentrations of target analytes, samples TMW04042015 (280-67662-2), TMW02042015 (280-67662-6), TMW03042015 (280-67662-7) and TMW06042015 (280-67662-10) had to be analyzed at dilutions. The reporting limits and method detection limits have been adjusted relative to the dilutions required.

MS/MSD analyses for analytical batch 280-272086 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



### Field QC Assignments and Associated Samples

**EDD File Name:** 280-67662-1  
**eQapp Name:** FtWingate\_Primary\_120405

	Associated Samples	Sample Collection Date
<b>Field QC</b> TB-07-042015 <b>QC Type:</b> TB		
	TMW02042015	4/9/2015 8:55:00 AM
	TMW03042015	4/9/2015 10:35:00 AM
	TMW04042015	4/9/2015 12:00:00 PM
	TMW06042015	4/9/2015 1:10:00 PM
	TMW13042015	4/9/2015 9:25:00 AM
	TMW32042015	4/9/2015 9:00:00 AM
	TMW40D042015	4/9/2015 12:10:00 PM
	TMW45042015	4/9/2015 11:10:00 AM
	TMW49042015	4/9/2015 10:31:00 AM



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS	<b>Method:</b>	6010C	<b>Matrix:</b>	AQ
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**Sample ID:**TMW02042015      **Collected:**4/9/2015 8:55:00 AM      **Analysis Type:**RE2/TOT      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1300	J	250	LOD	3000	LOQ	ug/L	J	RI

**Sample ID:**TMW02042015      **Collected:**4/9/2015 8:55:00 AM      **Analysis Type:**RE4/TOT      **Dilution:** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	960000	D	1300	LOD	25000	LOQ	ug/L	J	Ms

**Sample ID:**TMW02042015      **Collected:**4/9/2015 8:55:00 AM      **Analysis Type:**RES/DIS      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2000	J	250	LOD	3000	LOQ	ug/L	J	RI

**Sample ID:**TMW02042015      **Collected:**4/9/2015 8:55:00 AM      **Analysis Type:**RES/TOT      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	18	J	31	LOD	300	LOQ	ug/L	J	RI

**Sample ID:**TMW03042015      **Collected:**4/9/2015 10:35:00 AM      **Analysis Type:**RE2/TOT      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	510	J	250	LOD	3000	LOQ	ug/L	J	RI

**Sample ID:**TMW03042015      **Collected:**4/9/2015 10:35:00 AM      **Analysis Type:**RE4/TOT      **Dilution:** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	890000	D	1300	LOD	25000	LOQ	ug/L	J	Ms

**Sample ID:**TMW03042015      **Collected:**4/9/2015 10:35:00 AM      **Analysis Type:**RES/DIS      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	860	J	250	LOD	3000	LOQ	ug/L	J	RI

**Sample ID:**TMW04042015      **Collected:**4/9/2015 12:00:00 PM      **Analysis Type:**RE2/TOT      **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	750	J	250	LOD	3000	LOQ	ug/L	J	RI

\* denotes a non-reportable result

**Project Name and Number:** 102012 - FWDA 102012 GW





## Data Qualifier Summary

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6010C	<b>Matrix:</b>	AQ						

Sample ID:TMW04042015		4/9/2015 12:00:00 Collected:PM			Analysis Type:RE4/TOT			Dilution: 5	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	830000	D	1300	LOD	25000	LOQ	ug/L	J	Ms

Sample ID:TMW04042015		4/9/2015 12:00:00 Collected:PM			Analysis Type:RES/DIS			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	980	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW04042015		4/9/2015 12:00:00 Collected:PM			Analysis Type:RES/TOT			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	54	J	30	LOD	100	LOQ	ug/L	J	RI

Sample ID:TMW06042015		4/9/2015 1:10:00 PM Collected:			Analysis Type:RE2/TOT			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	430	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW06042015		4/9/2015 1:10:00 PM Collected:			Analysis Type:RE4/TOT			Dilution: 5	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	820000	D	1300	LOD	25000	LOQ	ug/L	J	Ms

Sample ID:TMW06042015		4/9/2015 1:10:00 PM Collected:			Analysis Type:RES/DIS			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	640	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW06042015		4/9/2015 1:10:00 PM Collected:			Analysis Type:RES/TOT			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	24	J	31	LOD	300	LOQ	ug/L	J	RI
IRON	24	J	30	LOD	100	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 12:22:29 PM

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Page 2 of 16



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS									
<b>Method:</b>	6010C	<b>Matrix:</b>	AQ							

Sample ID:TMW13042015 Collected:4/9/2015 9:25:00 AM Analysis Type:RE2/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	550	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW13042015 Collected:4/9/2015 9:25:00 AM Analysis Type:RE4/TOT Dilution: 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	510000	D	1300	LOD	25000	LOQ	ug/L	J	Ms

Sample ID:TMW13042015 Collected:4/9/2015 9:25:00 AM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	810	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW32042015 Collected:4/9/2015 9:00:00 AM Analysis Type:RE2/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	960	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW32042015 Collected:4/9/2015 9:00:00 AM Analysis Type:RE4/TOT Dilution: 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	650000	D	1300	LOD	25000	LOQ	ug/L	J	Ms

Sample ID:TMW32042015 Collected:4/9/2015 9:00:00 AM Analysis Type:RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	19	J	31	LOD	300	LOQ	ug/L	J	RI
POTASSIUM	1300	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW40D042015 Collected:4/9/2015 12:10:00 PM Analysis Type:RE2/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1100	J	250	LOD	3000	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 12:22:29 PM

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Page 3 of 16



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6010C	<b>Matrix:</b>	AQ						

<b>Sample ID:</b> TMW40D042015		<b>Collected:</b> PM			<b>Analysis Type:</b> RE4/TOT			<b>Dilution:</b> 5	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
SODIUM	650000	D	1300	LOD	25000	LOQ	ug/L	J	Ms

<b>Sample ID:</b> TMW40D042015		<b>Collected:</b> PM			<b>Analysis Type:</b> RES/DIS			<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
POTASSIUM	1300	J	250	LOD	3000	LOQ	ug/L	J	RI

<b>Sample ID:</b> TMW40D042015		<b>Collected:</b> PM			<b>Analysis Type:</b> RES/TOT			<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
ALUMINUM	28	J	31	LOD	300	LOQ	ug/L	J	RI

<b>Sample ID:</b> TMW45042015		<b>Collected:</b> AM			<b>Analysis Type:</b> RE2/TOT			<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
POTASSIUM	680	J	250	LOD	3000	LOQ	ug/L	J	RI

<b>Sample ID:</b> TMW45042015		<b>Collected:</b> AM			<b>Analysis Type:</b> RE4/TOT			<b>Dilution:</b> 5	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
SODIUM	830000	D	1300	LOD	25000	LOQ	ug/L	J	Ms

<b>Sample ID:</b> TMW45042015		<b>Collected:</b> AM			<b>Analysis Type:</b> RES/DIS			<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
POTASSIUM	1100	J	250	LOD	3000	LOQ	ug/L	J	RI

<b>Sample ID:</b> TMW45042015		<b>Collected:</b> AM			<b>Analysis Type:</b> RES/TOT			<b>Dilution:</b> 1	
<b>Analyte</b>	<b>Lab Result</b>	<b>Lab Qual</b>	<b>DL</b>	<b>DL Type</b>	<b>RL</b>	<b>RL Type</b>	<b>Units</b>	<b>Data Review Qual</b>	<b>Reason Code</b>
ALUMINUM	55	J	31	LOD	300	LOQ	ug/L	J	RI
IRON	34	J	30	LOD	100	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 12:22:29 PM

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Page 4 of 16



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS	
<b>Method:</b>	6010C	<b>Matrix:</b> AQ

<b>Sample ID:</b> TMW49042015		<b>Collected:</b> 4/9/2015 10:31:00 AM			<b>Analysis Type:</b> RE2/TOT			<b>Dilution:</b> 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1500	J	250	LOD	3000	LOQ	ug/L	J	RI

<b>Sample ID:</b> TMW49042015		<b>Collected:</b> 4/9/2015 10:31:00 AM			<b>Analysis Type:</b> RE4/TOT			<b>Dilution:</b> 5	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	670000	D J	1300	LOD	25000	LOQ	ug/L	J	Ms

<b>Sample ID:</b> TMW49042015		<b>Collected:</b> 4/9/2015 10:31:00 AM			<b>Analysis Type:</b> RES/DIS			<b>Dilution:</b> 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1600	J	250	LOD	3000	LOQ	ug/L	J	RI

<b>Sample ID:</b> TMW49042015		<b>Collected:</b> 4/9/2015 10:31:00 AM			<b>Analysis Type:</b> RES/TOT			<b>Dilution:</b> 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	89	J	30	LOD	100	LOQ	ug/L	J	RI, ProfJudg

<b>Method Category:</b>	METALS	
<b>Method:</b>	6020A	<b>Matrix:</b> AQ

<b>Sample ID:</b> TMW02042015		<b>Collected:</b> 4/9/2015 8:55:00 AM			<b>Analysis Type:</b> RES/DIS			<b>Dilution:</b> 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	1.2	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COPPER	1.2	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
MANGANESE	0.31	J	0.90	LOD	3.5	LOQ	ug/L	U	Mb
NICKEL	0.50	J	0.90	LOD	3.0	LOQ	ug/L	J	RI

<b>Sample ID:</b> TMW02042015		<b>Collected:</b> 4/9/2015 8:55:00 AM			<b>Analysis Type:</b> RES/TOT			<b>Dilution:</b> 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.87	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	0.52	J	1.5	LOD	10	LOQ	ug/L	J	RI
MANGANESE	0.44	J	0.90	LOD	3.5	LOQ	ug/L	J	RI

\* denotes a non-reportable result

**Project Name and Number:** 102012 - FWDA 102012 GW



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: TMW03042015      4/9/2015 10:35:00      Collected: AM      Analysis Type: RE2/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	3.4	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW03042015      4/9/2015 10:35:00      Collected: AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.63	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COPPER	1.0	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	0.49	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	1.8	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	7.7	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW03042015      4/9/2015 10:35:00      Collected: AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.52	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.089	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
VANADIUM	1.9	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID: TMW04042015      4/9/2015 12:00:00      Collected: PM      Analysis Type: RE2/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	5.1	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW04042015      4/9/2015 12:00:00      Collected: PM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.80	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	1.5	J	1.5	LOD	10	LOQ	ug/L	J	RI
COPPER	1.1	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	0.31	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
THALLIUM	0.069	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
ZINC	3.3	J	6.0	LOD	20	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 12:22:29 PM

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Page 6 of 16



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: TMW04042015      Collected: 4/9/2015 12:00:00 PM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	1.3	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	1.9	J	1.5	LOD	10	LOQ	ug/L	J	RI
MANGANESE	0.40	J	0.90	LOD	3.5	LOQ	ug/L	J	RI
THALLIUM	0.067	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb

Sample ID: TMW06042015      Collected: 4/9/2015 1:10:00 PM      Analysis Type: RE2/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	2.0	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW06042015      Collected: 4/9/2015 1:10:00 PM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.94	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	0.57	J	1.5	LOD	10	LOQ	ug/L	J	RI
NICKEL	0.65	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SELENIUM	1.5	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
VANADIUM	3.4	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	3.5	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW06042015      Collected: 4/9/2015 1:10:00 PM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.74	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.067	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	1.8	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
SELENIUM	1.8	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
VANADIUM	2.9	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID: TMW13042015      Collected: 4/9/2015 9:25:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	2.7	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 12:22:29 PM

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Page 7 of 16



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: TMW13042015 Collected: 4/9/2015 9:25:00 AM Analysis Type: RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	0.57	J	1.5	LOD	10	LOQ	ug/L	J	RI
MANGANESE	0.63	J	0.90	LOD	3.5	LOQ	ug/L	J	RI
VANADIUM	2.4	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID: TMW32042015 Collected: 4/9/2015 9:00:00 AM Analysis Type: RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	1.1	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COPPER	0.58	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	0.84	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SELENIUM	3.2	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
VANADIUM	3.0	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	4.2	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW32042015 Collected: 4/9/2015 9:00:00 AM Analysis Type: RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	1.4	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.31	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	0.61	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
LEAD	0.51	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
NICKEL	1.9	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SELENIUM	3.7	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
SILVER	0.066	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
VANADIUM	3.3	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID: TMW40D042015 Collected: 4/9/2015 12:10:00 PM Analysis Type: RE2/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	4.1	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW40D042015 Collected: 4/9/2015 12:10:00 PM Analysis Type: RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.37	J	1.0	LOD	5.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

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Page 8 of 16



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: TMW40D042015      Collected: 4/9/2015 12:10:00 PM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	0.075	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	0.72	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SELENIUM	3.1	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
VANADIUM	2.7	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	4.6	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW40D042015      Collected: 4/9/2015 12:10:00 PM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.41	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.065	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
SELENIUM	3.3	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
VANADIUM	2.9	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID: TMW45042015      Collected: 4/9/2015 11:10:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.85	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COPPER	1.8	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	1.2	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	4.0	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID: TMW45042015      Collected: 4/9/2015 11:10:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.95	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.15	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	1.3	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	1.3	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SELENIUM	1.1	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
SILVER	0.051	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
VANADIUM	3.7	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 12:22:29 PM

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Page 9 of 16





## Data Qualifier Summary

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: TMW49042015      Collected: 4/9/2015 10:31:00 AM      Analysis Type: RE2/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	4.5	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW49042015      Collected: 4/9/2015 10:31:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.57	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COPPER	1.3	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	0.31	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
ZINC	6.8	J	6.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW49042015      Collected: 4/9/2015 10:31:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.78	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	0.54	J	1.5	LOD	10	LOQ	ug/L	J	RI
COBALT	0.088	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
COPPER	1.1	J	1.5	LOD	2.0	LOQ	ug/L	J	RI
LEAD	0.18	J	0.50	LOD	3.0	LOQ	ug/L	J	RI
MANGANESE	0.55	J	0.90	LOD	3.5	LOQ	ug/L	J	RI
NICKEL	1.5	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SILVER	0.066	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.084	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb

