

CASE NARRATIVE
Client: Sundance Consulting, Inc.
Project: Fort Wingate, New Mexico
Report Number: 280-76405-1

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.

Revision - 01/07/2015

The SVOC method reference was changed from 8270C to 8270D or 8270_DOD to be consistent throughout the report.

Sample Receipt

Fourteen samples were received on 11/5/2015 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 6 coolers at receipt time were 0.2°C, 0.4°C, 1.2°C, 1.7°C, 2.6°C and 4.3°C.

One 1L unpreserved amber glass bottle was received for sample MW22S102015 (280-76405-10) for 8081A Organochlorine Pesticides analysis. Sufficient volume is present to perform the requested analysis. However, re-extraction or re-analysis may not be possible due to limited sample volume if requested or required.

Please note the Caprolactam data are reported under separate cover (280-76405-2), as the laboratory does not hold DOD ELAP certification for this compound.

The 6010C analyses were subcontracted to TestAmerica Sacramento as Denver's ICP instrument was down at the time of sample receipt.

No other anomalies were encountered during sample receipt.

GC/MS Volatiles - 8260B

Samples TB-12-102015 (280-76405-1), TMW13102015 (280-76405-3), TMW01102015 (280-76405-4), TMW10102015 (280-76405-5), TMW25102015 (280-76405-6), TMW03102015 (280-76405-7), TMW39D102015 (280-76405-8), TMW11102015 (280-76405-9), TMW06102015 (280-76405-11), TMW04102015 (280-76405-12), TMW48102015 (280-76405-13) and TMW28102015 (280-76405-14) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 11/13/2015 and 11/14/2015.

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

Methylene Chloride was detected in method blank MB 280-304089/6 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 batch 280-304089 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 TMW03102015 (280-76405-7), TMW39D102015 (280-76405-8), TMW06102015 (280-76405-11), TMW04102015 (280-76405-12) and TMW48102015 (280-76405-13) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 11/06/2015 and analyzed on 11/16/2015 and 11/17/2015.

Please note the Caprolactam data are reported under separate cover (280-76405-2), 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.

Internal standard responses were outside of acceptance limits for sample TMW03102015 (280-76405-7). The sample shows evidence of matrix interference; therefore, corrective action was not performed.

Surrogate Terphenyl-d14 was recovered below the QC control limits in sample TMW03102015 (280-76405-7). Upon re-extraction past hold time and reanalysis, surrogate recovery outliers were still present, demonstrating that this anomaly is most likely due to matrix

interference. The in hold data have been reported. The associated data have been flagged "Q" in accordance with the DOD QSM.

The LCS associated with prep batch 280-303282 exhibited a percent recovery below the QC control limits for Benzidine. 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.

MS/MSD analyses for prep batch 280-303282 were not requested.

The continuing calibration verification (CCV) associated with analytical batch 280-304324 recovered above the upper control limit for Benzidine (+24.2%D). This compound is not a calibration check compound (CCC); therefore, the lab defaults to in house or project specific criteria for evaluation. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. Associated samples 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.

Gasoline Range Organics - 8015C

Sample TB-13-102015 (280-76405-2) was analyzed for gasoline range organics (GRO) in accordance with 8015C GRO. The sample was analyzed on 11/14/2015.

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

MS/MSD analyses for analytical batch 280-303999 were not requested.

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

Organochlorine Pesticides - 8081A

Samples TMW39D102015 (280-76405-8), MW22S102015 (280-76405-10) and TMW48102015 (280-76405-13) were analyzed for Organochlorine Pesticides (GC) in accordance with SW846 8081A. The samples were prepared on 11/09/2015 and analyzed on 11/18/2015.

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 MW22S102015 (280-76405-10). 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.

MS/MSD analyses for prep batch 280-303241 were not requested.

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

Explosives - 8330B

Samples TMW01102015 (280-76405-4), TMW10102015 (280-76405-5), TMW25102015 (280-76405-6), TMW03102015 (280-76405-7), TMW39D102015 (280-76405-8), TMW06102015 (280-76405-11), TMW04102015 (280-76405-12) and TMW48102015 (280-76405-13) were analyzed for Nitroaromatics and Nitramines (HPLC) in accordance with SW846 8330B. The samples were prepared on 11/09/2015 and analyzed on 11/14/2015 and 11/15/2015.

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.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to analytes present above the linear calibration curve and matrix interference, samples TMW03102015 (280-76405-7) and TMW04102015 (280-76405-12) had to be analyzed at dilutions. Surrogate recoveries could not be accurately calculated for the diluted analyses because the extracts were 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 in samples TMW03102015 (280-76405-7) and TMW04102015 (280-76405-12). 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 2,4-Dinitrotoluene and 4-Amino-2,6-dinitrotoluene in sample TMW03102015 (280-76405-7). The RPD between the primary and confirmation columns exceeded 40% for 4-Amino-2,6-dinitrotoluene and p-Nitrotoluene in sample TMW04102015 (280-76405-12). 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 280-303142/1-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. Samples with detections for 2-Amino-4,6-dinitrotoluene were confirmed by method 8321 (LCMS) due to the potential for false positive results from interferences on the confirmation column for method 8330. The value should be considered an estimate, and has been flagged "J" in accordance with the DOD QSM.

4-Amino-2,6-dinitrotoluene was detected in method blank MB 280-303142/1-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 280-303142 were not requested.

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

Perchlorate - 6860

Samples TMW13102015 (280-76405-3), TMW01102015 (280-76405-4), TMW10102015 (280-76405-5), TMW03102015 (280-76405-7), TMW39D102015 (280-76405-8), TMW11102015 (280-76405-9), TMW04102015 (280-76405-12) and TMW48102015 (280-76405-13) were analyzed for Perchlorate in accordance with 6860. The samples were analyzed on 11/22/2015 and 11/25/2015.

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 analytes present above the calibration curve, samples TMW01102015 (280-76405-4), TMW03102015 (280-76405-7), TMW39D102015 (280-76405-8) and TMW48102015 (280-76405-13) 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 280-305017 and 280-305631 were not requested.

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

Total Metals - 6010C

Samples TMW13102015 (280-76405-3), TMW01102015 (280-76405-4), TMW10102015 (280-76405-5), TMW25102015 (280-76405-6), TMW03102015 (280-76405-7), TMW39D102015 (280-76405-8), TMW11102015 (280-76405-9), TMW06102015 (280-76405-11), TMW04102015 (280-76405-12), TMW48102015 (280-76405-13) and TMW28102015 (280-76405-14) were analyzed for Metals (ICP) in accordance with 6010C. The samples were prepared on 11/20/2015 and analyzed on 11/20/2015 and 11/23/2015.

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 TMW13102015 (280-76405-3), TMW01102015 (280-76405-4), TMW10102015 (280-76405-5), TMW25102015 (280-76405-6), TMW03102015 (280-76405-7), TMW39D102015 (280-76405-8), TMW11102015 (280-76405-9), TMW06102015 (280-76405-11), TMW04102015 (280-76405-12), TMW48102015 (280-76405-13) and TMW28102015 (280-76405-14) had to be analyzed at dilutions. The reporting limits and method detection limits have been adjusted relative to the dilutions required.

Potassium was detected in method blank MB 320-93070/1-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 320-93069 and 320-93070 were not requested.

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

Dissolved Metals - 6010C

Samples TMW13102015 (280-76405-3), TMW01102015 (280-76405-4), TMW10102015 (280-76405-5), TMW25102015 (280-76405-6), TMW03102015 (280-76405-7), TMW39D102015 (280-76405-8), TMW06102015 (280-76405-11), TMW04102015 (280-76405-12), TMW48102015 (280-76405-13) and TMW28102015 (280-76405-14) were analyzed for Dissolved Metals (ICP/MS) in accordance with SW846 6010C. The samples were prepared on 11/20/2015 and analyzed on 11/20/2015 and 11/23/2015.

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 TMW13102015 (280-76405-3), TMW01102015 (280-76405-4), TMW10102015 (280-76405-5), TMW25102015 (280-76405-6), TMW03102015 (280-76405-7), TMW39D102015 (280-76405-8), TMW06102015 (280-76405-11), TMW04102015 (280-76405-12), TMW48102015 (280-76405-13) and TMW28102015 (280-76405-14) 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 320-93057 were not requested.

