Laboratory Data Consultants, Inc.

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Terranext
4050 E. Cotton Center Blvd. Ste 73
Phoenix, AZ 85040
ATTN: Mr. Chuck Gordon

May 14, 2013

SUBJECT: West Van Buren Area, Data Validation

Dear Mr. Gordon,

Enclosed are the final validation reports for the fractions listed below. These SDGs were received on April 23, 2013. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 29578:

SDG #	Fraction
458918 459007 459063 459172 459243 459337 459346 459504 459592 459593 459683 459692 459871 459938	Volatiles, 1,4-Dioxane, Chromium

The data validation was performed under EPA Level III & IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- USEPA, Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, June 2008
- USEPA, Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, January 2010
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; Update IV, February 2007

The following are definitions of the Arizona Data Qualifiers (ADQ):

Method Blank:

B1 Target analyte detected in method blank at or above the method reporting limit.

B2 Non-target analyte detected in method blank and sample, producing interference.

B3 Target analyte detected in calibration blank at or above the method reporting limit.

B4 Target analyte detected in blank at or above method acceptance criteria.

B5 Target analyte detected in method blank at or above the method reporting limit, but below trigger level or MCL.

B6 Target analyte detected in calibration blank at or above the method reporting limit, but below trigger level or MCL.

B7 Target analyte detected in method blank at or above the method reporting limit. Concentration found in the sample was 10 times above the concentration found in the method blank.

Confirmation:

C1 Confirmatory analysis not performed as required by the method.

C3 Qualitative confirmation performed.

C4 Confirmatory analysis was past holding time.

C5 Confirmatory analysis was past holding time. Original result not confirmed.

C6 Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the higher value was reported as there was no obvious chromatographic interference.

C7 Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the lower value was reported due to apparent chromatographic interference.

Dilution:

D1 Sample required dilution due to matrix interference.

D2 Sample required dilution due to high concentration of target analyte.

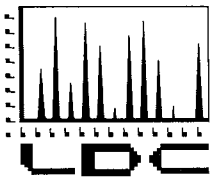
D3 Sample dilution required due to insufficient sample.

D4 Minimum reporting level (MRL) adjusted to reflect sample amount received and analyzed.

Estimated Concentration:

E1 Concentration estimated. Analyte exceeded calibration range. Reanalysis not possible due to insufficient sample.

E2 Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.



E3 Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to holding time requirements.

E4 Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL).

E5 Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL), but not confirmed by alternate analysis.

E6 Concentration estimated. Internal standard recoveries did not meet method acceptance criteria.

E7 Concentration estimated. Internal standard recoveries did not meet laboratory acceptance criteria.

Hold Time:

H1 Sample analysis performed past holding time.

H2 Initial analysis within holding time. Reanalysis for the required dilution was past holding time.

H3 Sample was received and analyzed past holding time.

H4 Sample was extracted past required extraction holding time, but analyzed within analysis holding time.

Laboratory Fortified Blank/Blank Spike:

L1 The associated blank spike recovery was above laboratory acceptance limits.

L2 The associated blank spike recovery was below laboratory acceptance limits.

L3 The associated blank spike recovery was above method acceptance limits.

L4 The associated blank spike recovery was below method acceptance limits.

Matrix Spike:

M1 Matrix spike recovery was high, the method control sample recovery was acceptable.

M2 Matrix spike recovery was low, the method control sample recovery was acceptable.

M3 The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.

M4 The analysis of the spiked sample required a dilution such that the spike concentration was diluted below the reporting limit. The method control sample recovery was acceptable.

M5 Analyte concentration was determined by the method of standard addition (MSA).

M6 Matrix spike recovery was high. Data reported per ADEQ policy 0154.000.

M7 Matrix spike recovery was low. Data reported per ADEQ policy 0154.000.

Sample Quality:

Q1 Sample integrity was not maintained.

Q2 Sample received with head space.

Q3 Sample received with improper chemical preservation.

Q4 Sample received and analyzed without chemical preservation.

Q5 Sample received with inadequate chemical preservation, but preserved by the laboratory.

Q6 Sample was received above recommended temperature.

Q7 Sample inadequately dechlorinated.

Q8 Insufficient sample received to meet method QC requirements. Batch QC requirements satisfies ADEQ policies 0154 and 0155.

Q9 Insufficient sample received to meet method QC requirements.

Q10 Sample received in inappropriate sample container.

Q11 Sample is heterogeneous. Sample homogeneity could not be readily achieved using routine laboratory practices.

Duplicates:

R1 RPD exceeded the method control limit.

R2 RPD exceeded the laboratory control limit.

R4 MS/MSD RPD exceeded the method control limit. Recovery met acceptance criteria.

R5 MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.

R6 LFB/LFBD RPD exceeded the method control limit. Recovery met acceptance criteria.

R7 LFB/LFBD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.

R8 Sample RPD exceeded the method control limit.

R9 Sample RPD exceeded the laboratory control limit.

R10 Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the lower value was reported due to apparent chromatographic problems.

R11 The RPD calculation for the MS/MSD does not provide useful information due to varying sample weights when Encore samplers/methanol preserved samples are used.

Surrogates:

S1 Surrogate recovery was above laboratory acceptance limits, but within method acceptance limits.

S3 Surrogate recovery was above laboratory acceptance limits, but within method acceptance limits. No target analytes were detected in the sample.

S4 Surrogate recovery was above laboratory and method acceptance limits. No target analytes were detected in the sample.

S5 Surrogate recovery was below laboratory acceptance limits, but within method acceptance limits.

S6 Surrogate recovery was below laboratory and method acceptance limits. Reextraction and/or reanalysis confirms low recovery caused by matrix effect.

S7 Surrogate recovery was below laboratory and method acceptance limits. Unable to confirm matrix effect.

S8 The analysis of the sample required a dilution such that the surrogate recovery calculation does not provide any useful information. The method control sample recovery was acceptable.

S10 Surrogate recovery was above laboratory and method acceptance limits. See case narrative.

S11 Surrogate recovery was high. Data reported per ADEQ policy 0154.000.

S12 Surrogate recovery was low. Data reported per ADEQ policy 0154.000.

Calibration Verification:

V1 CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.

V2 CCV recovery was above method acceptance limits. This target analyte was detected in the sample. The sample could not be reanalyzed due to insufficient sample.

V3 CCV recovery was above method acceptance limits. This target analyte was detected in the sample, but the sample could not be reanalyzed. See case narrative.

V4 CCV recovery was below method acceptance limits. The sample could not be reanalyzed due to insufficient sample.

V5 CCV recovery after a group of samples was above method acceptance limits. This target analyte was not detected in the sample. Acceptable per EPA Method 8000B.

V6 Data reported from one-point calibration criteria per ADEQ policy 0155.000.

V7 Calibration verification recovery was above the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.

V8 Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.

Calibration:

W1 The % RSD for this compound was above 20%. The average % RSD for all compounds in the calibration met the 20% criteria as specified in EPA Method 8000B.

W2 The % RSD for this compound was above 15%. The average % RSD for all compounds in the calibration met the 15% criteria as specified in EPA Method 8260B/8270C.

Please feel free to contact us if you have any questions.

Sincerely,

Erlinda T. Rauto
Operations Manager/Senior Chemist

1,131 pages-SF

Attachment 1

Level III/IV-Client Select

LDC #29578 (Terranext-Phoenix, AZ / West Van Buren Area)

Project #0310-3154-16

LDC	SDG#	DATE REC'D	(3) DATE DUE	VOA (8260B)		1,4-Dioxane (8260B)		Cr (6010B)		Diss. Cr (6010B)																									
Matrix: Water/Soil				W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	458918	04/23/13	05/14/13	5	0	4	0	4	0	4	0																								
B	459007	04/23/13	05/14/13	6	0	5	0	5	0	5	0																								
C	459063	04/23/13	05/14/13	7	0	6	0	6	0	6	0																								
D	459172	04/23/13	05/14/13	7	0	6	0	5	0	5	0																								
E	459243	04/23/13	05/14/13	6	0	5	0	5	0	5	0																								
F	459337	04/23/13	05/14/13	16	0	15	0	-	-	-	-																								
G	459346	04/23/13	05/14/13	12	0	11	0	10	0	10	0																								
H	459504	04/23/13	05/14/13	12	0	11	0	11	0	11	0																								
I	459592	04/23/13	05/14/13	8	0	7	0	6	0	6	0																								
J	459593	04/23/13	05/14/13	1	0	1	0	1	0	1	0																								
K	459683	04/23/13	05/14/13	10	0	9	0	9	0	9	0																								
L	459692	04/23/13	05/14/13	14	0	13	0	-	-	-	-																								
M	459871	04/23/13	05/14/13	18	0	17	0	-	-	-	-																								
N	459938	04/23/13	05/14/13	13	0	12	0	-	-	-	-																								
Total	T/LR			135	0	122	0	62	0	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	381

Shaded cells indicate Level IV validation (all other cells are Level IIII validation). These sample counts do not include MS/MSD, and DUPs

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 8, 2013

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 458918

Sample Identification

AVB133-0102-1000
AVB133-0100-14200
AVB126-0200-12230
AVB126-0300-11325
AVB126-0304-1000

Introduction

This data review covers 5 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample AVB133-0102-1000 was identified as a trip blank. No volatile contaminants were found.

Sample AVB126-0304-1000 was identified as an equipment blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

West Van Buren Area
Volatiles - Data Qualification Summary - SDG 458918

No Sample Data Qualified in this SDG

West Van Buren Area
Volatiles - Laboratory Blank Data Qualification Summary - SDG 458918

No Sample Data Qualified in this SDG

West Van Buren Area
Volatiles - Field Blank Data Qualification Summary - SDG 458918

No Sample Data Qualified in this SDG

LDC #: 29578A1a **VALIDATION COMPLETENESS WORKSHEET** Date: 5/1/13
SDG #: 458918 Level III Page: 1 of 1
Laboratory: Xenco Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/8/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates N	SW FT	client specified
VIII.	Laboratory control samples	A	LCS ID
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	TB = 1 EB = 5

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: water

1	AVB133-0102-1000 TB	11	635048-1-BLK	21		31	
2	AVB133-0100-14200	12		22		32	
3	AVB126-0200-12230	13		23		33	
4	AVB126-0300-11325	14		24		34	
5	AVB126-0304-1000 EB	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 8, 2012

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: 1,4-Dioxane

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 458918

Sample Identification

AVB133-0100-14200
AVB126-0200-12230
AVB126-0300-11325
AVB126-0304-1000
AVB126-0304-1000MS
AVB126-0304-1000MSD

Introduction

This data review covers 6 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8260B for 1,4-Dioxane.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks

Sample AVB126-0304-1000 was identified as an equipment blank. No 1,4-dioxane was found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

West Van Buren Area
1,4-Dioxane - Data Qualification Summary - SDG 458918

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG 458918

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Field Blank Data Qualification Summary - SDG 458918

No Sample Data Qualified in this SDG

LDC #: 29578A1b
SDG #: 458918
Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 5/1/13
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/8/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	EB = 4

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: ~~Soil~~ Water

1	AVB133-0100-14200	11	635324-BLK	21		31	
2	AVB126-0200-12230	12		22		32	
3	AVB126-0300-11325	13		23		33	
4	AVB126-0304-1000 EB	14		24		34	
5	AVB126-0304-1000MS	15		25		35	
6	AVB126-0304-1000MSD	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 8, 2013

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: Chromium

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 458918

Sample Identification

AVB133-0100-14200
AVB126-0200-12230
AVB126-0300-11325
AVB126-0304-1000
AVB133-0100-14200F
AVB126-0200-12230F
AVB126-0300-11325F
AVB126-0304-1000F

Sample IDs appended with "F" were analyzed for dissolved chromium.

Introduction

This data review covers 8 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6010B for Chromium.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

ICP-MS was not utilized in this SDG.

III. Calibration

Calibration data were not reviewed for Level III.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No chromium was found in the preparation blanks.

Samples AVB126-0304-1000 and AVB126-0304-1000F were identified as equipment blanks. No chromium was found.

V. ICP Interference Check Sample (ICS) Analysis

ICP interference check data were not reviewed for Level III.

VI. Matrix Spike Analysis

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Internal Standards

ICP-MS was not utilized in this SDG.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution was not performed for this SDG.

XII. Sample Result Verification

Raw data was not reviewed for this SDG.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

West Van Buren Area
Chromium - Data Qualification Summary - SDG 458918

No Sample Data Qualified in this SDG

West Van Buren Area
Chromium - Laboratory Blank Data Qualification Summary - SDG 458918

No Sample Data Qualified in this SDG

West Van Buren Area
Chromium - Field Blank Data Qualification Summary - SDG 458918

No Sample Data Qualified in this SDG

LDC #: 29578A4 **VALIDATION COMPLETENESS WORKSHEET** Date: 4/30/13
SDG #: 458918 Level III Page: 1 of 1
Laboratory: Xenco Laboratories Reviewer: W
2nd Reviewer: [illegible]

METHOD: Chromium (EPA SW846 Method 6010B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/8/13
II.	Calibration	N	~~not utilized~~ W
III.	Blanks	A	
IV.	ICP Interference Check Sample (ICS) Analysis	N	
V.	Matrix Spike Analysis	N	3 CS
VI.	Duplicate Sample Analysis	N	
VII.	Laboratory Control Samples (LCS)	A	LCS/LCSD
VIII.	Internal Standard (ICP-MS)	N	not utilized
IX.	Furnace Atomic Absorption QC	N	↓
X.	ICP Serial Dilution	N	not performed
XI.	Sample Result Verification	N	
XII.	Overall Assessment of Data	A	
XIII.	Field Duplicates	N	
XIV.	Field Blanks	ND	EB= 4, 8

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: All

1	AVB133-0100-14200	11	MB	21		11	
2	AVB126-0200-12230	12		22		12	
3	AVB126-0300-11325	13		23		13	
4	AVB126-0304-1000	14		24		14	
5	AVB133-0100-14200F	15		25		15	
6	AVB126-0200-12230F	16		26		16	
7	AVB126-0300-11325F	17		27		17	
8	AVB126-0304-1000F	18		28		18	
9		19		29		19	
10		20		30		20	

Notes: Samples appended with "F" were analyzed for dissolved chromium

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 458918

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB133-0102-1000 Matrix: Water Date Received: 03.08.13 14.42
Lab Sample Id: 458918-001 Date Collected: 03.08.13 09.00

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.12.13 13.32
Seq Number: 908997

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.12.13 18.55		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.12.13 18.55		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.12.13 18.55		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.12.13 18.55		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.12.13 18.55		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.12.13 18.55		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.12.13 18.55		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.12.13 18.55		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.12.13 18.55		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.12.13 18.55		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.12.13 18.55		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.12.13 18.55		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.12.13 18.55		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.12.13 18.55		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.12.13 18.55		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.12.13 18.55		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.12.13 18.55		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.12.13 18.55		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.12.13 18.55		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.12.13 18.55		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.12.13 18.55		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.12.13 18.55		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.12.13 18.55		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.12.13 18.55		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.12.13 18.55		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.12.13 18.55		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.12.13 18.55		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.12.13 18.55		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.12.13 18.55		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.12.13 18.55		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.12.13 18.55		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.12.13 18.55		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.12.13 18.55		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.12.13 18.55		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.12.13 18.55		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.12.13 18.55		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.12.13 18.55		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.12.13 18.55		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.12.13 18.55		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.12.13 18.55		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.12.13 18.55		1

Final 1.000

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 458918

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB133-0102-1000 Matrix: Water Date Received: 03.08.13 14.42
Lab Sample Id: 458918-001 Date Collected: 03.08.13 09.00

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.12.13 13.32
Seq Number: 908997

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.12.13 18.55		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.12.13 18.55		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.12.13 18.55		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.12.13 18.55		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.12.13 18.55		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.12.13 18.55		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.12.13 18.55		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.12.13 18.55		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.12.13 18.55		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.12.13 18.55		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.12.13 18.55		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.12.13 18.55		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.12.13 18.55		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.12.13 18.55		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.12.13 18.55		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.12.13 18.55		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.12.13 18.55		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.12.13 18.55		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.12.13 18.55		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.12.13 18.55		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.12.13 18.55		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.12.13 18.55		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.12.13 18.55		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.12.13 18.55		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.12.13 18.55		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.12.13 18.55		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.12.13 18.55		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	69-133	03.12.13 18.55	
1,2-Dichloroethane-D4	17060-07-0	88	%	66-139	03.12.13 18.55	
Toluene-D8	2037-26-5	95	%	70-130	03.12.13 18.55	
4-Bromofluorobenzene	460-00-4	90	%	70-135	03.12.13 18.55	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 458918

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB133-0100-14200 Matrix: Water Date Received: 03.08.13 14.42
Lab Sample Id: **458918-002** Date Collected: 03.08.13 09.00

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.12.13 13.32
Seq Number: 908997

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.12.13 19.20		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.12.13 19.20		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.12.13 19.20		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.12.13 19.20		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.12.13 19.20		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.12.13 19.20		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.12.13 19.20		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.12.13 19.20		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.12.13 19.20		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.12.13 19.20		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.12.13 19.20		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.12.13 19.20		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.12.13 19.20		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.12.13 19.20		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.12.13 19.20		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.12.13 19.20		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.12.13 19.20		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.12.13 19.20		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.12.13 19.20		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.12.13 19.20		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.12.13 19.20		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.12.13 19.20		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.12.13 19.20		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.12.13 19.20		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.12.13 19.20		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.12.13 19.20		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.12.13 19.20		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.12.13 19.20		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.12.13 19.20		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.12.13 19.20		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.12.13 19.20		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.12.13 19.20		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.12.13 19.20		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.12.13 19.20		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.12.13 19.20		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.12.13 19.20		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.12.13 19.20		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.12.13 19.20		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.12.13 19.20		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.12.13 19.20		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.12.13 19.20		1

Final 1.000

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 458918

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB133-0100-14200 Matrix: Water Date Received: 03.08.13 14.42
Lab Sample Id: 458918-002 Date Collected: 03.08.13 09.00

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.12.13 13.32
Seq Number: 908997

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.12.13 19.20		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.12.13 19.20		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.12.13 19.20		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.12.13 19.20		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.12.13 19.20		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.12.13 19.20		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.12.13 19.20		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.12.13 19.20		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.12.13 19.20		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.12.13 19.20		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.12.13 19.20		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.12.13 19.20		1
Toluene	108-88-3	**51.3**	2.00	ug/L	03.12.13 19.20		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.12.13 19.20		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.12.13 19.20		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.12.13 19.20		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.12.13 19.20		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.12.13 19.20		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.12.13 19.20		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.12.13 19.20		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.12.13 19.20		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.12.13 19.20		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.12.13 19.20		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.12.13 19.20		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.12.13 19.20		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.12.13 19.20		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.12.13 19.20		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	95	%	69-133	03.12.13 19.20	
1,2-Dichloroethane-D4	17060-07-0	89	%	66-139	03.12.13 19.20	
Toluene-D8	2037-26-5	96	%	70-130	03.12.13 19.20	
4-Bromofluorobenzene	460-00-4	91	%	70-135	03.12.13 19.20	

5/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 458918

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB126-0200-12230 Matrix: Water Date Received: 03.08.13 14.42
Lab Sample Id: 458918-003 Date Collected: 03.08.13 11.55

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.12.13 13.32
Seq Number: 908997

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.12.13 19.45		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.12.13 19.45		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.12.13 19.45		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.12.13 19.45		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.12.13 19.45		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.12.13 19.45		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.12.13 19.45		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.12.13 19.45		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.12.13 19.45		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.12.13 19.45		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.12.13 19.45		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.12.13 19.45		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.12.13 19.45		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.12.13 19.45		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.12.13 19.45		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.12.13 19.45		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.12.13 19.45		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.12.13 19.45		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.12.13 19.45		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.12.13 19.45		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.12.13 19.45		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.12.13 19.45		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.12.13 19.45		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.12.13 19.45		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.12.13 19.45		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.12.13 19.45		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.12.13 19.45		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.12.13 19.45		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.12.13 19.45		1
1,1-Dichloroethane	75-34-3	**0.990**	0.500	ug/L	03.12.13 19.45		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.12.13 19.45		1
1,1-Dichloroethene	75-35-4	**3.31**	0.500	ug/L	03.12.13 19.45		1
cis-1,2-Dichloroethene	156-59-2	**2.53**	0.500	ug/L	03.12.13 19.45		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.12.13 19.45		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.12.13 19.45		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.12.13 19.45		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.12.13 19.45		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.12.13 19.45		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.12.13 19.45		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.12.13 19.45		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.12.13 19.45		1

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 458918

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB126-0200-12230 Matrix: Water Date Received: 03.08.13 14.42
Lab Sample Id: 458918-003 Date Collected: 03.08.13 11.55

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.12.13 13.32
Seq Number: 908997

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.12.13 19.45		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.12.13 19.45		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.12.13 19.45		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.12.13 19.45		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.12.13 19.45		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.12.13 19.45		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.12.13 19.45		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.12.13 19.45		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.12.13 19.45		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.12.13 19.45		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.12.13 19.45		1
Tetrachloroethylene	127-18-4	**1.73**	0.500	ug/L	03.12.13 19.45		1
Toluene	108-88-3	**6.61**	2.00	ug/L	03.12.13 19.45		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.12.13 19.45		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.12.13 19.45		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.12.13 19.45		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.12.13 19.45		1
Trichloroethene	79-01-6	**10.6**	0.500	ug/L	03.12.13 19.45		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.12.13 19.45		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.12.13 19.45		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.12.13 19.45		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.12.13 19.45		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.12.13 19.45		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.12.13 19.45		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.12.13 19.45		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.12.13 19.45		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.12.13 19.45		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	95	%	69-133	03.12.13 19.45	
1,2-Dichloroethane-D4	17060-07-0	89	%	66-139	03.12.13 19.45	
Toluene-D8	2037-26-5	95	%	70-130	03.12.13 19.45	
4-Bromofluorobenzene	460-00-4	88	%	70-135	03.12.13 19.45	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 458918

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB126-0300-11325 Matrix: Water Date Received: 03.08.13 14.42
Lab Sample Id: 458918-004 Date Collected: 03.08.13 13.45

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.12.13 13.32
Seq Number: 908997

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.12.13 20.10		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.12.13 20.10		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.12.13 20.10		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.12.13 20.10		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.12.13 20.10		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.12.13 20.10		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.12.13 20.10		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.12.13 20.10		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.12.13 20.10		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.12.13 20.10		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.12.13 20.10		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.12.13 20.10		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.12.13 20.10		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.12.13 20.10		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.12.13 20.10		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.12.13 20.10		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.12.13 20.10		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.12.13 20.10		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.12.13 20.10		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.12.13 20.10		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.12.13 20.10		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.12.13 20.10		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.12.13 20.10		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.12.13 20.10		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.12.13 20.10		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.12.13 20.10		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.12.13 20.10		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.12.13 20.10		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.12.13 20.10		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.12.13 20.10		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.12.13 20.10		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.12.13 20.10		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.12.13 20.10		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.12.13 20.10		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.12.13 20.10		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.12.13 20.10		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.12.13 20.10		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.12.13 20.10		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.12.13 20.10		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.12.13 20.10		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.12.13 20.10		1

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Trans West Analytical Services, LLC

Certificate of Analytical Results 458918

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB126-0300-11325 Matrix: Water Date Received: 03.08.13 14.42
Lab Sample Id: 458918-004 Date Collected: 03.08.13 13.45

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.12.13 13.32
Seq Number: 908997

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.12.13 20.10		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.12.13 20.10		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.12.13 20.10		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.12.13 20.10		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.12.13 20.10		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.12.13 20.10		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.12.13 20.10		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.12.13 20.10		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.12.13 20.10		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.12.13 20.10		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.12.13 20.10		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.12.13 20.10		1
Toluene	108-88-3	**24.1**	2.00	ug/L	03.12.13 20.10		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.12.13 20.10		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.12.13 20.10		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.12.13 20.10		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.12.13 20.10		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.12.13 20.10		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.12.13 20.10		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.12.13 20.10		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.12.13 20.10		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.12.13 20.10		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.12.13 20.10		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.12.13 20.10		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.12.13 20.10		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.12.13 20.10		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.12.13 20.10		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	69-133	03.12.13 20.10	
1,2-Dichloroethane-D4	17060-07-0	87	%	66-139	03.12.13 20.10	
Toluene-D8	2037-26-5	94	%	70-130	03.12.13 20.10	
4-Bromofluorobenzene	460-00-4	88	%	70-135	03.12.13 20.10	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 458918

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB126-0304-1000 Matrix: Water Date Received: 03.08.13 14.42
Lab Sample Id: 458918-005 Date Collected: 03.08.13 14.05

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.12.13 13.32
Seq Number: 908997

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.12.13 20.36		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.12.13 20.36		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.12.13 20.36		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.12.13 20.36		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.12.13 20.36		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.12.13 20.36		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.12.13 20.36		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.12.13 20.36		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.12.13 20.36		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.12.13 20.36		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.12.13 20.36		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.12.13 20.36		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.12.13 20.36		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.12.13 20.36		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.12.13 20.36		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.12.13 20.36		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.12.13 20.36		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.12.13 20.36		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.12.13 20.36		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.12.13 20.36		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.12.13 20.36		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.12.13 20.36		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.12.13 20.36		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.12.13 20.36		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.12.13 20.36		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.12.13 20.36		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.12.13 20.36		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.12.13 20.36		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.12.13 20.36		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.12.13 20.36		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.12.13 20.36		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.12.13 20.36		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.12.13 20.36		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.12.13 20.36		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.12.13 20.36		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.12.13 20.36		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.12.13 20.36		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.12.13 20.36		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.12.13 20.36		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.12.13 20.36		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.12.13 20.36		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 458918

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB126-0304-1000 Matrix: Water Date Received: 03.08.13 14.42
Lab Sample Id: **458918-005** Date Collected: 03.08.13 14.05

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.12.13 13.32
Seq Number: 908997

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.12.13 20.36		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.12.13 20.36		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.12.13 20.36		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.12.13 20.36		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.12.13 20.36		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.12.13 20.36		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.12.13 20.36		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.12.13 20.36		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.12.13 20.36		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.12.13 20.36		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.12.13 20.36		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.12.13 20.36		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.12.13 20.36		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.12.13 20.36		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.12.13 20.36		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.12.13 20.36		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.12.13 20.36		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.12.13 20.36		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.12.13 20.36		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.12.13 20.36		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.12.13 20.36		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.12.13 20.36		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.12.13 20.36		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.12.13 20.36		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.12.13 20.36		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.12.13 20.36		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.12.13 20.36		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	69-133	03.12.13 20.36	
1,2-Dichloroethane-D4	17060-07-0	89	%	66-139	03.12.13 20.36	
Toluene-D8	2037-26-5	95	%	70-130	03.12.13 20.36	
4-Bromofluorobenzene	460-00-4	89	%	70-135	03.12.13 20.36	

3/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 458918

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB133-0100-14200 Matrix: Water Date Received: 03.08.13 14.42
Lab Sample Id: 458918-002 Date Collected: 03.08.13 09.00

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.15.13 12.30
Seq Number: 909220 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.15.13 21.56		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.00
Seq Number: 909241 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.18.13 17.26		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.14.13 16.00
Seq Number: 909314 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.14.13 16.18	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	96	%	75-131	03.14.13 16.18	
1,2-Dichloroethane-D4	17060-07-0	110	%	63-144	03.14.13 16.18	
Toluene-D8	2037-26-5	92	%	80-117	03.14.13 16.18	
4-Bromofluorobenzene	460-00-4	94	%	74-124	03.14.13 16.18	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 458918

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB126-0200-12230 Matrix: Water Date Received: 03.08.13 14.42
Lab Sample Id: **458918-003** Date Collected: 03.08.13 11.55

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.15.13 12.30
Seq Number: 909220 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0341**	0.0100	mg/L	03.15.13 22.12		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.00
Seq Number: 909241 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.18.13 17.32		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.14.13 16.01
Seq Number: 909314 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.14.13 16.42	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	96	%	75-131	03.14.13 16.42	
1,2-Dichloroethane-D4	17060-07-0	108	%	63-144	03.14.13 16.42	
Toluene-D8	2037-26-5	94	%	80-117	03.14.13 16.42	
4-Bromofluorobenzene	460-00-4	101	%	74-124	03.14.13 16.42	

4/13/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 458918

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB126-0300-11325 Matrix: Water Date Received: 03.08.13 14.42
Lab Sample Id: 458918-004 Date Collected: 03.08.13 13.45

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.15.13 12.30
Seq Number: 909220 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0342**	0.0100	mg/L	03.15.13 22.18		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.00
Seq Number: 909241 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0104**	0.0100	mg/L	03.18.13 17.54		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.14.13 16.02
Seq Number: 909314 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.14.13 17.05	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	93	%	75-131	03.14.13 17.05	
1,2-Dichloroethane-D4	17060-07-0	105	%	63-144	03.14.13 17.05	
Toluene-D8	2037-26-5	92	%	80-117	03.14.13 17.05	
4-Bromofluorobenzene	460-00-4	102	%	74-124	03.14.13 17.05	

4/12/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 458918

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB126-0304-1000 Matrix: Water Date Received: 03.08.13 14.42
Lab Sample Id: **458918-005** Date Collected: 03.08.13 14.05

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.15.13 12.30
Seq Number: 909220 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.15.13 22.24		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.00
Seq Number: 909241 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.18.13 18.00		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.14.13 16.03
Seq Number: 909314 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.14.13 17.29	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	75-131	03.14.13 17.29	
1,2-Dichloroethane-D4	17060-07-0	108	%	63-144	03.14.13 17.29	
Toluene-D8	2037-26-5	91	%	80-117	03.14.13 17.29	
4-Bromofluorobenzene	460-00-4	99	%	74-124	03.14.13 17.29	

4/13/13

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 11, 2013

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459007

Sample Identification

AVB124-0102-1000
AVB124-0200-14270
AVB131-0100-14215
AVB132-0200-13280
AVB136-0100-12235
AVB136-0104-1000

Introduction

This data review covers 6 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample AVB124-0102-1000 was identified as a trip blank. No volatile contaminants were found.

Sample AVB136-0104-10003 was identified as an equipment blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

West Van Buren Area
Volatiles - Data Qualification Summary - SDG 459007

No Sample Data Qualified in this SDG

West Van Buren Area
Volatiles - Laboratory Blank Data Qualification Summary - SDG 459007

No Sample Data Qualified in this SDG

West Van Buren Area
Volatiles - Field Blank Data Qualification Summary - SDG 459007

No Sample Data Qualified in this SDG

LDC #: 29578B1a

SDG #: 459007

Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 5/1/13

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/11/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client specific
VIII.	Laboratory control samples	A	LCS IP
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	TB = 1 EB = 6

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Water

1	AVB124-0102-1000	11	635172-1-BLK	21		31	
2	AVB124-0200-~~12470~~ 14290	12		22		32	
3	AVB131-0100-14215	13		23		33	
4	AVB132-0200-13280	14		24		34	
5	AVB136-0100-12235	15		25		35	
6	AVB136-0104-1000	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 11, 2012

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: 1,4-Dioxane

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459007

Sample Identification

AVB124-0200-14270
AVB131-0100-14215
AVB132-0200-13280
AVB136-0100-12235
AVB136-0104-1000

Introduction

This data review covers 5 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8260B for 1,4-Dioxane.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks

Sample AVB136-0104-1000 was identified as an equipment blank. No 1,4-dioxane was found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

West Van Buren Area
1,4-Dioxane - Data Qualification Summary - SDG 459007

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG 459007

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Field Blank Data Qualification Summary - SDG 459007

No Sample Data Qualified in this SDG

LDC #: 29578B1b

SDG #: 459007

Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 4/30/13

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/11/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	458918 - 5MS/D
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	EB = 6

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	AVB124-0200-~~12470~~ 14290	11	635324-1-BLK	21		31	
2	AVB131-0100-14215	12		22		32	
3	AVB132-0200-13280	13		23		33	
4	AVB136-0100-12235	14		24		34	
5	AVB136-0104-1000	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 11, 2013

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: Chromium

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459007

Sample Identification

AVB124-0200-14270
AVB131-0100-14215
AVB132-0200-13280
AVB136-0100-12235
AVB136-0104-1000
AVB124-0200-14270F
AVB131-0100-14215F
AVB132-0200-13280F
AVB136-0100-12235F
AVB136-0104-1000F

Sample IDs appended with "F" were analyzed for dissolved chromium.

Introduction

This data review covers 10 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6010B for Chromium.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

ICP-MS was not utilized in this SDG.

III. Calibration

Calibration data were not reviewed for Level III.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No chromium was found in the preparation blanks.

Samples AVB136-0104-1000 and AVB136-0104-1000F were identified as equipment blanks. No chromium was found.

V. ICP Interference Check Sample (ICS) Analysis

ICP interference check data were not reviewed for Level III.

VI. Matrix Spike Analysis

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Internal Standards

ICP-MS was not utilized in this SDG.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution was not performed for this SDG.

XII. Sample Result Verification

Raw data was not reviewed for this SDG.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

West Van Buren Area
Chromium - Data Qualification Summary - SDG 459007

No Sample Data Qualified in this SDG

West Van Buren Area
Chromium - Laboratory Blank Data Qualification Summary - SDG 459007

No Sample Data Qualified in this SDG

West Van Buren Area
Chromium - Field Blank Data Qualification Summary - SDG 459007

No Sample Data Qualified in this SDG

LDC #: 29578B4
SDG #: 459007
Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 4/30/13
Page: 1 of 1
Reviewer: W
2nd Reviewer: [illegible]

METHOD: Chromium (EPA SW846 Method 6010B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/11/13
II.	Calibration	N	~~Init Utility~~ W
III.	Blanks	A	
IV.	ICP Interference Check Sample (ICS) Analysis	N	
V.	Matrix Spike Analysis	N	SCS
VI.	Duplicate Sample Analysis	N	
VII.	Laboratory Control Samples (LCS)	A	LCS/LCSD
VIII.	Internal Standard (ICP-MS)	N	Init Utility
IX.	Furnace Atomic Absorption QC	N	I
X.	ICP Serial Dilution	N	Init protocol
XI.	Sample Result Verification	N	
XII.	Overall Assessment of Data	A	
XIII.	Field Duplicates	N	
XIV.	Field Blanks	ND	EB = 5, 10

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	AVB124-0200-12470 14290 W	11	MB	21		11	
2	AVB131-0100-14215	12		22		12	
3	AVB132-0200-13280	13		23		13	
4	AVB136-0100-12235	14		24		14	
5	AVB136-0104-1000	15		25		15	
6	AVB124-0200-12470F 14290 ✓	16		26		16	
7	AVB131-0100-14215F	17		27		17	
8	AVB132-0200-13280F	18		28		18	
9	AVB136-0100-12235F	19		29		19	
10	AVB136-0104-1000F	20		30		20	

Notes: Samples appended with "F" were analyzed for dissolved chromium

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459007

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB124-0102-1000 Matrix: Water Date Received: 03.11.13 15.25
Lab Sample Id: **459007-001** Date Collected: 03.11.13 07.00

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.14.13 13.07
Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.14.13 18.45		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.14.13 18.45		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.14.13 18.45		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.14.13 18.45		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.14.13 18.45		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.14.13 18.45		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.14.13 18.45		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.14.13 18.45		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.14.13 18.45		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.14.13 18.45		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.14.13 18.45		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.14.13 18.45		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.14.13 18.45		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.14.13 18.45		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.14.13 18.45		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.14.13 18.45		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.14.13 18.45		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.14.13 18.45		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.14.13 18.45		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.14.13 18.45		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.14.13 18.45		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.14.13 18.45		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.14.13 18.45		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.14.13 18.45		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.14.13 18.45		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.14.13 18.45		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.14.13 18.45		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.14.13 18.45		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.14.13 18.45		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.14.13 18.45		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.14.13 18.45		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.14.13 18.45		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.14.13 18.45		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.14.13 18.45		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.14.13 18.45		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.14.13 18.45		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.14.13 18.45		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.14.13 18.45		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.14.13 18.45		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.14.13 18.45		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.14.13 18.45		1

Final 1.000

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459007

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB124-0102-1000 | Matrix: Water | Date Received: 03.11.13 15.25

Lab Sample Id: **459007-001** | Date Collected: 03.11.13 07.00

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.14.13 13.07

Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.14.13 18.45		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.14.13 18.45		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.14.13 18.45		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.14.13 18.45		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.14.13 18.45		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.14.13 18.45		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.14.13 18.45		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.14.13 18.45		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.14.13 18.45		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.14.13 18.45		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.14.13 18.45		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.14.13 18.45		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.14.13 18.45		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.14.13 18.45		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.14.13 18.45		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.14.13 18.45		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.14.13 18.45		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.14.13 18.45		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.14.13 18.45		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.14.13 18.45		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.14.13 18.45		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.14.13 18.45		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.14.13 18.45		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.14.13 18.45		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.14.13 18.45		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.14.13 18.45		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.14.13 18.45		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	95	%	69-133	03.14.13 18.45	
1,2-Dichloroethane-D4	17060-07-0	85	%	66-139	03.14.13 18.45	
Toluene-D8	2037-26-5	96	%	70-130	03.14.13 18.45	
4-Bromofluorobenzene	460-00-4	91	%	70-135	03.14.13 18.45	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459007

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB124-0200-14270 Matrix: Water Date Received: 03.11.13 15.25
Lab Sample Id: 459007-002 Date Collected: 03.11.13 08.19

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.14.13 13.07
Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.14.13 19.10		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.14.13 19.10		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.14.13 19.10		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.14.13 19.10		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.14.13 19.10		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.14.13 19.10		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.14.13 19.10		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.14.13 19.10		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.14.13 19.10		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.14.13 19.10		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.14.13 19.10		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.14.13 19.10		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.14.13 19.10		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.14.13 19.10		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.14.13 19.10		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.14.13 19.10		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.14.13 19.10		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.14.13 19.10		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.14.13 19.10		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.14.13 19.10		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.14.13 19.10		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.14.13 19.10		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.14.13 19.10		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.14.13 19.10		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.14.13 19.10		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.14.13 19.10		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.14.13 19.10		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.14.13 19.10		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.14.13 19.10		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.14.13 19.10		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.14.13 19.10		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.14.13 19.10		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.14.13 19.10		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.14.13 19.10		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.14.13 19.10		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.14.13 19.10		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.14.13 19.10		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.14.13 19.10		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.14.13 19.10		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.14.13 19.10		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.14.13 19.10		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459007

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB124-0200-14270 Matrix: Water Date Received: 03.11.13 15.25
Lab Sample Id: **459007-002** Date Collected: 03.11.13 08.19

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.14.13 13.07
Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.14.13 19.10		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.14.13 19.10		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.14.13 19.10		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.14.13 19.10		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.14.13 19.10		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.14.13 19.10		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.14.13 19.10		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.14.13 19.10		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.14.13 19.10		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.14.13 19.10		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.14.13 19.10		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.14.13 19.10		1
Toluene	108-88-3	**46.8**	2.00	ug/L	03.14.13 19.10		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.14.13 19.10		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.14.13 19.10		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.14.13 19.10		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.14.13 19.10		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.14.13 19.10		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.14.13 19.10		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.14.13 19.10		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.14.13 19.10		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.14.13 19.10		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.14.13 19.10		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.14.13 19.10		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.14.13 19.10		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.14.13 19.10		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.14.13 19.10		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	69-133	03.14.13 19.10	
1,2-Dichloroethane-D4	17060-07-0	85	%	66-139	03.14.13 19.10	
Toluene-D8	2037-26-5	96	%	70-130	03.14.13 19.10	
4-Bromofluorobenzene	460-00-4	90	%	70-135	03.14.13 19.10	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459007

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB131-0100-14215 Matrix: Water Date Received: 03.11.13 15.25
Lab Sample Id: 459007-003 Date Collected: 03.11.13 10.00

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.14.13 13.07
Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.14.13 19.35		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.14.13 19.35		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.14.13 19.35		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.14.13 19.35		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.14.13 19.35		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.14.13 19.35		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.14.13 19.35		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.14.13 19.35		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.14.13 19.35		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.14.13 19.35		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.14.13 19.35		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.14.13 19.35		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.14.13 19.35		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.14.13 19.35		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.14.13 19.35		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.14.13 19.35		1
Chloroform	67-66-3	**7.13**	0.500	ug/L	03.14.13 19.35		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.14.13 19.35		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.14.13 19.35		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.14.13 19.35		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.14.13 19.35		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.14.13 19.35		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.14.13 19.35		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.14.13 19.35		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.14.13 19.35		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.14.13 19.35		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.14.13 19.35		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.14.13 19.35		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.14.13 19.35		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.14.13 19.35		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.14.13 19.35		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.14.13 19.35		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.14.13 19.35		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.14.13 19.35		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.14.13 19.35		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.14.13 19.35		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.14.13 19.35		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.14.13 19.35		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.14.13 19.35		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.14.13 19.35		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.14.13 19.35		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459007

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB131-0100-14215 Matrix: Water Date Received: 03.11.13 15.25
Lab Sample Id: 459007-003 Date Collected: 03.11.13 10.00