<b>Method Category:</b>	SVOA								
<b>Method:</b>	8270D	<b>Matrix:</b>	AQ						

Sample ID: TMW04042015      Collected: 4/9/2015 12:00:00 PM      Analysis Type: RES-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZALDEHYDE	2.1	U	2.1	LOD	10	LOQ	ug/L	UJ	Lcs
BENZIDINE	100	U Q	100	LOD	210	LOQ	ug/L	UJ	Lcs
DIETHYL PHTHALATE	0.52	J	1.0	LOD	21	LOQ	ug/L	J	RI
HEXACHLOROCYCLOPENTADIENE	21	U Q	21	LOD	52	LOQ	ug/L	UJ	Lcs, Lcs

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 12:22:29 PM

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Page 10 of 16



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA	
<b>Method:</b>	8270D	<b>Matrix:</b> AQ

**Sample ID:**TMW06042015 **Collected:**4/9/2015 1:10:00 PM **Analysis Type:**RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZALDEHYDE	2.2	U	2.2	LOD	11	LOQ	ug/L	UJ	Lcs
BENZIDINE	110	U Q	110	LOD	220	LOQ	ug/L	UJ	Lcs
HEXACHLOROCYCLOPENTADIENE	22	U Q	22	LOD	54	LOQ	ug/L	UJ	Lcs, Lcs

**Sample ID:**TMW32042015 **Collected:**4/9/2015 9:00:00 AM **Analysis Type:**RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZALDEHYDE	2.3	U	2.3	LOD	11	LOQ	ug/L	UJ	Lcs
BENZIDINE	110	U Q	110	LOD	230	LOQ	ug/L	UJ	Lcs
HEXACHLOROCYCLOPENTADIENE	23	U Q	23	LOD	57	LOQ	ug/L	UJ	Lcs, Lcs

**Sample ID:**TMW40D042015 **Collected:**4/9/2015 12:10:00 PM **Analysis Type:**RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZALDEHYDE	2.1	U	2.1	LOD	10	LOQ	ug/L	UJ	Lcs
BENZIDINE	100	U Q	100	LOD	210	LOQ	ug/L	UJ	Lcs
HEXACHLOROCYCLOPENTADIENE	21	U Q	21	LOD	52	LOQ	ug/L	UJ	Lcs, Lcs

**Sample ID:**TMW45042015 **Collected:**4/9/2015 11:10:00 AM **Analysis Type:**RES-ACID **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	10	J	52	LOD	84	LOQ	ug/L	J	RI

**Sample ID:**TMW45042015 **Collected:**4/9/2015 11:10:00 AM **Analysis Type:**RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZALDEHYDE	2.1	U	2.1	LOD	10	LOQ	ug/L	UJ	Lcs
BENZIDINE	100	U Q	100	LOD	210	LOQ	ug/L	UJ	Lcs
HEXACHLOROCYCLOPENTADIENE	21	U Q	21	LOD	52	LOQ	ug/L	UJ	Lcs, Lcs

**Sample ID:**TMW49042015 **Collected:**4/9/2015 10:31:00 AM **Analysis Type:**RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZALDEHYDE	2.2	U	2.2	LOD	11	LOQ	ug/L	UJ	Lcs
BENZIDINE	110	U Q	110	LOD	220	LOQ	ug/L	UJ	Lcs

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 12:22:29 PM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 11 of 16



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA
<b>Method:</b>	8270D
<b>Matrix:</b>	AQ

Sample ID: TMW49042015      Collected: 4/9/2015 10:31:00 AM      Analysis Type: RES-BASE/NEUTRAL      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXACHLOROCYCLOPENTADIENE	22	U Q	22	LOD	55	LOQ	ug/L	UJ	Lcs, Lcs

<b>Method Category:</b>	SVOA
<b>Method:</b>	8330B
<b>Matrix:</b>	AQ

Sample ID: TMW02042015      Collected: 4/9/2015 8:55:00 AM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-AMINO-4,6-DINITROTOLUENE	0.42	J	0.17	LOD	0.23	LOQ	ug/L	J	ProfJudg
4-AMINO-2,6-DINITROTOLUENE	0.41	J	0.17	LOD	0.23	LOQ	ug/L	J	ProfJudg

Sample ID: TMW03042015      Collected: 4/9/2015 10:35:00 AM      Analysis Type: DL2      Dilution: 50

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	420	Q D	7.7	LOD	10	LOQ	ug/L	J	ProfJudg

Sample ID: TMW03042015      Collected: 4/9/2015 10:35:00 AM      Analysis Type: RE2      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Dinitrotoluene, 2,6-	0.15	U Q	0.15	LOD	0.21	LOQ	ug/L	UJ	ProfJudg
NITROBENZENE	0.15	U Q	0.15	LOD	0.41	LOQ	ug/L	UJ	ProfJudg

Sample ID: TMW03042015      Collected: 4/9/2015 10:35:00 AM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3,5-TRINITROBENZENE	0.41	U	0.41	LOD	1.0	LOQ	ug/L	UJ	ProfJudg
1,3-DINITROBENZENE	0.15	U	0.15	LOD	0.41	LOQ	ug/L	UJ	ProfJudg
2,4,6-TRINITROTOLUENE	0.15	U	0.15	LOD	0.41	LOQ	ug/L	UJ	ProfJudg
2-AMINO-4,6-DINITROTOLUENE	2.4	J	0.15	LOD	0.21	LOQ	ug/L	J	ProfJudg
2-NITROTOLUENE	0.15	U	0.15	LOD	0.41	LOQ	ug/L	UJ	ProfJudg
3-NITROTOLUENE	0.15	U	0.15	LOD	0.41	LOQ	ug/L	UJ	ProfJudg
4-AMINO-2,6-DINITROTOLUENE	2.2	J	0.15	LOD	0.21	LOQ	ug/L	J	ProfJudg
4-NITROTOLUENE	0.41	U	0.41	LOD	1.0	LOQ	ug/L	UJ	ProfJudg
Dinitrotoluene, 2,4-	0.44		0.15	LOD	0.41	LOQ	ug/L	J	ProfJudg
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	0.15	U	0.15	LOD	0.25	LOQ	ug/L	UJ	ProfJudg

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 12:22:29 PM

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Page 12 of 16



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA	
<b>Method:</b>	8330B	<b>Matrix:</b> AQ

Sample ID: TMW03042015      Collected: 4/9/2015 10:35:00 AM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	4.0	M J	0.15	LOD	0.41	LOQ	ug/L	J	ProfJudg

Sample ID: TMW04042015      Collected: 4/9/2015 12:00:00 PM      Analysis Type: RE2      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3,5-TRINITROBENZENE	3.1	J Q	0.41	LOD	1.0	LOQ	ug/L	J	ProfJudg
Dinitrotoluene, 2,6-	0.15	U Q	0.15	LOD	0.20	LOQ	ug/L	UJ	ProfJudg
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	16	J Q	0.15	LOD	0.20	LOQ	ug/L	J	ProfJudg
METHYL-2,4,6-TRINITROPHENYLNITRAMINE	0.49	Q J	0.15	LOD	0.25	LOQ	ug/L	J	ProfJudg
NITROBENZENE	0.15	U Q	0.15	LOD	0.41	LOQ	ug/L	UJ	ProfJudg

Sample ID: TMW04042015      Collected: 4/9/2015 12:00:00 PM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3-DINITROBENZENE	0.15	U Q	0.15	LOD	0.41	LOQ	ug/L	UJ	ProfJudg
2,4,6-TRINITROTOLUENE	0.15	U Q	0.15	LOD	0.41	LOQ	ug/L	UJ	ProfJudg
2-AMINO-4,6-DINITROTOLUENE	2.9	J M Q	0.15	LOD	0.20	LOQ	ug/L	J	Surr, ProfJudg
2-NITROTOLUENE	1.5	J M Q	0.15	LOD	0.41	LOQ	ug/L	J	Surr, ProfJudg
3-NITROTOLUENE	0.15	U Q	0.15	LOD	0.41	LOQ	ug/L	UJ	ProfJudg
4-AMINO-2,6-DINITROTOLUENE	2.6	J M Q	0.15	LOD	0.20	LOQ	ug/L	J	Surr, ProfJudg
4-NITROTOLUENE	40	J M Q	0.41	LOD	1.0	LOQ	ug/L	J	Surr, ProfJudg
Dinitrotoluene, 2,4-	0.39	J M Q	0.15	LOD	0.41	LOQ	ug/L	J	RI, Surr, ProfJudg
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	5.1	J M Q	0.15	LOD	0.41	LOQ	ug/L	J	Surr, ProfJudg

<b>Method Category:</b>	VOA	
<b>Method:</b>	8260B	<b>Matrix:</b> AQ

Sample ID: TB-07-042015      Collected: 4/9/2015 8:00:00 AM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	2.3	J	6.4	LOD	10	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 12:22:29 PM

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Page 13 of 16



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	VOA	
<b>Method:</b>	8260B	<b>Matrix:</b> AQ

Sample ID:TMW02042015 Collected:4/9/2015 8:55:00 AM Analysis Type:RES Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	3.6	J	6.4	LOD	10	LOQ	ug/L	U	Tb

4/9/2015 10:35:00  
Sample ID:TMW03042015 Collected:AM Analysis Type:RES Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	4.1	J	6.4	LOD	10	LOQ	ug/L	U	Tb

4/9/2015 12:00:00  
Sample ID:TMW04042015 Collected:PM Analysis Type:RES Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	3.9	J	6.4	LOD	10	LOQ	ug/L	U	Tb

Sample ID:TMW06042015 Collected:4/9/2015 1:10:00 PM Analysis Type:RES Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	5.6	J	6.4	LOD	10	LOQ	ug/L	U	Tb

Sample ID:TMW13042015 Collected:4/9/2015 9:25:00 AM Analysis Type:RES Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	3.0	J	6.4	LOD	10	LOQ	ug/L	U	Tb

Sample ID:TMW32042015 Collected:4/9/2015 9:00:00 AM Analysis Type:RES Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	3.1	J	6.4	LOD	10	LOQ	ug/L	U	Tb

4/9/2015 12:10:00  
Sample ID:TMW40D042015 Collected:PM Analysis Type:RES Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	3.3	J	6.4	LOD	10	LOQ	ug/L	U	Tb

4/9/2015 11:10:00  
Sample ID:TMW45042015 Collected:AM Analysis Type:RES Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	5.8	J	6.4	LOD	10	LOQ	ug/L	U	Tb

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 12:22:29 PM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 14 of 16



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	VOA
<b>Method:</b>	8260B
<b>Matrix:</b>	AQ

Sample ID: TMW49042015      Collected: 4/9/2015 10:31:00 AM      Analysis Type: RES      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	3.8	J	6.4	LOD	10	LOQ	ug/L	U	Tb

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

### Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
Lcs	Laboratory Control Precision
Lcs	Laboratory Control Spike Lower Estimation
Mb	Method Blank Contamination
Ms	Matrix Spike Lower Estimation
Ms	Matrix Spike Lower Rejection
ProfJudg	Professional Judgment
RI	Reporting Limit Trace Value
Surr	Surrogate/Tracer Recovery Lower Estimation
Surr	Surrogate/Tracer Recovery Upper Estimation
Tb	Trip Blank Contamination

\* denotes a non-reportable result

**Project Name and Number: 102012 - FWDA 102012 GW**

5/15/2015 12:22:29 PM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 16 of 16



## Data Review Summary

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

<i>Validation Area</i>	<i>Note</i>
Technical Holding Times	A
Temperature	A
Initial Calibration	N
Continuing Calibration/Initial Calibration Verification	N
Method Blanks	SR
Surrogate/Tracer Spikes	SR
Matrix Spike/Matrix Spike Duplicates	SR
Laboratory Duplicates	N
Laboratory Replicates	N
Laboratory Control Samples	SR
Compound Quantitation	SR
Field Duplicates	N
Field Triplicates	N
Field Blanks	SR

A = Acceptable, N = Not provided/applicable, SR = See report

The contents of this report reflect findings made by ADR during Automated Data Review, manual applied qualifiers are not considered. Please refer to the Overall Qualifier Summary report for manual qualifiers.



