

**CASE NARRATIVE**  
**Client: Sundance Consulting, Inc.**  
**Project: Fort Wingate, New Mexico**  
**Report Number: 280-76268-2**

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**

Seven samples were received on 11/3/2015 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 11 coolers at receipt time were 0.3°C, 0.6°C, 0.6°C, 0.7°C, 1.5°C, 1.6°C, 1.7°C, 1.9°C, 2.2°C, 2.6°C and 3.1°C.

Additional samples/analyses requested on the chain-of-custody are reported under separate cover (280-76268-1 & 280-76268-3).

No other anomalies were encountered during sample receipt.

**GC/MS Semivolatiles - 8270D**

Samples FW31102015EQU002 (280-76268-3), FW3112015 (280-76268-4), TMW35102015 (280-76268-6), MW22S102015 (280-76268-7), MW22D102015 (280-76268-8), MW20102015 (280-76268-9) and DMW20102015 (280-76268-10) were analyzed for semivolatile organic compounds (GC-MS) in accordance with SW-846 8270D. The samples were prepared on 11/04/2015 and analyzed on 11/24/2015.

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:** 280-76268-2

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

	Associated Samples	Sample Collection Date
<b>Field QC</b> DMW20102015 <b>QC Type:</b> FD	MW20102015	11/2/2015 10:30:00 AM
<b>Field QC</b> FW31102015EQU002 <b>QC Type:</b> EB	DMW20102015	11/2/2015 10:30:00 AM
	FW3112015	11/2/2015 11:05:00 AM
	MW20102015	11/2/2015 10:30:00 AM
	MW22D102015	11/2/2015 12:10:00 PM
	MW22S102015	11/2/2015 11:15:00 AM



## *Data Qualifier Summary*

Lab Reporting Batch ID: 280-76268-2

Laboratory: TA DEN

EDD Filename: 280-76268-2

eQAPP Name: FtWingate\_Primary\_120405

No Data Review Qualifiers Applied.



## Data Review Summary

Lab Reporting Batch ID: 280-76268-2

Laboratory: TA DEN

EDD Filename: 280-76268-2

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	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: 280-76268-2</b>						
<b>Method: 8270D</b>						
DMW20102015	280-76268-10	AQ	FD	3520C	11/2/2015 10:30:00 AM	S2AVE
FW31102015EQU002	280-76268-3	AQ	EB	3520C	11/2/2015 9:30:00 AM	S2AVE
FW3112015	280-76268-4	AQ	N	3520C	11/2/2015 11:05:00 AM	S2AVE
MW20102015	280-76268-9	AQ	N	3520C	11/2/2015 10:30:00 AM	S2AVE
MW20102015MS	280-76268-9MS	AQ	MS	3520C	11/2/2015 10:30:00 AM	S2AVE
MW20102015MSD	280-76268-9MSD	AQ	MSD	3520C	11/2/2015 10:30:00 AM	S2AVE
MW22D102015	280-76268-8	AQ	N	3520C	11/2/2015 12:10:00 PM	S2AVE
MW22S102015	280-76268-7	AQ	N	3520C	11/2/2015 11:15:00 AM	S2AVE
TMW35102015	280-76268-6	AQ	N	3520C	11/2/2015 9:55:00 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: 280-76268-2

Laboratory: TA DEN

EDD Filename: 280-76268-2

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>
DMW20102015	Terphenyl-d14	37	50.00-135.00	No Affected Compounds	
MW20102015	Terphenyl-d14	36	50.00-135.00	No Affected Compounds	
MW22D102015	Terphenyl-d14	36	50.00-135.00	No Affected Compounds	
MW22S102015	Terphenyl-d14	26	50.00-135.00	No Affected Compounds	