#### **CASE NARRATIVE**

Client: Sundance Consulting, Inc. Project: Fort Wingate, New Mexico Report Number: 280-77373-1

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**

One sample was received on 12/2/2015 9:20 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.9°C. No anomalies were encountered during sample receipt.

#### Nitrate & Nitrite - 9056

Sample TMW28102015 (280-77373-1) was analyzed for anions by ion chromatography in accordance with SW 846 9056. The sample was analyzed on 12/02/2015.

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

Nitrate as N was detected in method blank MB 280-306281/13 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.

MS/MSD analyses for analytical batch 280-306281 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:** 280-77373-1

eQapp Name: FtWingate\_Primary\_120405

Samples Date	Associated	Sample Collection
	Samples	Date



## **Data Qualifier Summary**

**Laboratory: TA DEN** Lab Reporting Batch ID: 280-77373-1

eQAPP Name: FtWingate\_Primary\_120405 EDD Filename: 280-77373-1

Method Category: **GENCHEM** 

AQ Method: 9056 Matrix:

12/1/2015 1:35:00 Collected: PM

Sample ID:TMW28102015	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	0.048	J	0.10	LOD	0.50	LOQ	mg/L	U	Mb

<sup>\*</sup> denotes a non-reportable result



## **Data Qualifier Summary**

Lab Reporting Batch ID: 280-77373-1

Laboratory: TA DEN

EDD Filename: 280-77373-1

eQAPP Name: FtWingate\_Primary\_120405

### **Reason Code Legend**

Reason Code	Description
Mb	Method Blank Contamination
RI	Reporting Limit Trace Value

<sup>\*</sup> denotes a non-reportable result



# Data Review Sample Summary Report by Analysis Method

Reviewed By:			<b>Approved By:</b>		Labo	ratory: TA DEN
Client Sample ID	Lab Sample ID	Matrix	Sample Type	Preparation Method	Collection Date	Validation Code
Lab Reporting Bate	ch: 280-77373-1					
Method: 9056						
TMW28102015	280-77373-1	AQ	N	METHOD	12/1/2015 1:35:00 PM	S2AVE



# Data Review Sample Summary Report by Analysis Method

Reviewed By:

Approved By:

Laboratory: TA DEN

Preparation

Client Sample ID Lab Sample ID Matrix Sample Type Method Collection Date Validation Code

### Validation Label Legend

Label Code	Label Decription	EPA Level
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: 280-77373-1 Laboratory: TA DEN EDD Filename: 280-77373-1 eQAPP Name: FtWingate\_Primary\_120405

#### Validation Area Note

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

## Method Blank Outlier Report

Lab Reporting Batch ID: 280-77373-1 Laboratory: TA DEN

EDD Filename: 280-77373-1 eQAPP Name: FtWingate\_Primary\_120405

Method: Matrix:	9056 AQ				
Method Bla Sample ID	ank	Analysis Date	Analyte	Result	Associated Samples
MB 280-306281	/13	12/2/2015 2:58:00 PM	NITRATE	0.0424 mg/L	TMW28102015

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	
TMW28102015(RES/TOT)	NITRATE	0.048 mg/L	0.048U mg/L	

## **Reporting Limit Outliers**

Lab Reporting Batch ID: 280-77373-1 Laboratory: TA DEN

EDD Filename: 280-77373-1 eQAPP Name: FtWingate\_Primary\_120405

Method:	9056							
Matrix:	AQ							
SampleID		Analyte	Lab Qual	Result	Reporting Limit		Units	Flag
Sampleid		Analyte	Quai	nesuit	LIIIII	Type	Ullits	riag
TMW281020	015	NITRATE	J	0.048	0.50	LOQ	mg/L	J (all detects)