## Field Duplicate Outlier Report

Lab Reporting Batch ID: 280-67561-1

Laboratory: TA DEN

EDD Filename: 280-67561-1

eQAPP Name: FtWingate\_Primary\_120405

**Method:** 6010C**Matrix:** AQ

<i>Analyte</i>	<i>Concentration (ug/L)</i>		<i>Sample RPD</i>	<i>eQAPP RPD</i>	<i>Flag</i>
	TMW15042015 (DIS)	DTW15042015 (DIS)			
IRON	100 U	46	200	50.00	J (all detects) UJ (all non-detects)

**Method:** 9056**Matrix:** AQ

<i>Analyte</i>	<i>Concentration (mg/L)</i>		<i>Sample RPD</i>	<i>eQAPP RPD</i>	<i>Flag</i>
	TMW15042015	DTW15042015			
NITRATE	8.2	270	188	50.00	J(all detects) UJ(all non-detects)

**Project Name and Number: 102012 - FWDA 102012 GW**

5/15/2015 1:09:39 PM

ADR version 1.9.0.325

Page 1 of 1

## Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

**Method:** 8270D  
**Matrix:** AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS 280-272314/2-A LCSD 280-272314/3-A (TMW04042015 TMW06042015 TMW32042015 TMW40D042015 TMW45042015 TMW49042015)	BENZALDEHYDE BENZIDINE HEXACHLOROCYCLOPENTADIEN	57 - 5	- - 10	70.00-130.00 10.00-110.00 50.00-130.00	- 44 (30.00) 74 (30.00)	BENZALDEHYDE BENZIDINE HEXACHLOROCYCLOPENTADIE	J (all detects) UJ (all non-detects)



## History of Manual Changes to Automated Data Review Qualifiers

Changed by: Doug Scott

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW02042015								
<b>2-AMINO-4,6-DINITROTOLUENE</b>	8330B	RES	0.42	ug/L	Professional Judgment		J	5/15/2015 11:43
Reason for change: >40% confirmation col								
<b>4-AMINO-2,6-DINITROTOLUENE</b>	8330B	RES	0.41	ug/L	Professional Judgment		J	5/15/2015 11:44
Reason for change: >40% confirmation col								
<b>SODIUM</b>	6010C	RE4/TOT	960000	ug/L	Matrix Spike Lower Rejection	J		5/15/2015 12:07
Reason for change: 4X rule applied								
<b>Field Sample ID:</b> TMW03042015								
<b>1,3,5-TRINITROBENZENE</b>	8330B	RES	0.41	ug/L	Professional Judgment		UJ	5/15/2015 11:33
Reason for change: matrix may cause false positive or negative data								
<b>1,3-DINITROBENZENE</b>	8330B	RES	0.15	ug/L	Professional Judgment		UJ	5/15/2015 11:34
Reason for change: matrix may cause false positive or negative data								
<b>2,4,6-TRINITROTOLUENE</b>	8330B	RES	0.15	ug/L	Professional Judgment		UJ	5/15/2015 11:34
Reason for change: matrix may cause false positive or negative data								
<b>2-AMINO-4,6-DINITROTOLUENE</b>	8330B	RES	2.4	ug/L	Professional Judgment		J	5/15/2015 11:34
Reason for change: matrix may cause false positive or negative data								
<b>2-NITROTOLUENE</b>	8330B	RES	0.15	ug/L	Professional Judgment		UJ	5/15/2015 11:34
Reason for change: matrix may cause false positive or negative data								
<b>3-NITROTOLUENE</b>	8330B	RES	0.15	ug/L	Professional Judgment		UJ	5/15/2015 11:34
Reason for change: matrix may cause false positive or negative data								

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW03042015								
<b>4-AMINO-2,6-DINITROTOLUENE</b>	8330B	RES	2.2	ug/L	Professional Judgment		J	5/15/2015 11:34
Reason for change:	matrix may cause false positive or negative data							
<b>4-NITROTOLUENE</b>	8330B	RES	0.41	ug/L	Professional Judgment		UJ	5/15/2015 11:34
Reason for change:	matrix may cause false positive or negative data							
<b>Dinitrotoluene, 2,4-</b>	8330B	RES	0.44	ug/L	Professional Judgment		J	5/15/2015 11:34
Reason for change:	matrix may cause false positive or negative data							
<b>Dinitrotoluene, 2,6-</b>	8330B	RE2	0.15	ug/L	Professional Judgment		U	5/15/2015 11:33
Reason for change:	matrix may cause false positive or negative data							
<b>Dinitrotoluene, 2,6-</b>	8330B	RE2	0.15	ug/L	Professional Judgment	U	UJ	5/15/2015 11:33
Reason for change:	matrix may cause false positive or negative data							
<b>HEXAHYDRO-1,3,5-TRINITRO-1,3,5-</b>	8330B	DL2	420	ug/L	Professional Judgment		J	5/15/2015 11:33
Reason for change:	matrix may cause false positive or negative data							
<b>METHYL-2,4,6-</b>	8330B	RES	0.15	ug/L	Professional Judgment		UJ	5/15/2015 11:35
Reason for change:	matrix may cause false positive or negative data							
<b>NITROBENZENE</b>	8330B	RE2	0.15	ug/L	Professional Judgment		UJ	5/15/2015 11:33
Reason for change:	matrix may cause false positive or negative data							
<b>Octahydro-1,3,5,7-tetranitro-1,3,5,7-</b>	8330B	RES	4.0	ug/L	Professional Judgment		J	5/15/2015 11:35
Reason for change:	matrix may cause false positive or negative data							
<b>SODIUM</b>	6010C	RE4/TOT	890000	ug/L	Matrix Spike Lower Rejection	J		5/15/2015 12:07
Reason for change:	4X rule applied							
<b>Field Sample ID:</b> TMW04042015								
<b>1,3,5-TRINITROBENZENE</b>	8330B	RE2	3.1	ug/L	Professional Judgment		J	5/15/2015 11:31
Reason for change:	matrix may cause false positive or negative data							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
Field Sample ID: TMW04042015								
<b>1,3-DINITROBENZENE</b>	8330B	RES	0.15	ug/L	Professional Judgment		UJ	5/15/2015 11:31
Reason for change:	matrix may cause false positive or negative data							
<b>2,4,6-TRINITROTOLUENE</b>	8330B	RES	0.15	ug/L	Professional Judgment		UJ	5/15/2015 11:32
Reason for change:	matrix may cause false positive or negative data							
<b>2-AMINO-4,6-DINITROTOLUENE</b>	8330B	RES	2.9	ug/L	Professional Judgment		J	5/15/2015 11:32
Reason for change:	matrix may cause false positive or negative data							
<b>2-NITROTOLUENE</b>	8330B	RES	1.5	ug/L	Professional Judgment		J	5/15/2015 11:32
Reason for change:	matrix may cause false positive or negative data							
<b>3-NITROTOLUENE</b>	8330B	RES	0.15	ug/L	Professional Judgment		UJ	5/15/2015 11:32
Reason for change:	matrix may cause false positive or negative data							
<b>4-AMINO-2,6-DINITROTOLUENE</b>	8330B	RES	2.6	ug/L	Professional Judgment		J	5/15/2015 11:32
Reason for change:	matrix may cause false positive or negative data							
<b>4-NITROTOLUENE</b>	8330B	RES	40	ug/L	Professional Judgment		J	5/15/2015 11:32
Reason for change:	matrix may cause false positive or negative data							
<b>Dinitrotoluene, 2,4-</b>	8330B	RES	0.39	ug/L	Professional Judgment		J	5/15/2015 11:32
Reason for change:	matrix may cause false positive or negative data							
<b>Dinitrotoluene, 2,6-</b>	8330B	RE2	0.15	ug/L	Professional Judgment		UJ	5/15/2015 11:31
Reason for change:	matrix may cause false positive or negative data							
<b>HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE</b>	8330B	RE2	16	ug/L	Professional Judgment		J	5/15/2015 11:31
Reason for change:	matrix may cause false positive or negative data							
<b>METHYL-2,4,6-TRINITROBENZENE/ METRAMINE</b>	8330B	RE2	0.49	ug/L	Professional Judgment		J	5/15/2015 11:31
Reason for change:	matrix may cause false positive or negative data							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW04042015								
<b>NITROBENZENE</b>	8330B	RE2	0.15	ug/L	Professional Judgment		UJ	5/15/2015 11:31
Reason for change: matrix may cause false positive or negative data								
<b>Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrahydro-1,3,5,7-tetrazine (HMX)</b>	8330B	RES	5.1	ug/L	Professional Judgment		J	5/15/2015 11:32
Reason for change: matrix may cause false positive or negative data								
<b>SODIUM</b>	6010C	RE4/TOT	830000	ug/L	Matrix Spike Lower Rejection	J		5/15/2015 12:07
Reason for change: 4X rule applied								
<b>Field Sample ID:</b> TMW06042015								
<b>SODIUM</b>	6010C	RE4/TOT	820000	ug/L	Matrix Spike Lower Rejection	J		5/15/2015 12:07
Reason for change: 4X rule applied								
<b>Field Sample ID:</b> TMW13042015								
<b>SODIUM</b>	6010C	RE4/TOT	510000	ug/L	Matrix Spike Lower Rejection	J		5/15/2015 12:07
Reason for change: 4X rule applied								
<b>Field Sample ID:</b> TMW32042015								
<b>SODIUM</b>	6010C	RE4/TOT	650000	ug/L	Matrix Spike Lower Rejection	J		5/15/2015 12:07
Reason for change: 4X rule applied								
<b>Field Sample ID:</b> TMW40D042015								
<b>SODIUM</b>	6010C	RE4/TOT	650000	ug/L	Matrix Spike Lower Rejection	J		5/15/2015 12:07
Reason for change: 4X rule applied								

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW45042015								
<b>SODIUM</b>	6010C	RE4/TOT	830000	ug/L	Matrix Spike Lower Rejection	J		5/15/2015 12:07
Reason for change: 4X rule applied								
<b>Field Sample ID:</b> TMW49042015								
<b>IRON</b>	6010C	RES/TOT	89	ug/L	Professional Judgment		J	5/15/2015 12:10
Reason for change: post spike out of control as well as serial dilution								
<b>SODIUM</b>	6010C	RE4/TOT	670000	ug/L	Matrix Spike Lower Rejection	J		5/15/2015 12:07
Reason for change: 4X rule applied								



## History of Manual Changes to Automated Data Review Qualifiers

Changed by: Doug Scott

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> DTW15042015								
<b>IRON</b>	6010C	RES/TOT	30	ug/L	Professional Judgment		UJ	5/15/2015 12:58
Reason for change: post spike an serial dilution out								
<b>IRON</b>	6010C	RES/TOT	30	ug/L	Professional Judgment	UJ		5/15/2015 12:59
Reason for change: flagged in error for post spike, no flag needed on this sample								
<b>SODIUM</b>	6010C	RE2/TOT	550000	ug/L	Matrix Spike Upper Estimation	J		5/15/2015 12:57
Reason for change: 4X rule								
<b>Field Sample ID:</b> MW18D042015								
<b>GASOLINE RANGE ORGANICS</b>	8015C GRO	RE2	54	ug/L	Preservation		J	5/15/2015 12:50
Reason for change: pH >2 analyzed within 14 days but >7								
<b>GASOLINE RANGE ORGANICS</b>	8015C GRO	RE2	54	ug/L	Professional Judgment		J	5/15/2015 12:51
Reason for change: possible nonGRO, concentration due to discret peaks								
<b>SODIUM</b>	6010C	RE2/TOT	2000000	ug/L	Matrix Spike Upper Estimation	J		5/15/2015 12:57
Reason for change: 4X rule								
<b>Field Sample ID:</b> SMW01042015								
<b>SODIUM</b>	6010C	RE2/TOT	790000	ug/L	Matrix Spike Upper Estimation	J		5/15/2015 12:57
Reason for change: 4X rule								



Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> TMW08042015								
<b>GASOLINE RANGE ORGANICS</b>	8015C GRO	RE2	20	ug/L	Preservation		UJ	5/15/2015 12:50
Reason for change:	pH >2 analyzed within 14 days but >7							
<b>SODIUM</b>	6010C	RE2/TOT	3900000	ug/L	Matrix Spike Upper Estimation	J		5/15/2015 12:57
Reason for change:	4X rule							
<b>Field Sample ID:</b> TMW11042015								
<b>SODIUM</b>	6010C	RE2/TOT	520000	ug/L	Matrix Spike Upper Estimation	J		5/15/2015 12:57
Reason for change:	4X rule							
<b>Field Sample ID:</b> TMW14A042015								
<b>IRON</b>	6010C	RES/DIS	26	ug/L	Professional Judgment		J	5/15/2015 13:01
Reason for change:	post spike and serial dilution out							
<b>IRON</b>	6010C	RES/TOT	26	ug/L	Professional Judgment		J	5/15/2015 12:59
Reason for change:	post spike and serial dilution out							
<b>SODIUM</b>	6010C	RE2/TOT	410000	ug/L	Matrix Spike Upper Estimation	J		5/15/2015 12:57
Reason for change:	4X rule							
<b>Field Sample ID:</b> TMW15042015								
<b>SODIUM</b>	6010C	RE2/TOT	560000	ug/L	Matrix Spike Upper Estimation	J		5/15/2015 12:57
Reason for change:	4X rule							
<b>Field Sample ID:</b> TMW24042015								
<b>SODIUM</b>	6010C	RE2/TOT	930000	ug/L	Matrix Spike Upper Estimation	J		5/15/2015 12:57
Reason for change:	4X rule							

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
Field Sample ID: TMW38042015								
<b>SODIUM</b>	6010C	RE2/TOT	620000	ug/L	Matrix Spike Upper Estimation	J		5/15/2015 12:57
Reason for change:	4X rule							

## Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

**Method:** 6010C**Matrix:** AQ

<b>QC Sample ID (Associated Samples)</b>	<b>Compound</b>	<b>MS %R</b>	<b>MSD %R</b>	<b>%R Limits</b>	<b>RPD (Limits)</b>	<b>Affected Compounds</b>	<b>Flag</b>
TMW49042015MS (TOT) TMW49042015MSD (TOT) (TMW02042015 TMW03042015 TMW04042015 TMW06042015 TMW13042015 TMW32042015 TMW40D042015 TMW45042015 TMW49042015)	SODIUM	-81	42	80.00-120.00	-	SODIUM	J (all detects) R (all non-detects)

**Project Name and Number:** 102012 - FWDA 102012 GW

5/15/2015 12:15:28 PM

ADR version 1.9.0.325

Page 1 of 1

## Method Blank Outlier Report

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

Method: 6020A Matrix: AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-272253/1-A	4/15/2015 6:54:00 AM	THALLIUM	0.0680 ug/L	TMW02042015 TMW03042015 TMW04042015 TMW06042015 TMW13042015 TMW32042015 TMW40D042015 TMW45042015 TMW49042015
MB 280-272349/1-A	4/15/2015 3:11:00 AM	MANGANESE	0.542 ug/L	TMW02042015 TMW03042015 TMW04042015 TMW06042015 TMW13042015 TMW32042015 TMW40D042015 TMW45042015 TMW49042015

*The following samples and their listed target analytes were qualified due to contamination reported in this blank*

Sample ID	Analyte	Reported Result	Modified Final Result
TMW02042015(RES/DIS)	MANGANESE	0.31 ug/L	0.31U ug/L
TMW04042015(RES/TOT)	THALLIUM	0.067 ug/L	0.067U ug/L
TMW49042015(RES/TOT)	THALLIUM	0.084 ug/L	0.084U ug/L

Method: 8270D Matrix: AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-272314/1-A	4/17/2015 5:08:00 PM	PHENANTHRENE	0.308 ug/L	TMW04042015 TMW06042015 TMW32042015 TMW40D042015 TMW45042015 TMW49042015