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

Total Metals - 6020A

Samples TMW13102015 (280-76405-3), TMW01102015 (280-76405-4), TMW10102015 (280-76405-5), TMW25102015 (280-76405-6), TMW03102015 (280-76405-7), TMW39D102015 (280-76405-8), TMW11102015 (280-76405-9), TMW06102015 (280-76405-11), TMW04102015 (280-76405-12), TMW48102015 (280-76405-13) and TMW28102015 (280-76405-14) were analyzed for total metals (ICPMS) in accordance with SW846 6020A. The samples were prepared on 11/10/2015 and analyzed on 11/11/2015.

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

Manganese, Thallium and Barium were detected in method blank MB 280-302949/1-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.

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

Dissolved Metals - 6020A

Samples TMW13102015 (280-76405-3), TMW01102015 (280-76405-4), TMW10102015 (280-76405-5), TMW25102015 (280-76405-6), TMW03102015 (280-76405-7), TMW39D102015 (280-76405-8), TMW06102015 (280-76405-11), TMW04102015 (280-76405-12), TMW48102015 (280-76405-13) and TMW28102015 (280-76405-14) were analyzed for dissolved metals (ICPMS) in accordance with SW 846 6020A. The samples were prepared on 11/09/2015 and analyzed on 11/09/2015 and 11/10/2015.

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.

Total Mercury - 7470A

Samples TMW13102015 (280-76405-3), TMW01102015 (280-76405-4), TMW10102015 (280-76405-5), TMW25102015 (280-76405-6), TMW03102015 (280-76405-7), TMW39D102015 (280-76405-8), TMW11102015 (280-76405-9), TMW06102015 (280-76405-11), TMW04102015 (280-76405-12), TMW48102015 (280-76405-13) and TMW28102015 (280-76405-14) were analyzed for mercury in accordance with SW 846 7470A. The samples were prepared and analyzed on 11/19/2015.

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 TMW13102015 (280-76405-3), TMW01102015 (280-76405-4), TMW10102015 (280-76405-5), TMW25102015 (280-76405-6), TMW03102015 (280-76405-7), TMW39D102015 (280-76405-8), TMW06102015 (280-76405-11), TMW04102015 (280-76405-12), TMW48102015 (280-76405-13) and TMW28102015 (280-76405-14) were analyzed for dissolved mercury in accordance with SW 846 7470A. The samples were prepared and analyzed on 11/19/2015.

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 TMW13102015 (280-76405-3), TMW01102015 (280-76405-4), TMW10102015 (280-76405-5), TMW25102015 (280-76405-6), TMW03102015 (280-76405-7), TMW39D102015 (280-76405-8), TMW06102015 (280-76405-11), TMW04102015 (280-76405-12) and TMW48102015 (280-76405-13) were analyzed for anions by ion chromatography in accordance with SW 846 9056. The samples were analyzed on 11/05/2015 and 11/06/2015.

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 TMW10102015 (280-76405-5), TMW25102015 (280-76405-6), TMW03102015 (280-76405-7), TMW39D102015 (280-76405-8), TMW06102015 (280-76405-11), TMW04102015 (280-76405-12) and TMW48102015 (280-76405-13) 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 280-302657 were not requested.

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



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
Field Sample ID: TMW03102015								
4-AMINO-2,6-DINITROTOLUENE	8330B	RES	1.5	ug/L	Professional Judgment		J	1/8/2016 11:23
Reason for change: >40% RPD confirmation								
Dinitrotoluene, 2,4-	8330B	RES	0.29	ug/L	Professional Judgment		J	1/8/2016 11:23
Reason for change: >40% RPD confirmation								
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-	8330B	DL	490	ug/L	Surrogate/Tracer Recovery Low	J		1/8/2016 11:22
Reason for change: Diluted out								
Field Sample ID: TMW04102015								
4-AMINO-2,6-DINITROTOLUENE	8330B	RES	1.5	ug/L	Professional Judgment		J	1/8/2016 11:24
Reason for change: >40% RPD confirmation								
4-NITROTOLUENE	8330B	RE2	1.9	ug/L	Professional Judgment		J	1/8/2016 11:24
Reason for change: >40% RPD confirmation								



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>
Lab Reporting Batch: 280-76405-1						
Method: 6010C						
TMW01102015	280-76405-4	AQ	N	3010A	11/4/2015 11:05:00 AM	S2AVE
TMW03102015	280-76405-7	AQ	N	3010A	11/4/2015 10:00:00 AM	S2AVE
TMW04102015	280-76405-12	AQ	N	3010A	11/4/2015 11:05:00 AM	S2AVE
TMW06102015	280-76405-11	AQ	N	3010A	11/4/2015 9:05:00 AM	S2AVE
TMW10102015	280-76405-5	AQ	N	3010A	11/4/2015 1:00:00 PM	S2AVE
TMW11102015	280-76405-9	AQ	N	3010A	11/4/2015 1:25:00 PM	S2AVE
TMW13102015	280-76405-3	AQ	N	3010A	11/4/2015 10:05:00 AM	S2AVE
TMW25102015	280-76405-6	AQ	N	3010A	11/4/2015 1:30:00 PM	S2AVE
TMW28102015	280-76405-14	AQ	N	3010A	11/3/2015 4:20:00 PM	S2AVE
TMW39D102015	280-76405-8	AQ	N	3010A	11/4/2015 12:00:00 PM	S2AVE
TMW48102015	280-76405-13	AQ	N	3010A	11/4/2015 1:05:00 AM	S2AVE
Method: 6020A						
TMW01102015	280-76405-4	AQ	N	3020A	11/4/2015 11:05:00 AM	S2AVE
TMW01102015	280-76405-4	AQ	N	3005A	11/4/2015 11:05:00 AM	S2AVE
TMW01102015MS	280-76405-4MS	AQ	MS	3020A	11/4/2015 11:05:00 AM	S2AVE
TMW01102015MSD	280-76405-4MSD	AQ	MSD	3020A	11/4/2015 11:05:00 AM	S2AVE
TMW03102015	280-76405-7	AQ	N	3020A	11/4/2015 10:00:00 AM	S2AVE
TMW03102015	280-76405-7	AQ	N	3005A	11/4/2015 10:00:00 AM	S2AVE
TMW04102015	280-76405-12	AQ	N	3020A	11/4/2015 11:05:00 AM	S2AVE
TMW04102015	280-76405-12	AQ	N	3005A	11/4/2015 11:05:00 AM	S2AVE
TMW06102015	280-76405-11	AQ	N	3020A	11/4/2015 9:05:00 AM	S2AVE
TMW06102015	280-76405-11	AQ	N	3005A	11/4/2015 9:05:00 AM	S2AVE
TMW10102015	280-76405-5	AQ	N	3020A	11/4/2015 1:00:00 PM	S2AVE