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.14.13 13.07
Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.14.13 19.35		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.14.13 19.35		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.14.13 19.35		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.14.13 19.35		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.14.13 19.35		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.14.13 19.35		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.14.13 19.35		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.14.13 19.35		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.14.13 19.35		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.14.13 19.35		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.14.13 19.35		1
Tetrachloroethylene	127-18-4	**4.26**	0.500	ug/L	03.14.13 19.35		1
Toluene	108-88-3	**5.42**	2.00	ug/L	03.14.13 19.35		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.14.13 19.35		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.14.13 19.35		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.14.13 19.35		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.14.13 19.35		1
Trichloroethene	79-01-6	**0.830**	0.500	ug/L	03.14.13 19.35		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.14.13 19.35		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.14.13 19.35		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.14.13 19.35		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.14.13 19.35		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.14.13 19.35		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.14.13 19.35		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.14.13 19.35		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.14.13 19.35		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.14.13 19.35		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	95	%	69-133	03.14.13 19.35	
1,2-Dichloroethane-D4	17060-07-0	85	%	66-139	03.14.13 19.35	
Toluene-D8	2037-26-5	95	%	70-130	03.14.13 19.35	
4-Bromofluorobenzene	460-00-4	89	%	70-135	03.14.13 19.35	

4/15/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459007

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB132-0200-13280 Matrix: Water Date Received: 03.11.13 15.25
Lab Sample Id: 459007-004 Date Collected: 03.11.13 12.25

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.14.13 13.07
Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.14.13 20.00		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.14.13 20.00		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.14.13 20.00		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.14.13 20.00		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.14.13 20.00		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.14.13 20.00		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.14.13 20.00		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.14.13 20.00		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.14.13 20.00		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.14.13 20.00		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.14.13 20.00		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.14.13 20.00		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.14.13 20.00		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.14.13 20.00		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.14.13 20.00		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.14.13 20.00		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.14.13 20.00		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.14.13 20.00		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.14.13 20.00		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.14.13 20.00		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.14.13 20.00		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.14.13 20.00		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.14.13 20.00		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.14.13 20.00		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.14.13 20.00		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.14.13 20.00		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.14.13 20.00		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.14.13 20.00		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.14.13 20.00		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.14.13 20.00		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.14.13 20.00		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.14.13 20.00		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.14.13 20.00		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.14.13 20.00		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.14.13 20.00		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.14.13 20.00		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.14.13 20.00		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.14.13 20.00		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.14.13 20.00		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.14.13 20.00		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.14.13 20.00		1

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459007

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB132-0200-13280 | Matrix: Water | Date Received: 03.11.13 15.25

Lab Sample Id: **459007-004** | Date Collected: 03.11.13 12.25

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.14.13 13.07

Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.14.13 20.00		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.14.13 20.00		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.14.13 20.00		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.14.13 20.00		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.14.13 20.00		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.14.13 20.00		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.14.13 20.00		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.14.13 20.00		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.14.13 20.00		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.14.13 20.00		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.14.13 20.00		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.14.13 20.00		1
Toluene	108-88-3	**43.8**	2.00	ug/L	03.14.13 20.00		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.14.13 20.00		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.14.13 20.00		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.14.13 20.00		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.14.13 20.00		1
Trichloroethene	79-01-6	**1.24**	0.500	ug/L	03.14.13 20.00		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.14.13 20.00		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.14.13 20.00		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.14.13 20.00		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.14.13 20.00		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.14.13 20.00		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.14.13 20.00		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.14.13 20.00		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.14.13 20.00		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.14.13 20.00		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	96	%	69-133	03.14.13 20.00	
1,2-Dichloroethane-D4	17060-07-0	86	%	66-139	03.14.13 20.00	
Toluene-D8	2037-26-5	96	%	70-130	03.14.13 20.00	
4-Bromofluorobenzene	460-00-4	89	%	70-135	03.14.13 20.00	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459007

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB136-0100-12235 Matrix: Water Date Received: 03.11.13 15.25
Lab Sample Id: 459007-005 Date Collected: 03.11.13 14.25

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.14.13 13.07
Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.14.13 20.25		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.14.13 20.25		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.14.13 20.25		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.14.13 20.25		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.14.13 20.25		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.14.13 20.25		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.14.13 20.25		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.14.13 20.25		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.14.13 20.25		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.14.13 20.25		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.14.13 20.25		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.14.13 20.25		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.14.13 20.25		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.14.13 20.25		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.14.13 20.25		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.14.13 20.25		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.14.13 20.25		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.14.13 20.25		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.14.13 20.25		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.14.13 20.25		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.14.13 20.25		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.14.13 20.25		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.14.13 20.25		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.14.13 20.25		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.14.13 20.25		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.14.13 20.25		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.14.13 20.25		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.14.13 20.25		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.14.13 20.25		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.14.13 20.25		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.14.13 20.25		1
1,1-Dichloroethene	75-35-4	**2.13**	0.500	ug/L	03.14.13 20.25		1
cis-1,2-Dichloroethene	156-59-2	**3.62**	0.500	ug/L	03.14.13 20.25		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.14.13 20.25		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.14.13 20.25		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.14.13 20.25		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.14.13 20.25		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.14.13 20.25		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.14.13 20.25		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.14.13 20.25		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.14.13 20.25		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459007

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB136-0100-12235 Matrix: Water Date Received: 03.11.13 15.25
Lab Sample Id: 459007-005 Date Collected: 03.11.13 14.25

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.14.13 13.07
Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.14.13 20.25		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.14.13 20.25		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.14.13 20.25		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.14.13 20.25		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.14.13 20.25		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.14.13 20.25		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.14.13 20.25		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.14.13 20.25		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.14.13 20.25		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.14.13 20.25		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.14.13 20.25		1
Tetrachloroethylene	127-18-4	**8.66**	0.500	ug/L	03.14.13 20.25		1
Toluene	108-88-3	**16.1**	2.00	ug/L	03.14.13 20.25		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.14.13 20.25		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.14.13 20.25		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.14.13 20.25		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.14.13 20.25		1
Trichloroethene	79-01-6	**16.9**	0.500	ug/L	03.14.13 20.25		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.14.13 20.25		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.14.13 20.25		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.14.13 20.25		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.14.13 20.25		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.14.13 20.25		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.14.13 20.25		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.14.13 20.25		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.14.13 20.25		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.14.13 20.25		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	96	%	69-133	03.14.13 20.25	
1,2-Dichloroethane-D4	17060-07-0	86	%	66-139	03.14.13 20.25	
Toluene-D8	2037-26-5	95	%	70-130	03.14.13 20.25	
4-Bromofluorobenzene	460-00-4	90	%	70-135	03.14.13 20.25	

Final 1.000

3/19/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459007

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB136-0104-1000 Matrix: Water Date Received: 03.11.13 15.25
Lab Sample Id: **459007-006** Date Collected: 03.11.13 14.35

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.14.13 13.07
Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.14.13 21.15		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.14.13 21.15		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.14.13 21.15		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.14.13 21.15		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.14.13 21.15		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.14.13 21.15		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.14.13 21.15		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.14.13 21.15		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.14.13 21.15		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.14.13 21.15		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.14.13 21.15		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.14.13 21.15		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.14.13 21.15		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.14.13 21.15		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.14.13 21.15		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.14.13 21.15		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.14.13 21.15		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.14.13 21.15		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.14.13 21.15		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.14.13 21.15		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.14.13 21.15		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.14.13 21.15		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.14.13 21.15		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.14.13 21.15		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.14.13 21.15		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.14.13 21.15		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.14.13 21.15		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.14.13 21.15		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.14.13 21.15		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.14.13 21.15		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.14.13 21.15		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.14.13 21.15		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.14.13 21.15		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.14.13 21.15		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.14.13 21.15		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.14.13 21.15		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.14.13 21.15		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.14.13 21.15		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.14.13 21.15		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.14.13 21.15		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.14.13 21.15		1

Final 1.000

4/5/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459007

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB136-0104-1000 Matrix: Water Date Received: 03.11.13 15.25
Lab Sample Id: 459007-006 Date Collected: 03.11.13 14.35

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.14.13 13.07
Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.14.13 21.15		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.14.13 21.15		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.14.13 21.15		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.14.13 21.15		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.14.13 21.15		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.14.13 21.15		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.14.13 21.15		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.14.13 21.15		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.14.13 21.15		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.14.13 21.15		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.14.13 21.15		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.14.13 21.15		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.14.13 21.15		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.14.13 21.15		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.14.13 21.15		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.14.13 21.15		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.14.13 21.15		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.14.13 21.15		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.14.13 21.15		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.14.13 21.15		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.14.13 21.15		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.14.13 21.15		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.14.13 21.15		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.14.13 21.15		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.14.13 21.15		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.14.13 21.15		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.14.13 21.15		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	95	%	69-133	03.14.13 21.15	
1,2-Dichloroethane-D4	17060-07-0	88	%	66-139	03.14.13 21.15	
Toluene-D8	2037-26-5	97	%	70-130	03.14.13 21.15	
4-Bromofluorobenzene	460-00-4	89	%	70-135	03.14.13 21.15	

Final 1.000

3/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459007

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB124-0200-14270 Matrix: Water Date Received: 03.11.13 15.25
Lab Sample Id: 459007-002 Date Collected: 03.11.13 08.19

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.00
Seq Number: 909241 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0115**	0.0100	mg/L	03.18.13 16.41		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.00
Seq Number: 909241 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.18.13 18.06		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.14.13 19.00
Seq Number: 909314 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.14.13 21.30	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	104	%	75-131	03.14.13 21.30	
1,2-Dichloroethane-D4	17060-07-0	120	%	63-144	03.14.13 21.30	
Toluene-D8	2037-26-5	103	%	80-117	03.14.13 21.30	
4-Bromofluorobenzene	460-00-4	90	%	74-124	03.14.13 21.30	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459007

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB131-0100-14215 Matrix: Water Date Received: 03.11.13 15.25
Lab Sample Id: 459007-003 Date Collected: 03.11.13 10.00

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.00
Seq Number: 909241 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.18.13 16.47		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.00
Seq Number: 909241 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.18.13 18.11		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.14.13 19.01
Seq Number: 909314 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.14.13 21.54	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	103	%	75-131	03.14.13 21.54	
1,2-Dichloroethane-D4	17060-07-0	124	%	63-144	03.14.13 21.54	
Toluene-D8	2037-26-5	100	%	80-117	03.14.13 21.54	
4-Bromofluorobenzene	460-00-4	87	%	74-124	03.14.13 21.54	

5/13/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459007

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB132-0200-13280 Matrix: Water Date Received: 03.11.13 15.25
Lab Sample Id: 459007-004 Date Collected: 03.11.13 12.25

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.00
Seq Number: 909241 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.18.13 16.52		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.00
Seq Number: 909241 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.18.13 18.17		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.14.13 19.02
Seq Number: 909314 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.14.13 22.17	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	107	%	75-131	03.14.13 22.17	
1,2-Dichloroethane-D4	17060-07-0	116	%	63-144	03.14.13 22.17	
Toluene-D8	2037-26-5	100	%	80-117	03.14.13 22.17	
4-Bromofluorobenzene	460-00-4	88	%	74-124	03.14.13 22.17	

3/18/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459007

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB136-0100-12235 Matrix: Water Date Received: 03.11.13 15.25
Lab Sample Id: 459007-005 Date Collected: 03.11.13 14.25

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.00
Seq Number: 909241 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0177**	0.0100	mg/L	03.18.13 16.58		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.00
Seq Number: 909241 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.18.13 18.23		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.14.13 19.03
Seq Number: 909314 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.14.13 22.40	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	103	%	75-131	03.14.13 22.40	
1,2-Dichloroethane-D4	17060-07-0	113	%	63-144	03.14.13 22.40	
Toluene-D8	2037-26-5	98	%	80-117	03.14.13 22.40	
4-Bromofluorobenzene	460-00-4	91	%	74-124	03.14.13 22.40	

5/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459007

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB136-0104-1000 Matrix: Water Date Received: 03.11.13 15.25
Lab Sample Id: **459007-006** Date Collected: 03.11.13 14.35

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.00
Seq Number: 909241 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.18.13 17.03		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.00
Seq Number: 909241 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.18.13 18.28		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.14.13 19.04
Seq Number: 909314 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.14.13 23.04	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	99	%	75-131	03.14.13 23.04	
1,2-Dichloroethane-D4	17060-07-0	121	%	63-144	03.14.13 23.04	
Toluene-D8	2037-26-5	100	%	80-117	03.14.13 23.04	
4-Bromofluorobenzene	460-00-4	90	%	74-124	03.14.13 23.04	

4/5/13/13

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 12, 2013

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459063

Sample Identification

AVB121-0202-1000
AVB121-0200-11240
AVB137-0100-11260
AVB137-0101-11260
AVB122-0300-16330
AVB142-0100-09335
AVB142-0104-1000

Introduction

This data review covers 7 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample AVB121-0202-1000 was identified as a trip blank. No volatile contaminants were found.

Sample AVB142-0104-1000 was identified as an equipment blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples AVB137-0100-11260 and AVB137-0101-11260 were identified as field duplicates. No volatiles were detected in any of the samples.

West Van Buren Area
Volatiles - Data Qualification Summary - SDG 459063

No Sample Data Qualified in this SDG

West Van Buren Area
Volatiles - Laboratory Blank Data Qualification Summary - SDG 459063

No Sample Data Qualified in this SDG

West Van Buren Area
Volatiles - Field Blank Data Qualification Summary - SDG 459063

No Sample Data Qualified in this SDG

LDC #: 29578C1a **VALIDATION COMPLETENESS WORKSHEET** Date: 5/1/13
SDG #: 459063 Level III Page: 1 of 1
Laboratory: Xenco Laboratories Reviewer: EJ
2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/12/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = 3, 4
XVII.	Field blanks	ND	TB = 1 EB = 7

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: water

1	AVB121-0202-1000 TB	11		21		31	
2	AVB121-0200-11240	12		22		32	
3	AVB137-0100-11260 D	13		23		33	
4	AVB137-0101-11260 D	14		24		34	
5	AVB122-0300-16330	15		25		35	
6	AVB142-0100-09335	16		26		36	
7	AVB142-0104-1000 EB	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 12, 2012

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: 1,4-Dioxane

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459063

Sample Identification

AVB121-0200-11240
AVB137-0100-11260
AVB137-0101-11260
AVB122-0300-16330
AVB142-0100-09335
AVB142-0104-1000

Introduction

This data review covers 6 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8260B for 1,4-Dioxane.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks

Sample AVB142-0104-1000 was identified as an equipment blank. No 1,4-dioxane was found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples AVB137-0100-11260 and AVB137-0101-11260 were identified as field duplicates. No 1,4-dioxane was detected in any of the samples.

West Van Buren Area
1,4-Dioxane - Data Qualification Summary - SDG 459063

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG 459063

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Field Blank Data Qualification Summary - SDG 459063

No Sample Data Qualified in this SDG

LDC #: 29578C1b

SDG #: 459063

Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 5/1/13

Page: 1 of 1

Reviewer: FQ

2nd Reviewer: 4

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/12/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	458918-005 MS/D
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = 2, 3
XVII.	Field blanks	ND	EB = 6

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: water

1	AVB121-0200-11240	11	635 324-1-BLK	21		31	
2	AVB137-0100-11260 D	12		22		32	
3	AVB137-0101-11260 D	13		23		33	
4	AVB122-0300-16330	14		24		34	
5	AVB142-0100-09335	15		25		35	
6	AVB142-0104-1000 EB	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 12, 2013

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: Chromium

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459063

Sample Identification

AVB121-0200-11240
AVB137-0100-11260
AVB137-0101-11260
AVB122-0300-16330
AVB142-0100-09335
AVB142-0104-1000
AVB121-0200-11240F
AVB137-0100-11260F
AVB137-0101-11260F
AVB122-0300-16330F
AVB142-0100-09335F
AVB142-0104-1000F

Sample IDs appended with "F" were analyzed for dissolved chromium.

Introduction

This data review covers 12 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6010B for Chromium.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

ICP-MS was not utilized in this SDG.

III. Calibration

Calibration data were not reviewed for Level III.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No chromium was found in the preparation blanks.

Samples AVB142-0104-1000 and AVB142-0104-1000F were identified as equipment blanks. No chromium was found.

V. ICP Interference Check Sample (ICS) Analysis

ICP interference check data were not reviewed for Level III.

VI. Matrix Spike Analysis

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Internal Standards

ICP-MS was not utilized in this SDG.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution was not performed for this SDG.

XII. Sample Result Verification

Raw data was not reviewed for this SDG.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

Samples AVB137-0100-11260 and AVB137-0101-11260 and samples AVB137-0100-11260F and AVB137-0101-11260F were identified as field duplicates. No chromium was detected in any of the samples with the following exceptions:

Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
	AVB137-0100-11260	AVB137-0101-11260			
Chromium	0.0118	0.0100U	17 (≤20)	-	-

West Van Buren Area
Chromium - Data Qualification Summary - SDG 459063

No Sample Data Qualified in this SDG

West Van Buren Area
Chromium - Laboratory Blank Data Qualification Summary - SDG 459063

No Sample Data Qualified in this SDG

West Van Buren Area
Chromium - Field Blank Data Qualification Summary - SDG 459063

No Sample Data Qualified in this SDG

LDC #: 29578C4 **VALIDATION COMPLETENESS WORKSHEET** Date: 4/30/13
SDG #: 459063 Level III Page: 1 of 1
Laboratory: Xenco Laboratories Reviewer: W
2nd Reviewer:

METHOD: Chromium (EPA SW846 Method 6010B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/12/13
II.	Calibration	N	~~not utilized~~ W
III.	Blanks	A	
IV.	ICP Interference Check Sample (ICS) Analysis	N	
V.	Matrix Spike Analysis	N	
VI.	Duplicate Sample Analysis	N	
VII.	Laboratory Control Samples (LCS)	A	LCS/D
VIII.	Internal Standard (ICP-MS)	N	not utilized
IX.	Furnace Atomic Absorption QC	N	"
X.	ICP Serial Dilution	N	not performed
XI.	Sample Result Verification	N	
XII.	Overall Assessment of Data	A	
XIII.	Field Duplicates	SW	(2,3) *(8,9)
XIV.	Field Blanks	ND	EB = 6,12

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
* ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: All

1	AVB121-0200-11240	11	AVB142-0100-09335F	21	MB	11	
2	AVB137-0100-11260	12	AVB142-0104-1000F	22		12	
3	AVB137-0101-11260	13		23		13	
4	AVB122-0300-16330	14		24		14	
5	AVB142-0100-09335	15		25		15	
6	AVB142-0104-1000	16		26		16	
7	AVB121-0200-11240F	17		27		17	
8	AVB137-0100-11260F	18		28		18	
9	AVB137-0101-11260F	19		29		19	
10	AVB122-0300-16330F	20		30		20	

Notes: Samples appended with "F" were analyzed for dissolved chromium

LDC#: 29578C4

VALIDATION FINDINGS WORKSHEET

Field Duplicates

Page: 1 of 1
Reviewer: [signature]
2nd Reviewer: [signature]

METHOD: Metals (EPA Method 6010B)

Analyte	Concentration (mg/L)		RPD (≤20)	Parent only
	2	3		
Chromium	0.0118	0.0100U	17	

V:\FIELD DUPLICATES\FD_inorganic\29578C4.wpd

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459063

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB121-0202-1000 Matrix: Water Date Received: 03.12.13 15.45
Lab Sample Id: 459063-001 Date Collected: 03.12.13 08.00

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.14.13 13.07
Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.14.13 22.28		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.14.13 22.28		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.14.13 22.28		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.14.13 22.28		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.14.13 22.28		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.14.13 22.28		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.14.13 22.28		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.14.13 22.28		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.14.13 22.28		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.14.13 22.28		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.14.13 22.28		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.14.13 22.28		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.14.13 22.28		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.14.13 22.28		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.14.13 22.28		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.14.13 22.28		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.14.13 22.28		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.14.13 22.28		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.14.13 22.28		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.14.13 22.28		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.14.13 22.28		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.14.13 22.28		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.14.13 22.28		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.14.13 22.28		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.14.13 22.28		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.14.13 22.28		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.14.13 22.28		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.14.13 22.28		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.14.13 22.28		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.14.13 22.28		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.14.13 22.28		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.14.13 22.28		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.14.13 22.28		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.14.13 22.28		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.14.13 22.28		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.14.13 22.28		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.14.13 22.28		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.14.13 22.28		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.14.13 22.28		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.14.13 22.28		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.14.13 22.28		1

Final 1.000

3/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459063

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB121-0202-1000 | Matrix: Water | Date Received: 03.12.13 15.45

Lab Sample Id: **459063-001** | Date Collected: 03.12.13 08.00

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.14.13 13.07

Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.14.13 22.28		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.14.13 22.28		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.14.13 22.28		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.14.13 22.28		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.14.13 22.28		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.14.13 22.28		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.14.13 22.28		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.14.13 22.28		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.14.13 22.28		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.14.13 22.28		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.14.13 22.28		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.14.13 22.28		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.14.13 22.28		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.14.13 22.28		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.14.13 22.28		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.14.13 22.28		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.14.13 22.28		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.14.13 22.28		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.14.13 22.28		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.14.13 22.28		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.14.13 22.28		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.14.13 22.28		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.14.13 22.28		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.14.13 22.28		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.14.13 22.28		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.14.13 22.28		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.14.13 22.28		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	69-133	03.14.13 22.28	
1,2-Dichloroethane-D4	17060-07-0	84	%	66-139	03.14.13 22.28	
Toluene-D8	2037-26-5	96	%	70-130	03.14.13 22.28	
4-Bromofluorobenzene	460-00-4	89	%	70-135	03.14.13 22.28	

5/13/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459063

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB121-0200-11240 | Matrix: Water | Date Received: 03.12.13 15.45
Lab Sample Id: 459063-002 | Date Collected: 03.12.13 08.20

Analytical Method: VOCs by EPA 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.14.13 13.07
Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.14.13 22.53		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.14.13 22.53		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.14.13 22.53		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.14.13 22.53		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.14.13 22.53		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.14.13 22.53		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.14.13 22.53		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.14.13 22.53		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.14.13 22.53		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.14.13 22.53		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.14.13 22.53		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.14.13 22.53		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.14.13 22.53		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.14.13 22.53		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.14.13 22.53		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.14.13 22.53		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.14.13 22.53		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.14.13 22.53		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.14.13 22.53		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.14.13 22.53		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.14.13 22.53		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.14.13 22.53		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.14.13 22.53		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.14.13 22.53		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.14.13 22.53		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.14.13 22.53		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.14.13 22.53		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.14.13 22.53		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.14.13 22.53		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.14.13 22.53		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.14.13 22.53		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.14.13 22.53		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.14.13 22.53		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.14.13 22.53		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.14.13 22.53		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.14.13 22.53		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.14.13 22.53		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.14.13 22.53		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.14.13 22.53		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.14.13 22.53		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.14.13 22.53		1

Final 1.000

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459063

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB121-0200-11240 | Matrix: Water | Date Received: 03.12.13 15.45
Lab Sample Id: **459063-002** | Date Collected: 03.12.13 08.20

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.14.13 13.07
Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.14.13 22.53		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.14.13 22.53		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.14.13 22.53		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.14.13 22.53		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.14.13 22.53		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.14.13 22.53		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.14.13 22.53		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.14.13 22.53		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.14.13 22.53		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.14.13 22.53		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.14.13 22.53		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.14.13 22.53		1
Toluene	108-88-3	**49.1**	2.00	ug/L	03.14.13 22.53		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.14.13 22.53		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.14.13 22.53		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.14.13 22.53		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.14.13 22.53		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.14.13 22.53		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.14.13 22.53		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.14.13 22.53		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.14.13 22.53		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.14.13 22.53		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.14.13 22.53		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.14.13 22.53		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.14.13 22.53		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.14.13 22.53		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.14.13 22.53		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	69-133	03.14.13 22.53	
1,2-Dichloroethane-D4	17060-07-0	86	%	66-139	03.14.13 22.53	
Toluene-D8	2037-26-5	96	%	70-130	03.14.13 22.53	
4-Bromofluorobenzene	460-00-4	90	%	70-135	03.14.13 22.53	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459063

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB137-0100-11260 Matrix: Water Date Received: 03.12.13 15.45
Lab Sample Id: 459063-003 Date Collected: 03.12.13 10.15

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.14.13 13.07
Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.14.13 23.17		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.14.13 23.17		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.14.13 23.17		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.14.13 23.17		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.14.13 23.17		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.14.13 23.17		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.14.13 23.17		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.14.13 23.17		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.14.13 23.17		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.14.13 23.17		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.14.13 23.17		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.14.13 23.17		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.14.13 23.17		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.14.13 23.17		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.14.13 23.17		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.14.13 23.17		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.14.13 23.17		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.14.13 23.17		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.14.13 23.17		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.14.13 23.17		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.14.13 23.17		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.14.13 23.17		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.14.13 23.17		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.14.13 23.17		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.14.13 23.17		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.14.13 23.17		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.14.13 23.17		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.14.13 23.17		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.14.13 23.17		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.14.13 23.17		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.14.13 23.17		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.14.13 23.17		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.14.13 23.17		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.14.13 23.17		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.14.13 23.17		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.14.13 23.17		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.14.13 23.17		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.14.13 23.17		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.14.13 23.17		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.14.13 23.17		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.14.13 23.17		1

Final 1.000

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459063

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB137-0100-11260 | Matrix: Water | Date Received: 03.12.13 15.45

Lab Sample Id: **459063-003** | Date Collected: 03.12.13 10.15

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.14.13 13.07

Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.14.13 23.17		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.14.13 23.17		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.14.13 23.17		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.14.13 23.17		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.14.13 23.17		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.14.13 23.17		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.14.13 23.17		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.14.13 23.17		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.14.13 23.17		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.14.13 23.17		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.14.13 23.17		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.14.13 23.17		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.14.13 23.17		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.14.13 23.17		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.14.13 23.17		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.14.13 23.17		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.14.13 23.17		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.14.13 23.17		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.14.13 23.17		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.14.13 23.17		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.14.13 23.17		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.14.13 23.17		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.14.13 23.17		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.14.13 23.17		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.14.13 23.17		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.14.13 23.17		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.14.13 23.17		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	96	%	69-133	03.14.13 23.17	
1,2-Dichloroethane-D4	17060-07-0	87	%	66-139	03.14.13 23.17	
Toluene-D8	2037-26-5	96	%	70-130	03.14.13 23.17	
4-Bromofluorobenzene	460-00-4	89	%	70-135	03.14.13 23.17	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459063

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB137-0101-11260 Matrix: Water Date Received: 03.12.13 15.45
Lab Sample Id: **459063-004** Date Collected: 03.12.13 10.20

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.14.13 13.07
Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.14.13 23.41		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.14.13 23.41		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.14.13 23.41		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.14.13 23.41		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.14.13 23.41		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.14.13 23.41		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.14.13 23.41		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.14.13 23.41		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.14.13 23.41		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.14.13 23.41		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.14.13 23.41		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.14.13 23.41		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.14.13 23.41		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.14.13 23.41		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.14.13 23.41		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.14.13 23.41		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.14.13 23.41		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.14.13 23.41		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.14.13 23.41		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.14.13 23.41		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.14.13 23.41		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.14.13 23.41		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.14.13 23.41		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.14.13 23.41		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.14.13 23.41		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.14.13 23.41		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.14.13 23.41		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.14.13 23.41		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.14.13 23.41		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.14.13 23.41		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.14.13 23.41		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.14.13 23.41		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.14.13 23.41		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.14.13 23.41		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.14.13 23.41		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.14.13 23.41		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.14.13 23.41		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.14.13 23.41		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.14.13 23.41		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.14.13 23.41		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.14.13 23.41		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459063

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB137-0101-11260 Matrix: Water Date Received: 03.12.13 15.45

Lab Sample Id: 459063-004 Date Collected: 03.12.13 10.20

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C

Tech: OEM % Moisture:

Analyst: OEM Date Prep: 03.14.13 13.07

Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.14.13 23.41		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.14.13 23.41		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.14.13 23.41		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.14.13 23.41		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.14.13 23.41		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.14.13 23.41		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.14.13 23.41		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.14.13 23.41		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.14.13 23.41		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.14.13 23.41		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.14.13 23.41		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.14.13 23.41		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.14.13 23.41		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.14.13 23.41		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.14.13 23.41		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.14.13 23.41		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.14.13 23.41		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.14.13 23.41		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.14.13 23.41		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.14.13 23.41		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.14.13 23.41		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.14.13 23.41		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.14.13 23.41		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.14.13 23.41		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.14.13 23.41		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.14.13 23.41		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.14.13 23.41		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	93	%	69-133	03.14.13 23.41	
1,2-Dichloroethane-D4	17060-07-0	87	%	66-139	03.14.13 23.41	
Toluene-D8	2037-26-5	97	%	70-130	03.14.13 23.41	
4-Bromofluorobenzene	460-00-4	88	%	70-135	03.14.13 23.41	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459063

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB122-0300-16330 | Matrix: Water | Date Received: 03.12.13 15.45
Lab Sample Id: 459063-005 | Date Collected: 03.12.13 12.45

Analytical Method: VOCs by EPA 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.14.13 13.07
Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.15.13 00.06		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.15.13 00.06		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.15.13 00.06		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.15.13 00.06		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.15.13 00.06		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.15.13 00.06		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.15.13 00.06		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.15.13 00.06		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.15.13 00.06		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.15.13 00.06		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.15.13 00.06		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.15.13 00.06		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.15.13 00.06		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.15.13 00.06		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.15.13 00.06		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.15.13 00.06		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.15.13 00.06		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.15.13 00.06		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.15.13 00.06		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.15.13 00.06		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.15.13 00.06		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.15.13 00.06		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.15.13 00.06		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.15.13 00.06		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.15.13 00.06		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.15.13 00.06		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.15.13 00.06		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.15.13 00.06		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.15.13 00.06		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.15.13 00.06		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.15.13 00.06		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.15.13 00.06		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.15.13 00.06		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.15.13 00.06		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.15.13 00.06		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.15.13 00.06		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.15.13 00.06		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.15.13 00.06		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.15.13 00.06		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.15.13 00.06		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.15.13 00.06		1

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459063

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB122-0300-16330 | Matrix: Water | Date Received: 03.12.13 15.45
Lab Sample Id: **459063-005** | Date Collected: 03.12.13 12.45

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.14.13 13.07
Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.15.13 00.06		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.15.13 00.06		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.15.13 00.06		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.15.13 00.06		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.15.13 00.06		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.15.13 00.06		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.15.13 00.06		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.15.13 00.06		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.15.13 00.06		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.15.13 00.06		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.15.13 00.06		1
Tetrachloroethylene	127-18-4	**3.01**	0.500	ug/L	03.15.13 00.06		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.15.13 00.06		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.15.13 00.06		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.15.13 00.06		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.15.13 00.06		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.15.13 00.06		1
Trichloroethene	79-01-6	**2.63**	0.500	ug/L	03.15.13 00.06		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.15.13 00.06		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.15.13 00.06		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.15.13 00.06		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.15.13 00.06		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.15.13 00.06		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.15.13 00.06		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.15.13 00.06		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.15.13 00.06		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.15.13 00.06		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	96	%	69-133	03.15.13 00.06	
1,2-Dichloroethane-D4	17060-07-0	90	%	66-139	03.15.13 00.06	
Toluene-D8	2037-26-5	96	%	70-130	03.15.13 00.06	
4-Bromofluorobenzene	460-00-4	87	%	70-135	03.15.13 00.06	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459063

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB142-0100-09335 | Matrix: Water | Date Received: 03.12.13 15.45

Lab Sample Id: **459063-006** | Date Collected: 03.12.13 14.40

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.14.13 13.07

Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.15.13 00.30		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.15.13 00.30		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.15.13 00.30		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.15.13 00.30		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.15.13 00.30		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.15.13 00.30		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.15.13 00.30		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.15.13 00.30		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.15.13 00.30		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.15.13 00.30		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.15.13 00.30		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.15.13 00.30		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.15.13 00.30		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.15.13 00.30		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.15.13 00.30		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.15.13 00.30		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.15.13 00.30		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.15.13 00.30		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.15.13 00.30		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.15.13 00.30		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.15.13 00.30		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.15.13 00.30		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.15.13 00.30		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.15.13 00.30		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.15.13 00.30		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.15.13 00.30		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.15.13 00.30		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.15.13 00.30		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.15.13 00.30		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.15.13 00.30		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.15.13 00.30		1
1,1-Dichloroethene	75-35-4	**2.53**	0.500	ug/L	03.15.13 00.30		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.15.13 00.30		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.15.13 00.30		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.15.13 00.30		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.15.13 00.30		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.15.13 00.30		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.15.13 00.30		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.15.13 00.30		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.15.13 00.30		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.15.13 00.30		1

Final 1.000

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459063

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB142-0100-09335 Matrix: Water Date Received: 03.12.13 15.45
Lab Sample Id: 459063-006 Date Collected: 03.12.13 14.40

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.14.13 13.07
Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.15.13 00.30		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.15.13 00.30		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.15.13 00.30		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.15.13 00.30		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.15.13 00.30		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.15.13 00.30		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.15.13 00.30		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.15.13 00.30		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.15.13 00.30		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.15.13 00.30		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.15.13 00.30		1
Tetrachloroethylene	127-18-4	**7.34**	0.500	ug/L	03.15.13 00.30		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.15.13 00.30		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.15.13 00.30		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.15.13 00.30		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.15.13 00.30		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.15.13 00.30		1
Trichloroethene	79-01-6	**3.11**	0.500	ug/L	03.15.13 00.30		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.15.13 00.30		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.15.13 00.30		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.15.13 00.30		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.15.13 00.30		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.15.13 00.30		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.15.13 00.30		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.15.13 00.30		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.15.13 00.30		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.15.13 00.30		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	95	%	69-133	03.15.13 00.30	
1,2-Dichloroethane-D4	17060-07-0	87	%	66-139	03.15.13 00.30	
Toluene-D8	2037-26-5	95	%	70-130	03.15.13 00.30	
4-Bromofluorobenzene	460-00-4	88	%	70-135	03.15.13 00.30	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459063

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB142-0104-1000 Matrix: Water Date Received: 03.12.13 15.45
Lab Sample Id: 459063-007 Date Collected: 03.12.13 14.50

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.14.13 13.07
Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.15.13 00.54		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.15.13 00.54		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.15.13 00.54		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.15.13 00.54		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.15.13 00.54		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.15.13 00.54		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.15.13 00.54		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.15.13 00.54		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.15.13 00.54		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.15.13 00.54		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.15.13 00.54		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.15.13 00.54		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.15.13 00.54		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.15.13 00.54		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.15.13 00.54		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.15.13 00.54		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.15.13 00.54		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.15.13 00.54		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.15.13 00.54		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.15.13 00.54		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.15.13 00.54		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.15.13 00.54		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.15.13 00.54		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.15.13 00.54		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.15.13 00.54		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.15.13 00.54		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.15.13 00.54		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.15.13 00.54		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.15.13 00.54		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.15.13 00.54		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.15.13 00.54		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.15.13 00.54		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.15.13 00.54		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.15.13 00.54		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.15.13 00.54		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.15.13 00.54		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.15.13 00.54		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.15.13 00.54		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.15.13 00.54		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.15.13 00.54		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.15.13 00.54		1

Final 1.000

3/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459063

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB142-0104-1000 Matrix: Water Date Received: 03.12.13 15.45
Lab Sample Id: 459063-007 Date Collected: 03.12.13 14.50

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.14.13 13.07
Seq Number: 909266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.15.13 00.54		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.15.13 00.54		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.15.13 00.54		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.15.13 00.54		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.15.13 00.54		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.15.13 00.54		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.15.13 00.54		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.15.13 00.54		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.15.13 00.54		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.15.13 00.54		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.15.13 00.54		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.15.13 00.54		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.15.13 00.54		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.15.13 00.54		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.15.13 00.54		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.15.13 00.54		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.15.13 00.54		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.15.13 00.54		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.15.13 00.54		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.15.13 00.54		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.15.13 00.54		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.15.13 00.54		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.15.13 00.54		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.15.13 00.54		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.15.13 00.54		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.15.13 00.54		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.15.13 00.54		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	69-133	03.15.13 00.54	
1,2-Dichloroethane-D4	17060-07-0	87	%	66-139	03.15.13 00.54	
Toluene-D8	2037-26-5	96	%	70-130	03.15.13 00.54	
4-Bromofluorobenzene	460-00-4	89	%	70-135	03.15.13 00.54	

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Final 1.000

Certificate of Analytical Results 459063

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB121-0200-11240 Matrix: Water Date Received: 03.12.13 15.45
Lab Sample Id: 459063-002 Date Collected: 03.12.13 08.20

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.10
Seq Number: 909340 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.18.13 19.59		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.10
Seq Number: 909340 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.18.13 20.50		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.14.13 18.54
Seq Number: 909314 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.14.13 19.10	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	95	%	75-131	03.14.13 19.10	
1,2-Dichloroethane-D4	17060-07-0	98	%	63-144	03.14.13 19.10	
Toluene-D8	2037-26-5	102	%	80-117	03.14.13 19.10	
4-Bromofluorobenzene	460-00-4	102	%	74-124	03.14.13 19.10	

5/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459063

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB137-0100-11260 Matrix: Water Date Received: 03.12.13 15.45
Lab Sample Id: 459063-003 Date Collected: 03.12.13 10.15

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.10
Seq Number: 909340 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0118**	0.0100	mg/L	03.18.13 20.04		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.10
Seq Number: 909340 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.18.13 21.07		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.14.13 18.55
Seq Number: 909314 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.14.13 19.33	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	93	%	75-131	03.14.13 19.33	
1,2-Dichloroethane-D4	17060-07-0	99	%	63-144	03.14.13 19.33	
Toluene-D8	2037-26-5	95	%	80-117	03.14.13 19.33	
4-Bromofluorobenzene	460-00-4	100	%	74-124	03.14.13 19.33	

4/5/13/13

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459063

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB137-0101-11260 Matrix: Water Date Received: 03.12.13 15.45
Lab Sample Id: 459063-004 Date Collected: 03.12.13 10.20

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.10
Seq Number: 909340 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.18.13 20.10		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.10
Seq Number: 909340 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.18.13 21.13		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.14.13 18.56
Seq Number: 909314 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.14.13 19.57	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	75-131	03.14.13 19.57	
1,2-Dichloroethane-D4	17060-07-0	101	%	63-144	03.14.13 19.57	
Toluene-D8	2037-26-5	90	%	80-117	03.14.13 19.57	
4-Bromofluorobenzene	460-00-4	104	%	74-124	03.14.13 19.57	

3/13/13

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459063

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB122-0300-16330 Matrix: Water Date Received: 03.12.13 15.45
Lab Sample Id: 459063-005 Date Collected: 03.12.13 12.45

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.10
Seq Number: 909340 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.18.13 20.15		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.10
Seq Number: 909340 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.18.13 21.19		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.14.13 18.57
Seq Number: 909314 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.14.13 20.20	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	97	%	75-131	03.14.13 20.20	
1,2-Dichloroethane-D4	17060-07-0	110	%	63-144	03.14.13 20.20	
Toluene-D8	2037-26-5	96	%	80-117	03.14.13 20.20	
4-Bromofluorobenzene	460-00-4	96	%	74-124	03.14.13 20.20	

4/13/13

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459063

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB142-0100-09335 Matrix: Water Date Received: 03.12.13 15.45
Lab Sample Id: **459063-006** Date Collected: 03.12.13 14.40

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.10
Seq Number: 909340 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.18.13 20.21		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.10
Seq Number: 909340 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.18.13 21.24		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.14.13 18.58
Seq Number: 909314 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.14.13 20.43	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	104	%	75-131	03.14.13 20.43	
1,2-Dichloroethane-D4	17060-07-0	119	%	63-144	03.14.13 20.43	
Toluene-D8	2037-26-5	86	%	80-117	03.14.13 20.43	
4-Bromofluorobenzene	460-00-4	90	%	74-124	03.14.13 20.43	

3/15/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459063

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB142-0104-1000 Matrix: Water Date Received: 03.12.13 15.45
Lab Sample Id: 459063-007 Date Collected: 03.12.13 14.50

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.10
Seq Number: 909340 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.18.13 20.27		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.18.13 08.10
Seq Number: 909340 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.18.13 21.30		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.14.13 18.59
Seq Number: 909314 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.14.13 21.07	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	99	%	75-131	03.14.13 21.07	
1,2-Dichloroethane-D4	17060-07-0	107	%	63-144	03.14.13 21.07	
Toluene-D8	2037-26-5	92	%	80-117	03.14.13 21.07	
4-Bromofluorobenzene	460-00-4	98	%	74-124	03.14.13 21.07	

3/13/13

Final 1.000

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 13, 2013

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459172

Sample Identification

AVB91-0302-1000
AVB91-0300-10360
AVB82-0100-22327
AVB82-0200-10410
AVB10-0200-36290
AVB10-0100-37120
AVB10-0104-1000
AVB91-0300-10360MS
AVB91-0300-10360MSD

Introduction

This data review covers 9 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample AVB91-0302-1000 was identified as a trip blank. No volatile contaminants were found.