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 12:15:12 PM

ADR version 1.9.0.325

Page 1 of 1

## Reporting Limit Outliers

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method:</b> 6010C
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW02042015	ALUMINUM	J	18	300	LOQ	ug/L	J (all detects)
	POTASSIUM	J	1300	3000	LOQ	ug/L	
TMW03042015	POTASSIUM	J	510	3000	LOQ	ug/L	J (all detects)
TMW04042015	IRON	J	54	100	LOQ	ug/L	J (all detects)
	POTASSIUM	J	750	3000	LOQ	ug/L	
TMW06042015	ALUMINUM	J	24	300	LOQ	ug/L	J (all detects)
	IRON	J	24	100	LOQ	ug/L	
	POTASSIUM	J	430	3000	LOQ	ug/L	
TMW13042015	POTASSIUM	J	550	3000	LOQ	ug/L	J (all detects)
TMW32042015	ALUMINUM	J	19	300	LOQ	ug/L	J (all detects)
	POTASSIUM	J	960	3000	LOQ	ug/L	
TMW40D042015	ALUMINUM	J	28	300	LOQ	ug/L	J (all detects)
	POTASSIUM	J	1100	3000	LOQ	ug/L	
TMW45042015	ALUMINUM	J	55	300	LOQ	ug/L	J (all detects)
	IRON	J	34	100	LOQ	ug/L	
	POTASSIUM	J	680	3000	LOQ	ug/L	
TMW49042015	IRON	J	89	100	LOQ	ug/L	J (all detects)
	POTASSIUM	J	1500	3000	LOQ	ug/L	

<b>Method:</b> 6020A
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW02042015	ARSENIC	J	1.2	5.0	LOQ	ug/L	J (all detects)
	CHROMIUM	J	0.52	10	LOQ	ug/L	
	COPPER	J	1.2	2.0	LOQ	ug/L	
	MANGANESE	J	0.31	3.5	LOQ	ug/L	
	NICKEL	J	0.50	3.0	LOQ	ug/L	
TMW03042015	ARSENIC	J	0.63	5.0	LOQ	ug/L	J (all detects)
	COBALT	J	0.089	1.0	LOQ	ug/L	
	COPPER	J	1.0	2.0	LOQ	ug/L	
	NICKEL	J	0.49	3.0	LOQ	ug/L	
	VANADIUM	J	1.8	6.0	LOQ	ug/L	
ZINC	J	3.4	20	LOQ	ug/L		
TMW04042015	ARSENIC	J	0.80	5.0	LOQ	ug/L	J (all detects)
	CHROMIUM	J	1.5	10	LOQ	ug/L	
	COPPER	J	1.1	2.0	LOQ	ug/L	
	MANGANESE	J	0.40	3.5	LOQ	ug/L	
	NICKEL	J	0.31	3.0	LOQ	ug/L	
	THALLIUM	J	0.069	1.0	LOQ	ug/L	
	ZINC	J	5.1	20	LOQ	ug/L	

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 12:15:43 PM

ADR version 1.9.0.325

Page 1 of 3

## Reporting Limit Outliers

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method:</b> 6020A
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW06042015	ARSENIC	J	0.94	5.0	LOQ	ug/L	J (all detects)
	CHROMIUM	J	0.57	10	LOQ	ug/L	
	COBALT	J	0.067	1.0	LOQ	ug/L	
	COPPER	J	1.8	2.0	LOQ	ug/L	
	NICKEL	J	0.65	3.0	LOQ	ug/L	
	SELENIUM	J	1.5	5.0	LOQ	ug/L	
	VANADIUM	J	3.4	6.0	LOQ	ug/L	
ZINC	J	2.0	20	LOQ	ug/L		
TMW13042015	CHROMIUM	J	0.57	10	LOQ	ug/L	J (all detects)
	MANGANESE	J	0.63	3.5	LOQ	ug/L	
	VANADIUM	J	2.7	6.0	LOQ	ug/L	
TMW32042015	ARSENIC	J	1.1	5.0	LOQ	ug/L	J (all detects)
	COBALT	J	0.31	1.0	LOQ	ug/L	
	COPPER	J	0.58	2.0	LOQ	ug/L	
	LEAD	J	0.51	3.0	LOQ	ug/L	
	NICKEL	J	0.84	3.0	LOQ	ug/L	
	SELENIUM	J	3.2	5.0	LOQ	ug/L	
	SILVER	J	0.066	5.0	LOQ	ug/L	
	VANADIUM	J	3.0	6.0	LOQ	ug/L	
ZINC	J	4.2	20	LOQ	ug/L		
TMW40D042015	ARSENIC	J	0.37	5.0	LOQ	ug/L	J (all detects)
	COBALT	J	0.075	1.0	LOQ	ug/L	
	NICKEL	J	0.72	3.0	LOQ	ug/L	
	SELENIUM	J	3.1	5.0	LOQ	ug/L	
	VANADIUM	J	2.7	6.0	LOQ	ug/L	
	ZINC	J	4.1	20	LOQ	ug/L	
TMW45042015	ARSENIC	J	0.85	5.0	LOQ	ug/L	J (all detects)
	COBALT	J	0.15	1.0	LOQ	ug/L	
	COPPER	J	1.8	2.0	LOQ	ug/L	
	NICKEL	J	1.2	3.0	LOQ	ug/L	
	SELENIUM	J	1.1	5.0	LOQ	ug/L	
	SILVER	J	0.051	5.0	LOQ	ug/L	
	VANADIUM	J	4.0	6.0	LOQ	ug/L	
TMW49042015	ARSENIC	J	0.57	5.0	LOQ	ug/L	J (all detects)
	CHROMIUM	J	0.54	10	LOQ	ug/L	
	COBALT	J	0.088	1.0	LOQ	ug/L	
	COPPER	J	1.3	2.0	LOQ	ug/L	
	LEAD	J	0.18	3.0	LOQ	ug/L	
	MANGANESE	J	0.55	3.5	LOQ	ug/L	
	NICKEL	J	0.31	3.0	LOQ	ug/L	
	SILVER	J	0.066	5.0	LOQ	ug/L	
	THALLIUM	J	0.084	1.0	LOQ	ug/L	
	ZINC	J	4.5	20	LOQ	ug/L	

<b>Method:</b> 8260B
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TB-07-042015	ACETONE	J	2.3	10	LOQ	ug/L	J (all detects)

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 12:15:43 PM

ADR version 1.9.0.325

Page 2 of 3

## Reporting Limit Outliers

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method:</b> 8260B
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW02042015	ACETONE	J	3.6	10	LOQ	ug/L	J (all detects)
TMW03042015	ACETONE	J	4.1	10	LOQ	ug/L	J (all detects)
TMW04042015	ACETONE	J	3.9	10	LOQ	ug/L	J (all detects)
TMW06042015	ACETONE	J	5.6	10	LOQ	ug/L	J (all detects)
TMW13042015	ACETONE	J	3.0	10	LOQ	ug/L	J (all detects)
TMW32042015	ACETONE	J	3.1	10	LOQ	ug/L	J (all detects)
TMW40D042015	ACETONE	J	3.3	10	LOQ	ug/L	J (all detects)
TMW45042015	ACETONE	J	5.8	10	LOQ	ug/L	J (all detects)
TMW49042015	ACETONE	J	3.8	10	LOQ	ug/L	J (all detects)

<b>Method:</b> 8270D
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW04042015	DIETHYL PHTHALATE	J	0.52	21	LOQ	ug/L	J (all detects)
TMW45042015	BENZOIC ACID	J	10	84	LOQ	ug/L	J (all detects)

<b>Method:</b> 8330B
<b>Matrix:</b> AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW04042015	Dinitrotoluene, 2,4-	J M Q	0.39	0.41	LOQ	ug/L	J (all detects)



## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Lab Reporting Batch: 280-67662-1</b>						
<b>Method: 6010C</b>						
TMW02042015	280-67662-6	AQ	N	3005A	4/9/2015 8:55:00 AM	S2AVE
TMW02042015	280-67662-6	AQ	N	3010A	4/9/2015 8:55:00 AM	S2AVE
TMW03042015	280-67662-7	AQ	N	3005A	4/9/2015 10:35:00 AM	S2AVE
TMW03042015	280-67662-7	AQ	N	3010A	4/9/2015 10:35:00 AM	S2AVE
TMW04042015	280-67662-2	AQ	N	3005A	4/9/2015 12:00:00 PM	S2AVE
TMW04042015	280-67662-2	AQ	N	3010A	4/9/2015 12:00:00 PM	S2AVE
TMW06042015	280-67662-10	AQ	N	3005A	4/9/2015 1:10:00 PM	S2AVE
TMW06042015	280-67662-10	AQ	N	3010A	4/9/2015 1:10:00 PM	S2AVE
TMW13042015	280-67662-9	AQ	N	3005A	4/9/2015 9:25:00 AM	S2AVE
TMW13042015	280-67662-9	AQ	N	3010A	4/9/2015 9:25:00 AM	S2AVE
TMW32042015	280-67662-5	AQ	N	3005A	4/9/2015 9:00:00 AM	S2AVE
TMW32042015	280-67662-5	AQ	N	3010A	4/9/2015 9:00:00 AM	S2AVE
TMW40D042015	280-67662-3	AQ	N	3005A	4/9/2015 12:10:00 PM	S2AVE
TMW40D042015	280-67662-3	AQ	N	3010A	4/9/2015 12:10:00 PM	S2AVE
TMW45042015	280-67662-8	AQ	N	3005A	4/9/2015 11:10:00 AM	S2AVE
TMW45042015	280-67662-8	AQ	N	3010A	4/9/2015 11:10:00 AM	S2AVE
TMW49042015	280-67662-4	AQ	N	3005A	4/9/2015 10:31:00 AM	S2AVE
TMW49042015	280-67662-4	AQ	N	3010A	4/9/2015 10:31:00 AM	S2AVE
TMW49042015MS	280-67662-4MS	AQ	MS	3010A	4/9/2015 10:31:00 AM	S2AVE
TMW49042015MSD	280-67662-4MSD	AQ	MSD	3010A	4/9/2015 10:31:00 AM	S2AVE
<b>Method: 6020A</b>						
TMW02042015	280-67662-6	AQ	N	3005A	4/9/2015 8:55:00 AM	S2AVE
TMW02042015	280-67662-6	AQ	N	3020A	4/9/2015 8:55:00 AM	S2AVE

5/15/2015 12:18:19 PM

ADR version 1.9.0.325 (Licensed For Use On USACE Projects Only)

Page 1 of 6





## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 6020A</b>						
TMW03042015	280-67662-7	AQ	N	3005A	4/9/2015 10:35:00 AM	S2AVE
TMW03042015	280-67662-7	AQ	N	3020A	4/9/2015 10:35:00 AM	S2AVE
TMW04042015	280-67662-2	AQ	N	3005A	4/9/2015 12:00:00 PM	S2AVE
TMW04042015	280-67662-2	AQ	N	3020A	4/9/2015 12:00:00 PM	S2AVE
TMW06042015	280-67662-10	AQ	N	3005A	4/9/2015 1:10:00 PM	S2AVE
TMW06042015	280-67662-10	AQ	N	3020A	4/9/2015 1:10:00 PM	S2AVE
TMW13042015	280-67662-9	AQ	N	3005A	4/9/2015 9:25:00 AM	S2AVE
TMW13042015	280-67662-9	AQ	N	3020A	4/9/2015 9:25:00 AM	S2AVE
TMW32042015	280-67662-5	AQ	N	3005A	4/9/2015 9:00:00 AM	S2AVE
TMW32042015	280-67662-5	AQ	N	3020A	4/9/2015 9:00:00 AM	S2AVE
TMW40D042015	280-67662-3	AQ	N	3005A	4/9/2015 12:10:00 PM	S2AVE
TMW40D042015	280-67662-3	AQ	N	3020A	4/9/2015 12:10:00 PM	S2AVE
TMW40D042015MS	280-67662-3MS	AQ	MS	3020A	4/9/2015 12:10:00 PM	S2AVE
TMW40D042015MSD	280-67662-3MSD	AQ	MSD	3020A	4/9/2015 12:10:00 PM	S2AVE
TMW45042015	280-67662-8	AQ	N	3005A	4/9/2015 11:10:00 AM	S2AVE
TMW45042015	280-67662-8	AQ	N	3020A	4/9/2015 11:10:00 AM	S2AVE
TMW49042015	280-67662-4	AQ	N	3005A	4/9/2015 10:31:00 AM	S2AVE
TMW49042015	280-67662-4	AQ	N	3020A	4/9/2015 10:31:00 AM	S2AVE
<b>Method: 6860</b>						
TMW02042015	280-67662-6	AQ	N	METHOD	4/9/2015 8:55:00 AM	S2AVE
TMW03042015	280-67662-7	AQ	N	METHOD	4/9/2015 10:35:00 AM	S2AVE
TMW04042015	280-67662-2	AQ	N	METHOD	4/9/2015 12:00:00 PM	S2AVE
TMW13042015	280-67662-9	AQ	N	METHOD	4/9/2015 9:25:00 AM	S2AVE
TMW32042015	280-67662-5	AQ	N	METHOD	4/9/2015 9:00:00 AM	S2AVE

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Page 2 of 6



## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 6860</b>						
TMW40D042015	280-67662-3	AQ	N	METHOD	4/9/2015 12:10:00 PM	S2AVE
TMW45042015	280-67662-8	AQ	N	METHOD	4/9/2015 11:10:00 AM	S2AVE
TMW49042015	280-67662-4	AQ	N	METHOD	4/9/2015 10:31:00 AM	S2AVE
<b>Method: 7470A</b>						
TMW02042015	280-67662-6	AQ	N	7470A	4/9/2015 8:55:00 AM	S2AVE
TMW03042015	280-67662-7	AQ	N	7470A	4/9/2015 10:35:00 AM	S2AVE
TMW04042015	280-67662-2	AQ	N	7470A	4/9/2015 12:00:00 PM	S2AVE
TMW06042015	280-67662-10	AQ	N	7470A	4/9/2015 1:10:00 PM	S2AVE
TMW13042015	280-67662-9	AQ	N	7470A	4/9/2015 9:25:00 AM	S2AVE
TMW32042015	280-67662-5	AQ	N	7470A	4/9/2015 9:00:00 AM	S2AVE
TMW40D042015	280-67662-3	AQ	N	7470A	4/9/2015 12:10:00 PM	S2AVE
TMW45042015	280-67662-8	AQ	N	7470A	4/9/2015 11:10:00 AM	S2AVE
TMW49042015	280-67662-4	AQ	N	7470A	4/9/2015 10:31:00 AM	S2AVE
<b>Method: 8081A</b>						
TMW32042015	280-67662-5	AQ	N	3510C	4/9/2015 9:00:00 AM	S2AVE
TMW40D042015	280-67662-3	AQ	N	3510C	4/9/2015 12:10:00 PM	S2AVE
TMW45042015	280-67662-8	AQ	N	3510C	4/9/2015 11:10:00 AM	S2AVE
TMW49042015	280-67662-4	AQ	N	3510C	4/9/2015 10:31:00 AM	S2AVE
<b>Method: 8260B</b>						
TB-07-042015	280-67662-1	AQ	TB	5030	4/9/2015 8:00:00 AM	S2AVE
TMW02042015	280-67662-6	AQ	N	5030	4/9/2015 8:55:00 AM	S2AVE
TMW03042015	280-67662-7	AQ	N	5030	4/9/2015 10:35:00 AM	S2AVE
TMW04042015	280-67662-2	AQ	N	5030	4/9/2015 12:00:00 PM	S2AVE
TMW06042015	280-67662-10	AQ	N	5030	4/9/2015 1:10:00 PM	S2AVE