1/8/2016 11:26:06 AM

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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>
Method: 6020A						
TMW10102015	280-76405-5	AQ	N	3005A	11/4/2015 1:00:00 PM	S2AVE
TMW11102015	280-76405-9	AQ	N	3020A	11/4/2015 1:25:00 PM	S2AVE
TMW13102015	280-76405-3	AQ	N	3020A	11/4/2015 10:05:00 AM	S2AVE
TMW13102015	280-76405-3	AQ	N	3005A	11/4/2015 10:05:00 AM	S2AVE
TMW13102015MS	280-76405-3MS	AQ	MS	3005A	11/4/2015 10:05:00 AM	S2AVE
TMW13102015MSD	280-76405-3MSD	AQ	MSD	3005A	11/4/2015 10:05:00 AM	S2AVE
TMW25102015	280-76405-6	AQ	N	3020A	11/4/2015 1:30:00 PM	S2AVE
TMW25102015	280-76405-6	AQ	N	3005A	11/4/2015 1:30:00 PM	S2AVE
TMW28102015	280-76405-14	AQ	N	3020A	11/3/2015 4:20:00 PM	S2AVE
TMW28102015	280-76405-14	AQ	N	3005A	11/3/2015 4:20:00 PM	S2AVE
TMW39D102015	280-76405-8	AQ	N	3020A	11/4/2015 12:00:00 PM	S2AVE
TMW39D102015	280-76405-8	AQ	N	3005A	11/4/2015 12:00:00 PM	S2AVE
TMW48102015	280-76405-13	AQ	N	3020A	11/4/2015 1:05:00 AM	S2AVE
TMW48102015	280-76405-13	AQ	N	3005A	11/4/2015 1:05:00 AM	S2AVE
Method: 6860						
TMW01102015	280-76405-4	AQ	N	METHOD	11/4/2015 11:05:00 AM	S2AVE
TMW03102015	280-76405-7	AQ	N	METHOD	11/4/2015 10:00:00 AM	S2AVE
TMW04102015	280-76405-12	AQ	N	METHOD	11/4/2015 11:05:00 AM	S2AVE
TMW10102015	280-76405-5	AQ	N	METHOD	11/4/2015 1:00:00 PM	S2AVE
TMW11102015	280-76405-9	AQ	N	METHOD	11/4/2015 1:25:00 PM	S2AVE
TMW13102015	280-76405-3	AQ	N	METHOD	11/4/2015 10:05:00 AM	S2AVE
TMW39D102015	280-76405-8	AQ	N	METHOD	11/4/2015 12:00:00 PM	S2AVE
TMW48102015	280-76405-13	AQ	N	METHOD	11/4/2015 1:05:00 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>
Method: 7470A						
TMW01102015	280-76405-4	AQ	N	7470A	11/4/2015 11:05:00 AM	S2AVE
TMW03102015	280-76405-7	AQ	N	7470A	11/4/2015 10:00:00 AM	S2AVE
TMW04102015	280-76405-12	AQ	N	7470A	11/4/2015 11:05:00 AM	S2AVE
TMW06102015	280-76405-11	AQ	N	7470A	11/4/2015 9:05:00 AM	S2AVE
TMW10102015	280-76405-5	AQ	N	7470A	11/4/2015 1:00:00 PM	S2AVE
TMW11102015	280-76405-9	AQ	N	7470A	11/4/2015 1:25:00 PM	S2AVE
TMW13102015	280-76405-3	AQ	N	7470A	11/4/2015 10:05:00 AM	S2AVE
TMW13102015MS	280-76405-3MS	AQ	MS	7470A	11/4/2015 10:05:00 AM	S2AVE
TMW13102015MSD	280-76405-3MSD	AQ	MSD	7470A	11/4/2015 10:05:00 AM	S2AVE
TMW25102015	280-76405-6	AQ	N	7470A	11/4/2015 1:30:00 PM	S2AVE
TMW28102015	280-76405-14	AQ	N	7470A	11/3/2015 4:20:00 PM	S2AVE
TMW39D102015	280-76405-8	AQ	N	7470A	11/4/2015 12:00:00 PM	S2AVE
TMW48102015	280-76405-13	AQ	N	7470A	11/4/2015 1:05:00 AM	S2AVE
Method: 8015C GRO						
TB-13-102015	280-76405-2	AQ	TB	METHOD	11/4/2015 8:05:00 AM	S2AVE
Method: 8081A						
MW22S102015	280-76405-10	AQ	N	3510C	11/4/2015 8:10:00 AM	S2AVE
TMW39D102015	280-76405-8	AQ	N	3510C	11/4/2015 12:00:00 PM	S2AVE
TMW48102015	280-76405-13	AQ	N	3510C	11/4/2015 1:05:00 AM	S2AVE
Method: 8260B						
TB-12-102015	280-76405-1	AQ	TB	5030	11/4/2015 8:00:00 AM	S2AVE
TMW01102015	280-76405-4	AQ	N	5030	11/4/2015 11:05:00 AM	S2AVE
TMW03102015	280-76405-7	AQ	N	5030	11/4/2015 10:00:00 AM	S2AVE
TMW04102015	280-76405-12	AQ	N	5030	11/4/2015 11:05:00 AM	S2AVE

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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>
Method: 8260B						
TMW06102015	280-76405-11	AQ	N	5030	11/4/2015 9:05:00 AM	S2AVE
TMW10102015	280-76405-5	AQ	N	5030	11/4/2015 1:00:00 PM	S2AVE
TMW11102015	280-76405-9	AQ	N	5030	11/4/2015 1:25:00 PM	S2AVE
TMW13102015	280-76405-3	AQ	N	5030	11/4/2015 10:05:00 AM	S2AVE
TMW25102015	280-76405-6	AQ	N	5030	11/4/2015 1:30:00 PM	S2AVE
TMW28102015	280-76405-14	AQ	N	5030	11/3/2015 4:20:00 PM	S2AVE
TMW39D102015	280-76405-8	AQ	N	5030	11/4/2015 12:00:00 PM	S2AVE
TMW48102015	280-76405-13	AQ	N	5030	11/4/2015 1:05:00 AM	S2AVE
Method: 8270D						
TMW03102015	280-76405-7	AQ	N	3520C	11/4/2015 10:00:00 AM	S2AVE
TMW04102015	280-76405-12	AQ	N	3520C	11/4/2015 11:05:00 AM	S2AVE
TMW06102015	280-76405-11	AQ	N	3520C	11/4/2015 9:05:00 AM	S2AVE
TMW39D102015	280-76405-8	AQ	N	3520C	11/4/2015 12:00:00 PM	S2AVE
TMW48102015	280-76405-13	AQ	N	3520C	11/4/2015 1:05:00 AM	S2AVE
Method: 8330B						
TMW01102015	280-76405-4	AQ	N	3535	11/4/2015 11:05:00 AM	S2AVE
TMW03102015	280-76405-7	AQ	N	3535	11/4/2015 10:00:00 AM	S2AVE
TMW04102015	280-76405-12	AQ	N	3535	11/4/2015 11:05:00 AM	S2AVE
TMW06102015	280-76405-11	AQ	N	3535	11/4/2015 9:05:00 AM	S2AVE
TMW10102015	280-76405-5	AQ	N	3535	11/4/2015 1:00:00 PM	S2AVE
TMW25102015	280-76405-6	AQ	N	3535	11/4/2015 1:30:00 PM	S2AVE
TMW39D102015	280-76405-8	AQ	N	3535	11/4/2015 12:00:00 PM	S2AVE
TMW48102015	280-76405-13	AQ	N	3535	11/4/2015 1:05:00 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>
Method: 9056						
TMW01102015	280-76405-4	AQ	N	METHOD	11/4/2015 11:05:00 AM	S2AVE
TMW03102015	280-76405-7	AQ	N	METHOD	11/4/2015 10:00:00 AM	S2AVE
TMW04102015	280-76405-12	AQ	N	METHOD	11/4/2015 11:05:00 AM	S2AVE
TMW06102015	280-76405-11	AQ	N	METHOD	11/4/2015 9:05:00 AM	S2AVE
TMW10102015	280-76405-5	AQ	N	METHOD	11/4/2015 1:00:00 PM	S2AVE
TMW13102015	280-76405-3	AQ	N	METHOD	11/4/2015 10:05:00 AM	S2AVE
TMW25102015	280-76405-6	AQ	N	METHOD	11/4/2015 1:30:00 PM	S2AVE
TMW39D102015	280-76405-8	AQ	N	METHOD	11/4/2015 12:00:00 PM	S2AVE
TMW48102015	280-76405-13	AQ	N	METHOD	11/4/2015 1:05:00 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: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

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	A
Laboratory Duplicates	N
Laboratory Replicates	N
Laboratory Control Samples	SR
Compound Quantitation	SR
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.