Sample AVB10-0104-1000 was identified as an equipment blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
AVB91-0300-10360MS/MSD (AVB91-0300-10360)	Bromomethane	189 (53-141)	-	38 (≤22)	J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
635278-1-BKS (All samples in SDG 459172)	Bromomethane	215 (58-138)	147 (58-138)	38 (≤25)	J (all detects) UJ (all non-detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

West Van Buren Area
Volatiles - Data Qualification Summary - SDG 459172

SDG	Sample	Compound	Flag	A or P	Reason (Code)
459172	AVB91-0300-10360	Bromomethane	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (M1, R5)
459172	AVB91-0302-1000 AVB91-0300-10360 AVB82-0100-22327 AVB82-0200-10410 AVB10-0200-36290 AVB10-0100-37120 AVB10-0104-1000	Bromomethane	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L1, R7)

West Van Buren Area
Volatiles - Laboratory Blank Data Qualification Summary - SDG 459172

No Sample Data Qualified in this SDG

West Van Buren Area
Volatiles - Field Blank Data Qualification Summary - SDG 459172

No Sample Data Qualified in this SDG

LDC #: 29578D1a

SDG #: 459172

Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 5/1/13

Page: 6 of 7

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/13/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	SW	LCS ID
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	TB = 1 EB

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: water

1	AVB91-0302-1000 TB	11	635278-1-BLK	21		31	
2	AVB91-0300-10360	12		22		32	
3	AVB82-0100-22327	13		23		33	
4	AVB82-0200-10410	14		24		34	
5	AVB10-0200-36290	15		25		35	
6	AVB10-0100-37120	16		26		36	
7	AVB10-0104-1000 EB	17		27		37	
8	AVB91-0300-10360MS	18		28		38	
9	AVB91-0300-10360MSD	19		29		39	
10		20		30		40	

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene	BB. 1,1,2,2-Tetrachloroethane	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane	CC. Toluene	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform	EE. Ethylbenzene	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN. Iodomethane
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.1,1-Difluoroethane
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

LDC #: 29578D1a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer: Q

METHOD : GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		8, 9	B	189 (53-141)	( )	38 (22)	2	J/Adt M1, R5
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 195780la

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		635278-1-~~BLKS~~ BKS	B	215 (58-138)	147 (58-138)	38 (25)	All	J/Pqlt L1, R7 KJ
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 13, 2012

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: 1,4-Dioxane

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459172

Sample Identification

AVB91-0300-10360
AVB82-0100-22327
AVB82-0200-10410
AVB10-0200-36290
AVB10-0100-37120
AVB10-0104-1000
AVB91-0300-10360MS
AVB91-0300-10360MSD

Introduction

This data review covers 8 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8260B for 1,4-Dioxane.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks

Sample AVB10-0104-1000 was identified as an equipment blank. No 1,4-dioxane was found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

West Van Buren Area
1,4-Dioxane - Data Qualification Summary - SDG 459172

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG 459172

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Field Blank Data Qualification Summary - SDG 459172

No Sample Data Qualified in this SDG

LDC #: 29578D1b

SDG #: 459172

Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 5/1/13

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/13/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	vcs 1D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	EB=6

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: water

1	AVB91-0300-10360	11	635663-1-BLK	21		31	
2	AVB82-0100-22327	12		22		32	
3	AVB82-0200-10410	13		23		33	
4	AVB10-0200-36290	14		24		34	
5	AVB10-0100-37120	15		25		35	
6	AVB10-0104-1000 EB	16		26		36	
7	AVB91-0300-10360MS	17		27		37	
8	AVB91-0300-10360MSD	18		28		38	
9		19		29		39	
10		20		30		40	

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	West Van Buren Area
Collection Date:	March 13, 2013
LDC Report Date:	May 7, 2013
Matrix:	Water
Parameters:	Chromium
Validation Level:	EPA Level III
Laboratory:	Xenco Laboratories
Sample Delivery Group (SDG):	459172

Sample Identification

AVB91-0300-10360
AVB82-0200-10410
AVB10-0200-36290
AVB10-0100-37120
AVB10-0104-1000
AVB91-0300-10360F
AVB82-0200-10410F
AVB10-0200-36290F
AVB10-0100-37120F
AVB10-0104-1000F

Sample IDs appended with "F" were analyzed for dissolved chromium.

Introduction

This data review covers 10 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6010B for Chromium.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

ICP-MS was not utilized in this SDG.

III. Calibration

Calibration data were not reviewed for Level III.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No chromium was found in the preparation blanks.

Samples AVB10-0104-1000 and AVB10-0104-1000F were identified as equipment blanks. No chromium was found with the following exceptions:

Blank ID	Sampling Date	Analyte	Concentration	Associated Samples
AVB10-0104-1000F	3/13/13	Chromium	0.0108 mg/L	AVB91-0300-10360F AVB82-0200-10410F AVB10-0200-36290F AVB10-0100-37120F

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated field blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
AVB82-0200-10410F	Chromium	0.0132 mg/L	0.0132U mg/L

V. ICP Interference Check Sample (ICS) Analysis

ICP interference check data were not reviewed for Level III.

VI. Matrix Spike Analysis

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Internal Standards

ICP-MS was not utilized in this SDG.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution was not performed for this SDG.

XII. Sample Result Verification

Raw data was not reviewed for this SDG.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

West Van Buren Area
Chromium - Data Qualification Summary - SDG 459172

No Sample Data Qualified in this SDG

West Van Buren Area
Chromium - Laboratory Blank Data Qualification Summary - SDG 459172

No Sample Data Qualified in this SDG

West Van Buren Area
Chromium - Field Blank Data Qualification Summary - SDG 459172

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
459172	AVB82-0200-10410F	Chromium	0.0132U mg/L	A	B4

LDC #: 29578D4 **VALIDATION COMPLETENESS WORKSHEET** Date: 4/30/13
SDG #: 459172 Level III Page: 1 of 1
Laboratory: Xenco Laboratories Reviewer: MM
2nd Reviewer: A

METHOD: Chromium (EPA SW846 Method 6010B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/13/13
II.	Calibration	N	~~not utilized~~ w
III.	Blanks	A	
IV.	ICP Interference Check Sample (ICS) Analysis	N	
V.	Matrix Spike Analysis	N	3 CS
VI.	Duplicate Sample Analysis	N	
VII.	Laboratory Control Samples (LCS)	A	LCS/D
VIII.	Internal Standard (ICP-MS)	N	not utilized
IX.	Furnace Atomic Absorption QC	N	↓
X.	ICP Serial Dilution	N	not performed
XI.	Sample Result Verification	N	
XII.	Overall Assessment of Data	A	
XIII.	Field Duplicates	N	
XIV.	Field Blanks	SW	FB = 5, 10

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

AQ

1	AVB91-0300-10360	11	MB	21		11	
2	AVB82-0200-10410	12		22		12	
3	AVB10-0200-36290	13		23		13	
4	AVB10-0100-37120	14		24		14	
5	AVB10-0104-1000	15		25		15	
6	AVB91-0300-10360F	16		26		16	
7	AVB82-0200-10410F	17		27		17	
8	AVB10-0200-36290F	18		28		18	
9	AVB10-0100-37120F	19		29		19	
10	AVB10-0104-1000F	20		30		20	

Notes: Samples appended with "F" were analyzed for dissolved chromium

LDC #: 29578D4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW846 6010B)

(Y) N N/A Were field blanks identified in this SDG?

(Y) N N/A Were target analytes detected in the field blanks?

Blank units: mg/L **Associated sample units:** mg/L

Sampling date: 3/13/13 Soil factor applied

Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: 6-9 (Code: B4)

Analyte	Blank ID	Sample Identification										
	10	Action Level	7									
Cr	0.0108	0.054	0.0132									

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459172

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB91-0302-1000 Matrix: Water Date Received: 03.13.13 15.47
Lab Sample Id: 459172-001 Date Collected: 03.13.13 08.00

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.15.13 10.54
Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.15.13 14.24		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.15.13 14.24		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.15.13 14.24		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.15.13 14.24		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.15.13 14.24		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.15.13 14.24		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.15.13 14.24	N1	UJ 1 (LI, R7)
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.15.13 14.24		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.15.13 14.24		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.15.13 14.24		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.15.13 14.24		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.15.13 14.24		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.15.13 14.24		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.15.13 14.24		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.15.13 14.24		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.15.13 14.24		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.15.13 14.24		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.15.13 14.24		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.15.13 14.24		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.15.13 14.24		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.15.13 14.24		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.15.13 14.24		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.15.13 14.24		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.15.13 14.24		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.15.13 14.24		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.15.13 14.24		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.15.13 14.24		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.15.13 14.24		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.15.13 14.24		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.15.13 14.24		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.15.13 14.24		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.15.13 14.24		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.15.13 14.24		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.15.13 14.24		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.15.13 14.24		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.15.13 14.24		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.15.13 14.24		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.15.13 14.24		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.15.13 14.24		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.15.13 14.24		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.15.13 14.24		1

5/13/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459172

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB91-0302-1000 Matrix: Water Date Received: 03.13.13 15.47
Lab Sample Id: 459172-001 Date Collected: 03.13.13 08.00

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.15.13 10.54
Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.15.13 14.24		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.15.13 14.24		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.15.13 14.24		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.15.13 14.24		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.15.13 14.24		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.15.13 14.24		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.15.13 14.24		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.15.13 14.24		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.15.13 14.24		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.15.13 14.24		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.15.13 14.24		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.15.13 14.24		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.15.13 14.24		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.15.13 14.24		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.15.13 14.24		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.15.13 14.24		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.15.13 14.24		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.15.13 14.24		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.15.13 14.24		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.15.13 14.24		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.15.13 14.24		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.15.13 14.24		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.15.13 14.24		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.15.13 14.24		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.15.13 14.24		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.15.13 14.24		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.15.13 14.24		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	93	%	69-133	03.15.13 14.24	
1,2-Dichloroethane-D4	17060-07-0	85	%	66-139	03.15.13 14.24	
Toluene-D8	2037-26-5	95	%	70-130	03.15.13 14.24	
4-Bromofluorobenzene	460-00-4	89	%	70-135	03.15.13 14.24	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459172

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB91-0300-10360 | Matrix: Water | Date Received: 03.13.13 15.47
Lab Sample Id: **459172-002** | Date Collected: 03.13.13 08.42

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.15.13 10.54
Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.15.13 14.49		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.15.13 14.49		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.15.13 14.49		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.15.13 14.49		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.15.13 14.49		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.15.13 14.49		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.15.13 14.49	N1 UJ	1 (L1, R7)
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.15.13 14.49		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.15.13 14.49		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.15.13 14.49		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.15.13 14.49		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.15.13 14.49		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.15.13 14.49		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.15.13 14.49		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.15.13 14.49		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.15.13 14.49		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.15.13 14.49		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.15.13 14.49		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.15.13 14.49		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.15.13 14.49		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.15.13 14.49		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.15.13 14.49		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.15.13 14.49		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.15.13 14.49		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.15.13 14.49		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.15.13 14.49		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.15.13 14.49		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.15.13 14.49		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.15.13 14.49		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.15.13 14.49		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.15.13 14.49		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.15.13 14.49		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.15.13 14.49		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.15.13 14.49		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.15.13 14.49		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.15.13 14.49		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.15.13 14.49		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.15.13 14.49		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.15.13 14.49		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.15.13 14.49		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.15.13 14.49		1

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Final 1.000

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459172

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB91-0300-10360 | Matrix: Water | Date Received: 03.13.13 15.47
Lab Sample Id: **459172-002** | Date Collected: 03.13.13 08.42

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.15.13 10.54
Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.15.13 14.49		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.15.13 14.49		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.15.13 14.49		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.15.13 14.49		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.15.13 14.49		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.15.13 14.49		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.15.13 14.49		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.15.13 14.49		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.15.13 14.49		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.15.13 14.49		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.15.13 14.49		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.15.13 14.49		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.15.13 14.49		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.15.13 14.49		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.15.13 14.49		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.15.13 14.49		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.15.13 14.49		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.15.13 14.49		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.15.13 14.49		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.15.13 14.49		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.15.13 14.49		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.15.13 14.49		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.15.13 14.49		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.15.13 14.49		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.15.13 14.49		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.15.13 14.49		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.15.13 14.49		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	92	%	69-133	03.15.13 14.49	
1,2-Dichloroethane-D4	17060-07-0	87	%	66-139	03.15.13 14.49	
Toluene-D8	2037-26-5	94	%	70-130	03.15.13 14.49	
4-Bromofluorobenzene	460-00-4	91	%	70-135	03.15.13 14.49	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459172

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB82-0100-22327 | Matrix: Water | Date Received: 03.13.13 15.47
Lab Sample Id: **459172-003** | Date Collected: 03.13.13 09.50

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.15.13 10.54
Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	**24.4**	20.0	ug/L	03.15.13 15.14		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.15.13 15.14		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.15.13 15.14		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.15.13 15.14		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.15.13 15.14		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.15.13 15.14		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.15.13 15.14	N1 UJ	1 (LI, R7)
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.15.13 15.14		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.15.13 15.14		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.15.13 15.14		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.15.13 15.14		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.15.13 15.14		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.15.13 15.14		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.15.13 15.14		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.15.13 15.14		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.15.13 15.14		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.15.13 15.14		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.15.13 15.14		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.15.13 15.14		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.15.13 15.14		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.15.13 15.14		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.15.13 15.14		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.15.13 15.14		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.15.13 15.14		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.15.13 15.14		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.15.13 15.14		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.15.13 15.14		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.15.13 15.14		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.15.13 15.14		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.15.13 15.14		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.15.13 15.14		1
1,1-Dichloroethene	75-35-4	**29.4**	0.500	ug/L	03.15.13 15.14		1
cis-1,2-Dichloroethene	156-59-2	**1.52**	0.500	ug/L	03.15.13 15.14		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.15.13 15.14		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.15.13 15.14		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.15.13 15.14		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.15.13 15.14		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.15.13 15.14		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.15.13 15.14		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.15.13 15.14		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.15.13 15.14		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459172

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB82-0100-22327 | Matrix: Water | Date Received: 03.13.13 15.47
Lab Sample Id: 459172-003 | Date Collected: 03.13.13 09.50

Analytical Method: VOCs by EPA 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.15.13 10.54
Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.15.13 15.14		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.15.13 15.14		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.15.13 15.14		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.15.13 15.14		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.15.13 15.14		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.15.13 15.14		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.15.13 15.14		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.15.13 15.14		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.15.13 15.14		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.15.13 15.14		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.15.13 15.14		1
Tetrachloroethylene	127-18-4	**70.2**	0.500	ug/L	03.15.13 15.14		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.15.13 15.14		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.15.13 15.14		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.15.13 15.14		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.15.13 15.14		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.15.13 15.14		1
Trichloroethene	79-01-6	**21.2**	0.500	ug/L	03.15.13 15.14		1
Trichlorofluoromethane	75-69-4	**4.81**	2.00	ug/L	03.15.13 15.14		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.15.13 15.14		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.15.13 15.14		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.15.13 15.14		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.15.13 15.14		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.15.13 15.14		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.15.13 15.14		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.15.13 15.14		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.15.13 15.14		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	92	%	69-133	03.15.13 15.14	
1,2-Dichloroethane-D4	17060-07-0	85	%	66-139	03.15.13 15.14	
Toluene-D8	2037-26-5	93	%	70-130	03.15.13 15.14	
4-Bromofluorobenzene	460-00-4	88	%	70-135	03.15.13 15.14	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459172

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB82-0200-10410 | Matrix: Water | Date Received: 03.13.13 15.47
Lab Sample Id: 459172-004 | Date Collected: 03.13.13 11.16

Analytical Method: VOCs by EPA 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.15.13 10.54
Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.15.13 15.39		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.15.13 15.39		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.15.13 15.39		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.15.13 15.39		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.15.13 15.39		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.15.13 15.39		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.15.13 15.39	N1	UJ 1 (L1, R7)
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.15.13 15.39		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.15.13 15.39		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.15.13 15.39		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.15.13 15.39		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.15.13 15.39		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.15.13 15.39		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.15.13 15.39		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.15.13 15.39		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.15.13 15.39		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.15.13 15.39		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.15.13 15.39		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.15.13 15.39		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.15.13 15.39		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.15.13 15.39		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.15.13 15.39		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.15.13 15.39		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.15.13 15.39		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.15.13 15.39		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.15.13 15.39		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.15.13 15.39		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.15.13 15.39		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.15.13 15.39		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.15.13 15.39		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.15.13 15.39		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.15.13 15.39		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.15.13 15.39		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.15.13 15.39		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.15.13 15.39		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.15.13 15.39		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.15.13 15.39		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.15.13 15.39		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.15.13 15.39		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.15.13 15.39		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.15.13 15.39		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459172

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB82-0200-10410 | Matrix: Water | Date Received: 03.13.13 15.47
Lab Sample Id: **459172-004** | Date Collected: 03.13.13 11.16

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.15.13 10.54
Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.15.13 15.39		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.15.13 15.39		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.15.13 15.39		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.15.13 15.39		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.15.13 15.39		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.15.13 15.39		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.15.13 15.39		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.15.13 15.39		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.15.13 15.39		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.15.13 15.39		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.15.13 15.39		1
Tetrachloroethylene	127-18-4	**7.06**	0.500	ug/L	03.15.13 15.39		1
Toluene	108-88-3	**46.7**	2.00	ug/L	03.15.13 15.39		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.15.13 15.39		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.15.13 15.39		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.15.13 15.39		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.15.13 15.39		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.15.13 15.39		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.15.13 15.39		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.15.13 15.39		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.15.13 15.39		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.15.13 15.39		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.15.13 15.39		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.15.13 15.39		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.15.13 15.39		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.15.13 15.39		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.15.13 15.39		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	69-133	03.15.13 15.39	
1,2-Dichloroethane-D4	17060-07-0	86	%	66-139	03.15.13 15.39	
Toluene-D8	2037-26-5	96	%	70-130	03.15.13 15.39	
4-Bromofluorobenzene	460-00-4	91	%	70-135	03.15.13 15.39	

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Final 1.000

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459172

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB10-0200-36290 | Matrix: Water | Date Received: 03.13.13 15.47
Lab Sample Id: 459172-005 | Date Collected: 03.13.13 13.15

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.15.13 10.54
Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.15.13 16.04		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.15.13 16.04		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.15.13 16.04		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.15.13 16.04		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.15.13 16.04		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.15.13 16.04		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.15.13 16.04	N1 UJ	1 (L1,R7)
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.15.13 16.04		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.15.13 16.04		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.15.13 16.04		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.15.13 16.04		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.15.13 16.04		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.15.13 16.04		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.15.13 16.04		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.15.13 16.04		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.15.13 16.04		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.15.13 16.04		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.15.13 16.04		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.15.13 16.04		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.15.13 16.04		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.15.13 16.04		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.15.13 16.04		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.15.13 16.04		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.15.13 16.04		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.15.13 16.04		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.15.13 16.04		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.15.13 16.04		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.15.13 16.04		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.15.13 16.04		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.15.13 16.04		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.15.13 16.04		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.15.13 16.04		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.15.13 16.04		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.15.13 16.04		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.15.13 16.04		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.15.13 16.04		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.15.13 16.04		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.15.13 16.04		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.15.13 16.04		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.15.13 16.04		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.15.13 16.04		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459172

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB10-0200-36290 | Matrix: Water | Date Received: 03.13.13 15.47

Lab Sample Id: **459172-005** | Date Collected: 03.13.13 13.15

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.15.13 10.54

Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.15.13 16.04		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.15.13 16.04		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.15.13 16.04		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.15.13 16.04		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.15.13 16.04		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.15.13 16.04		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.15.13 16.04		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.15.13 16.04		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.15.13 16.04		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.15.13 16.04		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.15.13 16.04		1
Tetrachloroethylene	127-18-4	**7.54**	0.500	ug/L	03.15.13 16.04		1
Toluene	108-88-3	**5.50**	2.00	ug/L	03.15.13 16.04		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.15.13 16.04		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.15.13 16.04		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.15.13 16.04		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.15.13 16.04		1
Trichloroethene	79-01-6	**2.33**	0.500	ug/L	03.15.13 16.04		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.15.13 16.04		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.15.13 16.04		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.15.13 16.04		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.15.13 16.04		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.15.13 16.04		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.15.13 16.04		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.15.13 16.04		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.15.13 16.04		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.15.13 16.04		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	93	%	69-133	03.15.13 16.04	
1,2-Dichloroethane-D4	17060-07-0	85	%	66-139	03.15.13 16.04	
Toluene-D8	2037-26-5	94	%	70-130	03.15.13 16.04	
4-Bromofluorobenzene	460-00-4	88	%	70-135	03.15.13 16.04	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459172

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB10-0100-37120 | Matrix: Water | Date Received: 03.13.13 15.47
Lab Sample Id: **459172-006** | Date Collected: 03.13.13 14.08

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.15.13 10.54
Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.15.13 16.29		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.15.13 16.29		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.15.13 16.29		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.15.13 16.29		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.15.13 16.29		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.15.13 16.29		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.15.13 16.29	N1 UJ	1 (L1,R7)
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.15.13 16.29		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.15.13 16.29		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.15.13 16.29		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.15.13 16.29		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.15.13 16.29		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.15.13 16.29		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.15.13 16.29		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.15.13 16.29		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.15.13 16.29		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.15.13 16.29		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.15.13 16.29		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.15.13 16.29		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.15.13 16.29		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.15.13 16.29		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.15.13 16.29		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.15.13 16.29		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.15.13 16.29		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.15.13 16.29		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.15.13 16.29		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.15.13 16.29		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.15.13 16.29		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.15.13 16.29		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.15.13 16.29		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.15.13 16.29		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.15.13 16.29		1
cis-1,2-Dichloroethene	156-59-2	**0.620**	0.500	ug/L	03.15.13 16.29		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.15.13 16.29		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.15.13 16.29		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.15.13 16.29		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.15.13 16.29		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.15.13 16.29		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.15.13 16.29		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.15.13 16.29		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.15.13 16.29		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459172

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB10-0100-37120 | Matrix: Water | Date Received: 03.13.13 15.47

Lab Sample Id: **459172-006** | Date Collected: 03.13.13 14.08

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.15.13 10.54

Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.15.13 16.29		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.15.13 16.29		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.15.13 16.29		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.15.13 16.29		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.15.13 16.29		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.15.13 16.29		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.15.13 16.29		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.15.13 16.29		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.15.13 16.29		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.15.13 16.29		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.15.13 16.29		1
Tetrachloroethylene	127-18-4	**23.9**	0.500	ug/L	03.15.13 16.29		1
Toluene	108-88-3	**4.53**	2.00	ug/L	03.15.13 16.29		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.15.13 16.29		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.15.13 16.29		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.15.13 16.29		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.15.13 16.29		1
Trichloroethene	79-01-6	**2.00**	0.500	ug/L	03.15.13 16.29		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.15.13 16.29		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.15.13 16.29		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.15.13 16.29		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.15.13 16.29		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.15.13 16.29		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.15.13 16.29		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.15.13 16.29		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.15.13 16.29		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.15.13 16.29		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	69-133	03.15.13 16.29	
1,2-Dichloroethane-D4	17060-07-0	86	%	66-139	03.15.13 16.29	
Toluene-D8	2037-26-5	95	%	70-130	03.15.13 16.29	
4-Bromofluorobenzene	460-00-4	90	%	70-135	03.15.13 16.29	

9/5/13/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459172

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB10-0104-1000 | Matrix: Water | Date Received: 03.13.13 15.47
Lab Sample Id: 459172-007 | Date Collected: 03.13.13 14.20

Analytical Method: VOCs by EPA 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.15.13 10.54
Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.15.13 16.54		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.15.13 16.54		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.15.13 16.54		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.15.13 16.54		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.15.13 16.54		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.15.13 16.54		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.15.13 16.54	N1	1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.15.13 16.54		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.15.13 16.54		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.15.13 16.54		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.15.13 16.54		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.15.13 16.54		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.15.13 16.54		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.15.13 16.54		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.15.13 16.54		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.15.13 16.54		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.15.13 16.54		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.15.13 16.54		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.15.13 16.54		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.15.13 16.54		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.15.13 16.54		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.15.13 16.54		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.15.13 16.54		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.15.13 16.54		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.15.13 16.54		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.15.13 16.54		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.15.13 16.54		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.15.13 16.54		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.15.13 16.54		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.15.13 16.54		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.15.13 16.54		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.15.13 16.54		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.15.13 16.54		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.15.13 16.54		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.15.13 16.54		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.15.13 16.54		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.15.13 16.54		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.15.13 16.54		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.15.13 16.54		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.15.13 16.54		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.15.13 16.54		1

UJ (L1,R7)

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459172

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB10-0104-1000 | Matrix: Water | Date Received: 03.13.13 15.47
Lab Sample Id: 459172-007 | Date Collected: 03.13.13 14.20

Analytical Method: VOCs by EPA 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.15.13 10.54
Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.15.13 16.54		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.15.13 16.54		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.15.13 16.54		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.15.13 16.54		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.15.13 16.54		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.15.13 16.54		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.15.13 16.54		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.15.13 16.54		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.15.13 16.54		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.15.13 16.54		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.15.13 16.54		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.15.13 16.54		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.15.13 16.54		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.15.13 16.54		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.15.13 16.54		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.15.13 16.54		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.15.13 16.54		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.15.13 16.54		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.15.13 16.54		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.15.13 16.54		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.15.13 16.54		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.15.13 16.54		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.15.13 16.54		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.15.13 16.54		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.15.13 16.54		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.15.13 16.54		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.15.13 16.54		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	93	%	69-133	03.15.13 16.54	
1,2-Dichloroethane-D4	17060-07-0	86	%	66-139	03.15.13 16.54	
Toluene-D8	2037-26-5	94	%	70-130	03.15.13 16.54	
4-Bromofluorobenzene	460-00-4	89	%	70-135	03.15.13 16.54	

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Final 1.000

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459172

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB91-0300-10360 Matrix: Water Date Received: 03.13.13 15.47
Lab Sample Id: **459172-002** Date Collected: 03.13.13 08.42

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.20.13 11.00
Seq Number: 909491 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0140**	0.0100	mg/L	03.20.13 18.28		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.21.13 08.00
Seq Number: 909557 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.21.13 17.57		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.19.13 17.36
Seq Number: 909827 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.19.13 17.51	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	88	%	75-131	03.19.13 17.51	
1,2-Dichloroethane-D4	17060-07-0	93	%	63-144	03.19.13 17.51	
Toluene-D8	2037-26-5	113	%	80-117	03.19.13 17.51	
4-Bromofluorobenzene	460-00-4	101	%	74-124	03.19.13 17.51	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459172

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB82-0100-22327 Matrix: Water Date Received: 03.13.13 15.47
Lab Sample Id: **459172-003** Date Collected: 03.13.13 09.50

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.19.13 17.40
Seq Number: 909827 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.19.13 19.25	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	75-131	03.19.13 19.25	
1,2-Dichloroethane-D4	17060-07-0	103	%	63-144	03.19.13 19.25	
Toluene-D8	2037-26-5	85	%	80-117	03.19.13 19.25	
4-Bromofluorobenzene	460-00-4	92	%	74-124	03.19.13 19.25	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459172

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB82-0200-10410 Matrix: Water Date Received: 03.13.13 15.47
Lab Sample Id: **459172-004** Date Collected: 03.13.13 11.16

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.20.13 11.00
Seq Number: 909491 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0169**	0.0100	mg/L	03.20.13 18.34		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.21.13 08.00
Seq Number: 909557 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0132**	0.0100	mg/L	03.21.13 18.03	U (B4)	1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.19.13 17.41
Seq Number: 909827 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.19.13 19.49	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	93	%	75-131	03.19.13 19.49	
1,2-Dichloroethane-D4	17060-07-0	103	%	63-144	03.19.13 19.49	
Toluene-D8	2037-26-5	111	%	80-117	03.19.13 19.49	
4-Bromofluorobenzene	460-00-4	102	%	74-124	03.19.13 19.49	

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Final 1.000

Certificate of Analytical Results 459172

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB10-0200-36290 Matrix: Water Date Received: 03.13.13 15.47
Lab Sample Id: 459172-005 Date Collected: 03.13.13 13.15

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.20.13 11.00
Seq Number: 909491 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.20.13 18.39		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.21.13 08.00
Seq Number: 909557 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.21.13 18.08		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.19.13 17.42
Seq Number: 909827 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.19.13 20.12	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	75-131	03.19.13 20.12	
1,2-Dichloroethane-D4	17060-07-0	105	%	63-144	03.19.13 20.12	
Toluene-D8	2037-26-5	97	%	80-117	03.19.13 20.12	
4-Bromofluorobenzene	460-00-4	90	%	74-124	03.19.13 20.12	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459172

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB10-0100-37120 Matrix: Water Date Received: 03.13.13 15.47
Lab Sample Id: 459172-006 Date Collected: 03.13.13 14.08

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.20.13 11.00
Seq Number: 909491 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0144**	0.0100	mg/L	03.20.13 18.45		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.21.13 08.00
Seq Number: 909557 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.21.13 18.14		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.19.13 17.43
Seq Number: 909827 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.19.13 20.35	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	95	%	75-131	03.19.13 20.35	
1,2-Dichloroethane-D4	17060-07-0	110	%	63-144	03.19.13 20.35	
Toluene-D8	2037-26-5	108	%	80-117	03.19.13 20.35	
4-Bromofluorobenzene	460-00-4	89	%	74-124	03.19.13 20.35	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459172

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB10-0104-1000 Matrix: Water Date Received: 03.13.13 15.47
Lab Sample Id: **459172-007** Date Collected: 03.13.13 14.20

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.20.13 11.00
Seq Number: 909491 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.20.13 18.51		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.21.13 08.00
Seq Number: 909557 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0108**	0.0100	mg/L	03.21.13 18.20		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.21.13 16.32
Seq Number: 909551 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.21.13 17.20	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	101	%	75-131	03.21.13 17.20	
1,2-Dichloroethane-D4	17060-07-0	94	%	63-144	03.21.13 17.20	
Toluene-D8	2037-26-5	95	%	80-117	03.21.13 17.20	
4-Bromofluorobenzene	460-00-4	94	%	74-124	03.21.13 17.20	

9/13/13

Final 1.000

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 14, 2013

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459243

Sample Identification

AVB141-0102-1000
AVB141-0100-11285
AVB139-0100-11290
AVB139-0101-11290
AVB61-0100-30450
AVB61-0104-1000
AVB61-0100-30450MS
AVB61-0100-30450MSD

Introduction

This data review covers 8 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample AVB141-0102-1000 was identified as trip blank. No volatile contaminants were found.

Sample AVB61-0104-1000 was identified as an equipment blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
AVB61-0100-30450MS/MSD (AVB61-0100-30450)	Vinyl chloride	134 (70-130)	133 (70-130)	-	J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
635278-1-BKS (AVB141-0102-1000 AVB141-0100-11285 AVB139-0100-11290 AVB139-0101-11290 AVB61-0100-30450 AVB61-0104-1000 635278-1-BLK)	Bromomethane	215 (58-138)	147 (58-138)	38 (≤25)	J (all detects) UJ (all non-detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples AVB139-0100-11290 and AVB139-0101-11290 were identified as field duplicates. No volatiles were detected in any of the samples.

West Van Buren Area
Volatiles - Data Qualification Summary - SDG 459243

SDG	Sample	Compound	Flag	A or P	Reason (Code)
459243	AVB61-0100-30450	Vinyl chloride	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (M1)
459243	AVB141-0102-1000 AVB141-0100-11285 AVB139-0100-11290 AVB139-0101-11290 AVB61-0100-30450 AVB61-0104-1000	Bromomethane	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L1, R7)

West Van Buren Area
Volatiles - Laboratory Blank Data Qualification Summary - SDG 459243

No Sample Data Qualified in this SDG

West Van Buren Area
Volatiles - Field Blank Data Qualification Summary - SDG 459243

No Sample Data Qualified in this SDG

LDC #: 29578E1a

SDG #: 459243

Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 5/1/13

Page: 1 of 2

Reviewer: B

2nd Reviewer: K

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/14/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	Δ	
VI.	Surrogate spikes	Δ	
VII.	Matrix spike/Matrix spike duplicates	SW	459172-002
VIII.	Laboratory control samples	SW	LCS ID
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = 3, 4
XVII.	Field blanks	ND	TB = 1 EB = 6

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: water

1	AVB141-0102-1000 TB	11	635278-1-BLK	21		31	
2	AVB141-0100-11285	12	635279-1-BLK	22		32	
3	AVB139-0100-11290 R	13		23		33	
4	AVB139-0101-11290 D	14		24		34	
5	AVB61-0100-30450	15		25		35	
6	AVB61-0104-1000 EB	16		26		36	
7	AVB61-0100-30450MS	17		27		37	
8	AVB61-0100-30450MSD	18		28		38	
9		19		29		39	
10		20		30		40	

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene	BB. 1,1,2,2-Tetrachloroethane	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane	CC. Toluene	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform	EE. Ethylbenzene	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN. Iodomethane
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.1,1-Difluoroethane
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

LDC #: 29578E 1a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer: [illegible]

METHOD : GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		7+8	C	134 (70-130)	133 (70-130)	( )	5	J/A det (M1)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		

LDC #: 29578E1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		635278-1BKS	B	215 (58-138)	147 (58-138)	38 (25)	635278-1-BLK,	J/P(UT) L1, R1
				( )	( )	( )	1-6	UJ/P
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 14, 2012

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: 1,4-Dioxane

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459243

Sample Identification

AVB141-0100-11285
AVB139-0100-11290
AVB139-0101-11290
AVB61-0100-30450
AVB61-0104-1000

Introduction

This data review covers 5 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8260B for 1,4-Dioxane.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks

Sample AVB61-0104-1000 was identified as an equipment blank. No 1,4-dioxane was found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples AVB139-0100-11290 and AVB139-0101-11290 were identified as field duplicates. No 1,4-dioxane was detected in any of the samples.

West Van Buren Area
1,4-Dioxane - Data Qualification Summary - SDG 459243

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG 459243

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Field Blank Data Qualification Summary - SDG 459243

No Sample Data Qualified in this SDG

LDC #: 29578E1b

SDG #: 459243

Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 5/1/13

Page: 1 of 1

Reviewer: P

2nd Reviewer: P

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/14/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	459172-002 MS/D
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = 2, 3
XVII.	Field blanks	ND	EB = 5

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: water

1	AVB141-0100-11285	11	635663-1-BLK	21		31	
2	AVB139-0100-11290 D	12	635470-1-BLK	22		32	
3	AVB139-0101-11290 D	13		23		33	
4	AVB61-0100-30450	14		24		34	
5	AVB61-0104-1000 EB	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 14, 2013

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: Chromium

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459243

Sample Identification

AVB141-0100-11285
AVB139-0100-11290
AVB139-0101-11290
AVB61-0100-30450
AVB61-0104-1000
AVB141-0100-11285F
AVB139-0100-11290F
AVB139-0101-11290F
AVB61-0100-30450F
AVB61-0104-1000F

Sample IDs appended with "F" were analyzed for dissolved chromium.

Introduction

This data review covers 10 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6010B for Chromium.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

ICP-MS was not utilized in this SDG.

III. Calibration

Calibration data were not reviewed for Level III.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No chromium was found in the preparation blanks.

Samples AVB61-0104-1000 and AVB61-0104-1000F were identified as equipment blanks. No chromium was found.

V. ICP Interference Check Sample (ICS) Analysis

ICP interference check data were not reviewed for Level III.

VI. Matrix Spike Analysis

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Internal Standards

ICP-MS was not utilized in this SDG.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution was not performed for this SDG.