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Page 3 of 6



## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 8260B</b>						
TMW13042015	280-67662-9	AQ	N	5030	4/9/2015 9:25:00 AM	S2AVE
TMW32042015	280-67662-5	AQ	N	5030	4/9/2015 9:00:00 AM	S2AVE
TMW40D042015	280-67662-3	AQ	N	5030	4/9/2015 12:10:00 PM	S2AVE
TMW45042015	280-67662-8	AQ	N	5030	4/9/2015 11:10:00 AM	S2AVE
TMW49042015	280-67662-4	AQ	N	5030	4/9/2015 10:31:00 AM	S2AVE
<b>Method: 8270D</b>						
TMW04042015	280-67662-2	AQ	N	3520C	4/9/2015 12:00:00 PM	S2AVE
TMW06042015	280-67662-10	AQ	N	3520C	4/9/2015 1:10:00 PM	S2AVE
TMW32042015	280-67662-5	AQ	N	3520C	4/9/2015 9:00:00 AM	S2AVE
TMW40D042015	280-67662-3	AQ	N	3520C	4/9/2015 12:10:00 PM	S2AVE
TMW45042015	280-67662-8	AQ	N	3520C	4/9/2015 11:10:00 AM	S2AVE
TMW49042015	280-67662-4	AQ	N	3520C	4/9/2015 10:31:00 AM	S2AVE
<b>Method: 8330B</b>						
TMW02042015	280-67662-6	AQ	N	3535	4/9/2015 8:55:00 AM	S2AVE
TMW03042015	280-67662-7	AQ	N	3535	4/9/2015 10:35:00 AM	S2AVE
TMW04042015	280-67662-2	AQ	N	3535	4/9/2015 12:00:00 PM	S2AVE
TMW06042015	280-67662-10	AQ	N	3535	4/9/2015 1:10:00 PM	S2AVE
TMW32042015	280-67662-5	AQ	N	3535	4/9/2015 9:00:00 AM	S2AVE
TMW40D042015	280-67662-3	AQ	N	3535	4/9/2015 12:10:00 PM	S2AVE
TMW45042015	280-67662-8	AQ	N	3535	4/9/2015 11:10:00 AM	S2AVE
TMW49042015	280-67662-4	AQ	N	3535	4/9/2015 10:31:00 AM	S2AVE
<b>Method: 9056</b>						
TMW02042015	280-67662-6	AQ	N	METHOD	4/9/2015 8:55:00 AM	S2AVE
TMW03042015	280-67662-7	AQ	N	METHOD	4/9/2015 10:35:00 AM	S2AVE



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 9056</b>						
TMW04042015	280-67662-2	AQ	N	METHOD	4/9/2015 12:00:00 PM	S2AVE
TMW06042015	280-67662-10	AQ	N	METHOD	4/9/2015 1:10:00 PM	S2AVE
TMW13042015	280-67662-9	AQ	N	METHOD	4/9/2015 9:25:00 AM	S2AVE
TMW32042015	280-67662-5	AQ	N	METHOD	4/9/2015 9:00:00 AM	S2AVE
TMW40D042015	280-67662-3	AQ	N	METHOD	4/9/2015 12:10:00 PM	S2AVE
TMW45042015	280-67662-8	AQ	N	METHOD	4/9/2015 11:10:00 AM	S2AVE
TMW49042015	280-67662-4	AQ	N	METHOD	4/9/2015 10:31:00 AM	S2AVE



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
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### *Validation Label Legend*

<i>Label Code</i>	<i>Label Description</i>	<i>EPA Level</i>
S1VE	Stage_1_Validation_Electronic	N/A
S1VM	Stage_1_Validation_Manual	N/A
S1VEM	Stage_1_Validation_Electronic_and_Manual	N/A
S2AVE	Stage_2A_Validation_Electronic	Level 3 w/o calibration
S2AVM	Stage_2A_Validation_Manual	Level 3 w/o calibration
S2AVEM	Stage_2A_Validation_Electronic_and_Manual	Level 3 w/o calibration
S2BVE	Stage_2B_Validation_Electronic	Level 3 with calibration
S2BVM	Stage_2B_Validation_Manual	Level 3 with calibration
S2BVEM	Stage_2B_Validation_Electronic_and_Manual	Level 3 with calibration
S3VE	Stage_3_Validation_Electronic	Level 4
S3VM	Stage_3_Validation_Manual	Level 4
S3VEM	Stage_3_Validation_Electronic_and_Manual	Level 4
S4VE	Stage_4_Validation_Electronic	Level 4
S4VM	Stage_4_Validation_Manual	Level 4
S4VEM	Stage_4_Validation_Electronic_and_Manual	Level 4
NV	Not_Validated	N/A

## Surrogate Outlier Report

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method:</b> 8270D
<b>Matrix:</b> AQ

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
TMW04042015	Terphenyl-d14	41	50.00-135.00	No Affected Compounds	

<b>Method:</b> 8330B
<b>Matrix:</b> AQ

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
TMW04042015	1,2-DINITROBENZENE	137	75.00-118.00	All Target Analytes	J(all detects)

Project Name and Number: 102012 - FWDA 102012 GW

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ADR version 1.9.0.325

Page 1 of 1

## Trip Blank Outlier Report

Lab Reporting Batch ID: 280-67662-1

Laboratory: TA DEN

EDD Filename: 280-67662-1

eQAPP Name: FtWingate\_Primary\_120405

Method: 8260B				
Matrix: AQ				
Trip Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
TB-07-042015(RES)	4/9/2015 8:00:00 AM	ACETONE	2.3 ug/L	TMW02042015 TMW03042015 TMW04042015 TMW06042015 TMW13042015 TMW32042015 TMW40D042015 TMW45042015 TMW49042015

*The following samples and their listed target analytes were qualified due to contamination reported in this blank*

Sample ID	Analyte	Reported Result	Modified Final Result
TMW02042015(RES)	ACETONE	3.6 ug/L	3.6U ug/L
TMW03042015(RES)	ACETONE	4.1 ug/L	4.1U ug/L
TMW04042015(RES)	ACETONE	3.9 ug/L	3.9U ug/L
TMW06042015(RES)	ACETONE	5.6 ug/L	5.6U ug/L
TMW13042015(RES)	ACETONE	3.0 ug/L	3.0U ug/L
TMW32042015(RES)	ACETONE	3.1 ug/L	3.1U ug/L
TMW40D042015(RES)	ACETONE	3.3 ug/L	3.3U ug/L
TMW45042015(RES)	ACETONE	5.8 ug/L	5.8U ug/L
TMW49042015(RES)	ACETONE	3.8 ug/L	3.8U ug/L

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 12:16:52 PM

ADR version 1.9.0.325

Page 1 of 1

**CASE NARRATIVE**

**Client: Sundance Consulting, Inc.**  
**Project: Fort Wingate, New Mexico**  
**Report Number: 280-67662-2**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

**Sample Receipt**

The following report contains the analytical results for six water samples received April 10, 2015, according to documented sample acceptance procedures. The samples were received at temperatures of 1.8°C, 0.3°C, 3.4°C, 3.8°C, 0.3°C, 0.5°C, -0.7°C and 3.5°C.

Sample TMW04042015 (280-67662-2) is marked for both 8270D and 8081A on the chain-of-custody. Two 1L amber bottles were received for this sample, both indicating 8270D analysis. Sufficient volume is available for the two requested analyses. The client was notified on April 13, 2015, and instructed the laboratory to cancel the 8081A analysis for this sample.

Additional samples/analyses requested on the chain-of-custody are reported under separate cover (280-67662-1).

No other anomalies were encountered during sample receipt.

**GC/MS Semivolatiles - 8270D**

Samples TMW04042015 (280-67662-2), TMW40D042015 (280-67662-3), TMW49042015 (280-67662-4), TMW32042015 (280-67662-5), TMW45042015 (280-67662-8) and TMW06042015 (280-67662-10) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 04/11/2015 and analyzed on 04/18/2015 and 04/23/2015.

Please note the Caprolactam data are reported under separate cover, as the laboratory does not hold DOD ELAP certification for this compound. The laboratory does not maintain quarterly QC requirements for precision, accuracy and detections.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

MS/MSD analyses for prep batch 280-272761 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.





## ***Data Qualifier Summary***

Lab Reporting Batch ID: 280-67662-2

Laboratory: TA DEN

EDD Filename: 280-67662-2

eQAPP Name: FtWingate\_Primary\_120405

**No Data Review Qualifiers Applied.**



## Data Review Summary

Lab Reporting Batch ID: 280-67662-2

Laboratory: TA DEN

EDD Filename: 280-67662-2

eQAPP Name: FtWingate\_Primary\_120405

<i>Validation Area</i>	<i>Note</i>
Technical Holding Times	A
Temperature	A
Initial Calibration	N
Continuing Calibration/Initial Calibration Verification	N
Method Blanks	A
Surrogate/Tracer Spikes	SR
Matrix Spike/Matrix Spike Duplicates	N
Laboratory Duplicates	N
Laboratory Replicates	N
Laboratory Control Samples	A
Compound Quantitation	A
Field Duplicates	N
Field Triplicates	N
Field Blanks	N

A = Acceptable, N = Not provided/applicable, SR = See report

The contents of this report reflect findings made by ADR during Automated Data Review, manual applied qualifiers are not considered. Please refer to the Overall Qualifier Summary report for manual qualifiers.



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Lab Reporting Batch: 280-67662-2</b>						
<b>Method: 8270D</b>						
TMW04042015	280-67662-2	AQ	N	3520C	4/9/2015 12:00:00 PM	S2AVE
TMW06042015	280-67662-10	AQ	N	3520C	4/9/2015 1:10:00 PM	S2AVE
TMW32042015	280-67662-5	AQ	N	3520C	4/9/2015 9:00:00 AM	S2AVE
TMW40D042015	280-67662-3	AQ	N	3520C	4/9/2015 12:10:00 PM	S2AVE
TMW45042015	280-67662-8	AQ	N	3520C	4/9/2015 11:10:00 AM	S2AVE
TMW49042015	280-67662-4	AQ	N	3520C	4/9/2015 10:31:00 AM	S2AVE



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
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### *Validation Label Legend*

<i>Label Code</i>	<i>Label Description</i>	<i>EPA Level</i>
S1VE	Stage_1_Validation_Electronic	N/A
S1VM	Stage_1_Validation_Manual	N/A
S1VEM	Stage_1_Validation_Electronic_and_Manual	N/A
S2AVE	Stage_2A_Validation_Electronic	Level 3 w/o calibration
S2AVM	Stage_2A_Validation_Manual	Level 3 w/o calibration
S2AVEM	Stage_2A_Validation_Electronic_and_Manual	Level 3 w/o calibration
S2BVE	Stage_2B_Validation_Electronic	Level 3 with calibration
S2BVM	Stage_2B_Validation_Manual	Level 3 with calibration
S2BVEM	Stage_2B_Validation_Electronic_and_Manual	Level 3 with calibration
S3VE	Stage_3_Validation_Electronic	Level 4
S3VM	Stage_3_Validation_Manual	Level 4
S3VEM	Stage_3_Validation_Electronic_and_Manual	Level 4
S4VE	Stage_4_Validation_Electronic	Level 4
S4VM	Stage_4_Validation_Manual	Level 4
S4VEM	Stage_4_Validation_Electronic_and_Manual	Level 4
NV	Not_Validated	N/A

## Surrogate Outlier Report

Lab Reporting Batch ID: 280-67662-2

Laboratory: TA DEN

EDD Filename: 280-67662-2

eQAPP Name: FtWingate\_Primary\_120405

<b>Method:</b> 8270D
<b>Matrix:</b> AQ

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
<b>TMW04042015</b>	Terphenyl-d14	41	50.00-135.00	No Affected Compounds	

**CASE NARRATIVE**  
**Client: Sundance Consulting, Inc.**  
**Project: Fort Wingate, New Mexico**  
**Report Number: 280-67711-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

**Sample Receipt**

The following report contains the analytical results for four water samples received April 11, 2015, according to documented sample acceptance procedures. The samples were received at temperatures of 1.0°C, 1.4°C, 5.6°C, 0.9°C and 1.2°C.

The 8081A page of the chain-of-custody lists the sample ID as DMW43042015, but all other pages of the COC lists the ID as DTW43042015 (280-67711-2). The sample ID was logged as DTW43042015. The client was notified on April 13, 2015.

Please note the Caprolactam data are reported under separate cover (280-67711-2), as the laboratory does not hold DOD ELAP certification for this compound.

No other anomalies were encountered during sample receipt.

**GC/MS Volatiles - 8260B**

Samples TMW43042015 (280-67711-1), DTW43042015 (280-67711-2), TB-08-042015 (280-67711-3) and TMW47042015 (280-67711-4) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/21/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Methylene Chloride was detected in method blank MB 280-273642/8 at a level that was less than one half the reporting limit; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**GC/MS Semivolatiles - 8270D**

Samples TMW43042015 (280-67711-1), DTW43042015 (280-67711-2) and TMW47042015 (280-67711-4) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 04/15/2015 and analyzed on 04/18/2015.