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

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 280-303282/2-A (TMW03102015 TMW04102015 TMW06102015 TMW39D102015 TMW48102015)	BENZIDINE	22	-	27.00-150.00	-	BENZIDINE	J (all detects) UJ (all non-detects)

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

1/8/2016 11:28:06 AM

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Method Blank Outlier Report

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method: 6010C				
Matrix: AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 320-93070/1-A	11/20/2015 4:34:00 PM	POTASSIUM	112 ug/L	TMW01102015 TMW03102015 TMW04102015 TMW06102015 TMW10102015 TMW11102015 TMW13102015 TMW25102015 TMW39D102015 TMW48102015

Method: 6020A				
Matrix: AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-302949/1-A	11/11/2015 5:25:00 PM	BARIUM MANGANESE THALLIUM	0.497 ug/L 0.897 ug/L 0.179 ug/L	TMW01102015 TMW03102015 TMW04102015 TMW06102015 TMW10102015 TMW11102015 TMW13102015 TMW25102015 TMW28102015 TMW39D102015 TMW48102015

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
TMW01102015(RES/TOT)	THALLIUM	0.19 ug/L	0.19U ug/L
TMW03102015(RES/TOT)	THALLIUM	0.084 ug/L	0.084U ug/L
TMW10102015(RES/TOT)	THALLIUM	0.085 ug/L	0.085U ug/L
TMW13102015(RES/TOT)	MANGANESE	0.74 ug/L	0.74U ug/L
TMW13102015(RES/TOT)	THALLIUM	0.24 ug/L	0.24U ug/L

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

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Method Blank Outlier Report

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method: 8260B				
Matrix: AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-304089/6	11/13/2015 8:18:00 PM	METHYLENE CHLORIDE	0.539 ug/L	TB-12-102015 TMW01102015 TMW03102015 TMW04102015 TMW06102015 TMW10102015 TMW11102015 TMW13102015 TMW25102015 TMW28102015 TMW39D102015 TMW48102015

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

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Data Qualifier Summary

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method Category:	GENCHEM	
Method:	9056	Matrix: AQ

		11/4/2015 10:00:00		Analysis Type: RES/TOT		Dilution: 2			
Sample ID: TMW03102015	Collected: AM								
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRITE	0.24	J D	0.20	LOD	1.0	LOQ	mg/L	J	RI

		11/4/2015 1:30:00		Analysis Type: RES/TOT		Dilution: 2			
Sample ID: TMW25102015	Collected: PM								
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE	0.49	J D	0.20	LOD	1.0	LOQ	mg/L	J	RI

		11/4/2015 12:00:00		Analysis Type: RES/TOT		Dilution: 2			
Sample ID: TMW39D102015	Collected: PM								
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE	0.52	J D	0.20	LOD	1.0	LOQ	mg/L	J	RI

Method Category:	METALS	
Method:	6010C	Matrix: AQ

		11/4/2015 11:05:00		Analysis Type: RES/DIS		Dilution: 1			
Sample ID: TMW01102015	Collected: AM								
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	630	J	250	LOD	1000	LOQ	ug/L	J	RI

		11/4/2015 11:05:00		Analysis Type: RES/TOT		Dilution: 1			
Sample ID: TMW01102015	Collected: AM								
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	570	J	250	LOD	1000	LOQ	ug/L	J	RI

		11/4/2015 10:00:00		Analysis Type: RES/DIS		Dilution: 1			
Sample ID: TMW03102015	Collected: AM								
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	990	J	250	LOD	1000	LOQ	ug/L	J	RI

* denotes a non-reportable result

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

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Data Qualifier Summary

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method Category:	METALS									
Method:	6010C			Matrix: AQ						

11/4/2015 10:00:00										
Sample ID:TMW03102015		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	
IRON	20	J	50	LOD	100	LOQ	ug/L	J	RI	
POTASSIUM	750	J	250	LOD	1000	LOQ	ug/L	J	RI	

11/4/2015 9:05:00										
Sample ID:TMW06102015		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	710	J	250	LOD	1000	LOQ	ug/L	J	RI	

11/4/2015 9:05:00										
Sample ID:TMW06102015		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	
IRON	27	J	50	LOD	100	LOQ	ug/L	J	RI	
POTASSIUM	660	J	250	LOD	1000	LOQ	ug/L	J	RI	

11/4/2015 10:05:00										
Sample ID:TMW13102015		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	810	J	250	LOD	1000	LOQ	ug/L	J	RI	

11/4/2015 10:05:00										
Sample ID:TMW13102015		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	760	J	250	LOD	1000	LOQ	ug/L	J	RI	

11/4/2015 1:30:00										
Sample ID:TMW25102015		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	910	J	250	LOD	1000	LOQ	ug/L	J	RI	

11/4/2015 1:30:00										
Sample ID:TMW25102015		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	570	J	250	LOD	1000	LOQ	ug/L	J	RI	

* denotes a non-reportable result

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

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Data Qualifier Summary

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method Category:	METALS								
Method:	6020A	Matrix:	AQ						

Sample ID: TMW01102015 Collected: 11/4/2015 11:05:00 AM Analysis Type: RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.62	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
ARSENIC	0.76	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
BERYLLIUM	0.27	J	0.30	LOD	1.0	LOQ	ug/L	J	RI
CHROMIUM	0.64	J	1.8	LOD	10	LOQ	ug/L	J	RI
COBALT	0.12	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	1.1	J	1.0	LOD	3.0	LOQ	ug/L	J	RI
SILVER	0.040	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.10	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
ZINC	2.5	J	8.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW01102015 Collected: 11/4/2015 11:05:00 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	0.94	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	0.90	J	1.8	LOD	10	LOQ	ug/L	J	RI
COBALT	0.071	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
THALLIUM	0.19	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb

Sample ID: TMW03102015 Collected: 11/4/2015 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
COPPER	1.0	J	1.8	LOD	2.0	LOQ	ug/L	J	RI

Sample ID: TMW03102015 Collected: 11/4/2015 10:00:00 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	0.45	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.064	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
COPPER	0.96	J	1.8	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	1.1	J	1.0	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	2.3	J	2.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	8.7	J	8.0	LOD	20	LOQ	ug/L	J	RI

* denotes a non-reportable result

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

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Data Qualifier Summary

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method Category:	METALS								
Method:	6020A	Matrix:		AQ					

Sample ID: TMW03102015 Collected: 11/4/2015 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
ARSENIC	0.56	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	0.71	J	1.8	LOD	10	LOQ	ug/L	J	RI
COBALT	0.081	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
THALLIUM	0.084	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb
VANADIUM	2.2	J	2.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	10	J	8.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW04102015 Collected: 11/4/2015 11:05:00 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	1.1	J	1.8	LOD	2.0	LOQ	ug/L	J	RI

Sample ID: TMW04102015 Collected: 11/4/2015 11:05:00 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	0.86	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	2.4	J	1.8	LOD	10	LOQ	ug/L	J	RI
COPPER	0.90	J	1.8	LOD	2.0	LOQ	ug/L	J	RI
MANGANESE	0.36	J	0.95	LOD	3.5	LOQ	ug/L	J	RI
NICKEL	0.71	J	1.0	LOD	3.0	LOQ	ug/L	J	RI
ZINC	4.1	J	8.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW04102015 Collected: 11/4/2015 11:05:00 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	0.96	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	2.2	J	1.8	LOD	10	LOQ	ug/L	J	RI
COBALT	0.057	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
ZINC	2.3	J	8.0	LOD	20	LOQ	ug/L	J	RI

* denotes a non-reportable result

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

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Data Qualifier Summary

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method Category:	METALS								
Method:	6020A	Matrix:	AQ						

Sample ID: TMW06102015 Collected: 11/4/2015 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	0.80	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	0.66	J	1.8	LOD	10	LOQ	ug/L	J	RI
COBALT	0.054	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	0.81	J	1.0	LOD	3.0	LOQ	ug/L	J	RI
SELENIUM	1.4	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
VANADIUM	3.1	J	2.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	3.9	J	8.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW06102015 Collected: 11/4/2015 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	1.0	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	0.78	J	1.8	LOD	10	LOQ	ug/L	J	RI
COBALT	0.073	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	0.48	J	1.0	LOD	3.0	LOQ	ug/L	J	RI
SELENIUM	1.3	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
VANADIUM	3.1	J	2.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID: TMW10102015 Collected: 11/4/2015 1:00:00 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	0.55	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
NICKEL	1.3	J	1.0	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	3.1	J	2.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	2.2	J	8.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW10102015 Collected: 11/4/2015 1:00:00 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	0.58	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	1.4	J	1.8	LOD	10	LOQ	ug/L	J	RI
NICKEL	0.67	J	1.0	LOD	3.0	LOQ	ug/L	J	RI

* denotes a non-reportable result

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

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Data Qualifier Summary

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method Category:	METALS								
Method:	6020A	Matrix:	AQ						