XII. Sample Result Verification

Raw data was not reviewed for this SDG.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

Samples AVB139-0100-11290 and AVB139-0101-11290 and samples AVB139-0100-11290F and AVB139-0101-11290F were identified as field duplicates. No chromium was detected in any of the samples with the following exceptions:

Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
	AVB139-0100-11290	AVB139-0101-11290			
Chromium	0.0190	0.0363	63 (≤20)	J (all detects)	A

West Van Buren Area
Chromium - Data Qualification Summary - SDG 459243

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
459243	AVB139-0100-11290 AVB139-0101-11290	Chromium	J (all detects)	A	Field duplicates (RPD) (R8)

West Van Buren Area
Chromium - Laboratory Blank Data Qualification Summary - SDG 459243

No Sample Data Qualified in this SDG

West Van Buren Area
Chromium - Field Blank Data Qualification Summary - SDG 459243

No Sample Data Qualified in this SDG

LDC #: 29578E4
SDG #: 459243
Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 4/30/13
Page: 1 of 1
Reviewer: W
2nd Reviewer: A

METHOD: Chromium (EPA SW846 Method 6010B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/14/13
II.	Calibration	N	Not
III.	Blanks	A	
IV.	ICP Interference Check Sample (ICS) Analysis	N	
V.	Matrix Spike Analysis	N	3 CS
VI.	Duplicate Sample Analysis	N	
VII.	Laboratory Control Samples (LCS)	A	LCS/D
VIII.	Internal Standard (ICP-MS)	N	Not Utilized
IX.	Furnace Atomic Absorption QC	N	
X.	ICP Serial Dilution	N	Not performed
XI.	Sample Result Verification	N	
XII.	Overall Assessment of Data	A	
XIII.	Field Duplicates	SW	(2,3) #(7,8)
XIV.	Field Blanks	ND	EB=5, 10

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: All

1	AVB141-0100-11285	11	MB	21		11	
2	AVB139-0100-11290	12		22		12	
3	AVB139-0101-11290	13		23		13	
4	AVB61-0100-30450	14		24		14	
5	AVB61-0104-1000	15		25		15	
6	AVB141-0100-11285F	16		26		16	
7	AVB139-0100-11290F	17		27		17	
8	AVB139-0101-11290F	18		28		18	
9	AVB61-0100-30450F	19		29		19	
10	AVB61-0104-1000F	20		30		20	

Notes: Samples appended with "F" were analyzed for dissolved chromium

LDC#: 29578E4

VALIDATION FINDINGS WORKSHEET

Field Duplicates

Page: 1 of 1
Reviewer: [signature]
2nd Reviewer: [signature]

METHOD: Metals (EPA Method 6010B)

Analyte	Concentration (mg/L)		RPD (≤20)	Parent only
	2	3		
Chromium	0.0190	0.0363	63	J det / A (R8)

V:\FIELD DUPLICATES\FD_inorganic\29578E4.wpd

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459243

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB141-0102-1000 Matrix: Water Date Received: 03.14.13 13.10
Lab Sample Id: 459243-001 Date Collected: 03.14.13 07.00

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.15.13 10.54
Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.15.13 17.19		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.15.13 17.19		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.15.13 17.19		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.15.13 17.19		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.15.13 17.19		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.15.13 17.19		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.15.13 17.19	N1 UJ	1 (L1, R7)
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.15.13 17.19		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.15.13 17.19		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.15.13 17.19		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.15.13 17.19		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.15.13 17.19		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.15.13 17.19		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.15.13 17.19		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.15.13 17.19		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.15.13 17.19		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.15.13 17.19		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.15.13 17.19		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.15.13 17.19		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.15.13 17.19		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.15.13 17.19		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.15.13 17.19		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.15.13 17.19		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.15.13 17.19		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.15.13 17.19		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.15.13 17.19		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.15.13 17.19		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.15.13 17.19		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.15.13 17.19		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.15.13 17.19		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.15.13 17.19		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.15.13 17.19		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.15.13 17.19		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.15.13 17.19		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.15.13 17.19		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.15.13 17.19		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.15.13 17.19		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.15.13 17.19		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.15.13 17.19		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.15.13 17.19		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.15.13 17.19		1

5/13/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459243

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB141-0102-1000 Matrix: Water Date Received: 03.14.13 13.10

Lab Sample Id: **459243-001** Date Collected: 03.14.13 07.00

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C

Tech: OEM % Moisture:

Analyst: OEM Date Prep: 03.15.13 10.54

Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.15.13 17.19		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.15.13 17.19		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.15.13 17.19		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.15.13 17.19		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.15.13 17.19		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.15.13 17.19		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.15.13 17.19		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.15.13 17.19		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.15.13 17.19		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.15.13 17.19		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.15.13 17.19		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.15.13 17.19		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.15.13 17.19		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.15.13 17.19		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.15.13 17.19		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.15.13 17.19		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.15.13 17.19		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.15.13 17.19		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.15.13 17.19		1
1,2,3-Trichloropropane	96-18-4	**1.37**	1.00	ug/L	03.15.13 17.19		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.15.13 17.19		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.15.13 17.19		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.15.13 17.19		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.15.13 17.19		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.15.13 17.19		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.15.13 17.19		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.15.13 17.19		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	92	%	69-133	03.15.13 17.19	
1,2-Dichloroethane-D4	17060-07-0	86	%	66-139	03.15.13 17.19	
Toluene-D8	2037-26-5	94	%	70-130	03.15.13 17.19	
4-Bromofluorobenzene	460-00-4	90	%	70-135	03.15.13 17.19	

4/5/13/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459243

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB141-0100-11285 Matrix: Water Date Received: 03.14.13 13.10
Lab Sample Id: 459243-002 Date Collected: 03.14.13 07.35

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.15.13 10.54
Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.15.13 17.44		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.15.13 17.44		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.15.13 17.44		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.15.13 17.44		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.15.13 17.44		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.15.13 17.44		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.15.13 17.44	NI UJ	1 (LI, R7)
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.15.13 17.44		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.15.13 17.44		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.15.13 17.44		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.15.13 17.44		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.15.13 17.44		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.15.13 17.44		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.15.13 17.44		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.15.13 17.44		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.15.13 17.44		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.15.13 17.44		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.15.13 17.44		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.15.13 17.44		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.15.13 17.44		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.15.13 17.44		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.15.13 17.44		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.15.13 17.44		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.15.13 17.44		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.15.13 17.44		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.15.13 17.44		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.15.13 17.44		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.15.13 17.44		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.15.13 17.44		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.15.13 17.44		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.15.13 17.44		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.15.13 17.44		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.15.13 17.44		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.15.13 17.44		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.15.13 17.44		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.15.13 17.44		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.15.13 17.44		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.15.13 17.44		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.15.13 17.44		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.15.13 17.44		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.15.13 17.44		1

Final 1.000

4/3/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459243

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB141-0100-11285 | Matrix: Water | Date Received: 03.14.13 13.10

Lab Sample Id: **459243-002** | Date Collected: 03.14.13 07.35

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.15.13 10.54

Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.15.13 17.44		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.15.13 17.44		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.15.13 17.44		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.15.13 17.44		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.15.13 17.44		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.15.13 17.44		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.15.13 17.44		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.15.13 17.44		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.15.13 17.44		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.15.13 17.44		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.15.13 17.44		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.15.13 17.44		1
Toluene	108-88-3	**52.3**	2.00	ug/L	03.15.13 17.44		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.15.13 17.44		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.15.13 17.44		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.15.13 17.44		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.15.13 17.44		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.15.13 17.44		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.15.13 17.44		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.15.13 17.44		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.15.13 17.44		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.15.13 17.44		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.15.13 17.44		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.15.13 17.44		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.15.13 17.44		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.15.13 17.44		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.15.13 17.44		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	93	%	69-133	03.15.13 17.44	
1,2-Dichloroethane-D4	17060-07-0	85	%	66-139	03.15.13 17.44	
Toluene-D8	2037-26-5	94	%	70-130	03.15.13 17.44	
4-Bromofluorobenzene	460-00-4	91	%	70-135	03.15.13 17.44	

5/13/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459243

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB139-0100-11290 Matrix: Water Date Received: 03.14.13 13.10
Lab Sample Id: 459243-003 Date Collected: 03.14.13 09.42

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.15.13 10.54
Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.15.13 18.09		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.15.13 18.09		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.15.13 18.09		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.15.13 18.09		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.15.13 18.09		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.15.13 18.09		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.15.13 18.09	N1 U5	1 (L1, R7)
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.15.13 18.09		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.15.13 18.09		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.15.13 18.09		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.15.13 18.09		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.15.13 18.09		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.15.13 18.09		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.15.13 18.09		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.15.13 18.09		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.15.13 18.09		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.15.13 18.09		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.15.13 18.09		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.15.13 18.09		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.15.13 18.09		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.15.13 18.09		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.15.13 18.09		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.15.13 18.09		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.15.13 18.09		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.15.13 18.09		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.15.13 18.09		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.15.13 18.09		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.15.13 18.09		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.15.13 18.09		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.15.13 18.09		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.15.13 18.09		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.15.13 18.09		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.15.13 18.09		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.15.13 18.09		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.15.13 18.09		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.15.13 18.09		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.15.13 18.09		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.15.13 18.09		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.15.13 18.09		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.15.13 18.09		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.15.13 18.09		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459243

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB139-0100-11290 Matrix: Water Date Received: 03.14.13 13.10

Lab Sample Id: 459243-003 Date Collected: 03.14.13 09.42

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C

Tech: OEM % Moisture:

Analyst: OEM Date Prep: 03.15.13 10.54

Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.15.13 18.09		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.15.13 18.09		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.15.13 18.09		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.15.13 18.09		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.15.13 18.09		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.15.13 18.09		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.15.13 18.09		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.15.13 18.09		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.15.13 18.09		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.15.13 18.09		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.15.13 18.09		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.15.13 18.09		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.15.13 18.09		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.15.13 18.09		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.15.13 18.09		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.15.13 18.09		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.15.13 18.09		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.15.13 18.09		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.15.13 18.09		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.15.13 18.09		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.15.13 18.09		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.15.13 18.09		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.15.13 18.09		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.15.13 18.09		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.15.13 18.09		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.15.13 18.09		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.15.13 18.09		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	95	%	69-133	03.15.13 18.09	
1,2-Dichloroethane-D4	17060-07-0	85	%	66-139	03.15.13 18.09	
Toluene-D8	2037-26-5	94	%	70-130	03.15.13 18.09	
4-Bromofluorobenzene	460-00-4	89	%	70-135	03.15.13 18.09	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459243

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB139-0101-11290 | Matrix: Water | Date Received: 03.14.13 13.10
Lab Sample Id: 459243-004 | Date Collected: 03.14.13 09.45

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.15.13 10.54
Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.15.13 18.34		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.15.13 18.34		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.15.13 18.34		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.15.13 18.34		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.15.13 18.34		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.15.13 18.34		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.15.13 18.34	N1	1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.15.13 18.34		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.15.13 18.34		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.15.13 18.34		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.15.13 18.34		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.15.13 18.34		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.15.13 18.34		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.15.13 18.34		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.15.13 18.34		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.15.13 18.34		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.15.13 18.34		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.15.13 18.34		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.15.13 18.34		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.15.13 18.34		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.15.13 18.34		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.15.13 18.34		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.15.13 18.34		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.15.13 18.34		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.15.13 18.34		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.15.13 18.34		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.15.13 18.34		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.15.13 18.34		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.15.13 18.34		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.15.13 18.34		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.15.13 18.34		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.15.13 18.34		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.15.13 18.34		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.15.13 18.34		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.15.13 18.34		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.15.13 18.34		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.15.13 18.34		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.15.13 18.34		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.15.13 18.34		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.15.13 18.34		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.15.13 18.34		1

US (L1, R7)

Final 1.000

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459243

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB139-0101-11290 Matrix: Water Date Received: 03.14.13 13.10

Lab Sample Id: 459243-004 Date Collected: 03.14.13 09.45

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C

Tech: OEM % Moisture:

Analyst: OEM Date Prep: 03.15.13 10.54

Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.15.13 18.34		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.15.13 18.34		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.15.13 18.34		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.15.13 18.34		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.15.13 18.34		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.15.13 18.34		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.15.13 18.34		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.15.13 18.34		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.15.13 18.34		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.15.13 18.34		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.15.13 18.34		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.15.13 18.34		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.15.13 18.34		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.15.13 18.34		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.15.13 18.34		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.15.13 18.34		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.15.13 18.34		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.15.13 18.34		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.15.13 18.34		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.15.13 18.34		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.15.13 18.34		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.15.13 18.34		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.15.13 18.34		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.15.13 18.34		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.15.13 18.34		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.15.13 18.34		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.15.13 18.34		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	93	%	69-133	03.15.13 18.34	
1,2-Dichloroethane-D4	17060-07-0	84	%	66-139	03.15.13 18.34	
Toluene-D8	2037-26-5	92	%	70-130	03.15.13 18.34	
4-Bromofluorobenzene	460-00-4	90	%	70-135	03.15.13 18.34	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459243

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB61-0100-30450 Matrix: Water Date Received: 03.14.13 13.10
Lab Sample Id: 459243-005 Date Collected: 03.14.13 12.10

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.15.13 10.54
Seq Number: 909300

Dilution Analysis:
Seq#: 909315 Date Analyzed: 03/18/13 13:05 Date Prep: 03/18/13 09:54

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	**174**	20.0	ug/L	03.15.13 18.59		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.15.13 18.59		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.15.13 18.59		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.15.13 18.59		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.15.13 18.59		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.15.13 18.59		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.15.13 18.59	N1 UJ	1 (L1,R1)
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.15.13 18.59		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.15.13 18.59		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.15.13 18.59		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.15.13 18.59		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.15.13 18.59		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.15.13 18.59		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.15.13 18.59		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.15.13 18.59		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.15.13 18.59		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.15.13 18.59		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.15.13 18.59		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.15.13 18.59		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.15.13 18.59		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.15.13 18.59		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.15.13 18.59		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.15.13 18.59		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.15.13 18.59		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.15.13 18.59		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.15.13 18.59		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.15.13 18.59		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.15.13 18.59		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.15.13 18.59		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.15.13 18.59		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.15.13 18.59		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.15.13 18.59		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.15.13 18.59		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.15.13 18.59		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.15.13 18.59		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.15.13 18.59		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.15.13 18.59		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.15.13 18.59		1

Final 1.000

4/15/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459243

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB61-0100-30450 Matrix: Water Date Received: 03.14.13 13.10
Lab Sample Id: 459243-005 Date Collected: 03.14.13 12.10

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.15.13 10.54
Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.15.13 18.59		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.15.13 18.59		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.15.13 18.59		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.15.13 18.59		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.15.13 18.59		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.15.13 18.59		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.15.13 18.59		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.15.13 18.59		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.15.13 18.59		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.15.13 18.59		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.15.13 18.59		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.15.13 18.59		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.15.13 18.59		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.15.13 18.59		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.15.13 18.59		1
Toluene	108-88-3	**179**	20.0	ug/L	03.18.13 13.05	D2	10
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.15.13 18.59		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.15.13 18.59		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.15.13 18.59		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.15.13 18.59		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.15.13 18.59		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.15.13 18.59		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.15.13 18.59		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.15.13 18.59		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.15.13 18.59		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.15.13 18.59		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.15.13 18.59		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.15.13 18.59		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.15.13 18.59		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.15.13 18.59		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	93	%	69-133	03.15.13 18.59	
1,2-Dichloroethane-D4	17060-07-0	83	%	66-139	03.15.13 18.59	
Toluene-D8	2037-26-5	93	%	70-130	03.15.13 18.59	
4-Bromofluorobenzene	460-00-4	89	%	70-135	03.15.13 18.59	

5/13/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459243

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB61-0104-1000 Matrix: Water Date Received: 03.14.13 13.10

Lab Sample Id: 459243-006 Date Collected: 03.14.13 12.20

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C

Tech: OEM % Moisture:

Analyst: OEM Date Prep: 03.15.13 10.54

Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.15.13 19.24		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.15.13 19.24		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.15.13 19.24		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.15.13 19.24		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.15.13 19.24		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.15.13 19.24		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.15.13 19.24	N1 U5	1 (L1,R7)
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.15.13 19.24		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.15.13 19.24		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.15.13 19.24		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.15.13 19.24		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.15.13 19.24		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.15.13 19.24		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.15.13 19.24		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.15.13 19.24		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.15.13 19.24		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.15.13 19.24		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.15.13 19.24		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.15.13 19.24		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.15.13 19.24		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.15.13 19.24		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.15.13 19.24		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.15.13 19.24		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.15.13 19.24		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.15.13 19.24		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.15.13 19.24		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.15.13 19.24		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.15.13 19.24		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.15.13 19.24		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.15.13 19.24		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.15.13 19.24		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.15.13 19.24		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.15.13 19.24		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.15.13 19.24		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.15.13 19.24		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.15.13 19.24		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.15.13 19.24		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.15.13 19.24		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.15.13 19.24		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.15.13 19.24		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.15.13 19.24		1

4/15/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459243

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB61-0104-1000 Matrix: Water Date Received: 03.14.13 13.10
Lab Sample Id: 459243-006 Date Collected: 03.14.13 12.20

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.15.13 10.54
Seq Number: 909300

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.15.13 19.24		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.15.13 19.24		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.15.13 19.24		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.15.13 19.24		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.15.13 19.24		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.15.13 19.24		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.15.13 19.24		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.15.13 19.24		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.15.13 19.24		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.15.13 19.24		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.15.13 19.24		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.15.13 19.24		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.15.13 19.24		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.15.13 19.24		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.15.13 19.24		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.15.13 19.24		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.15.13 19.24		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.15.13 19.24		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.15.13 19.24		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.15.13 19.24		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.15.13 19.24		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.15.13 19.24		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.15.13 19.24		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.15.13 19.24		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.15.13 19.24		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.15.13 19.24		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.15.13 19.24		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	69-133	03.15.13 19.24	
1,2-Dichloroethane-D4	17060-07-0	83	%	66-139	03.15.13 19.24	
Toluene-D8	2037-26-5	94	%	70-130	03.15.13 19.24	
4-Bromofluorobenzene	460-00-4	90	%	70-135	03.15.13 19.24	

5/13/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459243

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB141-0100-11285 Matrix: Water Date Received: 03.14.13 13.10
Lab Sample Id: 459243-002 Date Collected: 03.14.13 07.35

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.21.13 08.00
Seq Number: 909557 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0106**	0.0100	mg/L	03.21.13 17.29		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.21.13 08.00
Seq Number: 909557 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.21.13 18.37		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.19.13 17.45
Seq Number: 909827 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.19.13 21.22	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	93	%	75-131	03.19.13 21.22	
1,2-Dichloroethane-D4	17060-07-0	106	%	63-144	03.19.13 21.22	
Toluene-D8	2037-26-5	115	%	80-117	03.19.13 21.22	
4-Bromofluorobenzene	460-00-4	76	%	74-124	03.19.13 21.22	

4/5/13/B

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459243

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB139-0100-11290 Matrix: Water Date Received: 03.14.13 13.10
Lab Sample Id: 459243-003 Date Collected: 03.14.13 09.42

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.21.13 08.00
Seq Number: 909557 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0190**	0.0100	mg/L	03.21.13 17.35	J (R8)	1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.21.13 08.00
Seq Number: 909557 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.21.13 18.42		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.19.13 17.46
Seq Number: 909827 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.19.13 21.46	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	96	%	75-131	03.19.13 21.46	
1,2-Dichloroethane-D4	17060-07-0	125	%	63-144	03.19.13 21.46	
Toluene-D8	2037-26-5	109	%	80-117	03.19.13 21.46	
4-Bromofluorobenzene	460-00-4	90	%	74-124	03.19.13 21.46	

5/13/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459243

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB139-0101-11290 Matrix: Water Date Received: 03.14.13 13.10
Lab Sample Id: **459243-004** Date Collected: 03.14.13 09.45

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.21.13 08.00
Seq Number: 909557 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0363**	0.0100	mg/L	03.21.13 17.40	J(R8)	1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.21.13 08.00
Seq Number: 909557 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.21.13 18.48		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.19.13 17.47
Seq Number: 909827 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.19.13 22.09	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	93	%	75-131	03.19.13 22.09	
1,2-Dichloroethane-D4	17060-07-0	105	%	63-144	03.19.13 22.09	
Toluene-D8	2037-26-5	98	%	80-117	03.19.13 22.09	
4-Bromofluorobenzene	460-00-4	95	%	74-124	03.19.13 22.09	

4/5/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459243

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB61-0100-30450 Matrix: Water Date Received: 03.14.13 13.10
Lab Sample Id: 459243-005 Date Collected: 03.14.13 12.10

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.21.13 08.00
Seq Number: 909557 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.109**	0.0100	mg/L	03.21.13 17.46		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.21.13 08.00
Seq Number: 909557 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.21.13 18.53		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.19.13 17.48
Seq Number: 909827 SUB: AZ0765

Dilution Analysis:
Seq#: 909315 Date Analyzed: 03/18/13 13:05 Date Prep: 03/18/13 09:54

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.19.13 22.32	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	96	%	75-131	03.19.13 22.32	
1,2-Dichloroethane-D4	17060-07-0	106	%	63-144	03.19.13 22.32	
Toluene-D8	2037-26-5	108	%	80-117	03.19.13 22.32	
4-Bromofluorobenzene	460-00-4	86	%	74-124	03.19.13 22.32	

5/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459243

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB61-0104-1000 Matrix: Water Date Received: 03.14.13 13.10
Lab Sample Id: 459243-006 Date Collected: 03.14.13 12.20

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.21.13 08.00
Seq Number: 909557 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.21.13 17.51		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.21.13 08.00
Seq Number: 909557 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.21.13 18.59		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.21.13 16.30
Seq Number: 909551 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.21.13 16.56	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	95	%	75-131	03.21.13 16.56	
1,2-Dichloroethane-D4	17060-07-0	98	%	63-144	03.21.13 16.56	
Toluene-D8	2037-26-5	95	%	80-117	03.21.13 16.56	
4-Bromofluorobenzene	460-00-4	93	%	74-124	03.21.13 16.56	

5/13/13

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 15, 2013

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459337

Sample Identification

AVB106-0202-1000
AVB106-0200-24177
AVB106-0300-24100
AVB40-0500-21098
AVB40-0700-21098
AVB77-0100-24108
AVB77-0200-24140
AVB77-0300-24215
AVB110-0600-21098
AVB83-0100-22114
AVB99-0100-21109
AVB69-0100-25255
AVB69-0101-25255
AVB84-0100-XXX
AVB26-0100-15099
AVB85-0100-23112
AVB77-0300-24215MS
AVB77-0300-24215MSD

Introduction

This data review covers 18 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample AVB106-0202-1000 was identified as trip blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
635397-1-BKS (AVB77-0200-24140 AVB77-0300-24215 AVB110-0600-21098 AVB83-0100-22114 AVB99-0100-21109 AVB69-0100-25255 AVB69-0101-25255 AVB84-0100-XXX AVB26-0100-15099 AVB85-0100-23112 635391-1-BLK)	Bromomethane	-	139 (58-138)	29 (≤25)	J (all detects) UJ (all non-detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples AVB69-0100-25255 and AVB69-0101-25255 were identified as field duplicates. No volatiles were detected in any of the samples.

West Van Buren Area
Volatiles - Data Qualification Summary - SDG 459337

SDG	Sample	Compound	Flag	A or P	Reason (Code)
459337	AVB77-0200-24140 AVB77-0300-24215 AVB110-0600-21098 AVB83-0100-22114 AVB99-0100-21109 AVB69-0100-25255 AVB69-0101-25255 AVB84-0100-XXX AVB26-0100-15099 AVB85-0100-23112	Bromomethane	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R)(RPD) (L1, R7)

West Van Buren Area
Volatiles - Laboratory Blank Data Qualification Summary - SDG 459337

No Sample Data Qualified in this SDG

West Van Buren Area
Volatiles - Field Blank Data Qualification Summary - SDG 459337

No Sample Data Qualified in this SDG

LDC #: 29578F1a
SDG #: 459337
Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 5/1/13
Page: 1 of 1
Reviewer: EZ
2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/15/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	SW	LCS ID
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = R, 13
XVII.	Field blanks	ND	TB = 1

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:
water

1	AVB106-0202-1000 TB	11	AVB99-0100-21109	21	635397-1-BLK	31	
2	AVB106-0200-24177	12	AVB69-0100-25255 D	22	635342-1-BLK	32	
3	AVB106-0300-24100	13	AVB69-0101-25255 D	23		33	
4	AVB40-0500-21098	14	AVB84-0100-XXX	24		34	
5	AVB40-0700-21098	15	AVB26-0100-15099	25		35	
6	AVB77-0100-24108	16	AVB85-0100-23112	26		36	
7	AVB77-0200-24140	17	AVB77-0300-24215MS	27		37	
8	AVB77-0300-24215	18	AVB77-0300-24215MSD	28		38	
9	AVB110-0600-21098	19		29		39	
10	AVB83-0100-22114	20		30		40	

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene	BB. 1,1,2,2-Tetrachloroethane	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane	CC. Toluene	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform	EE. Ethylbenzene	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN. Iodomethane
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.1,1-Difluoroethane
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

LDC #: 29578F/a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a LCS required?
Y (N) N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		635397-1-BKS	B	( )	139 (58-138)	29 (25)	635397-1-BLK,	J/Pdet L1, R7
				( )	( )	( )	7 → 16	/U
				( )	( )	( )		
				( )	( )	( )		R7
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 15, 2013

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: 1,4-Dioxane

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459337

Sample Identification

AVB106-0200-24177
AVB106-0300-24100
AVB40-0500-21098
AVB40-0700-21098
AVB77-0100-24108
AVB77-0200-24140
AVB77-0300-24215
AVB110-0600-21098
AVB83-0100-22114
AVB99-0100-21109
AVB69-0100-25255
AVB69-0101-25255
AVB84-0100-XXX
AVB26-0100-15099
AVB85-0100-23112
AVB85-0100-23112MS
AVB85-0100-23112MSD

Introduction

This data review covers 17 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8260B for 1,4-Dioxane.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples AVB69-0100-25255 and AVB69-0101-25255 were identified as field duplicates. No 1,4-dioxane was detected in any of the samples.

West Van Buren Area
1,4-Dioxane - Data Qualification Summary - SDG 459337

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG 459337

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Field Blank Data Qualification Summary - SDG 459337

No Sample Data Qualified in this SDG

LDC #: 29578F1b

SDG #: 459337

Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 5/1/13

Page: 1 of 1

Reviewer:

2nd Reviewer:

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/15/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	459172 -02 MS ID
VIII.	Laboratory control samples	A	LCS ID
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = 11, 12
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: water

1	AVB106-0200-24177	11	AVB69-0100-25255 P	21	635470-1-BLK	31	
2	AVB106-0300-24100	12	AVB69-0101-25255 D	22	635633-1-BLK	32	
3	AVB40-0500-21098	13	AVB84-0100-XXX	23		33	
4	AVB40-0700-21098	14	AVB26-0100-15099	24		34	
5	AVB77-0100-24108	15	AVB85-0100-23112	25		35	
6	AVB77-0200-24140	16	AVB85-0100-23112MS	26		36	
7	AVB77-0300-24215	17	AVB85-0100-23112MSD	27		37	
8	AVB110-0600-21098	18		28		38	
9	AVB83-0100-22114	19		29		39	
10	AVB99-0100-21109	20		30		40	

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB106-0202-1000 Matrix: Water Date Received: 03.15.13 13.40
Lab Sample Id: 459337-001 Date Collected: 03.15.13 07.30

Analytical Method: **Volatiles by SW 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.19.13 12.07
Seq Number: 909453

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	03.19.13 21.12		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.19.13 21.12		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.19.13 21.12		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.19.13 21.12		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.19.13 21.12		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.19.13 21.12		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.19.13 21.12		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.19.13 21.12		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.19.13 21.12		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.19.13 21.12		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.19.13 21.12		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.19.13 21.12		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.19.13 21.12		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.19.13 21.12		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.19.13 21.12		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.19.13 21.12		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.19.13 21.12		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.19.13 21.12		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.19.13 21.12		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.19.13 21.12		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.19.13 21.12		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.19.13 21.12		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.19.13 21.12		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.19.13 21.12		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.19.13 21.12		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.19.13 21.12		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.19.13 21.12		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.19.13 21.12		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.19.13 21.12		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.19.13 21.12		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.19.13 21.12		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.19.13 21.12		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.19.13 21.12		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.19.13 21.12		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.19.13 21.12		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.19.13 21.12		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.19.13 21.12		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.19.13 21.12		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.19.13 21.12		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.19.13 21.12		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.19.13 21.12		1

5/13/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB106-0202-1000 Matrix: Water Date Received: 03.15.13 13.40
Lab Sample Id: 459337-001 Date Collected: 03.15.13 07.30

Analytical Method: **Volatiles by SW 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.19.13 12.07
Seq Number: 909453

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.19.13 21.12		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.19.13 21.12		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.19.13 21.12		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.19.13 21.12		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.19.13 21.12		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.19.13 21.12		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.19.13 21.12		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.19.13 21.12		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.19.13 21.12		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.19.13 21.12		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.19.13 21.12		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.19.13 21.12		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.19.13 21.12		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.19.13 21.12		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.19.13 21.12		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.19.13 21.12		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.19.13 21.12		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.19.13 21.12		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.19.13 21.12		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.19.13 21.12		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.19.13 21.12		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.19.13 21.12		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	69-133	03.19.13 21.12	
1,2-Dichloroethane-D4	17060-07-0	87	%	66-139	03.19.13 21.12	
Toluene-D8	2037-26-5	98	%	70-130	03.19.13 21.12	
4-Bromofluorobenzene	460-00-4	91	%	70-135	03.19.13 21.12	

4/3/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB106-0200-24177 Matrix: Water Date Received: 03.15.13 13.40
Lab Sample Id: 459337-002 Date Collected: 03.15.13 07.32

Analytical Method: **Volatiles by SW 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.19.13 12.07
Seq Number: 909453

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	03.19.13 21.37		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.19.13 21.37		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.19.13 21.37		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.19.13 21.37		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.19.13 21.37		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.19.13 21.37		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.19.13 21.37		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.19.13 21.37		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.19.13 21.37		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.19.13 21.37		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.19.13 21.37		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.19.13 21.37		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.19.13 21.37		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.19.13 21.37		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.19.13 21.37		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.19.13 21.37		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.19.13 21.37		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.19.13 21.37		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.19.13 21.37		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.19.13 21.37		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.19.13 21.37		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.19.13 21.37		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.19.13 21.37		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.19.13 21.37		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.19.13 21.37		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.19.13 21.37		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.19.13 21.37		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.19.13 21.37		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.19.13 21.37		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.19.13 21.37		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.19.13 21.37		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.19.13 21.37		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.19.13 21.37		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.19.13 21.37		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.19.13 21.37		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.19.13 21.37		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.19.13 21.37		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.19.13 21.37		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.19.13 21.37		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.19.13 21.37		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.19.13 21.37		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB106-0200-24177 | Matrix: Water | Date Received: 03.15.13 13.40
Lab Sample Id: **459337-002** | Date Collected: 03.15.13 07.32

Analytical Method: **Volatiles by SW 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.19.13 12.07
Seq Number: 909453

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.19.13 21.37		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.19.13 21.37		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.19.13 21.37		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.19.13 21.37		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.19.13 21.37		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.19.13 21.37		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.19.13 21.37		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.19.13 21.37		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.19.13 21.37		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.19.13 21.37		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.19.13 21.37		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.19.13 21.37		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.19.13 21.37		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.19.13 21.37		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.19.13 21.37		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.19.13 21.37		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.19.13 21.37		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.19.13 21.37		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.19.13 21.37		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.19.13 21.37		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.19.13 21.37		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.19.13 21.37		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	97	%	69-133	03.19.13 21.37	
1,2-Dichloroethane-D4	17060-07-0	89	%	66-139	03.19.13 21.37	
Toluene-D8	2037-26-5	98	%	70-130	03.19.13 21.37	
4-Bromofluorobenzene	460-00-4	91	%	70-135	03.19.13 21.37	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB106-0300-24100 | Matrix: Water | Date Received: 03.15.13 13.40
Lab Sample Id: 459337-003 | Date Collected: 03.15.13 07.40

Analytical Method: **Volatiles by SW 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.19.13 12.07
Seq Number: 909453

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	03.19.13 22.02		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.19.13 22.02		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.19.13 22.02		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.19.13 22.02		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.19.13 22.02		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.19.13 22.02		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.19.13 22.02		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.19.13 22.02		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.19.13 22.02		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.19.13 22.02		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.19.13 22.02		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.19.13 22.02		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.19.13 22.02		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.19.13 22.02		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.19.13 22.02		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.19.13 22.02		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.19.13 22.02		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.19.13 22.02		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.19.13 22.02		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.19.13 22.02		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.19.13 22.02		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.19.13 22.02		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.19.13 22.02		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.19.13 22.02		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.19.13 22.02		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.19.13 22.02		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.19.13 22.02		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.19.13 22.02		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.19.13 22.02		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.19.13 22.02		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.19.13 22.02		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.19.13 22.02		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.19.13 22.02		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.19.13 22.02		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.19.13 22.02		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.19.13 22.02		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.19.13 22.02		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.19.13 22.02		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.19.13 22.02		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.19.13 22.02		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.19.13 22.02		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB106-0300-24100 | Matrix: Water | Date Received: 03.15.13 13.40
Lab Sample Id: **459337-003** | Date Collected: 03.15.13 07.40

Analytical Method: **Volatiles by SW 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.19.13 12.07
Seq Number: 909453

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.19.13 22.02		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.19.13 22.02		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.19.13 22.02		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.19.13 22.02		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.19.13 22.02		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.19.13 22.02		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.19.13 22.02		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.19.13 22.02		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.19.13 22.02		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.19.13 22.02		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.19.13 22.02		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.19.13 22.02		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.19.13 22.02		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.19.13 22.02		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.19.13 22.02		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.19.13 22.02		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.19.13 22.02		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.19.13 22.02		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.19.13 22.02		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.19.13 22.02		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.19.13 22.02		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.19.13 22.02		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	97	%	69-133	03.19.13 22.02	
1,2-Dichloroethane-D4	17060-07-0	86	%	66-139	03.19.13 22.02	
Toluene-D8	2037-26-5	98	%	70-130	03.19.13 22.02	
4-Bromofluorobenzene	460-00-4	92	%	70-135	03.19.13 22.02	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB40-0500-21098 | Matrix: Water | Date Received: 03.15.13 13.40

Lab Sample Id: **459337-004** | Date Collected: 03.15.13 08.37

Analytical Method: **Volatiles by SW 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.19.13 12.07

Seq Number: 909453

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	03.19.13 22.26		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.19.13 22.26		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.19.13 22.26		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.19.13 22.26		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.19.13 22.26		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.19.13 22.26		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.19.13 22.26		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.19.13 22.26		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.19.13 22.26		1
Carbon Disulfide	75-15-0	**0.590**	0.500	ug/L	03.19.13 22.26		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.19.13 22.26		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.19.13 22.26		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.19.13 22.26		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.19.13 22.26		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.19.13 22.26		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.19.13 22.26		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.19.13 22.26		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.19.13 22.26		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.19.13 22.26		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.19.13 22.26		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.19.13 22.26		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.19.13 22.26		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.19.13 22.26		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.19.13 22.26		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.19.13 22.26		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.19.13 22.26		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.19.13 22.26		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.19.13 22.26		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.19.13 22.26		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.19.13 22.26		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.19.13 22.26		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.19.13 22.26		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.19.13 22.26		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.19.13 22.26		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.19.13 22.26		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.19.13 22.26		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.19.13 22.26		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.19.13 22.26		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.19.13 22.26		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.19.13 22.26		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.19.13 22.26		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB40-0500-21098 | Matrix: Water | Date Received: 03.15.13 13.40

Lab Sample Id: **459337-004** | Date Collected: 03.15.13 08.37

Analytical Method: **Volatiles by SW 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.19.13 12.07

Seq Number: 909453

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.19.13 22.26		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.19.13 22.26		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.19.13 22.26		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.19.13 22.26		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.19.13 22.26		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.19.13 22.26		1
Tetrachloroethylene	127-18-4	**3.06**	0.500	ug/L	03.19.13 22.26		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.19.13 22.26		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.19.13 22.26		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.19.13 22.26		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.19.13 22.26		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.19.13 22.26		1
Trichloroethene	79-01-6	**3.07**	0.500	ug/L	03.19.13 22.26		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.19.13 22.26		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.19.13 22.26		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.19.13 22.26		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.19.13 22.26		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.19.13 22.26		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.19.13 22.26		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.19.13 22.26		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.19.13 22.26		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.19.13 22.26		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	96	%	69-133	03.19.13 22.26	
1,2-Dichloroethane-D4	17060-07-0	87	%	66-139	03.19.13 22.26	
Toluene-D8	2037-26-5	99	%	70-130	03.19.13 22.26	
4-Bromofluorobenzene	460-00-4	91	%	70-135	03.19.13 22.26	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB40-0700-21098 | Matrix: Water | Date Received: 03.15.13 13.40

Lab Sample Id: 459337-005 | Date Collected: 03.15.13 08.55

Analytical Method: **Volatiles by SW 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.19.13 12.07

Seq Number: 909453

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	03.19.13 22.50		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.19.13 22.50		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.19.13 22.50		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.19.13 22.50		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.19.13 22.50		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.19.13 22.50		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.19.13 22.50		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.19.13 22.50		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.19.13 22.50		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.19.13 22.50		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.19.13 22.50		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.19.13 22.50		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.19.13 22.50		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.19.13 22.50		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.19.13 22.50		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.19.13 22.50		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.19.13 22.50		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.19.13 22.50		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.19.13 22.50		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.19.13 22.50		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.19.13 22.50		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.19.13 22.50		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.19.13 22.50		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.19.13 22.50		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.19.13 22.50		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.19.13 22.50		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.19.13 22.50		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.19.13 22.50		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.19.13 22.50		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.19.13 22.50		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.19.13 22.50		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.19.13 22.50		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.19.13 22.50		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.19.13 22.50		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.19.13 22.50		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.19.13 22.50		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.19.13 22.50		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.19.13 22.50		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.19.13 22.50		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.19.13 22.50		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.19.13 22.50		1

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Final 1.000

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB40-0700-21098 | Matrix: Water | Date Received: 03.15.13 13.40

Lab Sample Id: **459337-005** | Date Collected: 03.15.13 08.55

Analytical Method: **Volatiles by SW 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.19.13 12.07

Seq Number: 909453

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.19.13 22.50		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.19.13 22.50		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.19.13 22.50		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.19.13 22.50		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.19.13 22.50		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.19.13 22.50		1
Tetrachloroethylene	127-18-4	**24.5**	0.500	ug/L	03.19.13 22.50		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.19.13 22.50		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.19.13 22.50		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.19.13 22.50		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.19.13 22.50		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.19.13 22.50		1
Trichloroethene	79-01-6	**6.59**	0.500	ug/L	03.19.13 22.50		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.19.13 22.50		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.19.13 22.50		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.19.13 22.50		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.19.13 22.50		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.19.13 22.50		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.19.13 22.50		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.19.13 22.50		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.19.13 22.50		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.19.13 22.50		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	98	%	69-133	03.19.13 22.50	
1,2-Dichloroethane-D4	17060-07-0	88	%	66-139	03.19.13 22.50	
Toluene-D8	2037-26-5	99	%	70-130	03.19.13 22.50	
4-Bromofluorobenzene	460-00-4	92	%	70-135	03.19.13 22.50	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB77-0100-24108 | Matrix: Water | Date Received: 03.15.13 13.40
Lab Sample Id: 459337-006 | Date Collected: 03.15.13 09.17

Analytical Method: **Volatiles by SW 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.19.13 12.07
Seq Number: 909453

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	03.19.13 23.15		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.19.13 23.15		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.19.13 23.15		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.19.13 23.15		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.19.13 23.15		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.19.13 23.15		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.19.13 23.15		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.19.13 23.15		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.19.13 23.15		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.19.13 23.15		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.19.13 23.15		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.19.13 23.15		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.19.13 23.15		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.19.13 23.15		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.19.13 23.15		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.19.13 23.15		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.19.13 23.15		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.19.13 23.15		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.19.13 23.15		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.19.13 23.15		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.19.13 23.15		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.19.13 23.15		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.19.13 23.15		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.19.13 23.15		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.19.13 23.15		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.19.13 23.15		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.19.13 23.15		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.19.13 23.15		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.19.13 23.15		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.19.13 23.15		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.19.13 23.15		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.19.13 23.15		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.19.13 23.15		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.19.13 23.15		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.19.13 23.15		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.19.13 23.15		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.19.13 23.15		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.19.13 23.15		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.19.13 23.15		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.19.13 23.15		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.19.13 23.15		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB77-0100-24108 | Matrix: Water | Date Received: 03.15.13 13.40
Lab Sample Id: 459337-006 | Date Collected: 03.15.13 09.17

Analytical Method: **Volatiles by SW 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.19.13 12.07
Seq Number: 909453

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.19.13 23.15		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.19.13 23.15		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.19.13 23.15		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.19.13 23.15		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.19.13 23.15		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.19.13 23.15		1
Tetrachloroethylene	127-18-4	**1.47**	0.500	ug/L	03.19.13 23.15		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.19.13 23.15		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.19.13 23.15		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.19.13 23.15		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.19.13 23.15		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.19.13 23.15		1
Trichloroethene	79-01-6	**2.77**	0.500	ug/L	03.19.13 23.15		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.19.13 23.15		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.19.13 23.15		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.19.13 23.15		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.19.13 23.15		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.19.13 23.15		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.19.13 23.15		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.19.13 23.15		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.19.13 23.15		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.19.13 23.15		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	98	%	69-133	03.19.13 23.15	
1,2-Dichloroethane-D4	17060-07-0	90	%	66-139	03.19.13 23.15	
Toluene-D8	2037-26-5	98	%	70-130	03.19.13 23.15	
4-Bromofluorobenzene	460-00-4	92	%	70-135	03.19.13 23.15	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB77-0200-24140 | Matrix: Water | Date Received: 03.15.13 13.40
Lab Sample Id: **459337-007** | Date Collected: 03.15.13 09.30

Analytical Method: **VOCs by SW 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.20.13 10.33
Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	03.20.13 14.27		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.20.13 14.27		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.20.13 14.27		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.20.13 14.27		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.20.13 14.27		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.20.13 14.27	L1	1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.20.13 14.27		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.20.13 14.27		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.20.13 14.27		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.20.13 14.27		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.20.13 14.27		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.20.13 14.27		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.20.13 14.27		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.20.13 14.27		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.20.13 14.27		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.20.13 14.27		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.20.13 14.27		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.20.13 14.27		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.20.13 14.27		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.20.13 14.27		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.20.13 14.27		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.20.13 14.27		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.20.13 14.27		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.20.13 14.27		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.20.13 14.27		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.20.13 14.27		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.20.13 14.27		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.20.13 14.27		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.20.13 14.27		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.20.13 14.27		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.20.13 14.27		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.20.13 14.27		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.20.13 14.27		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.20.13 14.27		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.20.13 14.27		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.20.13 14.27		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.20.13 14.27		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.20.13 14.27		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.20.13 14.27		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.20.13 14.27		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.20.13 14.27		1

L1 WJ(L1 R7)

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB77-0200-24140 | Matrix: Water | Date Received: 03.15.13 13.40
Lab Sample Id: 459337-007 | Date Collected: 03.15.13 09.30

Analytical Method: **VOCs by SW 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.20.13 10.33
Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.20.13 14.27		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.20.13 14.27		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.20.13 14.27		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.20.13 14.27		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.20.13 14.27		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.20.13 14.27		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.20.13 14.27		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.20.13 14.27		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.20.13 14.27		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.20.13 14.27		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.20.13 14.27		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.20.13 14.27		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.20.13 14.27		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.20.13 14.27		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.20.13 14.27		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.20.13 14.27		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.20.13 14.27		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.20.13 14.27		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.20.13 14.27		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.20.13 14.27		1
Vinyl Chloride	75-01-4	**0.980**	0.500	ug/L	03.20.13 14.27		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.20.13 14.27		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	92	%	69-133	03.20.13 14.27	
1,2-Dichloroethane-D4	17060-07-0	82	%	66-139	03.20.13 14.27	
Toluene-D8	2037-26-5	96	%	70-130	03.20.13 14.27	
4-Bromofluorobenzene	460-00-4	90	%	70-135	03.20.13 14.27	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB77-0300-24215 | Matrix: Water | Date Received: 03.15.13 13.40

Lab Sample Id: 459337-008 | Date Collected: 03.15.13 09.48

Analytical Method: VOCs by SW 8260B | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.20.13 10.33

Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	03.20.13 14.52		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.20.13 14.52		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.20.13 14.52		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.20.13 14.52		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.20.13 14.52		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.20.13 14.52	L1	1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.20.13 14.52		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.20.13 14.52		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.20.13 14.52		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.20.13 14.52		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.20.13 14.52		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.20.13 14.52		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.20.13 14.52		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.20.13 14.52		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.20.13 14.52		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.20.13 14.52		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.20.13 14.52		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.20.13 14.52		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.20.13 14.52		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.20.13 14.52		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.20.13 14.52		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.20.13 14.52		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.20.13 14.52		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.20.13 14.52		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.20.13 14.52		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.20.13 14.52		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.20.13 14.52		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.20.13 14.52		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.20.13 14.52		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.20.13 14.52		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.20.13 14.52		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.20.13 14.52		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.20.13 14.52		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.20.13 14.52		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.20.13 14.52		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.20.13 14.52		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.20.13 14.52		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.20.13 14.52		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.20.13 14.52		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.20.13 14.52		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.20.13 14.52		1

L1 LS(4,1 R7)

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB77-0300-24215 | Matrix: Water | Date Received: 03.15.13 13.40

Lab Sample Id: **459337-008** | Date Collected: 03.15.13 09.48

Analytical Method: **VOCs by SW 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.20.13 10.33

Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.20.13 14.52		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.20.13 14.52		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.20.13 14.52		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.20.13 14.52		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.20.13 14.52		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.20.13 14.52		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.20.13 14.52		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.20.13 14.52		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.20.13 14.52		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.20.13 14.52		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.20.13 14.52		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.20.13 14.52		1
Trichloroethene	79-01-6	**0.840**	0.500	ug/L	03.20.13 14.52		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.20.13 14.52		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.20.13 14.52		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.20.13 14.52		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.20.13 14.52		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.20.13 14.52		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.20.13 14.52		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.20.13 14.52		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.20.13 14.52		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.20.13 14.52		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	92	%	69-133	03.20.13 14.52	
1,2-Dichloroethane-D4	17060-07-0	80	%	66-139	03.20.13 14.52	
Toluene-D8	2037-26-5	97	%	70-130	03.20.13 14.52	
4-Bromofluorobenzene	460-00-4	89	%	70-135	03.20.13 14.52	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB110-0600-21098 | Matrix: Water | Date Received: 03.15.13 13.40
Lab Sample Id: 459337-009 | Date Collected: 03.15.13 10.05

Analytical Method: **VOCs by SW 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.20.13 10.33
Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	03.20.13 15.17		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.20.13 15.17		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.20.13 15.17		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.20.13 15.17		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.20.13 15.17		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.20.13 15.17	L1 U5	1 (L1,R7)
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.20.13 15.17		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.20.13 15.17		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.20.13 15.17		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.20.13 15.17		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.20.13 15.17		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.20.13 15.17		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.20.13 15.17		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.20.13 15.17		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.20.13 15.17		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.20.13 15.17		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.20.13 15.17		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.20.13 15.17		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.20.13 15.17		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.20.13 15.17		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.20.13 15.17		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.20.13 15.17		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.20.13 15.17		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.20.13 15.17		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.20.13 15.17		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.20.13 15.17		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.20.13 15.17		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.20.13 15.17		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.20.13 15.17		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.20.13 15.17		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.20.13 15.17		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.20.13 15.17		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.20.13 15.17		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.20.13 15.17		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.20.13 15.17		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.20.13 15.17		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.20.13 15.17		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.20.13 15.17		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.20.13 15.17		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.20.13 15.17		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.20.13 15.17		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB110-0600-21098 | Matrix: Water | Date Received: 03.15.13 13.40
Lab Sample Id: **459337-009** | Date Collected: 03.15.13 10.05

Analytical Method: **VOCs by SW 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.20.13 10.33
Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.20.13 15.17		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.20.13 15.17		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.20.13 15.17		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.20.13 15.17		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.20.13 15.17		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.20.13 15.17		1
Tetrachloroethylene	127-18-4	**1.58**	0.500	ug/L	03.20.13 15.17		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.20.13 15.17		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.20.13 15.17		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.20.13 15.17		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.20.13 15.17		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.20.13 15.17		1
Trichloroethene	79-01-6	**2.04**	0.500	ug/L	03.20.13 15.17		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.20.13 15.17		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.20.13 15.17		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.20.13 15.17		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.20.13 15.17		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.20.13 15.17		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.20.13 15.17		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.20.13 15.17		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.20.13 15.17		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.20.13 15.17		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	93	%	69-133	03.20.13 15.17	
1,2-Dichloroethane-D4	17060-07-0	82	%	66-139	03.20.13 15.17	
Toluene-D8	2037-26-5	96	%	70-130	03.20.13 15.17	
4-Bromofluorobenzene	460-00-4	90	%	70-135	03.20.13 15.17	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB83-0100-22114 | Matrix: Water | Date Received: 03.15.13 13.40
Lab Sample Id: **459337-010** | Date Collected: 03.15.13 10.29

Analytical Method: **VOCs by SW 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.20.13 10.33
Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	03.20.13 15.42		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.20.13 15.42		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.20.13 15.42		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.20.13 15.42		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.20.13 15.42		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.20.13 15.42	L1 UJ	1 (L1, R7)
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.20.13 15.42		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.20.13 15.42		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.20.13 15.42		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.20.13 15.42		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.20.13 15.42		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.20.13 15.42		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.20.13 15.42		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.20.13 15.42		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.20.13 15.42		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.20.13 15.42		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.20.13 15.42		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.20.13 15.42		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.20.13 15.42		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.20.13 15.42		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.20.13 15.42		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.20.13 15.42		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.20.13 15.42		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.20.13 15.42		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.20.13 15.42		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.20.13 15.42		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.20.13 15.42		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.20.13 15.42		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.20.13 15.42		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.20.13 15.42		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.20.13 15.42		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.20.13 15.42		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.20.13 15.42		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.20.13 15.42		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.20.13 15.42		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.20.13 15.42		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.20.13 15.42		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.20.13 15.42		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.20.13 15.42		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.20.13 15.42		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.20.13 15.42		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB83-0100-22114 | Matrix: Water | Date Received: 03.15.13 13.40
Lab Sample Id: **459337-010** | Date Collected: 03.15.13 10.29

Analytical Method: **VOCs by SW 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.20.13 10.33
Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.20.13 15.42		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.20.13 15.42		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.20.13 15.42		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.20.13 15.42		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.20.13 15.42		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.20.13 15.42		1
Tetrachloroethylene	127-18-4	**1.40**	0.500	ug/L	03.20.13 15.42		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.20.13 15.42		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.20.13 15.42		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.20.13 15.42		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.20.13 15.42		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.20.13 15.42		1
Trichloroethene	79-01-6	**1.47**	0.500	ug/L	03.20.13 15.42		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.20.13 15.42		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.20.13 15.42		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.20.13 15.42		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.20.13 15.42		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.20.13 15.42		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.20.13 15.42		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.20.13 15.42		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.20.13 15.42		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.20.13 15.42		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	93	%	69-133	03.20.13 15.42	
1,2-Dichloroethane-D4	17060-07-0	83	%	66-139	03.20.13 15.42	
Toluene-D8	2037-26-5	98	%	70-130	03.20.13 15.42	
4-Bromofluorobenzene	460-00-4	91	%	70-135	03.20.13 15.42	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB99-0100-21109
Lab Sample Id: 459337-011

Matrix: Water
Date Collected: 03.15.13 11.10

Date Received: 03.15.13 13.40

Analytical Method: **VOCs by SW 8260B**
Tech: OEM
Analyst: OEM
Seq Number: 909579

Prep Method: SW5030C
% Moisture:

Date Prep: 03.20.13 10.33

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	03.20.13 16.07		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.20.13 16.07		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.20.13 16.07		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.20.13 16.07		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.20.13 16.07		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.20.13 16.07	LI UJ	1 (H,R7)
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.20.13 16.07		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.20.13 16.07		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.20.13 16.07		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.20.13 16.07		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.20.13 16.07		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.20.13 16.07		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.20.13 16.07		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.20.13 16.07		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.20.13 16.07		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.20.13 16.07		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.20.13 16.07		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.20.13 16.07		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.20.13 16.07		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.20.13 16.07		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.20.13 16.07		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.20.13 16.07		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.20.13 16.07		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.20.13 16.07		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.20.13 16.07		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.20.13 16.07		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.20.13 16.07		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.20.13 16.07		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.20.13 16.07		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.20.13 16.07		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.20.13 16.07		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.20.13 16.07		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.20.13 16.07		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.20.13 16.07		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.20.13 16.07		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.20.13 16.07		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.20.13 16.07		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.20.13 16.07		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.20.13 16.07		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.20.13 16.07		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.20.13 16.07		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB99-0100-21109 | Matrix: Water | Date Received: 03.15.13 13.40
Lab Sample Id: 459337-011 | Date Collected: 03.15.13 11.10

Analytical Method: **VOCs by SW 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.20.13 10.33
Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.20.13 16.07		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.20.13 16.07		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.20.13 16.07		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.20.13 16.07		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.20.13 16.07		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.20.13 16.07		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.20.13 16.07		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.20.13 16.07		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.20.13 16.07		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.20.13 16.07		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.20.13 16.07		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.20.13 16.07		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.20.13 16.07		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.20.13 16.07		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.20.13 16.07		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.20.13 16.07		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.20.13 16.07		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.20.13 16.07		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.20.13 16.07		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.20.13 16.07		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.20.13 16.07		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.20.13 16.07		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	95	%	69-133	03.20.13 16.07	
1,2-Dichloroethane-D4	17060-07-0	81	%	66-139	03.20.13 16.07	
Toluene-D8	2037-26-5	97	%	70-130	03.20.13 16.07	
4-Bromofluorobenzene	460-00-4	91	%	70-135	03.20.13 16.07	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB69-0100-25255 | Matrix: Water | Date Received: 03.15.13 13.40
Lab Sample Id: 459337-012 | Date Collected: 03.15.13 11.40

Analytical Method: VOCs by SW 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.20.13 10.33
Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	03.20.13 16.32		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.20.13 16.32		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.20.13 16.32		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.20.13 16.32		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.20.13 16.32		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.20.13 16.32	L1 UJ	1 (H, R7)
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.20.13 16.32		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.20.13 16.32		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.20.13 16.32		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.20.13 16.32		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.20.13 16.32		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.20.13 16.32		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.20.13 16.32		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.20.13 16.32		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.20.13 16.32		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.20.13 16.32		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.20.13 16.32		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.20.13 16.32		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.20.13 16.32		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.20.13 16.32		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.20.13 16.32		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.20.13 16.32		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.20.13 16.32		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.20.13 16.32		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.20.13 16.32		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.20.13 16.32		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.20.13 16.32		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.20.13 16.32		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.20.13 16.32		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.20.13 16.32		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.20.13 16.32		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.20.13 16.32		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.20.13 16.32		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.20.13 16.32		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.20.13 16.32		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.20.13 16.32		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.20.13 16.32		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.20.13 16.32		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.20.13 16.32		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.20.13 16.32		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.20.13 16.32		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB69-0100-25255 | Matrix: Water | Date Received: 03.15.13 13.40
Lab Sample Id: **459337-012** | Date Collected: 03.15.13 11.40

Analytical Method: **VOCs by SW 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.20.13 10.33
Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.20.13 16.32		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.20.13 16.32		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.20.13 16.32		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.20.13 16.32		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.20.13 16.32		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.20.13 16.32		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.20.13 16.32		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.20.13 16.32		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.20.13 16.32		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.20.13 16.32		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.20.13 16.32		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.20.13 16.32		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.20.13 16.32		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.20.13 16.32		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.20.13 16.32		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.20.13 16.32		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.20.13 16.32		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.20.13 16.32		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.20.13 16.32		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.20.13 16.32		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.20.13 16.32		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.20.13 16.32		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	69-133	03.20.13 16.32	
1,2-Dichloroethane-D4	17060-07-0	82	%	66-139	03.20.13 16.32	
Toluene-D8	2037-26-5	96	%	70-130	03.20.13 16.32	
4-Bromofluorobenzene	460-00-4	90	%	70-135	03.20.13 16.32	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB69-0101-25255 | Matrix: Water | Date Received: 03.15.13 13.40
Lab Sample Id: 459337-013 | Date Collected: 03.15.13 11.45

Analytical Method: VOCs by SW 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.20.13 10.33
Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	03.20.13 16.57		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.20.13 16.57		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.20.13 16.57		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.20.13 16.57		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.20.13 16.57		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.20.13 16.57	L1 UJ	1 (L1,R7)
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.20.13 16.57		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.20.13 16.57		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.20.13 16.57		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.20.13 16.57		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.20.13 16.57		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.20.13 16.57		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.20.13 16.57		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.20.13 16.57		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.20.13 16.57		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.20.13 16.57		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.20.13 16.57		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.20.13 16.57		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.20.13 16.57		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.20.13 16.57		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.20.13 16.57		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.20.13 16.57		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.20.13 16.57		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.20.13 16.57		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.20.13 16.57		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.20.13 16.57		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.20.13 16.57		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.20.13 16.57		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.20.13 16.57		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.20.13 16.57		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.20.13 16.57		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.20.13 16.57		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.20.13 16.57		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.20.13 16.57		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.20.13 16.57		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.20.13 16.57		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.20.13 16.57		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.20.13 16.57		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.20.13 16.57		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.20.13 16.57		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.20.13 16.57		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB69-0101-25255 | Matrix: Water | Date Received: 03.15.13 13.40
Lab Sample Id: **459337-013** | Date Collected: 03.15.13 11.45

Analytical Method: **VOCs by SW 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.20.13 10.33
Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.20.13 16.57		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.20.13 16.57		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.20.13 16.57		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.20.13 16.57		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.20.13 16.57		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.20.13 16.57		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.20.13 16.57		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.20.13 16.57		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.20.13 16.57		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.20.13 16.57		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.20.13 16.57		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.20.13 16.57		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.20.13 16.57		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.20.13 16.57		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.20.13 16.57		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.20.13 16.57		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.20.13 16.57		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.20.13 16.57		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.20.13 16.57		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.20.13 16.57		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.20.13 16.57		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.20.13 16.57		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	95	%	69-133	03.20.13 16.57	
1,2-Dichloroethane-D4	17060-07-0	83	%	66-139	03.20.13 16.57	
Toluene-D8	2037-26-5	96	%	70-130	03.20.13 16.57	
4-Bromofluorobenzene	460-00-4	91	%	70-135	03.20.13 16.57	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB84-0100-XXX
Lab Sample Id: 459337-014

Matrix: Water
Date Collected: 03.15.13 12.20

Date Received: 03.15.13 13.40

Analytical Method: VOCs by SW 8260B
Tech: OEM
Analyst: OEM
Seq Number: 909579

Prep Method: SW5030C
% Moisture:

Date Prep: 03.20.13 10.33

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	03.20.13 17.21		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.20.13 17.21		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.20.13 17.21		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.20.13 17.21		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.20.13 17.21		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.20.13 17.21	L1	1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.20.13 17.21		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.20.13 17.21		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.20.13 17.21		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.20.13 17.21		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.20.13 17.21		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.20.13 17.21		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.20.13 17.21		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.20.13 17.21		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.20.13 17.21		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.20.13 17.21		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.20.13 17.21		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.20.13 17.21		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.20.13 17.21		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.20.13 17.21		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.20.13 17.21		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.20.13 17.21		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.20.13 17.21		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.20.13 17.21		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.20.13 17.21		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.20.13 17.21		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.20.13 17.21		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.20.13 17.21		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.20.13 17.21		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.20.13 17.21		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.20.13 17.21		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.20.13 17.21		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.20.13 17.21		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.20.13 17.21		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.20.13 17.21		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.20.13 17.21		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.20.13 17.21		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.20.13 17.21		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.20.13 17.21		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.20.13 17.21		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.20.13 17.21		1

L1 WJ 1 (L1, R9)

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB84-0100-XXX
Lab Sample Id: 459337-014

Matrix: Water
Date Collected: 03.15.13 12.20

Date Received: 03.15.13 13.40

Analytical Method: VOCs by SW 8260B
Tech: OEM
Analyst: OEM
Seq Number: 909579

Prep Method: SW5030C
% Moisture:

Date Prep: 03.20.13 10.33

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.20.13 17.21		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.20.13 17.21		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.20.13 17.21		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.20.13 17.21		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.20.13 17.21		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.20.13 17.21		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.20.13 17.21		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.20.13 17.21		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.20.13 17.21		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.20.13 17.21		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.20.13 17.21		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.20.13 17.21		1
Trichloroethene	79-01-6	**0.560**	0.500	ug/L	03.20.13 17.21		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.20.13 17.21		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.20.13 17.21		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.20.13 17.21		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.20.13 17.21		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.20.13 17.21		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.20.13 17.21		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.20.13 17.21		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.20.13 17.21		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.20.13 17.21		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	95	%	69-133	03.20.13 17.21	
1,2-Dichloroethane-D4	17060-07-0	82	%	66-139	03.20.13 17.21	
Toluene-D8	2037-26-5	96	%	70-130	03.20.13 17.21	
4-Bromofluorobenzene	460-00-4	91	%	70-135	03.20.13 17.21	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB26-0100-15099 | Matrix: Water | Date Received: 03.15.13 13.40

Lab Sample Id: 459337-015 | Date Collected: 03.15.13 12.45

Analytical Method: VOCs by SW 8260B | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.20.13 10.33

Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	03.20.13 17.46		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.20.13 17.46		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.20.13 17.46		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.20.13 17.46		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.20.13 17.46		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.20.13 17.46	L1 UJ	1 (L1,R7)
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.20.13 17.46		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.20.13 17.46		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.20.13 17.46		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.20.13 17.46		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.20.13 17.46		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.20.13 17.46		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.20.13 17.46		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.20.13 17.46		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.20.13 17.46		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.20.13 17.46		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.20.13 17.46		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.20.13 17.46		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.20.13 17.46		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.20.13 17.46		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.20.13 17.46		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.20.13 17.46		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.20.13 17.46		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.20.13 17.46		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.20.13 17.46		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.20.13 17.46		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.20.13 17.46		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.20.13 17.46		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.20.13 17.46		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.20.13 17.46		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.20.13 17.46		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.20.13 17.46		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.20.13 17.46		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.20.13 17.46		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.20.13 17.46		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.20.13 17.46		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.20.13 17.46		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.20.13 17.46		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.20.13 17.46		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.20.13 17.46		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.20.13 17.46		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB26-0100-15099 | Matrix: Water | Date Received: 03.15.13 13.40
Lab Sample Id: 459337-015 | Date Collected: 03.15.13 12.45

Analytical Method: VOCs by SW 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.20.13 10.33
Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.20.13 17.46		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.20.13 17.46		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.20.13 17.46		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.20.13 17.46		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.20.13 17.46		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.20.13 17.46		1
Tetrachloroethylene	127-18-4	**1.49**	0.500	ug/L	03.20.13 17.46		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.20.13 17.46		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.20.13 17.46		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.20.13 17.46		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.20.13 17.46		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.20.13 17.46		1
Trichloroethene	79-01-6	**0.630**	0.500	ug/L	03.20.13 17.46		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.20.13 17.46		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.20.13 17.46		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.20.13 17.46		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.20.13 17.46		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.20.13 17.46		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.20.13 17.46		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.20.13 17.46		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.20.13 17.46		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.20.13 17.46		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	69-133	03.20.13 17.46	
1,2-Dichloroethane-D4	17060-07-0	82	%	66-139	03.20.13 17.46	
Toluene-D8	2037-26-5	96	%	70-130	03.20.13 17.46	
4-Bromofluorobenzene	460-00-4	90	%	70-135	03.20.13 17.46	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB85-0100-23112 | Matrix: Water | Date Received: 03.15.13 13.40
Lab Sample Id: 459337-016 | Date Collected: 03.15.13 13.05

Analytical Method: VOCs by SW 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.20.13 10.33
Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	03.20.13 18.11		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.20.13 18.11		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.20.13 18.11		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.20.13 18.11		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.20.13 18.11		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.20.13 18.11	L1 UJ	1 (H,R7)
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.20.13 18.11		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.20.13 18.11		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.20.13 18.11		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.20.13 18.11		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.20.13 18.11		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.20.13 18.11		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.20.13 18.11		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.20.13 18.11		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.20.13 18.11		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.20.13 18.11		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.20.13 18.11		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.20.13 18.11		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.20.13 18.11		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.20.13 18.11		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.20.13 18.11		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.20.13 18.11		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.20.13 18.11		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.20.13 18.11		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.20.13 18.11		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.20.13 18.11		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.20.13 18.11		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.20.13 18.11		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.20.13 18.11		1
cis-1,2-Dichloroethene	156-59-2	**15.5**	0.500	ug/L	03.20.13 18.11		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.20.13 18.11		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.20.13 18.11		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.20.13 18.11		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.20.13 18.11		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.20.13 18.11		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.20.13 18.11		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.20.13 18.11		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.20.13 18.11		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.20.13 18.11		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.20.13 18.11		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.20.13 18.11		1

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Final 1.000

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Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB85-0100-23112 | Matrix: Water | Date Received: 03.15.13 13.40

Lab Sample Id: **459337-016** | Date Collected: 03.15.13 13.05

Analytical Method: **VOCs by SW 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.20.13 10.33

Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.20.13 18.11		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.20.13 18.11		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.20.13 18.11		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.20.13 18.11		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.20.13 18.11		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.20.13 18.11		1
Tetrachloroethylene	127-18-4	**36.8**	0.500	ug/L	03.20.13 18.11		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.20.13 18.11		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.20.13 18.11		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.20.13 18.11		1
1,1,1-Trichloroethane	71-55-6	**0.600**	0.500	ug/L	03.20.13 18.11		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.20.13 18.11		1
Trichloroethene	79-01-6	**10.1**	0.500	ug/L	03.20.13 18.11		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.20.13 18.11		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.20.13 18.11		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.20.13 18.11		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.20.13 18.11		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.20.13 18.11		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.20.13 18.11		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.20.13 18.11		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.20.13 18.11		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.20.13 18.11		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	69-133	03.20.13 18.11	
1,2-Dichloroethane-D4	17060-07-0	81	%	66-139	03.20.13 18.11	
Toluene-D8	2037-26-5	95	%	70-130	03.20.13 18.11	
4-Bromofluorobenzene	460-00-4	89	%	70-135	03.20.13 18.11	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB106-0200-24177 Matrix: Water Date Received: 03.15.13 13.40
Lab Sample Id: 459337-002 Date Collected: 03.15.13 07.32

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.19.13 17.50
Seq Number: 909827 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.19.13 23.19	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	75-131	03.19.13 23.19	
1,2-Dichloroethane-D4	17060-07-0	87	%	63-144	03.19.13 23.19	
Toluene-D8	2037-26-5	99	%	80-117	03.19.13 23.19	
4-Bromofluorobenzene	460-00-4	96	%	74-124	03.19.13 23.19	

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB106-0300-24100 Matrix: Water Date Received: 03.15.13 13.40
Lab Sample Id: **459337-003** Date Collected: 03.15.13 07.40

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.19.13 17.51
Seq Number: 909827 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.19.13 23.42	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	93	%	75-131	03.19.13 23.42	
1,2-Dichloroethane-D4	17060-07-0	106	%	63-144	03.19.13 23.42	
Toluene-D8	2037-26-5	114	%	80-117	03.19.13 23.42	
4-Bromofluorobenzene	460-00-4	85	%	74-124	03.19.13 23.42	

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Final 1.000

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB40-0500-21098 Matrix: Water Date Received: 03.15.13 13.40
Lab Sample Id: 459337-004 Date Collected: 03.15.13 08.37

Analytical Method: 1,4-Dioxane by EPA 8260B Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.19.13 17.52
Seq Number: 909827 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.20.13 00.05	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	93	%	75-131	03.20.13 00.05	
1,2-Dichloroethane-D4	17060-07-0	101	%	63-144	03.20.13 00.05	
Toluene-D8	2037-26-5	86	%	80-117	03.20.13 00.05	
4-Bromofluorobenzene	460-00-4	102	%	74-124	03.20.13 00.05	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB40-0700-21098 | Matrix: Water | Date Received: 03.15.13 13.40
Lab Sample Id: **459337-005** | Date Collected: 03.15.13 08.55

Analytical Method: **1,4-Dioxane by EPA 8260B** | Prep Method: SW5030B
Tech: ZHO | % Moisture:
Analyst: ZHO | Date Prep: 03.19.13 17.53
Seq Number: 909827 | SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.20.13 00.29	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	75-131	03.20.13 00.29	
1,2-Dichloroethane-D4	17060-07-0	120	%	63-144	03.20.13 00.29	
Toluene-D8	2037-26-5	102	%	80-117	03.20.13 00.29	
4-Bromofluorobenzene	460-00-4	90	%	74-124	03.20.13 00.29	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB77-0100-24108 | Matrix: Water | Date Received: 03.15.13 13.40

Lab Sample Id: **459337-006** | Date Collected: 03.15.13 09.17

Analytical Method: **1,4-Dioxane by EPA 8260B** | Prep Method: SW5030B

Tech: ZHO | % Moisture:

Analyst: ZHO | Date Prep: 03.19.13 17.54

Seq Number: 909827 | SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.20.13 00.52	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	75-131	03.20.13 00.52	
1,2-Dichloroethane-D4	17060-07-0	109	%	63-144	03.20.13 00.52	
Toluene-D8	2037-26-5	94	%	80-117	03.20.13 00.52	
4-Bromofluorobenzene	460-00-4	90	%	74-124	03.20.13 00.52	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB77-0200-24140 | Matrix: Water | Date Received: 03.15.13 13.40
Lab Sample Id: 459337-007 | Date Collected: 03.15.13 09.30

Analytical Method: **1,4-Dioxane by EPA 8260B** | Prep Method: SW5030B
Tech: MCH | % Moisture:
Analyst: MCH | Date Prep: 03.21.13 16.34
Seq Number: 909551 | SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<0.00400	0.0500	0.00400	mg/L	03.21.13 17.44	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	100	%	75-131	03.21.13 17.44	
1,2-Dichloroethane-D4	17060-07-0	104	%	63-144	03.21.13 17.44	
Toluene-D8	2037-26-5	95	%	80-117	03.21.13 17.44	
4-Bromofluorobenzene	460-00-4	92	%	74-124	03.21.13 17.44	

4/5/13/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB77-0300-24215 | Matrix: Water | Date Received: 03.15.13 13.40

Lab Sample Id: **459337-008** | Date Collected: 03.15.13 09.48

Analytical Method: **1,4-Dioxane by EPA 8260B** | Prep Method: SW5030B

Tech: MCH | % Moisture:

Analyst: MCH | Date Prep: 03.21.13 16.36

Seq Number: 909551 | SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<0.00400	0.0500	0.00400	mg/L	03.21.13 18.08	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	97	%	75-131	03.21.13 18.08	
1,2-Dichloroethane-D4	17060-07-0	98	%	63-144	03.21.13 18.08	
Toluene-D8	2037-26-5	95	%	80-117	03.21.13 18.08	
4-Bromofluorobenzene	460-00-4	103	%	74-124	03.21.13 18.08	

5/13/13

Final 1.000

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Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB110-0600-21098 Matrix: Water Date Received: 03.15.13 13.40
Lab Sample Id: 459337-009 Date Collected: 03.15.13 10.05

Analytical Method: 1,4-Dioxane by EPA 8260B Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.21.13 16.38
Seq Number: 909551 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<0.00400	0.0500	0.00400	mg/L	03.21.13 18.32	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	106	%	75-131	03.21.13 18.32	
1,2-Dichloroethane-D4	17060-07-0	106	%	63-144	03.21.13 18.32	
Toluene-D8	2037-26-5	92	%	80-117	03.21.13 18.32	
4-Bromofluorobenzene	460-00-4	92	%	74-124	03.21.13 18.32	

4/5/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB83-0100-22114 | Matrix: Water | Date Received: 03.15.13 13.40
Lab Sample Id: **459337-010** | Date Collected: 03.15.13 10.29

Analytical Method: **1,4-Dioxane by EPA 8260B** | Prep Method: SW5030B
Tech: MCH | % Moisture:
Analyst: MCH | Date Prep: 03.21.13 16.40
Seq Number: 909551 | SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<0.00400	0.0500	0.00400	mg/L	03.21.13 18.55	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	100	%	75-131	03.21.13 18.55	
1,2-Dichloroethane-D4	17060-07-0	103	%	63-144	03.21.13 18.55	
Toluene-D8	2037-26-5	95	%	80-117	03.21.13 18.55	
4-Bromofluorobenzene	460-00-4	95	%	74-124	03.21.13 18.55	

4/5/13/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB99-0100-21109 | Matrix: Water | Date Received: 03.15.13 13.40
Lab Sample Id: **459337-011** | Date Collected: 03.15.13 11.10

Analytical Method: **1,4-Dioxane by EPA 8260B** | Prep Method: SW5030B
Tech: MCH | % Moisture:
Analyst: MCH | Date Prep: 03.21.13 16.42
Seq Number: 909551 | SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<0.00400	0.0500	0.00400	mg/L	03.21.13 19.19	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	109	%	75-131	03.21.13 19.19	
1,2-Dichloroethane-D4	17060-07-0	97	%	63-144	03.21.13 19.19	
Toluene-D8	2037-26-5	91	%	80-117	03.21.13 19.19	
4-Bromofluorobenzene	460-00-4	86	%	74-124	03.21.13 19.19	

9/5/13/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB69-0100-25255 Matrix: Water Date Received: 03.15.13 13.40
Lab Sample Id: 459337-012 Date Collected: 03.15.13 11.40

Analytical Method: 1,4-Dioxane by EPA 8260B Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.21.13 16.44
Seq Number: 909551 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<0.00400	0.0500	0.00400	mg/L	03.21.13 19.43	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	106	%	75-131	03.21.13 19.43	
1,2-Dichloroethane-D4	17060-07-0	107	%	63-144	03.21.13 19.43	
Toluene-D8	2037-26-5	89	%	80-117	03.21.13 19.43	
4-Bromofluorobenzene	460-00-4	91	%	74-124	03.21.13 19.43	

4/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB69-0101-25255 Matrix: Water Date Received: 03.15.13 13.40
Lab Sample Id: 459337-013 Date Collected: 03.15.13 11.45

Analytical Method: 1,4-Dioxane by EPA 8260B Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.21.13 16.46
Seq Number: 909551 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<0.00400	0.0500	0.00400	mg/L	03.21.13 20.06	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	96	%	75-131	03.21.13 20.06	
1,2-Dichloroethane-D4	17060-07-0	100	%	63-144	03.21.13 20.06	
Toluene-D8	2037-26-5	94	%	80-117	03.21.13 20.06	
4-Bromofluorobenzene	460-00-4	98	%	74-124	03.21.13 20.06	

5/13/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB84-0100-XXX | Matrix: Water | Date Received: 03.15.13 13.40

Lab Sample Id: **459337-014** | Date Collected: 03.15.13 12.20

Analytical Method: **1,4-Dioxane by EPA 8260B** | Prep Method: SW5030B

Tech: MCH | % Moisture:

Analyst: MCH | Date Prep: 03.21.13 16.48

Seq Number: 909551 | SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<0.00400	0.0500	0.00400	mg/L	03.21.13 20.30	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	112	%	75-131	03.21.13 20.30	
1,2-Dichloroethane-D4	17060-07-0	106	%	63-144	03.21.13 20.30	
Toluene-D8	2037-26-5	90	%	80-117	03.21.13 20.30	
4-Bromofluorobenzene	460-00-4	93	%	74-124	03.21.13 20.30	

4/5/13/17

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB26-0100-15099 | Matrix: Water | Date Received: 03.15.13 13.40

Lab Sample Id: **459337-015** | Date Collected: 03.15.13 12.45

Analytical Method: **1,4-Dioxane by EPA 8260B** | Prep Method: SW5030B

Tech: MCH | % Moisture:

Analyst: MCH | Date Prep: 03.21.13 16.50

Seq Number: 909551 | SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<0.00400	0.0500	0.00400	mg/L	03.21.13 20.54	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	108	%	75-131	03.21.13 20.54	
1,2-Dichloroethane-D4	17060-07-0	104	%	63-144	03.21.13 20.54	
Toluene-D8	2037-26-5	93	%	80-117	03.21.13 20.54	
4-Bromofluorobenzene	460-00-4	91	%	74-124	03.21.13 20.54	

4/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459337

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB85-0100-23112 Matrix: Water Date Received: 03.15.13 13.40
Lab Sample Id: **459337-016** Date Collected: 03.15.13 13.05

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.22.13 12.40
Seq Number: 909785 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.22.13 14.02	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	96	%	75-131	03.22.13 14.02	
1,2-Dichloroethane-D4	17060-07-0	95	%	63-144	03.22.13 14.02	
Toluene-D8	2037-26-5	98	%	80-117	03.22.13 14.02	
4-Bromofluorobenzene	460-00-4	103	%	74-124	03.22.13 14.02	

4/5/13/13

Final 1.000

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 18, 2013

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level IV

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459346

Sample Identification

AVB57-0102-1000
AVB57-0100-32100
AVB106-0100-25102
AVB12-0100-36152
AVB14-0100-34108
AVB103-0200-12098
AVB140-0100-09128
AVB40-0800-18098
AVB69-02RO-01128
AVB125-0101-17148
AVB125-0100-17148
AVB125-0104-1000
AVB69-02RO-01128MS
AVB69-02RO-01128MSD

Introduction

This data review covers 14 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
3/20/13	Dichlorodifluoromethane	42.2	AVB57-0102-1000 AVB57-0100-32100 AVB106-0100-25102 AVB12-0100-36152 AVB14-0100-34108 AVB103-0200-12098 AVB140-0100-09128 AVB40-0800-18098 635397-1-BLK	J (all detects) UJ (all non-detects)	A
3/21/13	Bromomethane	71	AVB69-02RO-01128 AVB125-0101-17148 AVB125-0104-1000 AVB69-02RO-01128MS AVB69-02RO-01128MSD 635494-1-BLK	J (all detects) UJ (all non-detects)	A

Date	Compound	%D	Associated Samples	Flag	A or P
3/26/13	Bromomethane Acetone	46 73	AVB125-0100-17148 635718-1-BLK	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample AVB57-0102-1000 was identified as a trip blank. No volatile contaminants were found.

Sample AVB125-0104-1000 was identified as an equipment blank. No volatile contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
AVB125-0104-1000	3/18/13	Carbon disulfide	1.56 ug/L	AVB57-0100-32100 AVB106-0100-25102 AVB12-0100-36152 AVB14-0100-34108 AVB103-0200-12098 AVB140-0100-09128 AVB40-0800-18098 AVB69-02RO-01128 AVB125-0101-17148 AVB125-0100-17148

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
AVB69-02RO-01128MS/MSD (AVB69-02RO-01128)	Bromomethane	160 (53-141)	156 (53-141)	-	J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
635494-1-BKS (AVB69-02RO-01128 AVB125-0101-17148 AVB125-0104-1000 635494-1-BKS)	Bromomethane	165 (58-138)	155 (58-138)	-	J (all detects)	P
635718-1-BKS (AVB125-0100-17148 635718-1-BLK)	Bromomethane	147 (58-138)	148 (58-138)	-	J (all detects)	P
635397-1-BKS (AVB57-0102-1000 AVB57-0100-32100 AVB106-0100-25102 AVB12-0100-36152 AVB14-0100-34108 AVB103-0200-12098 AVB140-0100-09128 AVB40-0800-18098 635397-1-BLK)	Bromomethane	-	139 (58-138)	29 (≤25)	J (all detects) UJ (all non-detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation

All compound quantitations were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples AVB125-0101-17148 and AVB125-0100-17148 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)	Flag	A or P
	AVB125-0101-17148	AVB125-0100-17148			
Tetrachloroethene	24.0	18.1	28 (≤20)	J (all detects)	A

West Van Buren Area
Volatiles - Data Qualification Summary - SDG 459346

SDG	Sample	Compound	Flag	A or P	Reason (Code)
459346	AVB57-0102-1000 AVB57-0100-32100 AVB106-0100-25102 AVB12-0100-36152 AVB14-0100-34108 AVB103-0200-12098 AVB140-0100-09128 AVB40-0800-18098	Dichlorodifluoromethane	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (VI)
459346	AVB69-02RO-01128 AVB125-0101-17148 AVB125-0104-1000	Bromomethane	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (VI)
459346	AVB125-0100-17148	Bromomethane Acetone	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Laboratory control samples (RPD) (R7)
459346	AVB69-02RO-01128	Bromomethane	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (M1)
459346	AVB69-02RO-01128 AVB125-0101-17148 AVB125-0104-1000 AVB125-0100-17148	Bromomethane	J (all detects)	P	Laboratory control samples (%R) (L1)
459346	AVB57-0102-1000 AVB57-0100-32100 AVB106-0100-25102 AVB12-0100-36152 AVB14-0100-34108 AVB103-0200-12098 AVB140-0100-09128 AVB40-0800-18098	Bromomethane	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L1, R7)
459346	AVB125-0101-17148 AVB125-0100-17148	Tetrachloroethene	J (all detects)	A	Field duplicates (RPD) (R8)

West Van Buren Area
Volatiles - Laboratory Blank Data Qualification Summary - SDG 459346

No Sample Data Qualified in this SDG

West Van Buren Area
Volatiles - Field Blank Data Qualification Summary - SDG 459346

No Sample Data Qualified in this SDG

LDC #: 29578G1a

SDG #: 459346

Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level ~~III~~ IV

Date: 5/2/13

Page: 1 of 1

Reviewer: FT

2nd Reviewer: A

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/18/13
II.	GC/MS Instrument performance check	A N	
III.	Initial calibration	A	%RSD ≤ 30, r^2
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤ 25
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	459504-004MS ID, 459337-008
VIII.	Laboratory control samples	SW	
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A N	
XI.	Target compound identification	A N	
XII.	Compound quantitation/RL/LOQ/LODs	A N	
XIII.	Tentatively identified compounds (TICs)	N N	
XIV.	System performance	A N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 10 - 11
XVII.	Field blanks SW	ND	*TB = 1 EB = 12

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	AVB57-0102-1000 TB	11	AVB125-0100-17148 D	21	635397-1-BLK	31	
2	AVB57-0100-32100	12	AVB125-0104-1000 EB	22	635494-1-BLK	32	
3	AVB106-0100-25102	13	AVB69-02RO-01128MS	23	635718-1-BLK	33	
4	AVB12-0100-36152	14	AVB69-02RO-01128MSD	24		34	
5	AVB14-0100-34108	15		25		35	
6	AVB103-0200-12098	16		26		36	
7	AVB140-0100-09128	17		27		37	
8	AVB40-0800-18098	18		28		38	
9	AVB69-02RO-01128	19		29		39	
10	AVB125-0101-17148 D	20		30		40	

LDC #: 29578G|a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: F

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30%/15% and relative response factors (RRF) ≥ 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ ~~20%~~ 25 and relative response factors (RRF) ≥ 0.05?		✓		F
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 29578G1a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/RLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.	✓			

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene	BB. 1,1,2,2-Tetrachloroethane	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane	CC. Toluene	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform	EE. Ethylbenzene	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN. Iodomethane
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.1,1-Difluoroethane
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

LDC #: 29528G/9

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ~~≤20%~~ ≤25%D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ~~≤20.0%~~ ≤25)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	3/20/13	130320Q2-CCV	JJ	42.2		635397-1-BLK, 1-8,	J/UJ/A V1
	3/21/13	130321Q4-CCV	B	71		635494-1-BLK, 9, 10, 12, 13, 14	J/UJ/A V1
	3/26/13	130326Q7-CCV	B	46		635718-1-BLK, 11	J/UJ/A V1
			F	73			

LDC #: 29578G1a

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N /N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?

Blank units: ug/L **Associated sample units:** ug/L

Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: EB Associated Samples: 2 → 11 (ND)

Compound	Blank ID 12 EB 87	Blank ID	Sample Identification							
Sampling Date	3/18/13									
G	1.56									

Blank units: **Associated sample units:**

Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: Associated Samples:

Compound	Blank ID	Blank ID	Sample Identification							
Sampling Date										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

LDC #: 29578G/9

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer: [illegible]

METHOD : GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		13 + 14	B	160 (53-141)	156 (53-141)	( )	9	J/A dit MI
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 29578G/9

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		635494-1-BKS	B	165 (58-138)	155 (58-138)	( )	635494-1-BLK,	J/Pdet L1
				( )	( )	( )	9 → 10, 12	
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
		635718-1-BKS	B	147 (58-138)	148 (58-138)	( )	635718-1-BLK,	J/Pdet L1
				( )	( )	( )	11	
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		F1
		635397-1-BKS	B	( )	139 (58-138)	29 (25)	635397-1-BLK,	J+P. J/U J/P
				( )	( )	( )	1 → 8	L1, R7
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 29528G1a

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: FT
2nd reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds detected in the field duplicate pairs?