Please note the Caprolactam data are reported under separate cover (280-67711-2), as the laboratory does not hold DOD ELAP certification for this compound.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

The LCS associated with prep batch 280-273368 exhibited a percent recovery below the QC control limits for 2,3,4,6-Tetrachlorophenol. The laboratory's spike mix was updated in early 2015 to include 2,3,4,6-Tetrachlorophenol, but this compound was not part of the original project spike list. The project spike list has been updated to include this compound going forward. As this anomaly was determined after the holding times had expired, corrective action was not performed. The associated data have been flagged "Q" in accordance with the DOD QSM.

The LCS associated with prep batch 280-273368 exhibited a percent recovery below the QC control limits for Acetophenone. As the recovery is within marginal exceedance limits (62-135%), corrective action is deemed unnecessary. The associated data have been flagged "Q" in accordance with the DOD QSM.

The MS/MSD associated with prep batch 280-273368 was performed on sample TMW43042015 (280-67711-1). The MS/MSD exhibited spike compound recoveries and/or RPD data outside the QC control limits for several analytes. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample have been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organochlorine Pesticides - 8081A**

Samples TMW43042015 (280-67711-1), DTW43042015 (280-67711-2) and TMW47042015 (280-67711-4) were analyzed for chlorinated pesticides in accordance with EPA SW-846 Method 8081A. The samples were prepared on 04/13/2015 and analyzed on 04/15/2015.

TestAmerica Denver's practice for the reporting of dual column data in packages requiring forms and/or raw data is to report the surrogates from both columns, and the preferred result for any given target analyte from the analyst selected column. The preferred results for target analytes and surrogates are reported as PRIMARY on the Sample Datasheets.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Samples MB 280-272509/1-A and LCS 280-272509/2-A required a mercury clean-up to reduce matrix interferences caused by sulfur.

The MS/MSD associated with prep batch 280-272509 was performed on sample TMW43042015 (280-67711-1). The MS/MSD exhibited spike compound recoveries outside the QC control limits for Toxaphene. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample has been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Explosives - 8330B**

Samples TMW43042015 (280-67711-1), DTW43042015 (280-67711-2) and TMW47042015 (280-67711-4) were analyzed for explosives in accordance with EPA SW-846 Method 8330B. The samples were prepared on 04/13/2015 and analyzed on 04/16/2015 and 04/17/2015.

TestAmerica Denver's practice for the reporting of dual column data in packages requiring forms and/or raw data is to report the surrogates from both columns, and the preferred result for any given target analyte from the analyst selected column. The preferred results for target analytes and surrogates are reported as PRIMARY on the Sample Datasheets.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows:

The cartridges were eluted with 0.1% Acetic Acid in ACN instead of ACN to increase Tetryl recovery. This deviation was performed with QA and supervisor approval. The SOP is currently under revision to capture this change.

2-Amino-4,6-dinitrotoluene was detected in method blank MB 280-272447/1-A at a level that was less than the reporting limit on the back column. The front column result is ND; therefore, the method blank is ND. Detections in the associated samples less than 10X the amount found in the blank are suspect due to potential interferences on the confirmation column. As no detectable concentration of 2-Amino-4,6-dinitrotoluene is present in the associated samples, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Perchlorate - 6860**

Samples TMW43042015 (280-67711-1), DTW43042015 (280-67711-2) and TMW47042015 (280-67711-4) were analyzed for Perchlorate in accordance with SW846 6860. The samples were analyzed on 04/22/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Total Metals - 6010C**

Samples TMW43042015 (280-67711-1), DTW43042015 (280-67711-2) and TMW47042015 (280-67711-4) were analyzed for Total Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 04/14/2015 and analyzed on 04/14/2015, 04/27/2015 and 04/28/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

The MS/MSD associated with prep batch 280-272377 was performed on sample TMW43042015 (280-67711-1). The MS/MSD exhibited a spike compound recovery outside the QC control limits for Aluminum. In addition, the MS/MSD spike compound recoveries and RPD data could not be reliably calculated for Sodium because the sample concentration was greater than four times the spike amounts. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample have been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Dissolved Metals - 6010C**

Samples TMW43042015 (280-67711-1), DTW43042015 (280-67711-2) and TMW47042015 (280-67711-4) were analyzed for Dissolved Metals in accordance with EPA SW-846 Method 6010C. The samples were prepared on 04/14/2015 and analyzed on 04/16/2015,

04/17/2015 and 04/18/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high concentrations of target analytes and/or matrix interference, samples TMW43042015 (280-67711-1), DTW43042015 (280-67711-2) and TMW47042015 (280-67711-4) had to be analyzed at dilutions. The reporting limits have been adjusted relative to the dilutions required.

The MS/MSD associated with prep batch 280-272352 was performed on sample TMW43042015 (280-67711-1). The MS/MSD spike compound recoveries and RPD data could not be reliably calculated for Sodium because the sample concentration was greater than four times the spike amounts. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Total Metals - 6020A**

Samples TMW43042015 (280-67711-1), DTW43042015 (280-67711-2) and TMW47042015 (280-67711-4) were analyzed for total metals (ICPMS) in accordance with SW846 6020A. The samples were prepared on 04/14/2015 and analyzed on 04/16/2015 and 04/17/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Silver was detected in method blank MB 280-272372/1-A at a level that was less than one half the reporting limit; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

The ICSA solution associated with analytical batch 280-273341 was above DOD QSM Version 4.2 criteria of less than the LOD for Chromium. The laboratory has confirmed with the vendor that this element is a trace impurity in the ICSA solution; therefore, no corrective action was needed. The associated data have been flagged "Q" in accordance with the DOD QSM.

The post digestion spike (PDS) and serial dilution (SD) associated with prep batch 280-273341 was performed on sample TMW43042015 (280-67711-1). The SD exhibited a percent recovery outside the control limits for Barium; however, the PDS performed on this sample was in control.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Dissolved Metals - 6020A**

Samples TMW43042015 (280-67711-1), DTW43042015 (280-67711-2) and TMW47042015 (280-67711-4) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 04/14/2015 and analyzed on 04/15/2015 and 04/17/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

Manganese was detected in method blank MB 280-272349/1-A at a level that was less than one half the reporting limit; therefore, corrective action was deemed unnecessary. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

The low level Continuing Calibration Verification (CCVL) standard associated with analytical batch 280-273341 exhibited a %Difference (%D) value out of range, biased high, for Barium. As the detections in the associated samples are greater than ten times the CCVL level, corrective action was deemed unnecessary. The associated data have been flagged "Q" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Total Mercury - 7470A**

Samples TMW43042015 (280-67711-1), DTW43042015 (280-67711-2) and TMW47042015 (280-67711-4) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 04/12/2015 and analyzed on 04/14/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### **Dissolved Mercury - 7470A**

Samples TMW43042015 (280-67711-1), DTW43042015 (280-67711-2) and TMW47042015 (280-67711-4) were analyzed for dissolved mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 04/13/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

MS/MSD analyses for prep batch 280-66686 were not requested.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



**Nitrate & Nitrite - 9056**

Samples TMW43042015 (280-67711-1), DTW43042015 (280-67711-2) and TMW47042015 (280-67711-4) were analyzed for anions (48 hours) in accordance with EPA SW-846 Method 9056. The samples were analyzed on 04/11/2015.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

The MS/MSD associated with analytical batch 280-272288 was performed on sample TMW43042015 (280-67711-1). The MS/MSD exhibited spike compound recoveries outside the QC control limits for Nitrate as N. The acceptable LCS/LCSD analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary. The associated data in the parent sample has been flagged "J" in accordance with the DOD QSM.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



### Field QC Assignments and Associated Samples

**EDD File Name:** 280-67711-1  
**eQapp Name:** FtWingate\_Primary\_120405

	Associated Samples	Sample Collection Date
<b>Field QC</b> DTW43042015 <b>QC Type:</b> FD	TMW43042015	4/10/2015 8:25:00 AM
<b>Field QC</b> TB-08-042015 <b>QC Type:</b> TB		
	DTW43042015	4/10/2015 8:25:00 AM
	TMW43042015	4/10/2015 8:25:00 AM
	TMW47042015	4/10/2015 9:30:00 AM



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67711-1

Laboratory: TA DEN

EDD Filename: 280-67711-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS	
<b>Method:</b>	6010C	<b>Matrix:</b> AQ

Sample ID:DTW43042015      4/10/2015 8:25:00      Collected:AM      Analysis Type:RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1100	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:DTW43042015      4/10/2015 8:25:00      Collected:AM      Analysis Type:RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	41	J	31	LOD	300	LOQ	ug/L	J	RI, Ms
IRON	25	J	30	LOD	100	LOQ	ug/L	J	RI
POTASSIUM	800	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW43042015      4/10/2015 8:25:00      Collected:AM      Analysis Type:RE2/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	790	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW43042015      4/10/2015 8:25:00      Collected:AM      Analysis Type:RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1000	J	250	LOD	3000	LOQ	ug/L	J	RI

Sample ID:TMW43042015      4/10/2015 8:25:00      Collected:AM      Analysis Type:RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	200	J	31	LOD	300	LOQ	ug/L	J	RI, Ms

Sample ID:TMW47042015      4/10/2015 9:30:00      Collected:AM      Analysis Type:RE2/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	27	J	30	LOD	100	LOQ	ug/L	J	RI

Sample ID:TMW47042015      4/10/2015 9:30:00      Collected:AM      Analysis Type:RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1200	J	250	LOD	3000	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67711-1

Laboratory: TA DEN

EDD Filename: 280-67711-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS								
<b>Method:</b>	6010C	<b>Matrix:</b>	AQ						

Sample ID: TMW47042015      Collected: 4/10/2015 9:30:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	23	J	31	LOD	300	LOQ	ug/L	J	RI, Ms
IRON	31	J	30	LOD	100	LOQ	ug/L	J	RI
POTASSIUM	800	J	250	LOD	3000	LOQ	ug/L	J	RI

<b>Method Category:</b>	METALS								
<b>Method:</b>	6020A	<b>Matrix:</b>	AQ						

Sample ID: DTW43042015      Collected: 4/10/2015 8:25:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.11	J	0.24	LOD	1.0	LOQ	ug/L	J	RI, Fd
COBALT	0.094	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	0.32	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SILVER	0.14	J	0.10	LOD	5.0	LOQ	ug/L	J	RI, Fd
THALLIUM	0.13	J	0.20	LOD	1.0	LOQ	ug/L	J	RI, Fd
VANADIUM	2.0	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID: DTW43042015      Collected: 4/10/2015 8:25:00 AM      Analysis Type: RES/TOT      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.23	J	0.24	LOD	1.0	LOQ	ug/L	J	RI
COBALT	0.12	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
THALLIUM	0.13	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
VANADIUM	1.6	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID: TMW43042015      Collected: 4/10/2015 8:25:00 AM      Analysis Type: RES/DIS      Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.24	U	0.24	LOD	1.0	LOQ	ug/L	UJ	Fd
COBALT	0.096	J	0.10	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	0.38	J	0.90	LOD	3.0	LOQ	ug/L	J	RI
SILVER	0.10	U	0.10	LOD	5.0	LOQ	ug/L	UJ	Fd
THALLIUM	0.057	J	0.20	LOD	1.0	LOQ	ug/L	J	RI, Fd
VANADIUM	1.6	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 10:59:30 AM

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Page 2 of 6



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67711-1

Laboratory: TA DEN

EDD Filename: 280-67711-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	METALS	
<b>Method:</b>	6020A	<b>Matrix:</b> AQ

Sample ID:TMW43042015		4/10/2015 8:25:00		Collected:AM				Analysis Type:RES/TOT		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
COBALT	0.095	J	0.10	LOD	1.0	LOQ	ug/L	J	RI		
THALLIUM	0.13	J	0.20	LOD	1.0	LOQ	ug/L	J	RI		
VANADIUM	1.5	J	1.0	LOD	6.0	LOQ	ug/L	J	RI		
ZINC	2.1	J	6.0	LOD	20	LOQ	ug/L	J	RI		

Sample ID:TMW47042015		4/10/2015 9:30:00		Collected:AM				Analysis Type:RES/DIS		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
COBALT	0.072	J	0.10	LOD	1.0	LOQ	ug/L	J	RI		

Sample ID:TMW47042015		4/10/2015 9:30:00		Collected:AM				Analysis Type:RES/TOT		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
COPPER	1.1	J	1.5	LOD	2.0	LOQ	ug/L	J	RI		
NICKEL	0.38	J	0.90	LOD	3.0	LOQ	ug/L	J	RI		
VANADIUM	1.0	J	1.0	LOD	6.0	LOQ	ug/L	J	RI		
ZINC	3.0	J	6.0	LOD	20	LOQ	ug/L	J	RI		

<b>Method Category:</b>	SVOA	
<b>Method:</b>	8081A	<b>Matrix:</b> AQ

Sample ID:DTW43042015		4/10/2015 8:25:00		Collected:AM				Analysis Type:RES		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
TOXAPHENE	0.88	U	0.88	LOD	5.5	LOQ	ug/L	UJ	Ms		

Sample ID:TMW43042015		4/10/2015 8:25:00		Collected:AM				Analysis Type:RES		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
TOXAPHENE	0.96	U J	0.96	LOD	6.0	LOQ	ug/L	UJ	Ms		

Sample ID:TMW47042015		4/10/2015 9:30:00		Collected:AM				Analysis Type:RES		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
TOXAPHENE	0.84	U	0.84	LOD	5.2	LOQ	ug/L	UJ	Ms		

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 10:59:30 AM

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Page 3 of 6



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67711-1

Laboratory: TA DEN

EDD Filename: 280-67711-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA	
<b>Method:</b>	8081A	<b>Matrix:</b> AQ

<b>Method Category:</b>	SVOA	
<b>Method:</b>	8270D	<b>Matrix:</b> AQ

Sample ID:DTW43042015		4/10/2015 8:25:00			Collected:AM			Analysis Type:RES-ACID		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
2,3,4,6-TETRACHLOROPHENOL	1.9	U Q	1.9	LOD	49	LOQ	ug/L	UJ	Lcs		