Sample ID: TMW10102015 Collected: PM 11/4/2015 1:00:00 Analysis Type: RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.091	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.085	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb
VANADIUM	3.2	J	2.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID: TMW11102015 Collected: PM 11/4/2015 1:25:00 Analysis Type: RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.70	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	3.2	J	1.8	LOD	10	LOQ	ug/L	J	RI
COBALT	0.36	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
LEAD	0.72	J	0.70	LOD	3.0	LOQ	ug/L	J	RI
NICKEL	2.1	J	1.0	LOD	3.0	LOQ	ug/L	J	RI
SILVER	2.5	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
ZINC	16	J	8.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW13102015 Collected: AM 11/4/2015 10:05:00 Analysis Type: RE2/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	0.68	J	1.8	LOD	2.0	LOQ	ug/L	J	RI

Sample ID: TMW13102015 Collected: AM 11/4/2015 10:05:00 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	1.0	LOD	6.0	LOQ	ug/L	J	RI
CHROMIUM	0.69	J	1.8	LOD	10	LOQ	ug/L	J	RI
NICKEL	0.40	J	1.0	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	3.3	J	2.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	2.2	J	8.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW13102015 Collected: AM 11/4/2015 10:05:00 Analysis Type: RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	0.66	J	1.8	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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Data Qualifier Summary

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method Category: METALS

Method: 6020A

Matrix: AQ

Sample ID: TMW13102015 11/4/2015 10:05:00 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
MANGANESE	0.74	J	0.95	LOD	3.5	LOQ	ug/L	U	Mb
SILVER	0.16	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.24	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb
VANADIUM	2.6	J	2.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID: TMW25102015 11/4/2015 1:30:00 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	0.52	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.10	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
COPPER	1.2	J	1.8	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	1.1	J	1.0	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	3.8	J	2.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	4.1	J	8.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW25102015 11/4/2015 1:30:00 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
ARSENIC	3.4	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	1.9	J	1.8	LOD	10	LOQ	ug/L	J	RI
LEAD	1.8	J	0.70	LOD	3.0	LOQ	ug/L	J	RI
SILVER	1.6	J	0.10	LOD	5.0	LOQ	ug/L	J	RI

Sample ID: TMW28102015 11/3/2015 4:20:00 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
COBALT	0.090	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	0.46	J	1.0	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	1.4	J	2.0	LOD	6.0	LOQ	ug/L	J	RI

* denotes a non-reportable result

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

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Data Qualifier Summary

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method Category:	METALS								
Method:	6020A	Matrix:	AQ						

Sample ID: TMW28102015 Collected: PM 11/3/2015 4:20:00 Analysis Type: RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	0.099	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
VANADIUM	0.78	J	2.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	2.4	J	8.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW39D102015 Collected: PM 11/4/2015 12:00:00 Analysis Type: RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	0.51	J	1.8	LOD	10	LOQ	ug/L	J	RI
COBALT	0.21	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
COPPER	1.0	J	1.8	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	1.7	J	1.0	LOD	3.0	LOQ	ug/L	J	RI
SELENIUM	0.95	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
VANADIUM	1.9	J	2.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	5.4	J	8.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW48102015 Collected: AM 11/4/2015 1:05:00 Analysis Type: RE2/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	0.79	J	1.8	LOD	2.0	LOQ	ug/L	J	RI

Sample ID: TMW48102015 Collected: AM 11/4/2015 1:05:00 Analysis Type: RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.53	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COPPER	1.7	J	1.8	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	1.2	J	1.0	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	3.9	J	2.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	12	J	8.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW48102015 Collected: AM 11/4/2015 1:05:00 Analysis Type: RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.61	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

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Data Qualifier Summary

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method Category:	METALS								
Method:	6020A	Matrix:	AQ						

Sample ID: TMW48102015 Collected: 11/4/2015 1:05:00 AM Analysis Type: RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	5.3	J	2.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	7.8	J	8.0	LOD	20	LOQ	ug/L	J	RI

Method Category:	SVOA								
Method:	8081A	Matrix:	AQ						

Sample ID: MW22S102015 Collected: 11/4/2015 8:10:00 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	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
4,4'-DDE	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
4,4'-DDT	0.048	U Q	0.048	LOD	0.048	LOQ	ug/L	UJ	Surr
ALDRIN	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
ALPHA-BHC	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
ALPHA-CHLORDANE	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
BETA-BHC	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
DELTA-BHC	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
DIELDRIN	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
ENDOSULFAN I	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
ENDOSULFAN II	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
ENDOSULFAN SULFATE	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
ENDRIN	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
ENDRIN ALDEHYDE	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
ENDRIN KETONE	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
GAMMA-BHC	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
GAMMA-CHLORDANE	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
HEPTACHLOR	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
HEPTACHLOR EPOXIDE	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
METHOXYCHLOR	0.048	U Q	0.048	LOD	0.048	LOQ	ug/L	UJ	Surr
TOXAPHENE	0.77	U Q	0.77	LOD	4.8	LOQ	ug/L	UJ	Surr

* denotes a non-reportable result

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

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Data Qualifier Summary

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method Category:	SVOA
Method:	8270D
Matrix:	AQ

11/4/2015 10:00:00									
Sample ID:TMW03102015		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
2,4-DINITROPHENOL	28	J	33	LOD	89	LOQ	ug/L	J	RI

11/4/2015 10:00:00									
Sample ID:TMW03102015		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	110	U Q	110	LOD	220	LOQ	ug/L	UJ	Lcs

11/4/2015 11:05:00									
Sample ID:TMW04102015		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	110	U Q	110	LOD	210	LOQ	ug/L	UJ	Lcs

11/4/2015 9:05:00									
Sample ID:TMW06102015		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	110	U Q	110	LOD	220	LOQ	ug/L	UJ	Lcs

11/4/2015 12:00:00									
Sample ID:TMW39D102015		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	110	U Q	110	LOD	210	LOQ	ug/L	UJ	Lcs

11/4/2015 1:05:00									
Sample ID:TMW48102015		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	100	U Q	100	LOD	200	LOQ	ug/L	UJ	Lcs

* denotes a non-reportable result

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

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Data Qualifier Summary

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method Category:	SVOA									
Method:	8330B			Matrix: AQ						

11/4/2015 10:00:00

Sample ID: TMW03102015 **Collected:** AM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-AMINO-2,6-DINITROTOLUENE	1.5	J	0.13	LOD	0.21	LOQ	ug/L	J	ProfJudg
Dinitrotoluene, 2,4-	0.29	J	0.21	LOD	0.42	LOQ	ug/L	J	RI, ProfJudg

11/4/2015 11:05:00

Sample ID: TMW04102015 **Collected:** AM **Analysis Type:** RE2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-NITROTOLUENE	1.9	J	0.46	LOD	1.1	LOQ	ug/L	J	Surr, ProfJudg

11/4/2015 11:05:00

Sample ID: TMW04102015 **Collected:** 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	2.7	Q	0.14	LOD	0.23	LOQ	ug/L	J	Surr
4-AMINO-2,6-DINITROTOLUENE	1.5	Q J	0.14	LOD	0.23	LOQ	ug/L	J	Surr, ProfJudg

* denotes a non-reportable result

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

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Data Qualifier Summary

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
Lcs	Laboratory Control Spike Lower Estimation
Mb	Method Blank Contamination
ProfJudg	Professional Judgment
RI	Reporting Limit Trace Value
Surr	Surrogate/Tracer Recovery Lower Estimation
Surr	Surrogate/Tracer Recovery Lower Rejection
Surr	Surrogate/Tracer Recovery Upper Estimation

* denotes a non-reportable result

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

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Reporting Limit Outliers

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method: 6010C
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW01102015	POTASSIUM	J	630	1000	LOQ	ug/L	J (all detects)
TMW03102015	IRON	J	20	100	LOQ	ug/L	J (all detects)
	POTASSIUM	J	990	1000	LOQ	ug/L	
TMW06102015	IRON	J	27	100	LOQ	ug/L	J (all detects)
	POTASSIUM	J	710	1000	LOQ	ug/L	
TMW13102015	POTASSIUM	J	810	1000	LOQ	ug/L	J (all detects)
TMW25102015	POTASSIUM	J	910	1000	LOQ	ug/L	J (all detects)