Compound	Concentration (ug/L)		RPD
	10	11	20
AA	24.0	18.1	28 J/Adt (R8)

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

LDC #: 29528 6/9

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: [signature]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (10 std)	Recalculated RRF (10 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/7/13	Carbon Disulfide (1st internal standard)	1.425	1.425	1.439	1.439	10.529	10.529
			Trichloroethene (2nd internal standard)	0.361	0.361	0.365	0.365	14.620	14.620
			Toluene (3rd internal standard)	0.904	0.904	0.942	0.942	14.5682	14.5682
			Bromobenzene (4th internal standard)	0.847	0.847	0.893	0.893	14.1931	14.1931
2			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
3	ICAL	3/25/13	Carbon Disulfide (1st internal standard)	1.167	1.167	1.207	1.207	8.069	8.069
			Trichloroethene (2nd internal standard)	0.360	0.360	0.343	0.343	14.016	14.016
			Chlorobenzene (3rd internal standard)	0.982	0.982	0.974	0.974	9.2728	9.2728
			Bromobenzene (4th internal standard)	0.961	0.961	0.968	0.968	12.1838	12.1838
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 29528G19

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer: R

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV 11:17	3/20/13	Carbon Disulfide (1st internal standard)	1.439	1.307	1.307	9.2	9.2
			Trichloroethene (2nd internal standard)	0.365	0.329	0.329	9.9	9.9
			Toluene (3rd internal standard)	0.942	0.848	0.848	10.0	10.0
			Bromobenzene (4th internal standard)	0.893	0.806	0.806	9.7	9.7
2	CCV 12:23	3/21/13	(1st internal standard)	↓	1.526	1.526	6.0	6.0
			(2nd internal standard)	↓	0.358	0.358	1.9	1.9
			(3rd internal standard)	↓	0.933	0.933	1.0	1.0
			(4th internal standard)	↓	0.889	0.889	0.4	0.4
3	~~CCV 12:38~~	~~3/20/13~~	(1st internal standard)					
	F7		(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard) F7					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 29578G19

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer: R

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ccv12:28	3/26/13	Carbon Disulfide (1st internal standard)	1.207	1.146	1.146	5.1	5.1
			Trichloroethene (2nd internal standard)	0.343	0.363	0.363	5.8	5.8
			Chlorobenzene (3rd internal standard)	0.974	0.961	0.961	1.3	1.3
			Bromobenzene (4th internal standard)	0.968	0.927	0.927	4.2	4.2
2			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
3			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 29528 G/9

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: [signature]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #3

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane	50	47.45	95	95	0
1,2-Dichloroethane-d4	↓	41.91	84	84	
Toluene-d8		48.24	96	96	↓
Bromofluorobenzene		45.04	90	90	

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 29578G1a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD = I MSC - MSC I * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD sample: 13 + 14

Compound	Spike Added (ug/L)		Sample Concentration (ug/L)	Spiked Sample Concentration (ug/L)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,1-Dichloroethene	20	20	ND	21.1	20.7	106	106	104	104	2	2
Trichloroethene	↓	↓	↓	19.6	19.5	98	98	98	98	1	1
Benzene	↓	↓	↓	22.2	22.1	111	111	111	111	0	0
Toluene	↓	↓	↓	19.7	19.6	99	99	98	98	1	1
Chlorobenzene	↓	↓	↓	20.3	19.9	102	102	100	100	2	2

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 29578G/9

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration; SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: 635494-1-BKS

Compound	Spike Added (ug/L)		Spiked Sample Concentration (ug/L)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,1-Dichloroethene	20.0	20.0	21.7	21.1	109	109	106	106	3	3
Trichloroethene	↓	↓	19.4	19.7	97	97	99	99	2	2
Benzene			22.3	22.2	112	112	111	111	0	0
Toluene			20.5	20.2	103	103	101	101	1	1
Chlorobenzene			20.3	20.1	102	102	101	101	1	1

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 29578G1a
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #3, 5:

Conc. = $\frac{(20083)(50)(\quad)}{(999454)(0.365)(\quad)(\quad)}$

= 2.75 ug/L

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 18, 2012

LDC Report Date: May 10, 2013

Matrix: Water

Parameters: 1,4-Dioxane

Validation Level: EPA Level IV

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 439346

Sample Identification

AVB57-0100-32100
AVB106-0100-25102
AVB12-0100-36152
AVB14-0100-34108
AVB103-0200-12098
AVB140-0100-09128
AVB40-0800-18098
AVB69-02RO-01128
AVB125-0101-17148
AVB125-0100-17148
AVB125-0104-1000

Introduction

This data review covers 11 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8260B for 1,4-Dioxane.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% .

Average relative response factors (RRF) were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
3/21/13	1,4-Dioxane	0.003 (≤0.01)	All samples in SDG 459346	J (all detects) UJ (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 20.0% .

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% .

All of the continuing calibration RRF values were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
3/22/13	1,4-Dioxane	0.003 (≤0.01)	All samples in SDG 459346	J (all detects) UJ (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks

Sample AVB125-0104-1000.was identified as an equipment blank. No 1,4-dioxane was found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation

All compound quantitations were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples AVB125-0101-17148 and AVB125-0100-17148 were identified as field duplicates. No 1,4-dioxane was detected in any of the samples.

West Van Buren Area
1,4-Dioxane - Data Qualification Summary - SDG 439346

SDG	Sample	Compound	Flag	A or P	Reason (Code)
439519	AVB57-0100-32100 AVB106-0100-25102 AVB12-0100-36152 AVB14-0100-34108 AVB103-0200-12098 AVB140-0100-09128 AVB40-0800-18098 AVB69-02RO-01128 AVB125-0101-17148 AVB125-0100-17148 AVB125-0104-1000	1,4-Dioxane	J (all detects) UJ (all non-detects)	P	Initial calibration (RRF) (V1)
439519	AVB57-0100-32100 AVB106-0100-25102 AVB12-0100-36152 AVB14-0100-34108 AVB103-0200-12098 AVB140-0100-09128 AVB40-0800-18098 AVB69-02RO-01128 AVB125-0101-17148 AVB125-0100-17148 AVB125-0104-1000	1,4-Dioxane	J (all detects) UJ (all non-detects)	A	Continuing calibration (RRF) (V1)

West Van Buren Area
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG 439346

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Field Blank Data Qualification Summary - SDG 439346

No Sample Data Qualified in this SDG

LDC #: 29578G1b

SDG #: 459346

Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level III IV

Date: 5/2/13

Page: 1 of 1

Reviewer:

2nd Reviewer:

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/18/13
II.	GC/MS Instrument performance check	A N	
III.	Initial calibration SW	N N	
IV.	Continuing calibration/ICV SW	A N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	459337-016
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N N	
X.	Internal standards	A N	
XI.	Target compound identification	A N	
XII.	Compound quantitation/RL/LOQ/LODs	A N	
XIII.	Tentatively identified compounds (TICs)	N N	
XIV.	System performance	A N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = 9, 10
XVII.	Field blanks	ND	EB = 11

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

water

1	AVB57-0100-32100	11	AVB125-0104-1000 EB	21	635633-1-BLK	31	
2	AVB106-0100-25102	12		22		32	
3	AVB12-0100-36152	13		23		33	
4	AVB14-0100-34108	14		24		34	
5	AVB103-0200-12098	15		25		35	
6	AVB140-0100-09128	16		26		36	
7	AVB40-0800-18098	17		27		37	
8	AVB69-02RO-01128	18		28		38	
9	AVB125-0101-17148 D	19		29		39	
10	AVB125-0100-17148 D	20		30		40	

LDC #: 29578G1b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30%/15% and relative response factors (RRF) ≥ 0.05?		✓		
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ~~≤ 20%~~ 25 and relative response factors (RRF) ≥ 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 29578G1b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?			✓	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?			✓	
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/RLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?			✓	
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene	BB. 1,1,2,2-Tetrachloroethane	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane	CC. Toluene	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform	EE. Ethylbenzene	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN. Iodomethane
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.1,1-Difluoroethane
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

LDC #: 29578G1b

VALIDATION FINDINGS WORKSHEET
Initial Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Did the laboratory perform a 5 point calibration prior to sample analysis?
Y N N/A Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?
Y N N/A Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation?_____
Y N N/A Did the initial calibration meet the acceptance criteria?
Y N N/A Were all %RSDs and RRFs within the validation criteria of ≤30/15 %RSD and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %RSD (Limit: ≤30.0/15.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	3/21/13	ICAL	1,4-Dioxane		0.003 (≤0.01)	All	J/UJ/A V

INICAL.1SB

LDC #: 29578G1b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤20 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤20.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	3/22/13	CCV	1,4-Dioxane		0.003 (≤ 0.01)	All	J/UJ/A V1

LDC #: 29578G1b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (SD std)	Recalculated RRF (SD std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1			(1st internal standard)	1					
	1 CAL	3/21/13	1,4-Dioxan (2nd internal standard)	0.003	0.003248	0.003	0.003	14.92	14.92
			(3rd internal standard)						
			(4th internal standard)						
2			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 29578G1b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer: e

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1			(1st internal standard)					
	CCV 11:28AM	3/22/13	1,4-Dioxane (2nd internal standard)	0.003	0.003	0.003	0	0
			(3rd internal standard)					
			(4th internal standard)					
2			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
3			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 29578G1b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane	50.0	48.15	96	96	0
1,2-Dichloroethane-d4	↓	(1) ~~94.~~ 47.32	95	95	↑
Toluene-d8		49.88	100	100	
Bromofluorobenzene		52.83	106	106	↓

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 29578G1b

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer: e

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA

Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD = I MSC - MSC I * 2/(MSC + MSDC)

MSC = Matrix spike concentration; MSDC = Matrix spike duplicate concentration

MS/MSD sample: 459337-016 MS/D

Compound	Spike Added (ug/L)		Sample Concentration (ug/L)	Spiked Sample Concentration (ug/L)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,4-Dioxane											
~~1,1-~~Dichloroethene	500	500	ND	474	497	95	95	99	99	5	5
Trichloroethene											
Benzene											
Toluene											
~~Chlorobenzene~~											

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 29578G1b

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration; SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: 63563-1-BKS

Compound	Spike Added (ug/L)		Spiked Sample Concentration (ug/L)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,4-Dioxane	500	500	450	520	90	90	104	104	14	14
~~1,1-Dichloroethene~~										
Trichloroethene										
Benzene										
Toluene										
Chlorobenzene										

F7

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 29578 G1b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer: [signature]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
RRF	=	Relative response factor of the calibration standard.
V_o	=	Volume or weight of sample pruged in milliliters (ml) or grams (g).
Df	=	Dilution factor.
%S	=	Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. _____ , _____:

Conc. = $\frac{(\quad)(\quad)(\quad)(\quad)}{(\quad)(\quad)(\quad)(\quad)}$

=

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	West Van Buren Area
Collection Date:	March 18, 2013
LDC Report Date:	May 7, 2013
Matrix:	Water
Parameters:	Chromium
Validation Level:	EPA Level IV
Laboratory:	Xenco Laboratories
Sample Delivery Group (SDG):	459346

Sample Identification

AVB57-0100-32100
AVB106-0100-25102
AVB12-0100-36152
AVB14-0100-34108
AVB103-0200-12098
AVB140-0100-09128
AVB40-0800-18098
AVB69-02RO-01128
AVB125-0100-17148
AVB125-0104-1000
AVB57-0100-32100F
AVB106-0100-25102F
AVB12-0100-36152F
AVB14-0100-34108F
AVB103-0200-12098F
AVB140-0100-09128F
AVB40-0800-18098F
AVB69-02RO-01128F
AVB125-0100-17148F
AVB125-0104-1000F

Sample IDs appended with "F" were analyzed for dissolved chromium.

Introduction

This data review covers 20 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6010B for Chromium.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

ICP-MS was not utilized in this SDG.

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No chromium was found in the initial, continuing and preparation blanks.

Samples AVB125-0104-1000 and AVB125-0104-1000F were identified as equipment blanks. No chromium was found.

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Matrix Spike Analysis

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Internal Standards

ICP-MS was not utilized in this SDG.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution was not performed for this SDG.

XII. Sample Result Verification

All sample result verifications were acceptable.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

West Van Buren Area
Chromium - Data Qualification Summary - SDG 459346

No Sample Data Qualified in this SDG

West Van Buren Area
Chromium - Laboratory Blank Data Qualification Summary - SDG 459346

No Sample Data Qualified in this SDG

West Van Buren Area
Chromium - Field Blank Data Qualification Summary - SDG 459346

No Sample Data Qualified in this SDG

LDC #: 29578G4 **VALIDATION COMPLETENESS WORKSHEET** Date: 4/30/13
SDG #: 459346 Level IV Page: 1 of 1
Laboratory: Xenco Laboratories Reviewer: W
2nd Reviewer: A

METHOD: Chromium (EPA SW846 Method 6010B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/18/13
II.	Calibration	A	
III.	Blanks	A	
IV.	ICP Interference Check Sample (ICS) Analysis	A	
V.	Matrix Spike Analysis	N	} client specified
VI.	Duplicate Sample Analysis	N	
VII.	Laboratory Control Samples (LCS)	A	LCS/D
VIII.	Internal Standard (ICP-MS)	N	not utilized
IX.	Furnace Atomic Absorption QC	N	↓
X.	ICP Serial Dilution	N	not performed
XI.	Sample Result Verification	A	
XII.	Overall Assessment of Data	A	
XIII.	Field Duplicates	N	
XIV.	Field Blanks	ND	TB=10,20

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: All

1	AVB57-0100-32100	11	AVB57-0100-32100F	21	MB	11	
2	AVB106-0100-25102	12	AVB106-0100-25102F	22		12	
3	AVB12-0100-36152	13	AVB12-0100-36152F	23		13	
4	AVB14-0100-34108	14	AVB14-0100-34108F	24		14	
5	AVB103-0200-12098	15	AVB103-0200-12098F	25		15	
6	AVB140-0100-09128	16	AVB140-0100-09128F	26		16	
7	AVB40-0800-18098	17	AVB40-0800-18098F	27		17	
8	AVB69-02RO-01128	18	AVB69-02RO-01128F	28		18	
9	AVB125-0100-17148	19	AVB125-0100-17148F	29		19	
10	AVB125-0104-1000	20	AVB125-0104-1000F	30		20	

Notes: Samples appended with "F" were analyzed for dissolved chromium

LDC #: 45784Y

VALIDATION FINDINGS CHECKLIST

Reviewer: ~
2nd Reviewer: A

Method: Metals (EPA SW 846 Method 6010B/7000/6020)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	/			
Cooler temperature criteria was met.	/			
II. ICP/MS Tune				
Were all isotopes in the tuning solution mass resolution within 0.1 amu?			/	
Were %RSD of isotopes in the tuning solution ≤5%?			/	
III. Calibration				
Were all instruments calibrated daily, each set-up time?	/			
Were the proper number of standards used?	/			
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury) QC limits?	/			
Were all initial calibration correlation coefficients ≥ 0.995?	/			
IV. Blanks				
Was a method blank associated with every sample in this SDG?	/			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		/		
V. ICP Interference Check Sample				
Were ICP interference check samples performed daily?	/			
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?	/			
VI. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.		/		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.			/	
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of +/- RL(+/-2X RL for soil) was used for samples that were ≤ 5X the RL, including when only one of the duplicate sample values were < 5X the RL.			/	
VII. Laboratory control samples				
Was an LCS anaylzed for this SDG?	/			
Was an LCS analyzed per extraction batch?	/			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils?	/			

LDC #: 45169 4

VALIDATION FINDINGS CHECKLIST

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
VIII. Furnace Atomic Absorption QC				
If MSA was performed, was the correlation coefficients > 0.995?			/	
Do all applicable analysies have duplicate injections? (Level IV only)			/	
For sample concentrations > RL, are applicable duplicate injection RSD values < 20%? (Level IV only)			/	
Were analytical spike recoveries within the 85-115% QC limits?			/	
IX. ICP Serial Dilution				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the MDL (ICP)/>100X the MDL(ICP/MS)?		/		
Were all percent differences (%Ds) < 10%?			/	
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.			/	
X. Internal Standards (EPA SW 846 Method 6020/EPA 200.8)				
Were all the percent recoveries (%R) within the 30-120% (6020)/60-125% (200.8) of the intensity of the internal standard in the associated initial calibration?			/	
If the %Rs were outside the criteria, was a reanalysis performed?			/	
XI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			/	
Were the performance evaluation (PE) samples within the acceptance limits?			/	
XII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	/			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		/		
Target analytes were detected in the field duplicates.			/	
XV. Field blanks				
Field blanks were identified in this SDG.	/			
Target analytes were detected in the field blanks.		/		

LDC #: 29578G4

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: VN
2nd Reviewer: A

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{Found}{True} \times 100$ Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$ Where, S = Original sample concentration
D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$\%D = \frac{|I-SDR|}{I} \times 100$ Where, I = Initial Sample Result (mg/L)
SDR = Serial Dilution Result (mg/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (units)	True / D / SDR (units)	Recalculated %R / RPD / %D	Reported %R / RPD / %D	Acceptable (Y/N)
ICSAB	ICP interference check	Cr	489	500	97.8	NR	Y
LCS	Laboratory control sample	↓	0.996	1.00	100	1.00	↓
MS	Matrix spike		(SSR-SR)				
↓	Duplicate						
↓	ICP serial dilution						

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 19378C4

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found x 100 / True

Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution
True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated %R	Reported %R	Acceptable (Y/N)
ICV	ICP (Initial calibration)	Cr	1962	2000	98.1	NR	Y
ICV	ICP/MS (Initial calibration)						
ICV	CVAA (Initial calibration)						
CCV	ICP (Continuing calibration)	Cr	1989	2000	99.5	NR	Y
	ICP/MS (Continuing calibration)						
	CVAA (Continuing calibration)						
	GFAA (Initial calibration)						
	GFAA (Continuing calibation)						

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 2957894

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
X N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for 1 were recalculated and verified using the following equation:

Concentration = (RD)(FV)(Dil) / (In. Vol.)

Recalculation: From raw data

#1 Cr = 464.8 ug/L
= 0.465 mg/L

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

#	Sample ID	Analyte	Reported Concentration (mg/L)	Calculated Concentration (mg/L)	Acceptable (Y/N)
1	1	Cr	0.465	0.465	Y
2	4	Cr	0.0211	0.0211	Y
3	19	Cr	0.135	0.135	Y

Note:

RECALC.4SW

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB57-0102-1000 Matrix: Water Date Received: 03.18.13 15.55
Lab Sample Id: 459346-001 Date Collected: 03.18.13 08.00

Analytical Method: VOCs by SW 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.20.13 10.33
Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.20.13 19.26		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.20.13 19.26		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.20.13 19.26		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.20.13 19.26		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.20.13 19.26		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.20.13 19.26		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.20.13 19.26	L1 UJ(4	1 R7)
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.20.13 19.26		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.20.13 19.26		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.20.13 19.26		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.20.13 19.26		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.20.13 19.26		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.20.13 19.26		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.20.13 19.26		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.20.13 19.26		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.20.13 19.26		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.20.13 19.26		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.20.13 19.26		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.20.13 19.26		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.20.13 19.26		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.20.13 19.26		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.20.13 19.26		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.20.13 19.26		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.20.13 19.26		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.20.13 19.26		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.20.13 19.26		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.20.13 19.26		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.20.13 19.26		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.20.13 19.26	UJ (V1)	1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.20.13 19.26		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.20.13 19.26		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.20.13 19.26		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.20.13 19.26		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.20.13 19.26		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.20.13 19.26		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.20.13 19.26		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.20.13 19.26		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.20.13 19.26		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.20.13 19.26		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.20.13 19.26		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.20.13 19.26		1

5/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB57-0102-1000 | Matrix: Water | Date Received: 03.18.13 15.55
Lab Sample Id: 459346-001 | Date Collected: 03.18.13 08.00

Analytical Method: VOCs by SW 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.20.13 10.33
Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.20.13 19.26		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.20.13 19.26		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.20.13 19.26		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.20.13 19.26		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.20.13 19.26		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.20.13 19.26		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.20.13 19.26		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.20.13 19.26		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.20.13 19.26		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.20.13 19.26		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.20.13 19.26		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.20.13 19.26		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.20.13 19.26		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.20.13 19.26		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.20.13 19.26		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.20.13 19.26		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.20.13 19.26		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.20.13 19.26		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.20.13 19.26		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.20.13 19.26		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.20.13 19.26		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.20.13 19.26		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.20.13 19.26		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.20.13 19.26		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.20.13 19.26		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.20.13 19.26		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.20.13 19.26		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	69-133	03.20.13 19.26	
1,2-Dichloroethane-D4	17060-07-0	84	%	66-139	03.20.13 19.26	
Toluene-D8	2037-26-5	97	%	70-130	03.20.13 19.26	
4-Bromofluorobenzene	460-00-4	99	%	70-135	03.20.13 19.26	

4/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB57-0100-32100 | Matrix: Water | Date Received: 03.18.13 15.55
Lab Sample Id: 459346-002 | Date Collected: 03.18.13 08.05

Analytical Method: VOCs by SW 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.20.13 10.33
Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.20.13 19.51		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.20.13 19.51		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.20.13 19.51		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.20.13 19.51		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.20.13 19.51		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.20.13 19.51		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.20.13 19.51	L1	1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.20.13 19.51		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.20.13 19.51		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.20.13 19.51		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.20.13 19.51		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.20.13 19.51		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.20.13 19.51		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.20.13 19.51		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.20.13 19.51		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.20.13 19.51		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.20.13 19.51		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.20.13 19.51		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.20.13 19.51		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.20.13 19.51		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.20.13 19.51		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.20.13 19.51		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.20.13 19.51		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.20.13 19.51		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.20.13 19.51		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.20.13 19.51		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.20.13 19.51		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.20.13 19.51		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.20.13 19.51	UJ(V1)	1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.20.13 19.51		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.20.13 19.51		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.20.13 19.51		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.20.13 19.51		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.20.13 19.51		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.20.13 19.51		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.20.13 19.51		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.20.13 19.51		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.20.13 19.51		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.20.13 19.51		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.20.13 19.51		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.20.13 19.51		1

UJ(U1, R7)

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id:	**AVB57-0100-32100**	Matrix: Water	Date Received: 03.18.13 15.55
Lab Sample Id:	**459346-002**	Date Collected: 03.18.13 08.05	

Analytical Method:	**VOCs by SW 8260B**		Prep Method: SW5030C
Tech:	OEM		% Moisture:
Analyst:	OEM	Date Prep: 03.20.13 10.33	
Seq Number:	909579		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.20.13 19.51		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.20.13 19.51		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.20.13 19.51		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.20.13 19.51		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.20.13 19.51		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.20.13 19.51		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.20.13 19.51		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.20.13 19.51		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.20.13 19.51		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.20.13 19.51		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.20.13 19.51		1
Tetrachloroethylene	127-18-4	**0.590**	0.500	ug/L	03.20.13 19.51		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.20.13 19.51		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.20.13 19.51		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.20.13 19.51		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.20.13 19.51		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.20.13 19.51		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.20.13 19.51		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.20.13 19.51		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.20.13 19.51		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.20.13 19.51		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.20.13 19.51		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.20.13 19.51		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.20.13 19.51		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.20.13 19.51		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.20.13 19.51		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.20.13 19.51		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	93	%	69-133	03.20.13 19.51	
1,2-Dichloroethane-D4	17060-07-0	81	%	66-139	03.20.13 19.51	
Toluene-D8	2037-26-5	95	%	70-130	03.20.13 19.51	
4-Bromofluorobenzene	460-00-4	90	%	70-135	03.20.13 19.51	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB106-0100-25102 | Matrix: Water | Date Received: 03.18.13 15.55
Lab Sample Id: 459346-003 | Date Collected: 03.18.13 08.50

Analytical Method: VOCs by SW 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.20.13 10.33
Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.20.13 20.16		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.20.13 20.16		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.20.13 20.16		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.20.13 20.16		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.20.13 20.16		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.20.13 20.16		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.20.13 20.16	L1 UJ	1 (L1, R7)
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.20.13 20.16		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.20.13 20.16		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.20.13 20.16		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.20.13 20.16		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.20.13 20.16		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.20.13 20.16		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.20.13 20.16		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.20.13 20.16		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.20.13 20.16		1
Chloroform	67-66-3	**0.720**	0.500	ug/L	03.20.13 20.16		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.20.13 20.16		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.20.13 20.16		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.20.13 20.16		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.20.13 20.16		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.20.13 20.16		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.20.13 20.16		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.20.13 20.16		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.20.13 20.16		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.20.13 20.16		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.20.13 20.16		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.20.13 20.16		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.20.13 20.16	UJ(V1)	1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.20.13 20.16		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.20.13 20.16		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.20.13 20.16		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.20.13 20.16		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.20.13 20.16		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.20.13 20.16		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.20.13 20.16		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.20.13 20.16		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.20.13 20.16		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.20.13 20.16		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.20.13 20.16		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.20.13 20.16		1

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Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB106-0100-25102 | Matrix: Water | Date Received: 03.18.13 15.55
Lab Sample Id: 459346-003 | Date Collected: 03.18.13 08.50

Analytical Method: VOCs by SW 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.20.13 10.33
Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.20.13 20.16		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.20.13 20.16		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.20.13 20.16		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.20.13 20.16		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.20.13 20.16		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.20.13 20.16		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.20.13 20.16		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.20.13 20.16		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.20.13 20.16		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.20.13 20.16		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.20.13 20.16		1
Tetrachloroethylene	127-18-4	**1.04**	0.500	ug/L	03.20.13 20.16		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.20.13 20.16		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.20.13 20.16		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.20.13 20.16		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.20.13 20.16		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.20.13 20.16		1
Trichloroethene	79-01-6	**2.75**	0.500	ug/L	03.20.13 20.16		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.20.13 20.16		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.20.13 20.16		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.20.13 20.16		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.20.13 20.16		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.20.13 20.16		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.20.13 20.16		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.20.13 20.16		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.20.13 20.16		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.20.13 20.16		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	95	%	69-133	03.20.13 20.16	
1,2-Dichloroethane-D4	17060-07-0	84	%	66-139	03.20.13 20.16	
Toluene-D8	2037-26-5	96	%	70-130	03.20.13 20.16	
4-Bromofluorobenzene	460-00-4	90	%	70-135	03.20.13 20.16	

4/5/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB12-0100-36152 | Matrix: Water | Date Received: 03.18.13 15.55

Lab Sample Id: 459346-004 | Date Collected: 03.18.13 09.29

Analytical Method: VOCs by SW 8260B | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.20.13 10.33

Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.20.13 20.41		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.20.13 20.41		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.20.13 20.41		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.20.13 20.41		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.20.13 20.41		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.20.13 20.41		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.20.13 20.41	L1 UJ	1 (L1, R7)
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.20.13 20.41		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.20.13 20.41		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.20.13 20.41		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.20.13 20.41		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.20.13 20.41		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.20.13 20.41		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.20.13 20.41		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.20.13 20.41		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.20.13 20.41		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.20.13 20.41		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.20.13 20.41		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.20.13 20.41		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.20.13 20.41		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.20.13 20.41		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.20.13 20.41		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.20.13 20.41		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.20.13 20.41		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.20.13 20.41		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.20.13 20.41		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.20.13 20.41		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.20.13 20.41		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.20.13 20.41	UJ (V1)	1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.20.13 20.41		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.20.13 20.41		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.20.13 20.41		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.20.13 20.41		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.20.13 20.41		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.20.13 20.41		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.20.13 20.41		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.20.13 20.41		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.20.13 20.41		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.20.13 20.41		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.20.13 20.41		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.20.13 20.41		1

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB12-0100-36152 | Matrix: Water | Date Received: 03.18.13 15.55

Lab Sample Id: 459346-004 | Date Collected: 03.18.13 09.29

Analytical Method: VOCs by SW 8260B | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.20.13 10.33

Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.20.13 20.41		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.20.13 20.41		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.20.13 20.41		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.20.13 20.41		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.20.13 20.41		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.20.13 20.41		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.20.13 20.41		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.20.13 20.41		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.20.13 20.41		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.20.13 20.41		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.20.13 20.41		1
Tetrachloroethylene	127-18-4	**4.04**	0.500	ug/L	03.20.13 20.41		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.20.13 20.41		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.20.13 20.41		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.20.13 20.41		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.20.13 20.41		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.20.13 20.41		1
Trichloroethene	79-01-6	**3.85**	0.500	ug/L	03.20.13 20.41		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.20.13 20.41		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.20.13 20.41		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.20.13 20.41		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.20.13 20.41		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.20.13 20.41		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.20.13 20.41		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.20.13 20.41		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.20.13 20.41		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.20.13 20.41		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	95	%	69-133	03.20.13 20.41	
1,2-Dichloroethane-D4	17060-07-0	82	%	66-139	03.20.13 20.41	
Toluene-D8	2037-26-5	97	%	70-130	03.20.13 20.41	
4-Bromofluorobenzene	460-00-4	90	%	70-135	03.20.13 20.41	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB14-0100-34108 | Matrix: Water | Date Received: 03.18.13 15.55

Lab Sample Id: 459346-005 | Date Collected: 03.18.13 10.15

Analytical Method: VOCs by SW 8260B | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.20.13 10.33

Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.20.13 21.06		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.20.13 21.06		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.20.13 21.06		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.20.13 21.06		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.20.13 21.06		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.20.13 21.06		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.20.13 21.06	L1 UJ	1 (L1, R7)
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.20.13 21.06		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.20.13 21.06		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.20.13 21.06		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.20.13 21.06		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.20.13 21.06		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.20.13 21.06		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.20.13 21.06		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.20.13 21.06		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.20.13 21.06		1
Chloroform	67-66-3	**1.69**	0.500	ug/L	03.20.13 21.06		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.20.13 21.06		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.20.13 21.06		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.20.13 21.06		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.20.13 21.06		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.20.13 21.06		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.20.13 21.06		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.20.13 21.06		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.20.13 21.06		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.20.13 21.06		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.20.13 21.06		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.20.13 21.06		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.20.13 21.06	UJ (V1)	1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.20.13 21.06		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.20.13 21.06		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.20.13 21.06		1
cis-1,2-Dichloroethene	156-59-2	**1.20**	0.500	ug/L	03.20.13 21.06		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.20.13 21.06		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.20.13 21.06		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.20.13 21.06		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.20.13 21.06		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.20.13 21.06		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.20.13 21.06		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.20.13 21.06		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.20.13 21.06		1

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB14-0100-34108 | Matrix: Water | Date Received: 03.18.13 15.55
Lab Sample Id: 459346-005 | Date Collected: 03.18.13 10.15

Analytical Method: VOCs by SW 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.20.13 10.33
Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.20.13 21.06		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.20.13 21.06		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.20.13 21.06		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.20.13 21.06		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.20.13 21.06		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.20.13 21.06		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.20.13 21.06		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.20.13 21.06		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.20.13 21.06		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.20.13 21.06		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.20.13 21.06		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.20.13 21.06		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.20.13 21.06		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.20.13 21.06		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.20.13 21.06		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.20.13 21.06		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.20.13 21.06		1
Trichloroethene	79-01-6	**4.37**	0.500	ug/L	03.20.13 21.06		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.20.13 21.06		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.20.13 21.06		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.20.13 21.06		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.20.13 21.06		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.20.13 21.06		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.20.13 21.06		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.20.13 21.06		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.20.13 21.06		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.20.13 21.06		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	96	%	69-133	03.20.13 21.06	
1,2-Dichloroethane-D4	17060-07-0	83	%	66-139	03.20.13 21.06	
Toluene-D8	2037-26-5	95	%	70-130	03.20.13 21.06	
4-Bromofluorobenzene	460-00-4	87	%	70-135	03.20.13 21.06	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB103-0200-12098 | Matrix: Water | Date Received: 03.18.13 15.55
Lab Sample Id: 459346-006 | Date Collected: 03.18.13 10.55

Analytical Method: VOCs by SW 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.20.13 10.33
Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.20.13 21.30		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.20.13 21.30		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.20.13 21.30		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.20.13 21.30		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.20.13 21.30		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.20.13 21.30		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.20.13 21.30	L1 UJ	1 (L1,R7)
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.20.13 21.30		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.20.13 21.30		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.20.13 21.30		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.20.13 21.30		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.20.13 21.30		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.20.13 21.30		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.20.13 21.30		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.20.13 21.30		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.20.13 21.30		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.20.13 21.30		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.20.13 21.30		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.20.13 21.30		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.20.13 21.30		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.20.13 21.30		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.20.13 21.30		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.20.13 21.30		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.20.13 21.30		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.20.13 21.30		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.20.13 21.30		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.20.13 21.30		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.20.13 21.30		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.20.13 21.30	UJ(V1)	1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.20.13 21.30		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.20.13 21.30		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.20.13 21.30		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.20.13 21.30		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.20.13 21.30		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.20.13 21.30		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.20.13 21.30		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.20.13 21.30		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.20.13 21.30		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.20.13 21.30		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.20.13 21.30		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.20.13 21.30		1

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB103-0200-12098 | Matrix: Water | Date Received: 03.18.13 15.55

Lab Sample Id: 459346-006 | Date Collected: 03.18.13 10.55

Analytical Method: VOCs by SW 8260B | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.20.13 10.33

Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.20.13 21.30		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.20.13 21.30		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.20.13 21.30		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.20.13 21.30		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.20.13 21.30		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.20.13 21.30		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.20.13 21.30		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.20.13 21.30		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.20.13 21.30		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.20.13 21.30		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.20.13 21.30		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.20.13 21.30		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.20.13 21.30		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.20.13 21.30		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.20.13 21.30		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.20.13 21.30		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.20.13 21.30		1
Trichloroethene	79-01-6	**0.650**	0.500	ug/L	03.20.13 21.30		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.20.13 21.30		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.20.13 21.30		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.20.13 21.30		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.20.13 21.30		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.20.13 21.30		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.20.13 21.30		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.20.13 21.30		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.20.13 21.30		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.20.13 21.30		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	96	%	69-133	03.20.13 21.30	
1,2-Dichloroethane-D4	17060-07-0	85	%	66-139	03.20.13 21.30	
Toluene-D8	2037-26-5	96	%	70-130	03.20.13 21.30	
4-Bromofluorobenzene	460-00-4	89	%	70-135	03.20.13 21.30	

5/10/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB140-0100-09128 | Matrix: Water | Date Received: 03.18.13 15.55
Lab Sample Id: 459346-007 | Date Collected: 03.18.13 11.43

Analytical Method: VOCs by SW 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.20.13 10.33
Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.20.13 21.55		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.20.13 21.55		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.20.13 21.55		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.20.13 21.55		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.20.13 21.55		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.20.13 21.55		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.20.13 21.55	L1 UJ	1 (L1,R7)
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.20.13 21.55		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.20.13 21.55		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.20.13 21.55		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.20.13 21.55		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.20.13 21.55		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.20.13 21.55		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.20.13 21.55		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.20.13 21.55		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.20.13 21.55		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.20.13 21.55		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.20.13 21.55		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.20.13 21.55		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.20.13 21.55		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.20.13 21.55		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.20.13 21.55		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.20.13 21.55		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.20.13 21.55		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.20.13 21.55		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.20.13 21.55		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.20.13 21.55		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.20.13 21.55		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.20.13 21.55	UJ(V1)	1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.20.13 21.55		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.20.13 21.55		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.20.13 21.55		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.20.13 21.55		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.20.13 21.55		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.20.13 21.55		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.20.13 21.55		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.20.13 21.55		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.20.13 21.55		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.20.13 21.55		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.20.13 21.55		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.20.13 21.55		1

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Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB140-0100-09128
Lab Sample Id: 459346-007

Matrix: Water
Date Collected: 03.18.13 11.43

Date Received: 03.18.13 15.55

Analytical Method: VOCs by SW 8260B
Tech: OEM
Analyst: OEM
Seq Number: 909579

Prep Method: SW5030C
% Moisture:

Date Prep: 03.20.13 10.33

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.20.13 21.55		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.20.13 21.55		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.20.13 21.55		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.20.13 21.55		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.20.13 21.55		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.20.13 21.55		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.20.13 21.55		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.20.13 21.55		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.20.13 21.55		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.20.13 21.55		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.20.13 21.55		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.20.13 21.55		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.20.13 21.55		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.20.13 21.55		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.20.13 21.55		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.20.13 21.55		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.20.13 21.55		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.20.13 21.55		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.20.13 21.55		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.20.13 21.55		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.20.13 21.55		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.20.13 21.55		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.20.13 21.55		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.20.13 21.55		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.20.13 21.55		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.20.13 21.55		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.20.13 21.55		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	96	%	69-133	03.20.13 21.55	
1,2-Dichloroethane-D4	17060-07-0	87	%	66-139	03.20.13 21.55	
Toluene-D8	2037-26-5	98	%	70-130	03.20.13 21.55	
4-Bromofluorobenzene	460-00-4	91	%	70-135	03.20.13 21.55	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB40-0800-18098
Lab Sample Id: 459346-008

Matrix: Water
Date Collected: 03.18.13 12.14

Date Received: 03.18.13 15.55

Analytical Method: VOCs by SW 8260B
Tech: OEM
Analyst: OEM
Seq Number: 909579

Date Prep: 03.20.13 10.33

Prep Method: SW5030C
% Moisture:

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.20.13 22.20		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.20.13 22.20		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.20.13 22.20		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.20.13 22.20		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.20.13 22.20		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.20.13 22.20		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.20.13 22.20	L1 UJ	1(L1,R7)
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.20.13 22.20		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.20.13 22.20		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.20.13 22.20		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.20.13 22.20		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.20.13 22.20		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.20.13 22.20		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.20.13 22.20		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.20.13 22.20		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.20.13 22.20		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.20.13 22.20		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.20.13 22.20		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.20.13 22.20		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.20.13 22.20		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.20.13 22.20		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.20.13 22.20		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.20.13 22.20		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.20.13 22.20		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.20.13 22.20		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.20.13 22.20		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.20.13 22.20		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.20.13 22.20		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.20.13 22.20	UJ(V1)	1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.20.13 22.20		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.20.13 22.20		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.20.13 22.20		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.20.13 22.20		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.20.13 22.20		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.20.13 22.20		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.20.13 22.20		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.20.13 22.20		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.20.13 22.20		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.20.13 22.20		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.20.13 22.20		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.20.13 22.20		1

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB40-0800-18098 | Matrix: Water | Date Received: 03.18.13 15.55
Lab Sample Id: 459346-008 | Date Collected: 03.18.13 12.14

Analytical Method: VOCs by SW 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.20.13 10.33
Seq Number: 909579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.20.13 22.20		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.20.13 22.20		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.20.13 22.20		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.20.13 22.20		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.20.13 22.20		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.20.13 22.20		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.20.13 22.20		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.20.13 22.20		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.20.13 22.20		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.20.13 22.20		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.20.13 22.20		1
Tetrachloroethylene	127-18-4	**3.69**	0.500	ug/L	03.20.13 22.20		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.20.13 22.20		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.20.13 22.20		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.20.13 22.20		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.20.13 22.20		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.20.13 22.20		1
Trichloroethene	79-01-6	**9.62**	0.500	ug/L	03.20.13 22.20		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.20.13 22.20		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.20.13 22.20		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.20.13 22.20		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.20.13 22.20		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.20.13 22.20		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.20.13 22.20		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.20.13 22.20		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.20.13 22.20		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.20.13 22.20		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	95	%	69-133	03.20.13 22.20	
1,2-Dichloroethane-D4	17060-07-0	82	%	66-139	03.20.13 22.20	
Toluene-D8	2037-26-5	97	%	70-130	03.20.13 22.20	
4-Bromofluorobenzene	460-00-4	90	%	70-135	03.20.13 22.20	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB69-02RO-01128 | Matrix: Water | Date Received: 03.18.13 15.55
Lab Sample Id: 459346-009 | Date Collected: 03.18.13 13.42

Analytical Method: VOCs by EPA 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.21.13 11.58
Seq Number: 909653

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.21.13 14.20		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.21.13 14.20		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.21.13 14.20		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.21.13 14.20		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.21.13 14.20		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.21.13 14.20		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.21.13 14.20	N1 UJ(VI)	1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.21.13 14.20		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.21.13 14.20		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.21.13 14.20		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.21.13 14.20		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.21.13 14.20		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.21.13 14.20		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.21.13 14.20		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.21.13 14.20		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.21.13 14.20		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.21.13 14.20		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.21.13 14.20		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.21.13 14.20		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.21.13 14.20		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.21.13 14.20		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.21.13 14.20		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.21.13 14.20		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.21.13 14.20		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.21.13 14.20		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.21.13 14.20		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.21.13 14.20		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.21.13 14.20		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.21.13 14.20		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.21.13 14.20		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.21.13 14.20		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.21.13 14.20		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.21.13 14.20		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.21.13 14.20		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.21.13 14.20		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.21.13 14.20		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.21.13 14.20		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.21.13 14.20		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.21.13 14.20		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.21.13 14.20		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.21.13 14.20		1

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB69-02RO-01128
Lab Sample Id: 459346-009

Matrix: Water
Date Collected: 03.18.13 13.42

Date Received: 03.18.13 15.55

Analytical Method: VOCs by EPA 8260B
Tech: OEM
Analyst: OEM
Seq Number: 909653

Prep Method: SW5030C
% Moisture:

Date Prep: 03.21.13 11.58

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.21.13 14.20		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.21.13 14.20		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.21.13 14.20		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.21.13 14.20		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.21.13 14.20		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.21.13 14.20		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.21.13 14.20		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.21.13 14.20		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.21.13 14.20		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.21.13 14.20		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.21.13 14.20		1
Tetrachloroethylene	127-18-4	**7.24**	0.500	ug/L	03.21.13 14.20		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.21.13 14.20		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.21.13 14.20		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.21.13 14.20		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.21.13 14.20		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.21.13 14.20		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.21.13 14.20		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.21.13 14.20		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.21.13 14.20		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.21.13 14.20		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.21.13 14.20		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.21.13 14.20		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.21.13 14.20		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.21.13 14.20		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.21.13 14.20		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.21.13 14.20		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	69-133	03.21.13 14.20	
1,2-Dichloroethane-D4	17060-07-0	82	%	66-139	03.21.13 14.20	
Toluene-D8	2037-26-5	95	%	70-130	03.21.13 14.20	
4-Bromofluorobenzene	460-00-4	93	%	70-135	03.21.13 14.20	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB125-0100-17148 | Matrix: Water | Date Received: 03.18.13 15.55
Lab Sample Id: 459346-011 | Date Collected: 03.18.13 14.40

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.26.13 11.52
Seq Number: 909964