Sample ID:DTW43042015		4/10/2015 8:25:00			Collected:AM			Analysis Type:RES-BASE/NEUTRAL		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
BENZALDEHYDE	1.9	U	1.9	LOD	9.7	LOQ	ug/L	UJ	Ms, Lcs		
BENZIDINE	97	U	97	LOD	190	LOQ	ug/L	UJ	Ms		
HEXACHLOROCYCLOPENTADIENE	19	U	19	LOD	49	LOQ	ug/L	UJ	Ms, Lcs		

Sample ID:TMW43042015		4/10/2015 8:25:00			Collected:AM			Analysis Type:RES-ACID		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
2,3,4,6-TETRACHLOROPHENOL	2.2	U J Q	2.2	LOD	54	LOQ	ug/L	UJ	Lcs		

Sample ID:TMW43042015		4/10/2015 8:25:00			Collected:AM			Analysis Type:RES-BASE/NEUTRAL		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
BENZALDEHYDE	2.2	U J	2.2	LOD	11	LOQ	ug/L	UJ	Ms, Lcs		
BENZIDINE	110	U J	110	LOD	220	LOQ	ug/L	UJ	Ms		
HEXACHLOROCYCLOPENTADIENE	22	U J	22	LOD	54	LOQ	ug/L	UJ	Ms, Lcs		

Sample ID:TMW47042015		4/10/2015 9:30:00			Collected:AM			Analysis Type:RES-ACID		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
2,3,4,6-TETRACHLOROPHENOL	2.1	U Q	2.1	LOD	52	LOQ	ug/L	UJ	Lcs		

Sample ID:TMW47042015		4/10/2015 9:30:00			Collected:AM			Analysis Type:RES-BASE/NEUTRAL		Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code		
BENZALDEHYDE	2.1	U	2.1	LOD	10	LOQ	ug/L	UJ	Ms, Lcs		
BENZIDINE	100	U	100	LOD	210	LOQ	ug/L	UJ	Ms		
HEXACHLOROCYCLOPENTADIENE	21	U	21	LOD	52	LOQ	ug/L	UJ	Ms, Lcs		

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 10:59:30 AM

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Page 4 of 6



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67711-1

Laboratory: TA DEN

EDD Filename: 280-67711-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method Category:</b>	SVOA	<b>Matrix:</b>	AQ
<b>Method:</b>	8330B		

<b>Sample ID:</b> DTW43042015	<b>Collected:</b> AM	<b>4/10/2015 8:25:00</b>	<b>Analysis Type:</b> RES	<b>Dilution:</b> 1					
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.27	J M	0.17	LOD	0.44	LOQ	ug/L	J	RI, Fd

<b>Sample ID:</b> TMW43042015	<b>Collected:</b> AM	<b>4/10/2015 8:25:00</b>	<b>Analysis Type:</b> RES	<b>Dilution:</b> 1					
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.17	U	0.17	LOD	0.44	LOQ	ug/L	UJ	Fd

<b>Method Category:</b>	VOA	<b>Matrix:</b>	AQ
<b>Method:</b>	8260B		

<b>Sample ID:</b> DTW43042015	<b>Collected:</b> AM	<b>4/10/2015 8:25:00</b>	<b>Analysis Type:</b> RES	<b>Dilution:</b> 1					
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.46	J	0.80	LOD	5.0	LOQ	ug/L	U	Mb, Tb

<b>Sample ID:</b> TB-08-042015	<b>Collected:</b> AM	<b>4/10/2015 8:00:00</b>	<b>Analysis Type:</b> RES	<b>Dilution:</b> 1					
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.46	J	0.80	LOD	5.0	LOQ	ug/L	U	Mb

<b>Sample ID:</b> TMW43042015	<b>Collected:</b> AM	<b>4/10/2015 8:25:00</b>	<b>Analysis Type:</b> RES	<b>Dilution:</b> 1					
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.43	J	0.80	LOD	5.0	LOQ	ug/L	U	Mb, Tb

<b>Sample ID:</b> TMW47042015	<b>Collected:</b> AM	<b>4/10/2015 9:30:00</b>	<b>Analysis Type:</b> RES	<b>Dilution:</b> 1					
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CARBON DISULFIDE	0.65	J	1.6	LOD	2.0	LOQ	ug/L	J	RI
METHYLENE CHLORIDE	0.45	J	0.80	LOD	5.0	LOQ	ug/L	U	Mb, Tb

\* denotes a non-reportable result

Project Name and Number: 102012 - FWDA 102012 GW



## Data Qualifier Summary

Lab Reporting Batch ID: 280-67711-1

Laboratory: TA DEN

EDD Filename: 280-67711-1

eQAPP Name: FtWingate\_Primary\_120405

### Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
Fd	Field Duplicate Precision
Lcs	Laboratory Control Spike Lower Estimation
Mb	Method Blank Contamination
Ms	Matrix Spike Lower Estimation
Ms	Matrix Spike Precision
RI	Reporting Limit Trace Value
Tb	Trip Blank Contamination

\* denotes a non-reportable result

**Project Name and Number: 102012 - FWDA 102012 GW**





## Data Review Summary

Lab Reporting Batch ID: 280-67711-1

Laboratory: TA DEN

EDD Filename: 280-67711-1

eQAPP Name: FtWingate\_Primary\_120405

<i>Validation Area</i>	<i>Note</i>
Technical Holding Times	A
Temperature	A
Initial Calibration	N
Continuing Calibration/Initial Calibration Verification	N
Method Blanks	SR
Surrogate/Tracer Spikes	A
Matrix Spike/Matrix Spike Duplicates	SR
Laboratory Duplicates	A
Laboratory Replicates	N
Laboratory Control Samples	SR
Compound Quantitation	SR
Field Duplicates	SR
Field Triplicates	N
Field Blanks	SR

A = Acceptable, N = Not provided/applicable, SR = See report

The contents of this report reflect findings made by ADR during Automated Data Review, manual applied qualifiers are not considered. Please refer to the Overall Qualifier Summary report for manual qualifiers.

## Field Duplicate Outlier Report

Lab Reporting Batch ID: 280-67711-1

Laboratory: TA DEN

EDD Filename: 280-67711-1

eQAPP Name: FtWingate\_Primary\_120405

**Method:** 6020A**Matrix:** AQ

<i>Analyte</i>	<i>Concentration (ug/L)</i>		<i>Sample RPD</i>	<i>eQAPP RPD</i>	<i>Flag</i>
	TMW43042015 (DIS)	DTW43042015 (DIS)			
BERYLLIUM	1.0 U	0.11	200	50.00	J (all detects) UJ (all non-detects)
SILVER	5.0 U	0.14	200	50.00	
THALLIUM	0.057	0.13	78	50.00	

**Method:** 8330B**Matrix:** AQ

<i>Analyte</i>	<i>Concentration (ug/L)</i>		<i>Sample RPD</i>	<i>eQAPP RPD</i>	<i>Flag</i>
	TMW43042015	DTW43042015			
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (	0.44 U	0.27	200	50.00	J(all detects) UJ(all non-detects)

**Project Name and Number:** 102012 - FWDA 102012 GW

5/15/2015 10:52:09 AM

ADR version 1.9.0.325

Page 1 of 1

## Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-67711-1

Laboratory: TA DEN

EDD Filename: 280-67711-1

eQAPP Name: FtWingate\_Primary\_120405

**Method:** 8270D**Matrix:** AQ

<b>QC Sample ID (Associated Samples)</b>	<b>Compound</b>	<b>LCS %R</b>	<b>LCSD %R</b>	<b>%R Limits</b>	<b>RPD (Limits)</b>	<b>Affected Compounds</b>	<b>Flag</b>
LCS 280-273368/2-A (DTW43042015 TMW43042015 TMW47042015)	BENZALDEHYDE HEXACHLOROCYCLOPENTADIEN	56 13	- -	70.00-130.00 50.00-130.00	- -	BENZALDEHYDE HEXACHLOROCYCLOPENTADIE	J (all detects) UJ (all non-detects)

**Project Name and Number: 102012 - FWDA 102012 GW**

5/15/2015 10:51:27 AM

ADR version 1.9.0.325

Page 1 of 1



## History of Manual Changes to Automated Data Review Qualifiers

Changed by: Doug Scott

Analyte	Method	Analysis Type	Result	Unit	Reason Code	Original Value	New Value	Edit Time
<b>Field Sample ID:</b> DTW43042015								
<b>2,3,4,6-TETRACHLOROPHENOL</b>	8270D	RES	1.9	ug/L	Laboratory Control Spike Lower		UJ	5/15/2015 10:40
Reason for change:		Low recovery LCS						
<b>SODIUM</b>	6010C	RES/TOT	510000	ug/L	Matrix Spike Lower Estimation	J		5/15/2015 10:46
Reason for change:		4X rule						
<b>Field Sample ID:</b> TMW43042015								
<b>2,3,4,6-TETRACHLOROPHENOL</b>	8270D	RES	2.2	ug/L	Laboratory Control Spike Lower		UJ	5/15/2015 10:40
Reason for change:		Low recovery LCS						
<b>SODIUM</b>	6010C	RE2/TOT	590000	ug/L	Matrix Spike Lower Estimation	J		5/15/2015 10:46
Reason for change:		4X rule						
<b>Field Sample ID:</b> TMW47042015								
<b>2,3,4,6-TETRACHLOROPHENOL</b>	8270D	RES	2.1	ug/L	Laboratory Control Spike Lower		UJ	5/15/2015 10:40
Reason for change:		Low recovery LCS						
<b>SODIUM</b>	6010C	RES/TOT	410000	ug/L	Matrix Spike Lower Estimation	J		5/15/2015 10:46
Reason for change:		4X rule						

## Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-67711-1

Laboratory: TA DEN

EDD Filename: 280-67711-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method: 6010C</b>							
<b>Matrix: AQ</b>							
<b>QC Sample ID (Associated Samples)</b>	<b>Compound</b>	<b>MS %R</b>	<b>MSD %R</b>	<b>%R Limits</b>	<b>RPD (Limits)</b>	<b>Affected Compounds</b>	<b>Flag</b>
TMW43042015MS (TOT) TMW43042015MSD (TOT) (DTW43042015 TMW43042015 TMW47042015)	ALUMINUM SODIUM	- 55	78 62	80.00-120.00 80.00-120.00	- -	ALUMINUM SODIUM	J (all detects) UJ (all non-detects)
<b>Method: 8081A</b>							
<b>Matrix: AQ</b>							
<b>QC Sample ID (Associated Samples)</b>	<b>Compound</b>	<b>MS %R</b>	<b>MSD %R</b>	<b>%R Limits</b>	<b>RPD (Limits)</b>	<b>Affected Compounds</b>	<b>Flag</b>
TMW43042015MSD (DTW43042015 TMW43042015 TMW47042015)	TOXAPHENE	-	61	63.00-142.00	-	TOXAPHENE	J (all detects) UJ (all non-detects)
<b>Method: 8270D</b>							
<b>Matrix: AQ</b>							
<b>QC Sample ID (Associated Samples)</b>	<b>Compound</b>	<b>MS %R</b>	<b>MSD %R</b>	<b>%R Limits</b>	<b>RPD (Limits)</b>	<b>Affected Compounds</b>	<b>Flag</b>
TMW43042015MS TMW43042015MSD (DTW43042015 TMW43042015 TMW47042015)	BENZALDEHYDE BENZIDINE HEXACHLOROCYCLOPENTADIEN	42 0 -	42 0 -	70.00-130.00 10.00-110.00 0.00-53.00	- - 200 (30.00)	BENZALDEHYDE BENZIDINE HEXACHLOROCYCLOPENTADIE	J (all detects) UJ (all non-detects)

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 10:50:53 AM

ADR version 1.9.0.325

Page 1 of 1

## Method Blank Outlier Report

Lab Reporting Batch ID: 280-67711-1

Laboratory: TA DEN

EDD Filename: 280-67711-1

eQAPP Name: FtWingate\_Primary\_120405

Method: 6020A Matrix: AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-272349/1-A	4/15/2015 3:11:00 AM	MANGANESE	0.542 ug/L	DTW43042015 TMW43042015 TMW47042015
MB 280-272372/1-A	4/16/2015 2:25:00 AM	SILVER	0.0560 ug/L	DTW43042015 TMW43042015 TMW47042015

Method: 8260B Matrix: AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-273642/8	4/20/2015 8:58:00 PM	METHYLENE CHLORIDE	0.993 ug/L	DTW43042015 TB-08-042015 TMW43042015 TMW47042015

**The following samples and their listed target analytes were qualified due to contamination reported in this blank**

Sample ID	Analyte	Reported Result	Modified Final Result
DTW43042015(RES)	METHYLENE CHLORIDE	0.46 ug/L	0.46U ug/L
TB-08-042015(RES)	METHYLENE CHLORIDE	0.46 ug/L	0.46U ug/L
TMW43042015(RES)	METHYLENE CHLORIDE	0.43 ug/L	0.43U ug/L
TMW47042015(RES)	METHYLENE CHLORIDE	0.45 ug/L	0.45U ug/L