Method: 6020A
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW01102015	ANTIMONY	J	0.62	6.0	LOQ	ug/L	J (all detects)
	ARSENIC	J	0.76	5.0	LOQ	ug/L	
	BERYLLIUM	J	0.27	1.0	LOQ	ug/L	
	CHROMIUM	J	0.64	10	LOQ	ug/L	
	COBALT	J	0.12	1.0	LOQ	ug/L	
	NICKEL	J	1.1	3.0	LOQ	ug/L	
	SILVER	J	0.040	5.0	LOQ	ug/L	
	THALLIUM	J	0.10	1.0	LOQ	ug/L	
ZINC	J	2.5	20	LOQ	ug/L		
TMW03102015	ARSENIC	J	0.45	5.0	LOQ	ug/L	J (all detects)
	CHROMIUM	J	0.71	10	LOQ	ug/L	
	COBALT	J	0.064	1.0	LOQ	ug/L	
	COPPER	J	1.0	2.0	LOQ	ug/L	
	NICKEL	J	1.1	3.0	LOQ	ug/L	
	THALLIUM	J	0.084	1.0	LOQ	ug/L	
	VANADIUM	J	2.3	6.0	LOQ	ug/L	
ZINC	J	8.7	20	LOQ	ug/L		
TMW04102015	ARSENIC	J	0.86	5.0	LOQ	ug/L	J (all detects)
	CHROMIUM	J	2.4	10	LOQ	ug/L	
	COBALT	J	0.057	1.0	LOQ	ug/L	
	COPPER	J	1.1	2.0	LOQ	ug/L	
	MANGANESE	J	0.36	3.5	LOQ	ug/L	
	NICKEL	J	0.71	3.0	LOQ	ug/L	
	ZINC	J	4.1	20	LOQ	ug/L	
TMW06102015	ARSENIC	J	0.80	5.0	LOQ	ug/L	J (all detects)
	CHROMIUM	J	0.66	10	LOQ	ug/L	
	COBALT	J	0.054	1.0	LOQ	ug/L	
	NICKEL	J	0.81	3.0	LOQ	ug/L	
	SELENIUM	J	1.4	5.0	LOQ	ug/L	
	VANADIUM	J	3.1	6.0	LOQ	ug/L	
	ZINC	J	3.9	20	LOQ	ug/L	

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

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Reporting Limit Outliers

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method: 6020A							
Matrix: AQ							
SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW10102015	ARSENIC	J	0.55	5.0	LOQ	ug/L	J (all detects)
	CHROMIUM	J	1.4	10	LOQ	ug/L	
	NICKEL	J	1.3	3.0	LOQ	ug/L	
	SILVER	J	0.091	5.0	LOQ	ug/L	
	THALLIUM	J	0.085	1.0	LOQ	ug/L	
	VANADIUM	J	3.1	6.0	LOQ	ug/L	
	ZINC	J	2.2	20	LOQ	ug/L	
TMW11102015	ARSENIC	J	0.70	5.0	LOQ	ug/L	J (all detects)
	CHROMIUM	J	3.2	10	LOQ	ug/L	
	COBALT	J	0.36	1.0	LOQ	ug/L	
	LEAD	J	0.72	3.0	LOQ	ug/L	
	NICKEL	J	2.1	3.0	LOQ	ug/L	
	SILVER	J	2.5	5.0	LOQ	ug/L	
	ZINC	J	16	20	LOQ	ug/L	
TMW13102015	ANTIMONY	J	1.2	6.0	LOQ	ug/L	J (all detects)
	CHROMIUM	J	0.69	10	LOQ	ug/L	
	COPPER	J	0.68	2.0	LOQ	ug/L	
	MANGANESE	J	0.74	3.5	LOQ	ug/L	
	NICKEL	J	0.40	3.0	LOQ	ug/L	
	SILVER	J	0.16	5.0	LOQ	ug/L	
	THALLIUM	J	0.24	1.0	LOQ	ug/L	
	VANADIUM	J	3.3	6.0	LOQ	ug/L	
	ZINC	J	2.2	20	LOQ	ug/L	
TMW25102015	ARSENIC	J	0.52	5.0	LOQ	ug/L	J (all detects)
	CHROMIUM	J	1.9	10	LOQ	ug/L	
	COBALT	J	0.10	1.0	LOQ	ug/L	
	COPPER	J	1.2	2.0	LOQ	ug/L	
	LEAD	J	1.8	3.0	LOQ	ug/L	
	NICKEL	J	1.1	3.0	LOQ	ug/L	
	SILVER	J	1.6	5.0	LOQ	ug/L	
	VANADIUM	J	3.8	6.0	LOQ	ug/L	
	ZINC	J	4.1	20	LOQ	ug/L	
TMW28102015	COBALT	J	0.090	1.0	LOQ	ug/L	J (all detects)
	NICKEL	J	0.46	3.0	LOQ	ug/L	
	VANADIUM	J	1.4	6.0	LOQ	ug/L	
	ZINC	J	2.4	20	LOQ	ug/L	
TMW39D102015	CHROMIUM	J	0.51	10	LOQ	ug/L	J (all detects)
	COBALT	J	0.21	1.0	LOQ	ug/L	
	COPPER	J	1.0	2.0	LOQ	ug/L	
	NICKEL	J	1.7	3.0	LOQ	ug/L	
	SELENIUM	J	0.95	5.0	LOQ	ug/L	
	VANADIUM	J	1.9	6.0	LOQ	ug/L	
	ZINC	J	5.4	20	LOQ	ug/L	
TMW48102015	ARSENIC	J	0.53	5.0	LOQ	ug/L	J (all detects)
	COPPER	J	0.79	2.0	LOQ	ug/L	
	NICKEL	J	1.2	3.0	LOQ	ug/L	
	VANADIUM	J	3.9	6.0	LOQ	ug/L	
	ZINC	J	12	20	LOQ	ug/L	

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

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Reporting Limit Outliers

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method: 8270D**Matrix:** AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW03102015	2,4-DINITROPHENOL	J	28	89	LOQ	ug/L	J (all detects)

Method: 8330B**Matrix:** AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW03102015	Dinitrotoluene, 2,4-	J	0.29	0.42	LOQ	ug/L	J (all detects)

Method: 9056**Matrix:** AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TMW03102015	NITRITE	J D	0.24	1.0	LOQ	mg/L	J (all detects)
TMW25102015	NITRATE	J D	0.49	1.0	LOQ	mg/L	J (all detects)
TMW39D102015	NITRATE	J D	0.52	1.0	LOQ	mg/L	J (all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

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>
MW22S102015	DECACHLOROBIPHENYL	10	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>
TMW03102015	Terphenyl-d14	31	50.00-135.00	No Affected Compounds	

Method:	8330B
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>
TMW03102015 (DL)	1,2-DINITROBENZENE	0	75.00-118.00	All Target Analytes	J(all detects) R(all non-detects)
TMW04102015 (RE2)	1,2-DINITROBENZENE	11218	75.00-118.00	All Target Analytes	J(all detects)
TMW04102015	1,2-DINITROBENZENE	122	75.00-118.00	All Target Analytes	J(all detects)

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

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Field QC Assignments and Associated Samples

EDD File Name: 280-76405-1

eQapp Name: FtWingate_Primary_120405

	Associated Samples	Sample Collection Date
Field QC TB-12-102015		
QC Type: TB		
	MW22S102015	11/4/2015 8:10:00 AM
	TMW01102015	11/4/2015 11:05:00 AM
	TMW03102015	11/4/2015 10:00:00 AM
	TMW04102015	11/4/2015 11:05:00 AM
	TMW06102015	11/4/2015 9:05:00 AM
	TMW10102015	11/4/2015 1:00:00 PM
	TMW11102015	11/4/2015 1:25:00 PM
	TMW13102015	11/4/2015 10:05:00 AM
	TMW25102015	11/4/2015 1:30:00 PM
	TMW28102015	11/3/2015 4:20:00 PM
	TMW39D102015	11/4/2015 12:00:00 PM
	TMW48102015	11/4/2015 1:05:00 AM
Field QC TB-13-102015		
QC Type: TB		
	MW22S102015	11/4/2015 8:10:00 AM
	TMW01102015	11/4/2015 11:05:00 AM
	TMW03102015	11/4/2015 10:00:00 AM
	TMW04102015	11/4/2015 11:05:00 AM
	TMW06102015	11/4/2015 9:05:00 AM
	TMW10102015	11/4/2015 1:00:00 PM
	TMW11102015	11/4/2015 1:25:00 PM
	TMW13102015	11/4/2015 10:05:00 AM
	TMW25102015	11/4/2015 1:30:00 PM
	TMW28102015	11/3/2015 4:20:00 PM
	TMW39D102015	11/4/2015 12:00:00 PM
	TMW48102015	11/4/2015 1:05:00 AM