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.26.13 16.03	UJ (R7)	1
Benzene	71-43-2	<0.500	0.500	ug/L	03.26.13 16.03		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.26.13 16.03		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.26.13 16.03		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.26.13 16.03		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.26.13 16.03		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.26.13 16.03	N1 UJ (R7)	1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.26.13 16.03		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.26.13 16.03		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.26.13 16.03		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.26.13 16.03		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.26.13 16.03		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.26.13 16.03		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.26.13 16.03		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.26.13 16.03		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.26.13 16.03		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.26.13 16.03		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.26.13 16.03		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.26.13 16.03		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.26.13 16.03		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.26.13 16.03		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.26.13 16.03		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.26.13 16.03		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.26.13 16.03		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.26.13 16.03		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.26.13 16.03		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.26.13 16.03		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.26.13 16.03		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.26.13 16.03		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.26.13 16.03		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.26.13 16.03		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.26.13 16.03		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.26.13 16.03		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.26.13 16.03		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.26.13 16.03		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.26.13 16.03		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.26.13 16.03		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.26.13 16.03		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.26.13 16.03		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.26.13 16.03		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.26.13 16.03		1

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB125-0100-17148
Lab Sample Id: 459346-011

Matrix: Water
Date Collected: 03.18.13 14.40

Date Received: 03.18.13 15.55

Analytical Method: VOCs by EPA 8260B
Tech: OEM
Analyst: OEM
Seq Number: 909964

Prep Method: SW5030C
% Moisture:

Date Prep: 03.26.13 11.52

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.26.13 16.03		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.26.13 16.03		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.26.13 16.03		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.26.13 16.03		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.26.13 16.03		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.26.13 16.03		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.26.13 16.03		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.26.13 16.03		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.26.13 16.03		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.26.13 16.03		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.26.13 16.03		1
Tetrachloroethylene	127-18-4	**18.1**	0.500	ug/L	03.26.13 16.03	J (R8)	1
Toluene	108-88-3	<2.00	2.00	ug/L	03.26.13 16.03		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.26.13 16.03		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.26.13 16.03		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.26.13 16.03		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.26.13 16.03		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.26.13 16.03		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.26.13 16.03		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.26.13 16.03		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.26.13 16.03		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.26.13 16.03		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.26.13 16.03		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.26.13 16.03		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.26.13 16.03		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.26.13 16.03		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.26.13 16.03		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	95	%	69-133	03.26.13 16.03	
1,2-Dichloroethane-D4	17060-07-0	108	%	66-139	03.26.13 16.03	
Toluene-D8	2037-26-5	91	%	70-130	03.26.13 16.03	
4-Bromofluorobenzene	460-00-4	93	%	70-135	03.26.13 16.03	

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Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB125-0101-17148
Lab Sample Id: 459346-010

Matrix: Water
Date Collected: 03.18.13 14.05

Date Received: 03.18.13 15.55

Analytical Method: VOCs by EPA 8260B
Tech: OEM
Analyst: OEM
Seq Number: 909653

Date Prep: 03.21.13 11.58

Prep Method: SW5030C
% Moisture:

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.21.13 14.46		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.21.13 14.46		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.21.13 14.46		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.21.13 14.46		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.21.13 14.46		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.21.13 14.46		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.21.13 14.46	N1 UJ(V1)	1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.21.13 14.46		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.21.13 14.46		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.21.13 14.46		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.21.13 14.46		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.21.13 14.46		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.21.13 14.46		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.21.13 14.46		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.21.13 14.46		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.21.13 14.46		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.21.13 14.46		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.21.13 14.46		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.21.13 14.46		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.21.13 14.46		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.21.13 14.46		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.21.13 14.46		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.21.13 14.46		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.21.13 14.46		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.21.13 14.46		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.21.13 14.46		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.21.13 14.46		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.21.13 14.46		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.21.13 14.46		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.21.13 14.46		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.21.13 14.46		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.21.13 14.46		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.21.13 14.46		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.21.13 14.46		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.21.13 14.46		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.21.13 14.46		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.21.13 14.46		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.21.13 14.46		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.21.13 14.46		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.21.13 14.46		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.21.13 14.46		1

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB125-0101-17148
Lab Sample Id: 459346-010

Matrix: Water
Date Collected: 03.18.13 14.05

Date Received: 03.18.13 15.55

Analytical Method: VOCs by EPA 8260B
Tech: OEM
Analyst: OEM
Seq Number: 909653

Prep Method: SW5030C
% Moisture:

Date Prep: 03.21.13 11.58

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.21.13 14.46		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.21.13 14.46		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.21.13 14.46		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.21.13 14.46		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.21.13 14.46		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.21.13 14.46		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.21.13 14.46		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.21.13 14.46		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.21.13 14.46		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.21.13 14.46		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.21.13 14.46		1
Tetrachloroethylene	127-18-4	**24.0**	0.500	ug/L	03.21.13 14.46	J(R8)	1
Toluene	108-88-3	<2.00	2.00	ug/L	03.21.13 14.46		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.21.13 14.46		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.21.13 14.46		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.21.13 14.46		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.21.13 14.46		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.21.13 14.46		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.21.13 14.46		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.21.13 14.46		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.21.13 14.46		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.21.13 14.46		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.21.13 14.46		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.21.13 14.46		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.21.13 14.46		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.21.13 14.46		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.21.13 14.46		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	93	%	69-133	03.21.13 14.46	
1,2-Dichloroethane-D4	17060-07-0	82	%	66-139	03.21.13 14.46	
Toluene-D8	2037-26-5	95	%	70-130	03.21.13 14.46	
4-Bromofluorobenzene	460-00-4	91	%	70-135	03.21.13 14.46	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB125-0104-1000 | Matrix: Water | Date Received: 03.18.13 15.55
Lab Sample Id: 459346-012 | Date Collected: 03.18.13 15.10

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.21.13 11.58
Seq Number: 909653

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.21.13 15.39		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.21.13 15.39		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.21.13 15.39		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.21.13 15.39		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.21.13 15.39		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.21.13 15.39		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.21.13 15.39	N1	1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.21.13 15.39		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.21.13 15.39		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.21.13 15.39		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.21.13 15.39		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.21.13 15.39		1
Carbon Disulfide	75-15-0	**1.56**	0.500	ug/L	03.21.13 15.39		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.21.13 15.39		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.21.13 15.39		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.21.13 15.39		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.21.13 15.39		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.21.13 15.39		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.21.13 15.39		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.21.13 15.39		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.21.13 15.39		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.21.13 15.39		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.21.13 15.39		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.21.13 15.39		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.21.13 15.39		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.21.13 15.39		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.21.13 15.39		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.21.13 15.39		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.21.13 15.39		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.21.13 15.39		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.21.13 15.39		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.21.13 15.39		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.21.13 15.39		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.21.13 15.39		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.21.13 15.39		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.21.13 15.39		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.21.13 15.39		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.21.13 15.39		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.21.13 15.39		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.21.13 15.39		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.21.13 15.39		1

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Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB125-0104-1000 Matrix: Water Date Received: 03.18.13 15.55
Lab Sample Id: **459346-012** Date Collected: 03.18.13 15.10

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.21.13 11.58
Seq Number: 909653

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.21.13 15.39		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.21.13 15.39		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.21.13 15.39		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.21.13 15.39		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.21.13 15.39		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.21.13 15.39		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.21.13 15.39		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.21.13 15.39		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.21.13 15.39		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.21.13 15.39		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.21.13 15.39		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.21.13 15.39		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.21.13 15.39		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.21.13 15.39		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.21.13 15.39		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.21.13 15.39		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.21.13 15.39		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.21.13 15.39		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.21.13 15.39		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.21.13 15.39		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.21.13 15.39		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.21.13 15.39		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.21.13 15.39		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.21.13 15.39		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.21.13 15.39		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.21.13 15.39		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.21.13 15.39		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	69-133	03.21.13 15.39	
1,2-Dichloroethane-D4	17060-07-0	84	%	66-139	03.21.13 15.39	
Toluene-D8	2037-26-5	96	%	70-130	03.21.13 15.39	
4-Bromofluorobenzene	460-00-4	92	%	70-135	03.21.13 15.39	

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Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB57-0100-32100 Matrix: Water Date Received: 03.18.13 15.55
Lab Sample Id: 459346-002 Date Collected: 03.18.13 08.05

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 10.00
Seq Number: 909645 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.465**	0.0100	mg/L	03.22.13 16.05		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 11.00
Seq Number: 909724 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.22.13 22.13		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.22.13 12.48
Seq Number: 909785 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.22.13 15.41	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	96	%	75-131	03.22.13 15.41	
1,2-Dichloroethane-D4	17060-07-0	95	%	63-144	03.22.13 15.41	
Toluene-D8	2037-26-5	100	%	80-117	03.22.13 15.41	
4-Bromofluorobenzene	460-00-4	106	%	74-124	03.22.13 15.41	

US (VI)

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Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB106-0100-25102 Matrix: Water Date Received: 03.18.13 15.55
Lab Sample Id: 459346-003 Date Collected: 03.18.13 08.50

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 10.00
Seq Number: 909645 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0172**	0.0100	mg/L	03.22.13 16.11		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 11.00
Seq Number: 909724 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.22.13 22.19		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.22.13 12.50
Seq Number: 909785 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.22.13 16.06	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	98	%	75-131	03.22.13 16.06	
1,2-Dichloroethane-D4	17060-07-0	98	%	63-144	03.22.13 16.06	
Toluene-D8	2037-26-5	99	%	80-117	03.22.13 16.06	
4-Bromofluorobenzene	460-00-4	103	%	74-124	03.22.13 16.06	

Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB12-0100-36152 Matrix: Water Date Received: 03.18.13 15.55
Lab Sample Id: 459346-004 Date Collected: 03.18.13 09.29

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 10.00
Seq Number: 909645 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.22.13 16.16		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 11.00
Seq Number: 909724 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.22.13 22.24		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.22.13 12.52
Seq Number: 909785 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.22.13 16.31	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	96	%	75-131	03.22.13 16.31	
1,2-Dichloroethane-D4	17060-07-0	94	%	63-144	03.22.13 16.31	
Toluene-D8	2037-26-5	101	%	80-117	03.22.13 16.31	
4-Bromofluorobenzene	460-00-4	104	%	74-124	03.22.13 16.31	

US (VI)

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Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB14-0100-34108 Matrix: Water Date Received: 03.18.13 15.55
Lab Sample Id: 459346-005 Date Collected: 03.18.13 10.15

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 10.00
Seq Number: 909645 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0211**	0.0100	mg/L	03.22.13 16.22		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 11.00
Seq Number: 909724 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.22.13 22.30		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.22.13 12.54
Seq Number: 909785 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.22.13 16.56	E8 UI(VI)	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	98	%	75-131	03.22.13 16.56	
1,2-Dichloroethane-D4	17060-07-0	98	%	63-144	03.22.13 16.56	
Toluene-D8	2037-26-5	100	%	80-117	03.22.13 16.56	
4-Bromofluorobenzene	460-00-4	106	%	74-124	03.22.13 16.56	

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Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB103-0200-12098 Matrix: Water Date Received: 03.18.13 15.55
Lab Sample Id: 459346-006 Date Collected: 03.18.13 10.55

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 10.00
Seq Number: 909645 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.22.13 16.28		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 11.00
Seq Number: 909724 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.22.13 22.47		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.22.13 12.56
Seq Number: 909785 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.22.13 17.21	E8 U5(V1)	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	98	%	75-131	03.22.13 17.21	
1,2-Dichloroethane-D4	17060-07-0	96	%	63-144	03.22.13 17.21	
Toluene-D8	2037-26-5	99	%	80-117	03.22.13 17.21	
4-Bromofluorobenzene	460-00-4	102	%	74-124	03.22.13 17.21	

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Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB140-0100-09128 Matrix: Water Date Received: 03.18.13 15.55
Lab Sample Id: 459346-007 Date Collected: 03.18.13 11.43

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 10.00
Seq Number: 909645 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0175**	0.0100	mg/L	03.22.13 16.33		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 11.00
Seq Number: 909724 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.22.13 22.53		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.22.13 16.50
Seq Number: 909785 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.22.13 17.46	E8 UJ(VI)	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	97	%	75-131	03.22.13 17.46	
1,2-Dichloroethane-D4	17060-07-0	96	%	63-144	03.22.13 17.46	
Toluene-D8	2037-26-5	99	%	80-117	03.22.13 17.46	
4-Bromofluorobenzene	460-00-4	102	%	74-124	03.22.13 17.46	

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Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB40-0800-18098 Matrix: Water Date Received: 03.18.13 15.55
Lab Sample Id: 459346-008 Date Collected: 03.18.13 12.14

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 10.00
Seq Number: 909645 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0185**	0.0100	mg/L	03.22.13 16.39		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 11.00
Seq Number: 909724 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.22.13 22.58		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.22.13 16.52
Seq Number: 909785 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.22.13 18.10	E8 UJ(VI)	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	96	%	75-131	03.22.13 18.10	
1,2-Dichloroethane-D4	17060-07-0	96	%	63-144	03.22.13 18.10	
Toluene-D8	2037-26-5	98	%	80-117	03.22.13 18.10	
4-Bromofluorobenzene	460-00-4	102	%	74-124	03.22.13 18.10	

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Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB69-02RO-01128 Matrix: Water Date Received: 03.18.13 15.55
Lab Sample Id: 459346-009 Date Collected: 03.18.13 13.42

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 10.00
Seq Number: 909645 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0254**	0.0100	mg/L	03.22.13 16.44		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 11.00
Seq Number: 909724 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.22.13 23.04		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.22.13 16.54
Seq Number: 909785 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.22.13 18.35	E8 WJ(VI)	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	96	%	75-131	03.22.13 18.35	
1,2-Dichloroethane-D4	17060-07-0	99	%	63-144	03.22.13 18.35	
Toluene-D8	2037-26-5	99	%	80-117	03.22.13 18.35	
4-Bromofluorobenzene	460-00-4	103	%	74-124	03.22.13 18.35	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB125-0101-17148 | Matrix: Water | Date Received: 03.18.13 15.55

Lab Sample Id: **459346-010** | Date Collected: 03.18.13 14.05

Analytical Method: **1,4-Dioxane by EPA 8260B** | Prep Method: SW5030B

Tech: MCH | % Moisture:

Analyst: MCH | Date Prep: 03.22.13 16.56

Seq Number: 909785 | SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.22.13 19.00	E8 UJ(VI)	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	98	%	75-131	03.22.13 19.00	
1,2-Dichloroethane-D4	17060-07-0	98	%	63-144	03.22.13 19.00	
Toluene-D8	2037-26-5	97	%	80-117	03.22.13 19.00	
4-Bromofluorobenzene	460-00-4	100	%	74-124	03.22.13 19.00	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB125-0100-17148 Matrix: Water Date Received: 03.18.13 15.55
Lab Sample Id: 459346-011 Date Collected: 03.18.13 14.40

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 10.00
Seq Number: 909645 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.155**	0.0100	mg/L	03.22.13 17.01		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 11.00
Seq Number: 909724 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.135**	0.0100	mg/L	03.22.13 23.10		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.22.13 16.58
Seq Number: 909785 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.22.13 19.25	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	97	%	75-131	03.22.13 19.25	
1,2-Dichloroethane-D4	17060-07-0	99	%	63-144	03.22.13 19.25	
Toluene-D8	2037-26-5	99	%	80-117	03.22.13 19.25	
4-Bromofluorobenzene	460-00-4	101	%	74-124	03.22.13 19.25	

5/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459346

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB125-0104-1000 Matrix: Water Date Received: 03.18.13 15.55
Lab Sample Id: 459346-012 Date Collected: 03.18.13 15.10

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 10.00
Seq Number: 909645 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.22.13 17.07		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 11.00
Seq Number: 909724 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.22.13 23.15		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.22.13 17.00
Seq Number: 909785 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.22.13 19.49	E8 UJ(VI)	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	103	%	75-131	03.22.13 19.49	
1,2-Dichloroethane-D4	17060-07-0	101	%	63-144	03.22.13 19.49	
Toluene-D8	2037-26-5	98	%	80-117	03.22.13 19.49	
4-Bromofluorobenzene	460-00-4	101	%	74-124	03.22.13 19.49	

4/13/13

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 19, 2013

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459504

Sample Identification

AVB88-0102-1000
AVB88-0100-23118
AVB88-0101-23118
AVB97-0100-20118
AVB126-0100-13142
AVB70-0100-25115
AVB15-0100-14116
AVB72-0100-24135
PS-9
PS-7
PS-6
PS-6E
AVB97-0100-20118MS
AVB97-0100-20118MSD
PS-6MS
PS-6MSD

Introduction

This data review covers 16 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample AVB88-0102-1000 was identified as a trip blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
AVB97-0100-20118MS/MSD (AVB97-0100-20118)	Bromomethane Chloroform	169 (53-141) 130 (65-123)	- 133 (65-123)	27 (≤22) -	J (all detects) J (all detects)	A
PS-6MS/MSD (PS-6)	2-Butanone	154 (46-136)	153 (46-136)	-	J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
635494-1-BKS (AVB88-0102-1000 AVB15-0100-14116 635494-1-BLK)	Bromomethane	165 (58-138)	165 (58-138)	-	J (all detects)	P
635718-1-BKS (AVB88-0100-23118 AVB88-0101-23118 AVB97-0100-20118 AVB126-0100-13142 AVB70-0100-25115 AVB72-0100-24135 635718-1-BLK)	Bromomethane	147 (58-138)	148 (58-138)	-	J (all detects)	P
635798-1-BKS (PS-9 PS-7 635798-1-BLK)	Bromomethane	192 (58-138)	222 (58-138)	-	J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples AVB88-0100-23118 and AVB88-0101-23118 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)	Flag	A or P
	AVB88-0100-23118	AVB88-0101-23118			
Tetrachloroethene	65.1	59.6	9 (≤20)	-	-

West Van Buren Area
Volatiles - Data Qualification Summary - SDG 459504

SDG	Sample	Compound	Flag	A or P	Reason (Code)
459504	AVB97-0100-20118	Bromomethane	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (M1, R5)
459504	AVB97-0100-20118	Chloroform	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (M1)
459504	PS-6	2-Butanone	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (M1)
459504	AVB88-0102-1000 AVB15-0100-14116 AVB88-0100-23118 AVB88-0101-23118 AVB97-0100-20118 AVB126-0100-13142 AVB70-0100-25115 AVB72-0100-24135 PS-9 PS-7	Bromomethane	J (all detects)	P	Laboratory control samples (%R) (L1)

West Van Buren Area
Volatiles - Laboratory Blank Data Qualification Summary - SDG 459504

No Sample Data Qualified in this SDG

West Van Buren Area
Volatiles - Field Blank Data Qualification Summary - SDG 459504

No Sample Data Qualified in this SDG

LDC #: 29578H1a

SDG #: 459504

Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 5/1/13

Page: 1 of 1

Reviewer: D

2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/19/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	459346-009MS ID
VIII.	Laboratory control samples	SW	LCS ID
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 2, 3
XVII.	Field blanks	ND	TB = 1

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: water

1	AVB88-0102-1000	TB	11	PS-6	21		31	1	635494-1-BLK
2	AVB88-0100-23118	D	12	PS-6E	22		32	2	635718-1-BLK
3	AVB88-0101-23118	D	13	AVB97-0100-20118MS	23		33	3	635798-1-BLK
4	AVB97-0100-20118		14	AVB97-0100-20118MSD	24		34	4	635920-1-BLK
5	AVB126-0100-13142		15	PS-6MS	25		35		
6	AVB70-0100-25115		16	PS-6MSD	26		36		
7	AVB15-0100-14116		17		27		37		
8	AVB72-0100-24135		18		28		38		
9	PS-9		19		29		39		
10	PS-7		20		30		40		

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene	BB. 1,1,2,2-Tetrachloroethane	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane	CC. Toluene	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform	EE. Ethylbenzene	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN. Iodomethane
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.1,1-Difluoroethane
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

LDC #:_____

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer: ℓ

METHOD : GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		13 + 14	B	169 (53-141)	( )	27 (22)	4	J/A det M1, R5
			K	130 (65-123)	133 (65-123)	( )		↓ M1
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
		15 + 16	M	154 (46-136)	153 (46-136)	( )	11	J/A det M1
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #:_____

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: FT
2nd Reviewer: _____

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		635494-1-BKS	B	165 (58-138)	165 (58-138)	( )	635494-1-BLK,	J/Pdet L1
				( )	( )	( )	1, 7	
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
		635718-1-BKS	B	147 (58-138)	148 (58-138)	( )	635718-1-BLK,	J/Pdet L1
				( )	( )	( )	2-6, 8	
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
		635798-1-BKS	B	192 (58-138)	222 (58-138)	( )	635798-1-BLK,	J/Pde L1
				( )	( )	( )	9, 10	
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #:_____

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page:____of____
Reviewer: FT
2nd reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds detected in the field duplicate pairs?

Compound	Concentration (ug/L)		≤ 20 RPD
	2	3	
AA	65.1	59.6	9

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 19, 2013

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: 1,4-Dioxane

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459504

Sample Identification

AVB88-0100-23118
AVB88-0101-23118
AVB97-0100-20118
AVB126-0100-13142
AVB70-0100-25115
AVB15-0100-14116
AVB72-0100-24135
PS-9
PS-7
PS-6
PS-6E

Introduction

This data review covers 11 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8260B for 1,4-Dioxane.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples AVB88-0100-23118 and AVB88-0101-23118 were identified as field duplicates. No 1,4-dioxane was detected in any of the samples.

West Van Buren Area
1,4-Dioxane - Data Qualification Summary - SDG 459504

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG 459504

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Field Blank Data Qualification Summary - SDG 459504

No Sample Data Qualified in this SDG

LDC #: 29578H1b

SDG #: 459504

Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 5/01/13

Page: 1 of 1

Reviewer:

2nd Reviewer:

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/19/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	459337-016
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	MD	D = 1,2
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: water

1	AVB88-0100-23118 D	11	PS-6E	21	635497-1-BLK	31		
2	AVB88-0101-23118 D	12		22	635633-1-BLK	32		
3	AVB97-0100-20118	13		23	635698-1-BLK	33		
4	AVB126-0100-13142	14		24		34		
5	AVB70-0100-25115	15		25		35		
6	AVB15-0100-14116	16		26		36		
7	AVB72-0100-24135	17		27		37		
8	PS-9	18		28		38		
9	PS-7	19		29		39		
10	PS-6	20		30		40		

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	West Van Buren Area
Collection Date:	March 19, 2013
LDC Report Date:	May 7, 2013
Matrix:	Water
Parameters:	Chromium
Validation Level:	EPA Level III
Laboratory:	Xenco Laboratories
Sample Delivery Group (SDG):	459504

Sample Identification

AVB88-0100-23118	PS-6F
AVB88-0101-23118	PS-6EF
AVB97-0100-20118	AVB88-0100-23118MS
AVB126-0100-13142	AVB88-0100-23118MSD
AVB70-0100-25115	
AVB15-0100-14116	
AVB72-0100-24135	
PS-9	
PS-7	
PS-6	
PS-6E	
AVB88-0100-23118F	
AVB88-0101-23118F	
AVB97-0100-20118F	
AVB126-0100-13142F	
AVB70-0100-25115F	
AVB15-0100-14116F	
AVB72-0100-24135F	
PS-9F	
PS-7F	

Sample IDs appended with "F" were analyzed for dissolved chromium.

Introduction

This data review covers 24 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6010B for Chromium.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

ICP-MS was not utilized in this SDG.

III. Calibration

Calibration data were not reviewed for Level III.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No chromium was found in the preparation blanks.

No field blanks were identified in this SDG.

V. ICP Interference Check Sample (ICS) Analysis

ICP interference check data were not reviewed for Level III.

VI. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Internal Standards

ICP-MS was not utilized in this SDG.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution was not performed for this SDG.

XII. Sample Result Verification

Raw data was not reviewed for this SDG.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

Samples AVB88-0100-23118 and AVB88-0101-23118 and samples AVB88-0100-23118F and AVB88-0101-23118F were identified as field duplicates. No chromium was detected in any of the samples with the following exceptions:

Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
	AVB88-0100-23118	AVB88-0101-23118			
Chromium	0.0607	0.0676	11 (≤20)	-	-

Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
	AVB88-0100-23118F	AVB88-0101-23118F			
Chromium	0.0569	0.0590	4 (≤20)	-	-

West Van Buren Area
Chromium - Data Qualification Summary - SDG 459504

No Sample Data Qualified in this SDG

West Van Buren Area
Chromium - Laboratory Blank Data Qualification Summary - SDG 459504

No Sample Data Qualified in this SDG

West Van Buren Area
Chromium - Field Blank Data Qualification Summary - SDG 459504

No Sample Data Qualified in this SDG

LDC #: 29578H4
SDG #: 459504
Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 4/30/13
Page: 1 of 1
Reviewer: VV
2nd Reviewer: A

METHOD: Chromium (EPA SW846 Method 6010B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/19/13
II.	Calibration	N	
III.	Blanks	A	
IV.	ICP Interference Check Sample (ICS) Analysis	N	
V.	Matrix Spike Analysis	A	3 MS/MSD
VI.	Duplicate Sample Analysis	N	
VII.	Laboratory Control Samples (LCS)	A	LCS/LCSD
VIII.	Internal Standard (ICP-MS)	N	Not Validated
IX.	Furnace Atomic Absorption QC	N	↓
X.	ICP Serial Dilution	N	Not performed
XI.	Sample Result Verification	N	
XII.	Overall Assessment of Data	A	
XIII.	Field Duplicates	SW	(1,2) (12,13)
XIV.	Field Blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: All

1	AVB88-0100-23118	11	PS-6E	21	PS-6F	11	MB
2	AVB88-0101-23118	12	AVB88-0100-23118F	22	PS-6EF	12	
3	AVB97-0100-20118	13	AVB88-0101-23118F	23	AVB88-0100-23118MS	13	
4	AVB126-0100-13142	14	AVB97-0100-20118F	24	AVB88-0100-23118MSD	14	
5	AVB70-0100-25115	15	AVB126-0100-13142F	25		15	
6	AVB15-0100-14116	16	AVB70-0100-25115F	26		16	
7	AVB72-0100-24135	17	AVB15-0100-14116F	27		17	
8	PS-9	18	AVB72-0100-24135F	28		18	
9	PS-7	19	PS-9F	29		19	
10	PS-6	20	PS-7F	30		20	

Notes: Samples appended with "F" were analyzed for dissolved chromium

LDC#: 29578H4

VALIDATION FINDINGS WORKSHEET

Field Duplicates

Reviewer: [signature]
2nd Reviewer: [signature]

METHOD: Metals (EPA Method 6010B)

Analyte	Concentration (mg/L)		RPD (≤20)	Parent only
	1	2		
Chromium	0.0607	0.0676	11	

Analyte	Concentration (mg/L)		RPD (≤20)	Parent only
	12	13		
Chromium	0.0569	0.0590	4	

V:\FIELD DUPLICATES\FD_inorganic\29578H4.wpd

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB88-0102-1000 Matrix: Water Date Received: 03.19.13 15.26
Lab Sample Id: 459504-001 Date Collected: 03.19.13 07.30

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.21.13 11.58
Seq Number: 909653

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.21.13 21.22		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.21.13 21.22		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.21.13 21.22		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.21.13 21.22		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.21.13 21.22		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.21.13 21.22		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.21.13 21.22	N1	1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.21.13 21.22		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.21.13 21.22		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.21.13 21.22		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.21.13 21.22		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.21.13 21.22		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.21.13 21.22		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.21.13 21.22		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.21.13 21.22		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.21.13 21.22		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.21.13 21.22		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.21.13 21.22		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.21.13 21.22		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.21.13 21.22		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.21.13 21.22		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.21.13 21.22		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.21.13 21.22		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.21.13 21.22		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.21.13 21.22		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.21.13 21.22		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.21.13 21.22		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.21.13 21.22		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.21.13 21.22		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.21.13 21.22		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.21.13 21.22		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.21.13 21.22		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.21.13 21.22		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.21.13 21.22		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.21.13 21.22		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.21.13 21.22		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.21.13 21.22		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.21.13 21.22		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.21.13 21.22		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.21.13 21.22		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.21.13 21.22		1

5/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB88-0102-1000 | Matrix: Water | Date Received: 03.19.13 15.26
Lab Sample Id: 459504-001 | Date Collected: 03.19.13 07.30

Analytical Method: VOCs by EPA 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.21.13 11.58
Seq Number: 909653

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.21.13 21.22		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.21.13 21.22		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.21.13 21.22		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.21.13 21.22		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.21.13 21.22		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.21.13 21.22		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.21.13 21.22		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.21.13 21.22		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.21.13 21.22		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.21.13 21.22		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.21.13 21.22		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.21.13 21.22		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.21.13 21.22		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.21.13 21.22		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.21.13 21.22		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.21.13 21.22		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.21.13 21.22		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.21.13 21.22		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.21.13 21.22		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.21.13 21.22		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.21.13 21.22		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.21.13 21.22		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.21.13 21.22		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.21.13 21.22		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.21.13 21.22		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.21.13 21.22		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.21.13 21.22		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	71	%	69-133	03.21.13 21.22	
1,2-Dichloroethane-D4	17060-07-0	66	%	66-139	03.21.13 21.22	
Toluene-D8	2037-26-5	90	%	70-130	03.21.13 21.22	
4-Bromofluorobenzene	460-00-4	86	%	70-135	03.21.13 21.22	

4/5/13/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB88-0100-23118 | Matrix: Water | Date Received: 03.19.13 15.26

Lab Sample Id: 459504-002 | Date Collected: 03.19.13 08.00

Analytical Method: VOCs by EPA 8260B | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.26.13 11.52

Seq Number: 909964

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.26.13 19.24		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.26.13 19.24		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.26.13 19.24		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.26.13 19.24		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.26.13 19.24		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.26.13 19.24		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.26.13 19.24		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.26.13 19.24		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.26.13 19.24		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.26.13 19.24		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.26.13 19.24		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.26.13 19.24		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.26.13 19.24		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.26.13 19.24		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.26.13 19.24		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.26.13 19.24		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.26.13 19.24		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.26.13 19.24		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.26.13 19.24		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.26.13 19.24		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.26.13 19.24		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.26.13 19.24		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.26.13 19.24		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.26.13 19.24		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.26.13 19.24		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.26.13 19.24		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.26.13 19.24		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.26.13 19.24		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.26.13 19.24		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.26.13 19.24		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.26.13 19.24		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.26.13 19.24		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.26.13 19.24		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.26.13 19.24		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.26.13 19.24		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.26.13 19.24		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.26.13 19.24		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.26.13 19.24		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.26.13 19.24		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.26.13 19.24		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.26.13 19.24		1

4/5/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB88-0100-23118 | Matrix: Water | Date Received: 03.19.13 15.26
Lab Sample Id: 459504-002 | Date Collected: 03.19.13 08.00

Analytical Method: VOCs by EPA 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.26.13 11.52
Seq Number: 909964

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.26.13 19.24		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.26.13 19.24		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.26.13 19.24		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.26.13 19.24		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.26.13 19.24		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.26.13 19.24		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.26.13 19.24		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.26.13 19.24		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.26.13 19.24		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.26.13 19.24		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.26.13 19.24		1
Tetrachloroethylene	127-18-4	**65.1**	0.500	ug/L	03.26.13 19.24		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.26.13 19.24		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.26.13 19.24		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.26.13 19.24		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.26.13 19.24		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.26.13 19.24		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.26.13 19.24		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.26.13 19.24		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.26.13 19.24		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.26.13 19.24		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.26.13 19.24		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.26.13 19.24		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.26.13 19.24		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.26.13 19.24		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.26.13 19.24		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.26.13 19.24		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	98	%	69-133	03.26.13 19.24	
1,2-Dichloroethane-D4	17060-07-0	112	%	66-139	03.26.13 19.24	
Toluene-D8	2037-26-5	91	%	70-130	03.26.13 19.24	
4-Bromofluorobenzene	460-00-4	92	%	70-135	03.26.13 19.24	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB88-0101-23118 | Matrix: Water | Date Received: 03.19.13 15.26

Lab Sample Id: **459504-003** | Date Collected: 03.19.13 08.05

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.26.13 11.52

Seq Number: 909964

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.26.13 19.48		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.26.13 19.48		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.26.13 19.48		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.26.13 19.48		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.26.13 19.48		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.26.13 19.48		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.26.13 19.48		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.26.13 19.48		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.26.13 19.48		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.26.13 19.48		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.26.13 19.48		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.26.13 19.48		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.26.13 19.48		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.26.13 19.48		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.26.13 19.48		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.26.13 19.48		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.26.13 19.48		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.26.13 19.48		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.26.13 19.48		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.26.13 19.48		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.26.13 19.48		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.26.13 19.48		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.26.13 19.48		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.26.13 19.48		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.26.13 19.48		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.26.13 19.48		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.26.13 19.48		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.26.13 19.48		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.26.13 19.48		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.26.13 19.48		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.26.13 19.48		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.26.13 19.48		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.26.13 19.48		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.26.13 19.48		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.26.13 19.48		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.26.13 19.48		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.26.13 19.48		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.26.13 19.48		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.26.13 19.48		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.26.13 19.48		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.26.13 19.48		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB88-0101-23118 | Matrix: Water | Date Received: 03.19.13 15.26
Lab Sample Id: **459504-003** | Date Collected: 03.19.13 08.05

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.26.13 11.52
Seq Number: 909964

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.26.13 19.48		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.26.13 19.48		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.26.13 19.48		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.26.13 19.48		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.26.13 19.48		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.26.13 19.48		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.26.13 19.48		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.26.13 19.48		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.26.13 19.48		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.26.13 19.48		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.26.13 19.48		1
Tetrachloroethylene	127-18-4	**59.6**	0.500	ug/L	03.26.13 19.48		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.26.13 19.48		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.26.13 19.48		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.26.13 19.48		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.26.13 19.48		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.26.13 19.48		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.26.13 19.48		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.26.13 19.48		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.26.13 19.48		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.26.13 19.48		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.26.13 19.48		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.26.13 19.48		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.26.13 19.48		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.26.13 19.48		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.26.13 19.48		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.26.13 19.48		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	100	%	69-133	03.26.13 19.48	
1,2-Dichloroethane-D4	17060-07-0	114	%	66-139	03.26.13 19.48	
Toluene-D8	2037-26-5	91	%	70-130	03.26.13 19.48	
4-Bromofluorobenzene	460-00-4	92	%	70-135	03.26.13 19.48	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB97-0100-20118 | Matrix: Water | Date Received: 03.19.13 15.26
Lab Sample Id: **459504-004** | Date Collected: 03.19.13 08.45

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.26.13 11.52
Seq Number: 909964

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.26.13 20.14		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.26.13 20.14		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.26.13 20.14		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.26.13 20.14		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.26.13 20.14		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.26.13 20.14		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.26.13 20.14		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.26.13 20.14		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.26.13 20.14		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.26.13 20.14		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.26.13 20.14		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.26.13 20.14		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.26.13 20.14		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.26.13 20.14		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.26.13 20.14		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.26.13 20.14		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.26.13 20.14		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.26.13 20.14		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.26.13 20.14		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.26.13 20.14		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.26.13 20.14		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.26.13 20.14		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.26.13 20.14		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.26.13 20.14		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.26.13 20.14		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.26.13 20.14		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.26.13 20.14		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.26.13 20.14		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.26.13 20.14		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.26.13 20.14		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.26.13 20.14		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.26.13 20.14		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.26.13 20.14		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.26.13 20.14		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.26.13 20.14		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.26.13 20.14		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.26.13 20.14		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.26.13 20.14		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.26.13 20.14		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.26.13 20.14		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.26.13 20.14		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB97-0100-20118 | Matrix: Water | Date Received: 03.19.13 15.26
Lab Sample Id: **459504-004** | Date Collected: 03.19.13 08.45

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.26.13 11.52
Seq Number: 909964

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.26.13 20.14		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.26.13 20.14		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.26.13 20.14		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.26.13 20.14		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.26.13 20.14		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.26.13 20.14		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.26.13 20.14		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.26.13 20.14		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.26.13 20.14		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.26.13 20.14		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.26.13 20.14		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.26.13 20.14		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.26.13 20.14		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.26.13 20.14		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.26.13 20.14		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.26.13 20.14		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.26.13 20.14		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.26.13 20.14		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.26.13 20.14		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.26.13 20.14		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.26.13 20.14		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.26.13 20.14		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.26.13 20.14		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.26.13 20.14		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.26.13 20.14		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.26.13 20.14		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.26.13 20.14		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	98	%	69-133	03.26.13 20.14	
1,2-Dichloroethane-D4	17060-07-0	110	%	66-139	03.26.13 20.14	
Toluene-D8	2037-26-5	93	%	70-130	03.26.13 20.14	
4-Bromofluorobenzene	460-00-4	93	%	70-135	03.26.13 20.14	

5/13/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB126-0100-13142 | Matrix: Water | Date Received: 03.19.13 15.26

Lab Sample Id: **459504-005** | Date Collected: 03.19.13 09.44

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.26.13 11.52

Seq Number: 909964

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.26.13 20.40		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.26.13 20.40		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.26.13 20.40		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.26.13 20.40		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.26.13 20.40		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.26.13 20.40		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.26.13 20.40		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.26.13 20.40		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.26.13 20.40		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.26.13 20.40		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.26.13 20.40		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.26.13 20.40		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.26.13 20.40		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.26.13 20.40		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.26.13 20.40		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.26.13 20.40		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.26.13 20.40		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.26.13 20.40		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.26.13 20.40		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.26.13 20.40		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.26.13 20.40		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.26.13 20.40		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.26.13 20.40		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.26.13 20.40		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.26.13 20.40		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.26.13 20.40		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.26.13 20.40		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.26.13 20.40		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.26.13 20.40		1
1,1-Dichloroethane	75-34-3	**0.660**	0.500	ug/L	03.26.13 20.40		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.26.13 20.40		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.26.13 20.40		1
cis-1,2-Dichloroethene	156-59-2	**3.56**	0.500	ug/L	03.26.13 20.40		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.26.13 20.40		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.26.13 20.40		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.26.13 20.40		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.26.13 20.40		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.26.13 20.40		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.26.13 20.40		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.26.13 20.40		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.26.13 20.40		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB126-0100-13142 | Matrix: Water | Date Received: 03.19.13 15.26

Lab Sample Id: **459504-005** | Date Collected: 03.19.13 09.44

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.26.13 11.52

Seq Number: 909964

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.26.13 20.40		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.26.13 20.40		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.26.13 20.40		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.26.13 20.40		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.26.13 20.40		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.26.13 20.40		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.26.13 20.40		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.26.13 20.40		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.26.13 20.40		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.26.13 20.40		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.26.13 20.40		1
Tetrachloroethylene	127-18-4	**6.47**	0.500	ug/L	03.26.13 20.40		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.26.13 20.40		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.26.13 20.40		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.26.13 20.40		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.26.13 20.40		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.26.13 20.40		1
Trichloroethene	79-01-6	**5.39**	0.500	ug/L	03.26.13 20.40		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.26.13 20.40		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.26.13 20.40		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.26.13 20.40		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.26.13 20.40		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.26.13 20.40		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.26.13 20.40		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.26.13 20.40		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.26.13 20.40		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.26.13 20.40		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	97	%	69-133	03.26.13 20.40	
1,2-Dichloroethane-D4	17060-07-0	108	%	66-139	03.26.13 20.40	
Toluene-D8	2037-26-5	90	%	70-130	03.26.13 20.40	
4-Bromofluorobenzene	460-00-4	89	%	70-135	03.26.13 20.40	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB70-0100-25115 | Matrix: Water | Date Received: 03.19.13 15.26
Lab Sample Id: **459504-006** | Date Collected: 03.19.13 10.25

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.26.13 11.52
Seq Number: 909964

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.26.13 21.05		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.26.13 21.05		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.26.13 21.05		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.26.13 21.05		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.26.13 21.05		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.26.13 21.05		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.26.13 21.05		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.26.13 21.05		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.26.13 21.05		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.26.13 21.05		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.26.13 21.05		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.26.13 21.05		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.26.13 21.05		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.26.13 21.05		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.26.13 21.05		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.26.13 21.05		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.26.13 21.05		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.26.13 21.05		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.26.13 21.05		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.26.13 21.05		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.26.13 21.05		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.26.13 21.05		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.26.13 21.05		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.26.13 21.05		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.26.13 21.05		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.26.13 21.05		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.26.13 21.05		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.26.13 21.05		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.26.13 21.05		1
1,1-Dichloroethane	75-34-3	**0.850**	0.500	ug/L	03.26.13 21.05		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.26.13 21.05		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.26.13 21.05		1
cis-1,2-Dichloroethene	156-59-2	**7.25**	0.500	ug/L	03.26.13 21.05		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.26.13 21.05		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.26.13 21.05		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.26.13 21.05		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.26.13 21.05		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.26.13 21.05		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.26.13 21.05		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.26.13 21.05		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.26.13 21.05		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB70-0100-25115 | Matrix: Water | Date Received: 03.19.13 15.26

Lab Sample Id: 459504-006 | Date Collected: 03.19.13 10.25

Analytical Method: VOCs by EPA 8260B | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.26.13 11.52