Project Name and Number: 102012 - FWDA 102012 GW

5/15/2015 10:52:45 AM

ADR version 1.9.0.325

Page 1 of 1



## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Lab Reporting Batch: 280-67711-1</b>						
<b>Method: 6010C</b>						
DTW43042015	280-67711-2	AQ	FD	3005A	4/10/2015 8:25:00 AM	S2AVE
DTW43042015	280-67711-2	AQ	FD	3010A	4/10/2015 8:25:00 AM	S2AVE
TMW43042015	280-67711-1	AQ	N	3005A	4/10/2015 8:25:00 AM	S2AVE
TMW43042015	280-67711-1	AQ	N	3010A	4/10/2015 8:25:00 AM	S2AVE
TMW43042015MS	280-67711-1MS	AQ	MS	3005A	4/10/2015 8:25:00 AM	S2AVE
TMW43042015MS	280-67711-1MS	AQ	MS	3010A	4/10/2015 8:25:00 AM	S2AVE
TMW43042015MSD	280-67711-1MSD	AQ	MSD	3005A	4/10/2015 8:25:00 AM	S2AVE
TMW43042015MSD	280-67711-1MSD	AQ	MSD	3010A	4/10/2015 8:25:00 AM	S2AVE
TMW47042015	280-67711-4	AQ	N	3005A	4/10/2015 9:30:00 AM	S2AVE
TMW47042015	280-67711-4	AQ	N	3010A	4/10/2015 9:30:00 AM	S2AVE
<b>Method: 6020A</b>						
DTW43042015	280-67711-2	AQ	FD	3005A	4/10/2015 8:25:00 AM	S2AVE
DTW43042015	280-67711-2	AQ	FD	3020A	4/10/2015 8:25:00 AM	S2AVE
TMW43042015	280-67711-1	AQ	N	3005A	4/10/2015 8:25:00 AM	S2AVE
TMW43042015	280-67711-1	AQ	N	3020A	4/10/2015 8:25:00 AM	S2AVE
TMW43042015MS	280-67711-1MS	AQ	MS	3005A	4/10/2015 8:25:00 AM	S2AVE
TMW43042015MS	280-67711-1MS	AQ	MS	3020A	4/10/2015 8:25:00 AM	S2AVE
TMW43042015MSD	280-67711-1MSD	AQ	MSD	3005A	4/10/2015 8:25:00 AM	S2AVE
TMW43042015MSD	280-67711-1MSD	AQ	MSD	3020A	4/10/2015 8:25:00 AM	S2AVE
TMW47042015	280-67711-4	AQ	N	3005A	4/10/2015 9:30:00 AM	S2AVE
TMW47042015	280-67711-4	AQ	N	3020A	4/10/2015 9:30:00 AM	S2AVE
<b>Method: 6860</b>						
DTW43042015	280-67711-2	AQ	FD	METHOD	4/10/2015 8:25:00 AM	S2AVE

5/15/2015 10:56:51 AM

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Page 1 of 4



## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 6860</b>						
TMW43042015	280-67711-1	AQ	N	METHOD	4/10/2015 8:25:00 AM	S2AVE
TMW43042015MS	280-67711-1MS	AQ	MS	METHOD	4/10/2015 8:25:00 AM	S2AVE
TMW43042015MSD	280-67711-1MSD	AQ	MSD	METHOD	4/10/2015 8:25:00 AM	S2AVE
TMW47042015	280-67711-4	AQ	N	METHOD	4/10/2015 9:30:00 AM	S2AVE
<b>Method: 7470A</b>						
DTW43042015	280-67711-2	AQ	FD	7470A	4/10/2015 8:25:00 AM	S2AVE
TMW43042015	280-67711-1	AQ	N	7470A	4/10/2015 8:25:00 AM	S2AVE
TMW43042015MS	280-67711-1MS	AQ	MS	7470A	4/10/2015 8:25:00 AM	S2AVE
TMW43042015MSD	280-67711-1MSD	AQ	MSD	7470A	4/10/2015 8:25:00 AM	S2AVE
TMW47042015	280-67711-4	AQ	N	7470A	4/10/2015 9:30:00 AM	S2AVE
<b>Method: 8081A</b>						
DTW43042015	280-67711-2	AQ	FD	3510C	4/10/2015 8:25:00 AM	S2AVE
TMW43042015	280-67711-1	AQ	N	3510C	4/10/2015 8:25:00 AM	S2AVE
TMW43042015MS	280-67711-1MS	AQ	MS	3510C	4/10/2015 8:25:00 AM	S2AVE
TMW43042015MSD	280-67711-1MSD	AQ	MSD	3510C	4/10/2015 8:25:00 AM	S2AVE
TMW47042015	280-67711-4	AQ	N	3510C	4/10/2015 9:30:00 AM	S2AVE
<b>Method: 8260B</b>						
DTW43042015	280-67711-2	AQ	FD	5030	4/10/2015 8:25:00 AM	S2AVE
TB-08-042015	280-67711-3	AQ	TB	5030	4/10/2015 8:00:00 AM	S2AVE
TMW43042015	280-67711-1	AQ	N	5030	4/10/2015 8:25:00 AM	S2AVE
TMW43042015MS	280-67711-1MS	AQ	MS	5030	4/10/2015 8:25:00 AM	S2AVE
TMW43042015MSD	280-67711-1MSD	AQ	MSD	5030	4/10/2015 8:25:00 AM	S2AVE
TMW47042015	280-67711-4	AQ	N	5030	4/10/2015 9:30:00 AM	S2AVE





## Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Method: 8270D</b>						
DTW43042015	280-67711-2	AQ	FD	3520C	4/10/2015 8:25:00 AM	S2AVE
TMW43042015	280-67711-1	AQ	N	3520C	4/10/2015 8:25:00 AM	S2AVE
TMW43042015MS	280-67711-1MS	AQ	MS	3520C	4/10/2015 8:25:00 AM	S2AVE
TMW43042015MSD	280-67711-1MSD	AQ	MSD	3520C	4/10/2015 8:25:00 AM	S2AVE
TMW47042015	280-67711-4	AQ	N	3520C	4/10/2015 9:30:00 AM	S2AVE
<b>Method: 8330B</b>						
DTW43042015	280-67711-2	AQ	FD	3535	4/10/2015 8:25:00 AM	S2AVE
TMW43042015	280-67711-1	AQ	N	3535	4/10/2015 8:25:00 AM	S2AVE
TMW43042015MS	280-67711-1MS	AQ	MS	3535	4/10/2015 8:25:00 AM	S2AVE
TMW43042015MSD	280-67711-1MSD	AQ	MSD	3535	4/10/2015 8:25:00 AM	S2AVE
TMW47042015	280-67711-4	AQ	N	3535	4/10/2015 9:30:00 AM	S2AVE
<b>Method: 9056</b>						
DTW43042015	280-67711-2	AQ	FD	METHOD	4/10/2015 8:25:00 AM	S2AVE
TMW43042015	280-67711-1	AQ	N	METHOD	4/10/2015 8:25:00 AM	S2AVE
TMW43042015DUP	280-67711-1DUP	AQ	DUP	METHOD	4/10/2015 8:25:00 AM	S2AVE
TMW43042015MS	280-67711-1MS	AQ	MS	METHOD	4/10/2015 8:25:00 AM	S2AVE
TMW43042015MSD	280-67711-1MSD	AQ	MSD	METHOD	4/10/2015 8:25:00 AM	S2AVE
TMW47042015	280-67711-4	AQ	N	METHOD	4/10/2015 9:30:00 AM	S2AVE



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
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### *Validation Label Legend*

<i>Label Code</i>	<i>Label Description</i>	<i>EPA Level</i>
S1VE	Stage_1_Validation_Electronic	N/A
S1VM	Stage_1_Validation_Manual	N/A
S1VEM	Stage_1_Validation_Electronic_and_Manual	N/A
S2AVE	Stage_2A_Validation_Electronic	Level 3 w/o calibration
S2AVM	Stage_2A_Validation_Manual	Level 3 w/o calibration
S2AVEM	Stage_2A_Validation_Electronic_and_Manual	Level 3 w/o calibration
S2BVE	Stage_2B_Validation_Electronic	Level 3 with calibration
S2BVM	Stage_2B_Validation_Manual	Level 3 with calibration
S2BVEM	Stage_2B_Validation_Electronic_and_Manual	Level 3 with calibration
S3VE	Stage_3_Validation_Electronic	Level 4
S3VM	Stage_3_Validation_Manual	Level 4
S3VEM	Stage_3_Validation_Electronic_and_Manual	Level 4
S4VE	Stage_4_Validation_Electronic	Level 4
S4VM	Stage_4_Validation_Manual	Level 4
S4VEM	Stage_4_Validation_Electronic_and_Manual	Level 4
NV	Not_Validated	N/A

## Trip Blank Outlier Report

Lab Reporting Batch ID: 280-67711-1

Laboratory: TA DEN

EDD Filename: 280-67711-1

eQAPP Name: FtWingate\_Primary\_120405

<b>Method:</b> 8260B				
<b>Matrix:</b> AQ				
Trip Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
TB-08-042015(RES)	4/10/2015 8:00:00 AM	METHYLENE CHLORIDE	0.46 ug/L	DTW43042015 TMW43042015 TMW47042015

*The following samples and their listed target analytes were qualified due to contamination reported in this blank*

Sample ID	Analyte	Reported Result	Modified Final Result
DTW43042015(RES)	METHYLENE CHLORIDE	0.46 ug/L	0.46U ug/L
TMW43042015(RES)	METHYLENE CHLORIDE	0.43 ug/L	0.43U ug/L
TMW47042015(RES)	METHYLENE CHLORIDE	0.45 ug/L	0.45U ug/L

**CASE NARRATIVE**

**Client: Sundance Consulting, Inc.**  
**Project: Fort Wingate, New Mexico**  
**Report Number: 280-67711-2**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

**Sample Receipt**

The following report contains the analytical results for three water samples received April 11, 2015, according to documented sample acceptance procedures. The samples were received at temperatures of 1.0°C, 1.4°C, 5.6°C, 0.9°C and 1.2°C.

The 8081A page of the chain-of-custody lists the sample ID as DMW43042015, but all other pages of the COC lists the ID as DTW43042015 (280-67711-2). The sample ID was logged as DTW43042015. The client was notified on April 13, 2015.

Additional samples/analyses requested on the chain-of-custody are reported under separate cover (280-67711-1).

No other anomalies were encountered during sample receipt.

**GC/MS Semivolatiles - 8270D**

Samples TMW43042015 (280-67711-1), DTW43042015 (280-67711-2) and TMW47042015 (280-67711-4) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 04/15/2015 and analyzed on 04/18/2015.

Please note the Caprolactam data are reported under separate cover, as the laboratory does not hold DOD ELAP certification for this compound. The laboratory does not maintain quarterly QC requirements for precision, accuracy and detections.

Reporting limits and method detection limits have been adjusted accordingly for the initial volumes extracted.

A deviation from the Standard Operating Procedure (SOP) occurred. The details are as follows:

The samples were extracted per SW-846 3520C for 18 hours at a pH of 1-2 and 18 hours at a pH of 11-12; however, the laboratory's SOP requires the samples be extracted for 24 hours at each pH range. The laboratory's SOP is in the process of being revised for these changes.

Due to an analyst oversight, the MS/MSD was spiked with the LCS Main and LCS Supp after the acid had been added. Per the SOP, the acid is supposed to be added after the samples are spiked.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



## Field QC Assignments and Associated Samples

**EDD File Name:** 280-67711-2  
**eQapp Name:** FtWingate\_Primary\_120405

	Associated Samples	Sample Collection Date
<b>Field QC</b> DTW43042015 <b>QC Type:</b> FD	TMW43042015	4/10/2015 8:25:00 AM



## ***Data Qualifier Summary***

Lab Reporting Batch ID: 280-67711-2

Laboratory: TA DEN

EDD Filename: 280-67711-2

eQAPP Name: FtWingate\_Primary\_120405

**No Data Review Qualifiers Applied.**



## Data Review Summary

Lab Reporting Batch ID: 280-67711-2

Laboratory: TA DEN

EDD Filename: 280-67711-2

eQAPP Name: FtWingate\_Primary\_120405

<i>Validation Area</i>	<i>Note</i>
Technical Holding Times	A
Temperature	A
Initial Calibration	N
Continuing Calibration/Initial Calibration Verification	N
Method Blanks	A
Surrogate/Tracer Spikes	A
Matrix Spike/Matrix Spike Duplicates	A
Laboratory Duplicates	N
Laboratory Replicates	N
Laboratory Control Samples	A
Compound Quantitation	A
Field Duplicates	A
Field Triplicates	N
Field Blanks	N

A = Acceptable, N = Not provided/applicable, SR = See report

The contents of this report reflect findings made by ADR during Automated Data Review, manual applied qualifiers are not considered. Please refer to the Overall Qualifier Summary report for manual qualifiers.



## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
<b>Lab Reporting Batch: 280-67711-2</b>						
<b>Method: 8270D</b>						
DTW43042015	280-67711-2	AQ	FD	3520C	4/10/2015 8:25:00 AM	S2AVE
TMW43042015	280-67711-1	AQ	N	3520C	4/10/2015 8:25:00 AM	S2AVE
TMW43042015MS	280-67711-1MS	AQ	MS	3520C	4/10/2015 8:25:00 AM	S2AVE
TMW43042015MSD	280-67711-1MSD	AQ	MSD	3520C	4/10/2015 8:25:00 AM	S2AVE
TMW47042015	280-67711-4	AQ	N	3520C	4/10/2015 9:30:00 AM	S2AVE





## *Data Review Sample Summary Report by Analysis Method*

Reviewed By:

Approved By:

Laboratory: TA DEN

<i>Client Sample ID</i>	<i>Lab Sample ID</i>	<i>Matrix</i>	<i>Sample Type</i>	<i>Preparation Method</i>	<i>Collection Date</i>	<i>Validation Code</i>
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### *Validation Label Legend*

<i>Label Code</i>	<i>Label Description</i>	<i>EPA Level</i>
S1VE	Stage_1_Validation_Electronic	N/A
S1VM	Stage_1_Validation_Manual	N/A
S1VEM	Stage_1_Validation_Electronic_and_Manual	N/A
S2AVE	Stage_2A_Validation_Electronic	Level 3 w/o calibration
S2AVM	Stage_2A_Validation_Manual	Level 3 w/o calibration
S2AVEM	Stage_2A_Validation_Electronic_and_Manual	Level 3 w/o calibration
S2BVE	Stage_2B_Validation_Electronic	Level 3 with calibration
S2BVM	Stage_2B_Validation_Manual	Level 3 with calibration
S2BVEM	Stage_2B_Validation_Electronic_and_Manual	Level 3 with calibration
S3VE	Stage_3_Validation_Electronic	Level 4
S3VM	Stage_3_Validation_Manual	Level 4
S3VEM	Stage_3_Validation_Electronic_and_Manual	Level 4
S4VE	Stage_4_Validation_Electronic	Level 4
S4VM	Stage_4_Validation_Manual	Level 4
S4VEM	Stage_4_Validation_Electronic_and_Manual	Level 4
NV	Not_Validated	N/A