Data Qualifier Summary

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method Category:	GENCHEM									
Method:	9056	Matrix:		AQ						

Sample ID: TMW03102015 Collected: AM 11/4/2015 10:00:00 Analysis Type: RES/TOT Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRITE	0.24	J D	0.20	LOD	1.0	LOQ	mg/L	J	RI

Sample ID: TMW25102015 Collected: PM 11/4/2015 1:30:00 Analysis Type: RES/TOT Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE	0.49	J D	0.20	LOD	1.0	LOQ	mg/L	J	RI

Sample ID: TMW39D102015 Collected: PM 11/4/2015 12:00:00 Analysis Type: RES/TOT Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE	0.52	J D	0.20	LOD	1.0	LOQ	mg/L	J	RI

Method Category:	METALS									
Method:	6010C	Matrix:		AQ						

Sample ID: TMW01102015 Collected: AM 11/4/2015 11:05:00 Analysis Type: RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	630	J	250	LOD	1000	LOQ	ug/L	J	RI

Sample ID: TMW01102015 Collected: AM 11/4/2015 11:05:00 Analysis Type: RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	570	J	250	LOD	1000	LOQ	ug/L	J	RI

Sample ID: TMW03102015 Collected: AM 11/4/2015 10:00:00 Analysis Type: RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	990	J	250	LOD	1000	LOQ	ug/L	J	RI

Sample ID: TMW03102015 Collected: AM 11/4/2015 10:00:00 Analysis Type: RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	20	J	50	LOD	100	LOQ	ug/L	J	RI
POTASSIUM	750	J	250	LOD	1000	LOQ	ug/L	J	RI

* denotes a non-reportable result

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

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Data Qualifier Summary

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method Category:	METALS	Method:	6010C	Matrix:	AQ
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11/4/2015 9:05:00									
Sample ID: TMW06102015	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	710	J	250	LOD	1000	LOQ	ug/L	J	RI

11/4/2015 9:05:00									
Sample ID: TMW06102015	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
IRON	27	J	50	LOD	100	LOQ	ug/L	J	RI
POTASSIUM	660	J	250	LOD	1000	LOQ	ug/L	J	RI

11/4/2015 10:05:00									
Sample ID: TMW13102015	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	810	J	250	LOD	1000	LOQ	ug/L	J	RI

11/4/2015 10:05:00									
Sample ID: TMW13102015	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	760	J	250	LOD	1000	LOQ	ug/L	J	RI

11/4/2015 1:30:00									
Sample ID: TMW25102015	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	910	J	250	LOD	1000	LOQ	ug/L	J	RI

11/4/2015 1:30:00									
Sample ID: TMW25102015	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	570	J	250	LOD	1000	LOQ	ug/L	J	RI

Method Category:	METALS	Method:	6020A	Matrix:	AQ
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11/4/2015 11:05:00									
Sample ID: TMW01102015	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	0.62	J	1.0	LOD	6.0	LOQ	ug/L	J	RI

* denotes a non-reportable result

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



Data Qualifier Summary

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method Category:	METALS	
Method:	6020A	Matrix: AQ

Sample ID: TMW01102015 Collected: 11/4/2015 11:05:00 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	0.76	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
BERYLLIUM	0.27	J	0.30	LOD	1.0	LOQ	ug/L	J	RI
CHROMIUM	0.64	J	1.8	LOD	10	LOQ	ug/L	J	RI
COBALT	0.12	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	1.1	J	1.0	LOD	3.0	LOQ	ug/L	J	RI
SILVER	0.040	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.10	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
ZINC	2.5	J	8.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW01102015 Collected: 11/4/2015 11:05:00 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	0.94	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	0.90	J	1.8	LOD	10	LOQ	ug/L	J	RI
COBALT	0.071	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
THALLIUM	0.19	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb

Sample ID: TMW03102015 Collected: 11/4/2015 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
COPPER	1.0	J	1.8	LOD	2.0	LOQ	ug/L	J	RI

Sample ID: TMW03102015 Collected: 11/4/2015 10:00:00 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	0.45	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COBALT	0.064	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
COPPER	0.96	J	1.8	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	1.1	J	1.0	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	2.3	J	2.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	8.7	J	8.0	LOD	20	LOQ	ug/L	J	RI

* denotes a non-reportable result

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

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Data Qualifier Summary

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method Category:	METALS								
Method:	6020A	Matrix:	AQ						

Sample ID: TMW03102015 11/4/2015 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
ARSENIC	0.56	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	0.71	J	1.8	LOD	10	LOQ	ug/L	J	RI
COBALT	0.081	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
THALLIUM	0.084	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb
VANADIUM	2.2	J	2.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	10	J	8.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW04102015 11/4/2015 11:05:00 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
COPPER	1.1	J	1.8	LOD	2.0	LOQ	ug/L	J	RI

Sample ID: TMW04102015 11/4/2015 11:05:00 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	0.86	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	2.4	J	1.8	LOD	10	LOQ	ug/L	J	RI
COPPER	0.90	J	1.8	LOD	2.0	LOQ	ug/L	J	RI
MANGANESE	0.36	J	0.95	LOD	3.5	LOQ	ug/L	J	RI
NICKEL	0.71	J	1.0	LOD	3.0	LOQ	ug/L	J	RI
ZINC	4.1	J	8.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW04102015 11/4/2015 11:05:00 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	0.96	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	2.2	J	1.8	LOD	10	LOQ	ug/L	J	RI
COBALT	0.057	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
ZINC	2.3	J	8.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW06102015 11/4/2015 9:05:00 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	0.80	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	0.66	J	1.8	LOD	10	LOQ	ug/L	J	RI

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

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Data Qualifier Summary

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method Category:	METALS								
Method:	6020A	Matrix:	AQ						

Sample ID: TMW06102015 Collected: AM 11/4/2015 9:05:00 Analysis Type: RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	0.054	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	0.81	J	1.0	LOD	3.0	LOQ	ug/L	J	RI
SELENIUM	1.4	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
VANADIUM	3.1	J	2.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	3.9	J	8.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW06102015 Collected: AM 11/4/2015 9:05:00 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	0.78	J	1.8	LOD	10	LOQ	ug/L	J	RI
COBALT	0.073	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	0.48	J	1.0	LOD	3.0	LOQ	ug/L	J	RI
SELENIUM	1.3	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
VANADIUM	3.1	J	2.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID: TMW10102015 Collected: PM 11/4/2015 1:00:00 Analysis Type: RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.55	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
NICKEL	1.3	J	1.0	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	3.1	J	2.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	2.2	J	8.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW10102015 Collected: PM 11/4/2015 1:00:00 Analysis Type: RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.58	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	1.4	J	1.8	LOD	10	LOQ	ug/L	J	RI
NICKEL	0.67	J	1.0	LOD	3.0	LOQ	ug/L	J	RI
SILVER	0.091	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.085	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb
VANADIUM	3.2	J	2.0	LOD	6.0	LOQ	ug/L	J	RI

* denotes a non-reportable result

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

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Data Qualifier Summary

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method Category: METALS

Method: 6020A

Matrix: AQ

Sample ID: TMW11102015 11/4/2015 1:25:00 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
ARSENIC	0.70	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	3.2	J	1.8	LOD	10	LOQ	ug/L	J	RI
COBALT	0.36	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
LEAD	0.72	J	0.70	LOD	3.0	LOQ	ug/L	J	RI
NICKEL	2.1	J	1.0	LOD	3.0	LOQ	ug/L	J	RI
SILVER	2.5	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
ZINC	16	J	8.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW13102015 11/4/2015 10:05:00 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
COPPER	0.68	J	1.8	LOD	2.0	LOQ	ug/L	J	RI

Sample ID: TMW13102015 11/4/2015 10:05:00 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
ANTIMONY	1.2	J	1.0	LOD	6.0	LOQ	ug/L	J	RI
CHROMIUM	0.69	J	1.8	LOD	10	LOQ	ug/L	J	RI
NICKEL	0.40	J	1.0	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	3.3	J	2.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	2.2	J	8.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW13102015 11/4/2015 10:05:00 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
CHROMIUM	0.66	J	1.8	LOD	10	LOQ	ug/L	J	RI
MANGANESE	0.74	J	0.95	LOD	3.5	LOQ	ug/L	U	Mb
SILVER	0.16	J	0.10	LOD	5.0	LOQ	ug/L	J	RI
THALLIUM	0.24	J	0.20	LOD	1.0	LOQ	ug/L	U	Mb
VANADIUM	2.6	J	2.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID: TMW25102015 11/4/2015 1:30:00 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	0.52	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

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Data Qualifier Summary

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method Category:	METALS								
Method:	6020A	Matrix:	AQ						

Sample ID: TMW25102015 Collected: PM 11/4/2015 1:30:00 Analysis Type: RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	0.10	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
COPPER	1.2	J	1.8	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	1.1	J	1.0	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	3.8	J	2.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	4.1	J	8.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW25102015 Collected: PM 11/4/2015 1:30:00 Analysis Type: RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	3.4	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
CHROMIUM	1.9	J	1.8	LOD	10	LOQ	ug/L	J	RI
LEAD	1.8	J	0.70	LOD	3.0	LOQ	ug/L	J	RI
SILVER	1.6	J	0.10	LOD	5.0	LOQ	ug/L	J	RI

Sample ID: TMW28102015 Collected: PM 11/3/2015 4:20:00 Analysis Type: RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	0.090	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
NICKEL	0.46	J	1.0	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	1.4	J	2.0	LOD	6.0	LOQ	ug/L	J	RI

Sample ID: TMW28102015 Collected: PM 11/3/2015 4:20:00 Analysis Type: RES/TOT Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	0.099	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
VANADIUM	0.78	J	2.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	2.4	J	8.0	LOD	20	LOQ	ug/L	J	RI

Sample ID: TMW39D102015 Collected: PM 11/4/2015 12:00:00 Analysis Type: RES/DIS Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	0.51	J	1.8	LOD	10	LOQ	ug/L	J	RI
COBALT	0.21	J	0.20	LOD	1.0	LOQ	ug/L	J	RI
COPPER	1.0	J	1.8	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	1.7	J	1.0	LOD	3.0	LOQ	ug/L	J	RI

* denotes a non-reportable result

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

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Data Qualifier Summary

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method Category:	METALS	
Method:	6020A	Matrix: AQ

11/4/2015 12:00:00
Sample ID: TMW39D102015 **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
SELENIUM	0.95	J	2.0	LOD	5.0	LOQ	ug/L	J	RI
VANADIUM	1.9	J	2.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	5.4	J	8.0	LOD	20	LOQ	ug/L	J	RI

11/4/2015 1:05:00
Sample ID: TMW48102015 **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	0.79	J	1.8	LOD	2.0	LOQ	ug/L	J	RI

11/4/2015 1:05:00
Sample ID: TMW48102015 **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	0.53	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
COPPER	1.7	J	1.8	LOD	2.0	LOQ	ug/L	J	RI
NICKEL	1.2	J	1.0	LOD	3.0	LOQ	ug/L	J	RI
VANADIUM	3.9	J	2.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	12	J	8.0	LOD	20	LOQ	ug/L	J	RI

11/4/2015 1:05:00
Sample ID: TMW48102015 **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	0.61	J	1.0	LOD	5.0	LOQ	ug/L	J	RI
VANADIUM	5.3	J	2.0	LOD	6.0	LOQ	ug/L	J	RI
ZINC	7.8	J	8.0	LOD	20	LOQ	ug/L	J	RI

Method Category:	SVOA	
Method:	8081A	Matrix: AQ

11/4/2015 8:10:00
Sample ID: MW22S102015 **Collected:** 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	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
4,4'-DDE	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
4,4'-DDT	0.048	U Q	0.048	LOD	0.048	LOQ	ug/L	UJ	Surr
ALDRIN	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr

* denotes a non-reportable result

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

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Data Qualifier Summary

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method Category:	SVOA		
Method:	8081A	Matrix:	AQ

Sample ID: MW22S102015 Collected: 11/4/2015 8:10:00 AM Analysis Type: RES Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALPHA-BHC	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
ALPHA-CHLORDANE	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
BETA-BHC	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
DELTA-BHC	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
DIELDRIN	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
ENDOSULFAN I	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
ENDOSULFAN II	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
ENDOSULFAN SULFATE	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
ENDRIN	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
ENDRIN ALDEHYDE	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
ENDRIN KETONE	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
GAMMA-BHC	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
GAMMA-CHLORDANE	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
HEPTACHLOR	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
HEPTACHLOR EPOXIDE	0.019	U Q	0.019	LOD	0.048	LOQ	ug/L	UJ	Surr
METHOXYCHLOR	0.048	U Q	0.048	LOD	0.048	LOQ	ug/L	UJ	Surr
TOXAPHENE	0.77	U Q	0.77	LOD	4.8	LOQ	ug/L	UJ	Surr

Method Category:	SVOA		
Method:	8270D	Matrix:	AQ

Sample ID: TMW03102015 Collected: 11/4/2015 10:00:00 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	28	J	33	LOD	89	LOQ	ug/L	J	RI

Sample ID: TMW03102015 Collected: 11/4/2015 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
BENZIDINE	110	U Q	110	LOD	220	LOQ	ug/L	UJ	Lcs

Sample ID: TMW04102015 Collected: 11/4/2015 11:05:00 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	110	U Q	110	LOD	210	LOQ	ug/L	UJ	Lcs

* denotes a non-reportable result

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

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Data Qualifier Summary

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Method Category:	SVOA
Method:	8270D
Matrix:	AQ

Sample ID: TMW06102015 Collected: AM 11/4/2015 9:05:00 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 Q	110	LOD	220	LOQ	ug/L	UJ	Lcs

Sample ID: TMW39D102015 Collected: PM 11/4/2015 12:00:00 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 Q	110	LOD	210	LOQ	ug/L	UJ	Lcs

Sample ID: TMW48102015 Collected: AM 11/4/2015 1:05:00 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	UJ	Lcs

Method Category:	SVOA
Method:	8330B
Matrix:	AQ

Sample ID: TMW03102015 Collected: AM 11/4/2015 10:00:00 Analysis Type: RES Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-AMINO-2,6-DINITROTOLUENE	1.5	J	0.13	LOD	0.21	LOQ	ug/L	J	ProfJudg
Dinitrotoluene, 2,4-	0.29	J	0.21	LOD	0.42	LOQ	ug/L	J	RI, ProfJudg

Sample ID: TMW04102015 Collected: AM 11/4/2015 11:05:00 Analysis Type: RE2 Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-NITROTOLUENE	1.9	J	0.46	LOD	1.1	LOQ	ug/L	J	Surr, ProfJudg

Sample ID: TMW04102015 Collected: AM 11/4/2015 11:05:00 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	2.7	Q	0.14	LOD	0.23	LOQ	ug/L	J	Surr
4-AMINO-2,6-DINITROTOLUENE	1.5	Q J	0.14	LOD	0.23	LOQ	ug/L	J	Surr, ProfJudg

* denotes a non-reportable result

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

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Data Qualifier Summary

Lab Reporting Batch ID: 280-76405-1

Laboratory: TA DEN

EDD Filename: Prep280-76405-1

eQAPP Name: FtWingate_Primary_120405

Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
Lcs	Laboratory Control Spike Lower Estimation
Mb	Method Blank Contamination
ProfJudg	Professional Judgment
RI	Reporting Limit Trace Value
Surr	Surrogate/Tracer Recovery Lower Estimation
Surr	Surrogate/Tracer Recovery Lower Rejection
Surr	Surrogate/Tracer Recovery Upper Estimation

* denotes a non-reportable result

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

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