Seq Number: 909964

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.26.13 21.05		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.26.13 21.05		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.26.13 21.05		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.26.13 21.05		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.26.13 21.05		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.26.13 21.05		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.26.13 21.05		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.26.13 21.05		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.26.13 21.05		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.26.13 21.05		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.26.13 21.05		1
Tetrachloroethylene	127-18-4	**11.2**	0.500	ug/L	03.26.13 21.05		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.26.13 21.05		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.26.13 21.05		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.26.13 21.05		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.26.13 21.05		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.26.13 21.05		1
Trichloroethene	79-01-6	**7.16**	0.500	ug/L	03.26.13 21.05		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.26.13 21.05		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.26.13 21.05		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.26.13 21.05		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.26.13 21.05		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.26.13 21.05		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.26.13 21.05		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.26.13 21.05		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.26.13 21.05		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.26.13 21.05		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	97	%	69-133	03.26.13 21.05	
1,2-Dichloroethane-D4	17060-07-0	109	%	66-139	03.26.13 21.05	
Toluene-D8	2037-26-5	92	%	70-130	03.26.13 21.05	
4-Bromofluorobenzene	460-00-4	92	%	70-135	03.26.13 21.05	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB15-0100-14116 | Matrix: Water | Date Received: 03.19.13 15.26
Lab Sample Id: 459504-007 | Date Collected: 03.19.13 11.15

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.21.13 11.58
Seq Number: 909653

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.21.13 23.54		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.21.13 23.54		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.21.13 23.54		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.21.13 23.54		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.21.13 23.54		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.21.13 23.54		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.21.13 23.54	N1	1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.21.13 23.54		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.21.13 23.54		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.21.13 23.54		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.21.13 23.54		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.21.13 23.54		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.21.13 23.54		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.21.13 23.54		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.21.13 23.54		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.21.13 23.54		1
Chloroform	67-66-3	**0.940**	0.500	ug/L	03.21.13 23.54		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.21.13 23.54		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.21.13 23.54		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.21.13 23.54		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.21.13 23.54		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.21.13 23.54		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.21.13 23.54		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.21.13 23.54		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.21.13 23.54		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.21.13 23.54		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.21.13 23.54		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.21.13 23.54		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.21.13 23.54		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.21.13 23.54		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.21.13 23.54		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.21.13 23.54		1
cis-1,2-Dichloroethene	156-59-2	**6.20**	0.500	ug/L	03.21.13 23.54		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.21.13 23.54		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.21.13 23.54		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.21.13 23.54		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.21.13 23.54		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.21.13 23.54		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.21.13 23.54		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.21.13 23.54		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.21.13 23.54		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB15-0100-14116 Matrix: Water Date Received: 03.19.13 15.26
Lab Sample Id: 459504-007 Date Collected: 03.19.13 11.15

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.21.13 11.58
Seq Number: 909653

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.21.13 23.54		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.21.13 23.54		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.21.13 23.54		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.21.13 23.54		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.21.13 23.54		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.21.13 23.54		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.21.13 23.54		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.21.13 23.54		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.21.13 23.54		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.21.13 23.54		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.21.13 23.54		1
Tetrachloroethylene	127-18-4	**3.07**	0.500	ug/L	03.21.13 23.54		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.21.13 23.54		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.21.13 23.54		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.21.13 23.54		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.21.13 23.54		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.21.13 23.54		1
Trichloroethene	79-01-6	**34.7**	0.500	ug/L	03.21.13 23.54		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.21.13 23.54		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.21.13 23.54		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.21.13 23.54		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.21.13 23.54		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.21.13 23.54		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.21.13 23.54		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.21.13 23.54		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.21.13 23.54		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.21.13 23.54		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	71	%	69-133	03.21.13 23.54	
1,2-Dichloroethane-D4	17060-07-0	66	%	66-139	03.21.13 23.54	
Toluene-D8	2037-26-5	91	%	70-130	03.21.13 23.54	
4-Bromofluorobenzene	460-00-4	86	%	70-135	03.21.13 23.54	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB72-0100-24135 | Matrix: Water | Date Received: 03.19.13 15.26
Lab Sample Id: **459504-008** | Date Collected: 03.19.13 11.50

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.26.13 11.52
Seq Number: 909964

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.26.13 21.31		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.26.13 21.31		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.26.13 21.31		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.26.13 21.31		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.26.13 21.31		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.26.13 21.31		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.26.13 21.31		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.26.13 21.31		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.26.13 21.31		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.26.13 21.31		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.26.13 21.31		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.26.13 21.31		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.26.13 21.31		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.26.13 21.31		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.26.13 21.31		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.26.13 21.31		1
Chloroform	67-66-3	**1.89**	0.500	ug/L	03.26.13 21.31		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.26.13 21.31		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.26.13 21.31		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.26.13 21.31		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.26.13 21.31		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.26.13 21.31		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.26.13 21.31		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.26.13 21.31		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.26.13 21.31		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.26.13 21.31		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.26.13 21.31		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.26.13 21.31		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.26.13 21.31		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.26.13 21.31		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.26.13 21.31		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.26.13 21.31		1
cis-1,2-Dichloroethene	156-59-2	**1.00**	0.500	ug/L	03.26.13 21.31		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.26.13 21.31		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.26.13 21.31		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.26.13 21.31		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.26.13 21.31		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.26.13 21.31		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.26.13 21.31		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.26.13 21.31		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.26.13 21.31		1

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Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB72-0100-24135 | Matrix: Water | Date Received: 03.19.13 15.26

Lab Sample Id: 459504-008 | Date Collected: 03.19.13 11.50

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.26.13 11.52

Seq Number: 909964

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.26.13 21.31		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.26.13 21.31		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.26.13 21.31		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.26.13 21.31		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.26.13 21.31		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.26.13 21.31		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.26.13 21.31		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.26.13 21.31		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.26.13 21.31		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.26.13 21.31		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.26.13 21.31		1
Tetrachloroethylene	127-18-4	**2.79**	0.500	ug/L	03.26.13 21.31		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.26.13 21.31		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.26.13 21.31		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.26.13 21.31		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.26.13 21.31		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.26.13 21.31		1
Trichloroethene	79-01-6	**6.70**	0.500	ug/L	03.26.13 21.31		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.26.13 21.31		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.26.13 21.31		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.26.13 21.31		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.26.13 21.31		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.26.13 21.31		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.26.13 21.31		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.26.13 21.31		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.26.13 21.31		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.26.13 21.31		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	97	%	69-133	03.26.13 21.31	
1,2-Dichloroethane-D4	17060-07-0	112	%	66-139	03.26.13 21.31	
Toluene-D8	2037-26-5	91	%	70-130	03.26.13 21.31	
4-Bromofluorobenzene	460-00-4	88	%	70-135	03.26.13 21.31	

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: PS-9 | Matrix: Water | Date Received: 03.19.13 15.26
Lab Sample Id: 459504-009 | Date Collected: 03.19.13 12.48

Analytical Method: VOCs by EPA 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.27.13 15.15
Seq Number: 910156

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.28.13 00.24		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.28.13 00.24		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.28.13 00.24		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.28.13 00.24		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.28.13 00.24		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.28.13 00.24		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.28.13 00.24	N1	1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.28.13 00.24		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.28.13 00.24		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.28.13 00.24		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.28.13 00.24		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.28.13 00.24		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.28.13 00.24		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.28.13 00.24		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.28.13 00.24		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.28.13 00.24		1
Chloroform	67-66-3	**3.37**	0.500	ug/L	03.28.13 00.24		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.28.13 00.24		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.28.13 00.24		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.28.13 00.24		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.28.13 00.24		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.28.13 00.24		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.28.13 00.24		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.28.13 00.24		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.28.13 00.24		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.28.13 00.24		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.28.13 00.24		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.28.13 00.24		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.28.13 00.24		1
1,1-Dichloroethane	75-34-3	**0.500**	0.500	ug/L	03.28.13 00.24		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.28.13 00.24		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.28.13 00.24		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.28.13 00.24		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.28.13 00.24		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.28.13 00.24		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.28.13 00.24		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.28.13 00.24		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.28.13 00.24		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.28.13 00.24		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.28.13 00.24		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.28.13 00.24		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: PS-9 | Matrix: Water | Date Received: 03.19.13 15.26

Lab Sample Id: **459504-009** | Date Collected: 03.19.13 12.48

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.27.13 15.15

Seq Number: 910156

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.28.13 00.24		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.28.13 00.24		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.28.13 00.24		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.28.13 00.24		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.28.13 00.24		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.28.13 00.24		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.28.13 00.24		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.28.13 00.24		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.28.13 00.24		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.28.13 00.24		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.28.13 00.24		1
Tetrachloroethylene	127-18-4	**1.33**	0.500	ug/L	03.28.13 00.24		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.28.13 00.24		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.28.13 00.24		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.28.13 00.24		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.28.13 00.24		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.28.13 00.24		1
Trichloroethene	79-01-6	**5.23**	0.500	ug/L	03.28.13 00.24		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.28.13 00.24		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.28.13 00.24		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.28.13 00.24		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.28.13 00.24		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.28.13 00.24		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.28.13 00.24		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.28.13 00.24		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.28.13 00.24		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.28.13 00.24		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	101	%	69-133	03.28.13 00.24	
1,2-Dichloroethane-D4	17060-07-0	119	%	66-139	03.28.13 00.24	
Toluene-D8	2037-26-5	89	%	70-130	03.28.13 00.24	
4-Bromofluorobenzene	460-00-4	79	%	70-135	03.28.13 00.24	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: PS-7 Matrix: Water Date Received: 03.19.13 15.26
Lab Sample Id: **459504-010** Date Collected: 03.19.13 13.40

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.27.13 15.15
Seq Number: 910156

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.28.13 00.48		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.28.13 00.48		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.28.13 00.48		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.28.13 00.48		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.28.13 00.48		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.28.13 00.48		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.28.13 00.48	N1	1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.28.13 00.48		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.28.13 00.48		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.28.13 00.48		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.28.13 00.48		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.28.13 00.48		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.28.13 00.48		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.28.13 00.48		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.28.13 00.48		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.28.13 00.48		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.28.13 00.48		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.28.13 00.48		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.28.13 00.48		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.28.13 00.48		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.28.13 00.48		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.28.13 00.48		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.28.13 00.48		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.28.13 00.48		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.28.13 00.48		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.28.13 00.48		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.28.13 00.48		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.28.13 00.48		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.28.13 00.48		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.28.13 00.48		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.28.13 00.48		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.28.13 00.48		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.28.13 00.48		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.28.13 00.48		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.28.13 00.48		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.28.13 00.48		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.28.13 00.48		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.28.13 00.48		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.28.13 00.48		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.28.13 00.48		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.28.13 00.48		1

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: PS-7 | Matrix: Water | Date Received: 03.19.13 15.26
Lab Sample Id: **459504-010** | Date Collected: 03.19.13 13.40

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.27.13 15.15
Seq Number: 910156

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.28.13 00.48		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.28.13 00.48		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.28.13 00.48		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.28.13 00.48		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.28.13 00.48		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.28.13 00.48		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.28.13 00.48		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.28.13 00.48		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.28.13 00.48		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.28.13 00.48		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.28.13 00.48		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.28.13 00.48		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.28.13 00.48		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.28.13 00.48		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.28.13 00.48		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.28.13 00.48		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.28.13 00.48		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.28.13 00.48		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.28.13 00.48		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.28.13 00.48		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.28.13 00.48		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.28.13 00.48		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.28.13 00.48		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.28.13 00.48		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.28.13 00.48		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.28.13 00.48		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.28.13 00.48		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	69-133	03.28.13 00.48	
1,2-Dichloroethane-D4	17060-07-0	105	%	66-139	03.28.13 00.48	
Toluene-D8	2037-26-5	88	%	70-130	03.28.13 00.48	
4-Bromofluorobenzene	460-00-4	82	%	70-135	03.28.13 00.48	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: PS-6 | Matrix: Water | Date Received: 03.19.13 15.26
Lab Sample Id: **459504-011** | Date Collected: 03.19.13 14.20

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.28.13 13.29
Seq Number: 910263

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.28.13 18.42		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.28.13 18.42		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.28.13 18.42		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.28.13 18.42		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.28.13 18.42		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.28.13 18.42		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.28.13 18.42		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.28.13 18.42	M1	1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.28.13 18.42		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.28.13 18.42		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.28.13 18.42		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.28.13 18.42		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.28.13 18.42		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.28.13 18.42		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.28.13 18.42		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.28.13 18.42		1
Chloroform	67-66-3	**3.55**	0.500	ug/L	03.28.13 18.42		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.28.13 18.42		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.28.13 18.42		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.28.13 18.42		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.28.13 18.42		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.28.13 18.42		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.28.13 18.42		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.28.13 18.42		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.28.13 18.42		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.28.13 18.42		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.28.13 18.42		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.28.13 18.42		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.28.13 18.42		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.28.13 18.42		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.28.13 18.42		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.28.13 18.42		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.28.13 18.42		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.28.13 18.42		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.28.13 18.42		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.28.13 18.42		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.28.13 18.42		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.28.13 18.42		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.28.13 18.42		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.28.13 18.42		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.28.13 18.42		1

Final 1.000

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: PS-6 Matrix: Water Date Received: 03.19.13 15.26
Lab Sample Id: **459504-011** Date Collected: 03.19.13 14.20

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.28.13 13.29
Seq Number: 910263

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.28.13 18.42		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.28.13 18.42		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.28.13 18.42		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.28.13 18.42		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.28.13 18.42		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.28.13 18.42		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.28.13 18.42		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.28.13 18.42		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.28.13 18.42		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.28.13 18.42		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.28.13 18.42		1
Tetrachloroethylene	127-18-4	**0.660**	0.500	ug/L	03.28.13 18.42		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.28.13 18.42		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.28.13 18.42		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.28.13 18.42		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.28.13 18.42		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.28.13 18.42		1
Trichloroethene	79-01-6	**1.14**	0.500	ug/L	03.28.13 18.42		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.28.13 18.42		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.28.13 18.42		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.28.13 18.42		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.28.13 18.42		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.28.13 18.42		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.28.13 18.42		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.28.13 18.42		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.28.13 18.42		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.28.13 18.42		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	88	%	69-133	03.28.13 18.42	
1,2-Dichloroethane-D4	17060-07-0	95	%	66-139	03.28.13 18.42	
Toluene-D8	2037-26-5	83	%	70-130	03.28.13 18.42	
4-Bromofluorobenzene	460-00-4	75	%	70-135	03.28.13 18.42	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: PS-6E | Matrix: Water | Date Received: 03.19.13 15.26
Lab Sample Id: **459504-012** | Date Collected: 03.19.13 14.30

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.28.13 13.29
Seq Number: 910263

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.28.13 19.07		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.28.13 19.07		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.28.13 19.07		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.28.13 19.07		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.28.13 19.07		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.28.13 19.07		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.28.13 19.07		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.28.13 19.07		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.28.13 19.07		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.28.13 19.07		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.28.13 19.07		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.28.13 19.07		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.28.13 19.07		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.28.13 19.07		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.28.13 19.07		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.28.13 19.07		1
Chloroform	67-66-3	**19.9**	0.500	ug/L	03.28.13 19.07		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.28.13 19.07		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.28.13 19.07		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.28.13 19.07		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.28.13 19.07		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.28.13 19.07		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.28.13 19.07		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.28.13 19.07		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.28.13 19.07		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.28.13 19.07		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.28.13 19.07		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.28.13 19.07		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.28.13 19.07		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.28.13 19.07		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.28.13 19.07		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.28.13 19.07		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.28.13 19.07		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.28.13 19.07		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.28.13 19.07		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.28.13 19.07		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.28.13 19.07		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.28.13 19.07		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.28.13 19.07		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.28.13 19.07		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.28.13 19.07		1

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: PS-6E | Matrix: Water | Date Received: 03.19.13 15.26
Lab Sample Id: 459504-012 | Date Collected: 03.19.13 14.30

Analytical Method: VOCs by EPA 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.28.13 13.29
Seq Number: 910263

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.28.13 19.07		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.28.13 19.07		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.28.13 19.07		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.28.13 19.07		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.28.13 19.07		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.28.13 19.07		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.28.13 19.07		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.28.13 19.07		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.28.13 19.07		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.28.13 19.07		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.28.13 19.07		1
Tetrachloroethylene	127-18-4	**1.44**	0.500	ug/L	03.28.13 19.07		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.28.13 19.07		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.28.13 19.07		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.28.13 19.07		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.28.13 19.07		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.28.13 19.07		1
Trichloroethene	79-01-6	**4.99**	0.500	ug/L	03.28.13 19.07		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.28.13 19.07		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.28.13 19.07		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.28.13 19.07		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.28.13 19.07		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.28.13 19.07		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.28.13 19.07		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.28.13 19.07		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.28.13 19.07		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.28.13 19.07		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	106	%	69-133	03.28.13 19.07	
1,2-Dichloroethane-D4	17060-07-0	113	%	66-139	03.28.13 19.07	
Toluene-D8	2037-26-5	95	%	70-130	03.28.13 19.07	
4-Bromofluorobenzene	460-00-4	83	%	70-135	03.28.13 19.07	

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Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB88-0100-23118 Matrix: Water Date Received: 03.19.13 15.26
Lab Sample Id: **459504-002** Date Collected: 03.19.13 08.00

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 11.00
Seq Number: 909724 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0607**	0.0100	mg/L	03.22.13 20.49		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.25.13 07.40
Seq Number: 909838 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0569**	0.0100	mg/L	03.25.13 18.13		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.22.13 17.02
Seq Number: 909785 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.22.13 20.14	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	103	%	75-131	03.22.13 20.14	
1,2-Dichloroethane-D4	17060-07-0	105	%	63-144	03.22.13 20.14	
Toluene-D8	2037-26-5	98	%	80-117	03.22.13 20.14	
4-Bromofluorobenzene	460-00-4	101	%	74-124	03.22.13 20.14	

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WVBA

Sample Id: AVB88-0101-23118 Matrix: Water Date Received: 03.19.13 15.26
Lab Sample Id: 459504-003 Date Collected: 03.19.13 08.05

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 11.00
Seq Number: 909724 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0676**	0.0100	mg/L	03.22.13 21.17		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.25.13 07.40
Seq Number: 909838 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0590**	0.0100	mg/L	03.25.13 18.18		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.22.13 17.04
Seq Number: 909785 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.22.13 20.39	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	104	%	75-131	03.22.13 20.39	
1,2-Dichloroethane-D4	17060-07-0	102	%	63-144	03.22.13 20.39	
Toluene-D8	2037-26-5	99	%	80-117	03.22.13 20.39	
4-Bromofluorobenzene	460-00-4	98	%	74-124	03.22.13 20.39	

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Final 1.000

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Certificate of Analytical Results 459504

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WVBA

Sample Id: AVB97-0100-20118 Matrix: Water Date Received: 03.19.13 15.26
Lab Sample Id: 459504-004 Date Collected: 03.19.13 08.45

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 11.00
Seq Number: 909724 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0136**	0.0100	mg/L	03.22.13 21.23		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.25.13 07.40
Seq Number: 909838 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.25.13 18.24		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.22.13 17.06
Seq Number: 909785 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.22.13 21.04	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	105	%	75-131	03.22.13 21.04	
1,2-Dichloroethane-D4	17060-07-0	103	%	63-144	03.22.13 21.04	
Toluene-D8	2037-26-5	98	%	80-117	03.22.13 21.04	
4-Bromofluorobenzene	460-00-4	100	%	74-124	03.22.13 21.04	

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Final 1.000

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Certificate of Analytical Results 459504

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WVBA

Sample Id: AVB126-0100-13142 Matrix: Water Date Received: 03.19.13 15.26
Lab Sample Id: **459504-005** Date Collected: 03.19.13 09.44

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 11.00
Seq Number: 909724 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0163**	0.0100	mg/L	03.22.13 21.39		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.25.13 07.40
Seq Number: 909838 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.25.13 18.30		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.22.13 17.08
Seq Number: 909785 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.22.13 21.28	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	104	%	75-131	03.22.13 21.28	
1,2-Dichloroethane-D4	17060-07-0	101	%	63-144	03.22.13 21.28	
Toluene-D8	2037-26-5	97	%	80-117	03.22.13 21.28	
4-Bromofluorobenzene	460-00-4	98	%	74-124	03.22.13 21.28	

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Certificate of Analytical Results 459504

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WVBA

Sample Id: AVB70-0100-25115 Matrix: Water Date Received: 03.19.13 15.26
Lab Sample Id: **459504-006** Date Collected: 03.19.13 10.25

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 11.00
Seq Number: 909724 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**3.19**	0.0100	mg/L	03.22.13 21.45		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.25.13 07.40
Seq Number: 909838 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.25.13 18.35		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.22.13 17.10
Seq Number: 909785 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.22.13 21.52	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	104	%	75-131	03.22.13 21.52	
1,2-Dichloroethane-D4	17060-07-0	102	%	63-144	03.22.13 21.52	
Toluene-D8	2037-26-5	93	%	80-117	03.22.13 21.52	
4-Bromofluorobenzene	460-00-4	97	%	74-124	03.22.13 21.52	

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Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB15-0100-14116 Matrix: Water Date Received: 03.19.13 15.26
Lab Sample Id: **459504-007** Date Collected: 03.19.13 11.15

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 11.00
Seq Number: 909724 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0146**	0.0100	mg/L	03.22.13 21.51		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.25.13 07.40
Seq Number: 909838 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.25.13 18.41		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.22.13 17.12
Seq Number: 909785 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.22.13 22.18	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	101	%	75-131	03.22.13 22.18	
1,2-Dichloroethane-D4	17060-07-0	101	%	63-144	03.22.13 22.18	
Toluene-D8	2037-26-5	97	%	80-117	03.22.13 22.18	
4-Bromofluorobenzene	460-00-4	99	%	74-124	03.22.13 22.18	

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Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB72-0100-24135 Matrix: Water Date Received: 03.19.13 15.26
Lab Sample Id: **459504-008** Date Collected: 03.19.13 11.50

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 11.00
Seq Number: 909724 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**1.19**	0.0100	mg/L	03.22.13 21.56		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.25.13 07.40
Seq Number: 909838 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.25.13 18.47		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.25.13 14.58
Seq Number: 909897 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.25.13 16.49	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	104	%	75-131	03.25.13 16.49	
1,2-Dichloroethane-D4	17060-07-0	95	%	63-144	03.25.13 16.49	
Toluene-D8	2037-26-5	97	%	80-117	03.25.13 16.49	
4-Bromofluorobenzene	460-00-4	108	%	74-124	03.25.13 16.49	

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Terranext, Phoenix, AZ

WVBA

Sample Id: PS-9 Matrix: Water Date Received: 03.19.13 15.26
Lab Sample Id: **459504-009** Date Collected: 03.19.13 12.48

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 11.00
Seq Number: 909724 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0437**	0.0100	mg/L	03.22.13 22.02		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.25.13 07.40
Seq Number: 909838 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.25.13 18.52		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.25.13 15.14
Seq Number: 909897 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.25.13 20.06	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	110	%	75-131	03.25.13 20.06	
1,2-Dichloroethane-D4	17060-07-0	102	%	63-144	03.25.13 20.06	
Toluene-D8	2037-26-5	103	%	80-117	03.25.13 20.06	
4-Bromofluorobenzene	460-00-4	92	%	74-124	03.25.13 20.06	

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Terranext, Phoenix, AZ

WVBA

Sample Id: PS-7 Matrix: Water Date Received: 03.19.13 15.26
Lab Sample Id: **459504-010** Date Collected: 03.19.13 13.40

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.22.13 11.00
Seq Number: 909724 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.22.13 22.07		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.25.13 07.40
Seq Number: 909838 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.25.13 19.09		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.25.13 15.16
Seq Number: 909897 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.25.13 20.31	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	105	%	75-131	03.25.13 20.31	
1,2-Dichloroethane-D4	17060-07-0	104	%	63-144	03.25.13 20.31	
Toluene-D8	2037-26-5	102	%	80-117	03.25.13 20.31	
4-Bromofluorobenzene	460-00-4	103	%	74-124	03.25.13 20.31	

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Certificate of Analytical Results 459504

Terranext, Phoenix, AZ

WVBA

Sample Id: PS-6 Matrix: Water Date Received: 03.19.13 15.26
Lab Sample Id: 459504-011 Date Collected: 03.19.13 14.20

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.25.13 07.40
Seq Number: 909838 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0411**	0.0100	mg/L	03.25.13 17.44		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.25.13 07.40
Seq Number: 909838 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.25.13 19.15		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 03.25.13 15.18
Seq Number: 909897 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.25.13 20.56	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	109	%	75-131	03.25.13 20.56	
1,2-Dichloroethane-D4	17060-07-0	102	%	63-144	03.25.13 20.56	
Toluene-D8	2037-26-5	101	%	80-117	03.25.13 20.56	
4-Bromofluorobenzene	460-00-4	100	%	74-124	03.25.13 20.56	

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WVBA

Sample Id: PS-6E | Matrix: Water | Date Received: 03.19.13 15.26
Lab Sample Id: 459504-012 | Date Collected: 03.19.13 14.30

Analytical Method: **Total Metals by EPA 6010B** | Prep Method: SW3010A
Tech: MLI | % Moisture:
Analyst: MKO | Date Prep: 03.25.13 07.40
Seq Number: 909838 | SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0244**	0.0100	mg/L	03.25.13 17.39		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** | Prep Method: SW3010A
Tech: MLI | % Moisture:
Analyst: MKO | Date Prep: 03.25.13 07.40
Seq Number: 909838 | SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.25.13 19.21		1

Analytical Method: **1,4-Dioxane by EPA 8260B** | Prep Method: SW5030B
Tech: MCH | % Moisture:
Analyst: MCH | Date Prep: 03.25.13 15.20
Seq Number: 909897 | SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.25.13 21.20	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	109	%	75-131	03.25.13 21.20	
1,2-Dichloroethane-D4	17060-07-0	106	%	63-144	03.25.13 21.20	
Toluene-D8	2037-26-5	105	%	80-117	03.25.13 21.20	
4-Bromofluorobenzene	460-00-4	104	%	74-124	03.25.13 21.20	

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Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 20, 2013

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459592

Sample Identification

AVB108-0104-1000
AVB108-0100-25148
AVB108-0101-25148
AVB108-0200-18225
AVB112-0500-12160
AVB93-0100-20137
AVB92-0100-19138
AVB92-0104-1000

Introduction

This data review covers 8 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Samples AVB108-0104-1000 and AVB92-0104-1000 were identified as equipment blanks. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were not within QC limits. Since there were no associated samples, no data were qualified.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples AVB108-0100-25148 and AVB108-0101-25148 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)	Flag	A or P
	AVB108-0100-25148	AVB108-0101-25148			
Chloroform	3.61	3.52	3 (≤20)	-	-
1,1-Dichloroethane	0.620	0.720	15 (≤20)	-	-
cis-1,2-Dichloroethene	0.900	0.860	5 (≤20)	-	-
Tetrachloroethene	10.3	9.75	5 (≤20)	-	-
Trichloroethene	12.9	13.0	1 (≤20)	-	-

West Van Buren Area
Volatiles - Data Qualification Summary - SDG 459592

No Sample Data Qualified in this SDG

West Van Buren Area
Volatiles - Laboratory Blank Data Qualification Summary - SDG 459592

No Sample Data Qualified in this SDG

West Van Buren Area
Volatiles - Field Blank Data Qualification Summary - SDG 459592

No Sample Data Qualified in this SDG

LDC #: 29578I1a

SDG #: 459592

Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 5/1/13

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/20/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	459504-011 MS/D no Ass sample
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 2, 3
XVII.	Field blanks	ND	EB = 1, 8

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: water

1	AVB108-0104-1000 EB	11	635920-1-BLK	21		31	
2	AVB108-0100-25148 D	12		22		32	
3	AVB108-0101-25148 D	13		23		33	
4	AVB108-0200-18225	14		24		34	
5	AVB112-0500-12160	15		25		35	
6	AVB93-0100-20137	16		26		36	
7	AVB92-0100-19138	17		27		37	
8	AVB92-0104-1000 EB	18		28		38	
9		19		29		39	
10		20		30		40	

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene	BB. 1,1,2,2-Tetrachloroethane	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane	CC. Toluene	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform	EE. Ethylbenzene	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN. Iodomethane
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.1,1-Difluoroethane
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

LDC#: 29578I1a

VALIDATION FINDINGS WORKSHEET

Field Duplicates

Reviewer:
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N NA Were field duplicate pairs identified in this SDG?

Y N NA Were target analytes detected in the field duplicate pairs?

Compound	Concentration (ug/L)		≤ 20 RPD	
	2	3		
K	3.61	3.52	3	
I	0.620	0.720	15	
QQQ	0.900	0.860	5	
AA	10.3	9.75	5	
S	12.9	13.0	1	

V:\FIELD DUPLICATES\templates\29578I1a.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 20, 2012

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: 1,4-Dioxane

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459592

Sample Identification

AVB108-0100-25148
AVB108-0101-25148
AVB108-0200-18225
AVB112-0500-12160
AVB93-0100-20137
AVB92-0100-19138
AVB92-0104-1000

Introduction

This data review covers 7 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8260B for 1,4-Dioxane.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks

Sample AVB92-0104-1000 was identified as an equipment blank. No 1,4-dioxane was found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples AVB108-0100-25148 and AVB108-0101-25148 were identified as field duplicates. No 1,4-dioxane was detected in any of the samples.

West Van Buren Area
1,4-Dioxane - Data Qualification Summary - SDG 459592

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG 459592

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Field Blank Data Qualification Summary - SDG 459592

No Sample Data Qualified in this SDG

LDC #: 29578I1b

SDG #: 459592

Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 5/1/13

Page: 1 of 1

Reviewer:

2nd Reviewer:

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	Δ	Sampling dates: 3/20/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	Δ	
VI.	Surrogate spikes	Δ	
VII.	Matrix spike/Matrix spike duplicates	N	client specific
VIII.	Laboratory control samples	A	use ID
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = 1, 2
XVII.	Field blanks	ND	EB=7

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: Water

1	AVB108-0100-25148 D	11	636047-1-BLK	21		31	
2	AVB108-0101-25148 D	12		22		32	
3	AVB108-0200-18225	13		23		33	
4	AVB112-0500-12160	14		24		34	
5	AVB93-0100-20137	15		25		35	
6	AVB92-0100-19138	16		26		36	
7	AVB92-0104-1000 EB	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 20, 2013

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: Chromium

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459592

Sample Identification

AVB108-0100-25148
AVB108-0101-25148
AVB112-0500-12160
AVB93-0100-20137
AVB92-0100-19138
AVB92-0104-1000
AVB108-0100-25148F
AVB108-0101-25148F
AVB112-0500-12160F
AVB93-0100-20137F
AVB92-0100-19138F
AVB92-0104-1000F
AVB108-0100-25148MS
AVB108-0100-25148MSD

Sample IDs appended with "F" were analyzed for dissolved chromium.

Introduction

This data review covers 14 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6010B for Chromium.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

ICP-MS was not utilized in this SDG.

III. Calibration

Calibration data were not reviewed for Level III.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No chromium was found in the preparation blanks.

Samples AVB92-0104-1000 and AVB92-0104-1000F were identified as equipment blanks. No chromium was found.

V. ICP Interference Check Sample (ICS) Analysis

ICP interference check data were not reviewed for Level III.

VI. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Internal Standards

ICP-MS was not utilized in this SDG.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution was not performed for this SDG.

XII. Sample Result Verification

Raw data was not reviewed for this SDG.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

Samples AVB108-0100-25148 and AVB108-0101-25148 and samples AVB108-0100-25148F and AVB108-0101-25148F were identified as field duplicates. No chromium was detected in any of the samples with the following exceptions:

Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
	AVB108-0100-25148	AVB108-0101-25148			
Chromium	0.0268	0.0318	17 (≤20)	-	-

West Van Buren Area
Chromium - Data Qualification Summary - SDG 459592

No Sample Data Qualified in this SDG

West Van Buren Area
Chromium - Laboratory Blank Data Qualification Summary - SDG 459592

No Sample Data Qualified in this SDG

West Van Buren Area
Chromium - Field Blank Data Qualification Summary - SDG 459592

No Sample Data Qualified in this SDG

LDC #: 29578I4

SDG #: 459592

Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 4/30/13

Page: 1 of 1

Reviewer: W

2nd Reviewer: A

METHOD: Chromium (EPA SW846 Method 6010B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/20/13
II.	Calibration	N	
III.	Blanks	A	
IV.	ICP Interference Check Sample (ICS) Analysis	N	
V.	Matrix Spike Analysis	A	3MS/MSD
VI.	Duplicate Sample Analysis	N	
VII.	Laboratory Control Samples (LCS)	A	LCS/D
VIII.	Internal Standard (ICP-MS)	N	Not utilized
IX.	Furnace Atomic Absorption QC	N	↓
X.	ICP Serial Dilution	N	Not performed
XI.	Sample Result Verification	N	
XII.	Overall Assessment of Data	A	
XIII.	Field Duplicates	SW	(1,2) *(7,8)
XIV.	Field Blanks	MB	FB = 6,12

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
* ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: AB

1	AVB108-0100-25148	11	AVB92-0100-19138F	21	MB	11	
2	AVB108-0101-25148	12	AVB92-0104-1000F	22		12	
3	AVB112-0500-12160	13	AVB108-0100-25148MS	23		13	
4	AVB93-0100-20137	14	AVB108-0100-25148MSD	24		14	
5	AVB92-0100-19138	15		25		15	
6	AVB92-0104-1000	16		26		16	
7	AVB108-0100-25148F	17		27		17	
8	AVB108-0101-25148F	18		28		18	
9	AVB112-0500-12160F	19		29		19	
10	AVB93-0100-20137F	20		30		20	

Notes: Samples appended with "F" were analyzed for dissolved chromium

LDC#: 29578I4

VALIDATION FINDINGS WORKSHEET

Field Duplicates

Reviewer: [signature]

2nd Reviewer: [signature]

METHOD: Metals (EPA Method 6010B)

Analyte	Concentration (mg/L)		RPD (≤20)	Parent only
	1	2		
Chromium	0.0268	0.0318	17	

V:\FIELD DUPLICATES\FD_inorganic\29578I4.wpd

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459592

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB108-0104-1000
Lab Sample Id: 459592-001

Matrix: Water
Date Collected: 03.20.13 08.00

Date Received: 03.20.13 14.00

Analytical Method: VOCs by EPA 8260B
Tech: OEM
Analyst: OEM
Seq Number: 910263

Prep Method: SW5030C
% Moisture:

Date Prep: 03.28.13 13.29

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.28.13 19.32		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.28.13 19.32		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.28.13 19.32		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.28.13 19.32		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.28.13 19.32		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.28.13 19.32		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.28.13 19.32		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.28.13 19.32		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.28.13 19.32		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.28.13 19.32		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.28.13 19.32		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.28.13 19.32		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.28.13 19.32		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.28.13 19.32		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.28.13 19.32		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.28.13 19.32		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.28.13 19.32		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.28.13 19.32		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.28.13 19.32		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.28.13 19.32		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.28.13 19.32		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.28.13 19.32		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.28.13 19.32		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.28.13 19.32		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.28.13 19.32		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.28.13 19.32		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.28.13 19.32		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.28.13 19.32		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.28.13 19.32		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.28.13 19.32		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.28.13 19.32		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.28.13 19.32		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.28.13 19.32		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.28.13 19.32		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.28.13 19.32		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.28.13 19.32		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.28.13 19.32		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.28.13 19.32		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.28.13 19.32		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.28.13 19.32		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.28.13 19.32		1

Final 1.000

4/5/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459592

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB108-0104-1000
Lab Sample Id: 459592-001

Matrix: Water
Date Collected: 03.20.13 08.00

Date Received: 03.20.13 14.00

Prep Method: SW5030C
% Moisture:

Analytical Method: VOCs by EPA 8260B
Tech: OEM
Analyst: OEM
Seq Number: 910263

Date Prep: 03.28.13 13.29

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.28.13 19.32		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.28.13 19.32		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.28.13 19.32		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.28.13 19.32		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.28.13 19.32		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.28.13 19.32		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.28.13 19.32		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.28.13 19.32		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.28.13 19.32		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.28.13 19.32		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.28.13 19.32		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.28.13 19.32		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.28.13 19.32		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.28.13 19.32		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.28.13 19.32		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.28.13 19.32		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.28.13 19.32		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.28.13 19.32		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.28.13 19.32		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.28.13 19.32		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.28.13 19.32		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.28.13 19.32		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.28.13 19.32		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.28.13 19.32		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.28.13 19.32		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.28.13 19.32		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.28.13 19.32		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	103	%	69-133	03.28.13 19.32	
1,2-Dichloroethane-D4	17060-07-0	114	%	66-139	03.28.13 19.32	
Toluene-D8	2037-26-5	94	%	70-130	03.28.13 19.32	
4-Bromofluorobenzene	460-00-4	84	%	70-135	03.28.13 19.32	

Final 1.000

4/3/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459592

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB108-0100-25148 | Matrix: Water | Date Received: 03.20.13 14.00

Lab Sample Id: **459592-002** | Date Collected: 03.20.13 10.12

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.28.13 13.29

Seq Number: 910263

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.28.13 19.57		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.28.13 19.57		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.28.13 19.57		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.28.13 19.57		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.28.13 19.57		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.28.13 19.57		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.28.13 19.57		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.28.13 19.57		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.28.13 19.57		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.28.13 19.57		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.28.13 19.57		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.28.13 19.57		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.28.13 19.57		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.28.13 19.57		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.28.13 19.57		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.28.13 19.57		1
Chloroform	67-66-3	**3.61**	0.500	ug/L	03.28.13 19.57		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.28.13 19.57		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.28.13 19.57		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.28.13 19.57		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.28.13 19.57		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.28.13 19.57		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.28.13 19.57		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.28.13 19.57		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.28.13 19.57		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.28.13 19.57		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.28.13 19.57		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.28.13 19.57		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.28.13 19.57		1
1,1-Dichloroethane	75-34-3	**0.620**	0.500	ug/L	03.28.13 19.57		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.28.13 19.57		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.28.13 19.57		1
cis-1,2-Dichloroethene	156-59-2	**0.900**	0.500	ug/L	03.28.13 19.57		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.28.13 19.57		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.28.13 19.57		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.28.13 19.57		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.28.13 19.57		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.28.13 19.57		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.28.13 19.57		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.28.13 19.57		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.28.13 19.57		1

Final 1.000

4/3/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459592

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB108-0100-25148 | Matrix: Water | Date Received: 03.20.13 14.00
Lab Sample Id: **459592-002** | Date Collected: 03.20.13 10.12

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.28.13 13.29
Seq Number: 910263

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.28.13 19.57		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.28.13 19.57		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.28.13 19.57		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.28.13 19.57		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.28.13 19.57		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.28.13 19.57		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.28.13 19.57		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.28.13 19.57		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.28.13 19.57		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.28.13 19.57		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.28.13 19.57		1
Tetrachloroethylene	127-18-4	**10.3**	0.500	ug/L	03.28.13 19.57		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.28.13 19.57		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.28.13 19.57		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.28.13 19.57		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.28.13 19.57		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.28.13 19.57		1
Trichloroethene	79-01-6	**12.9**	0.500	ug/L	03.28.13 19.57		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.28.13 19.57		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.28.13 19.57		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.28.13 19.57		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.28.13 19.57		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.28.13 19.57		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.28.13 19.57		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.28.13 19.57		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.28.13 19.57		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.28.13 19.57		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	104	%	69-133	03.28.13 19.57	
1,2-Dichloroethane-D4	17060-07-0	115	%	66-139	03.28.13 19.57	
Toluene-D8	2037-26-5	96	%	70-130	03.28.13 19.57	
4-Bromofluorobenzene	460-00-4	83	%	70-135	03.28.13 19.57	

Final 1.000

4/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459592

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB108-0101-25148 | Matrix: Water | Date Received: 03.20.13 14.00
Lab Sample Id: **459592-003** | Date Collected: 03.20.13 10.15

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.28.13 13.29
Seq Number: 910263

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.28.13 20.22		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.28.13 20.22		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.28.13 20.22		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.28.13 20.22		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.28.13 20.22		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.28.13 20.22		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.28.13 20.22		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.28.13 20.22		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.28.13 20.22		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.28.13 20.22		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.28.13 20.22		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.28.13 20.22		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.28.13 20.22		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.28.13 20.22		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.28.13 20.22		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.28.13 20.22		1
Chloroform	67-66-3	**3.52**	0.500	ug/L	03.28.13 20.22		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.28.13 20.22		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.28.13 20.22		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.28.13 20.22		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.28.13 20.22		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.28.13 20.22		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.28.13 20.22		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.28.13 20.22		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.28.13 20.22		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.28.13 20.22		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.28.13 20.22		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.28.13 20.22		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.28.13 20.22		1
1,1-Dichloroethane	75-34-3	**0.720**	0.500	ug/L	03.28.13 20.22		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.28.13 20.22		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.28.13 20.22		1
cis-1,2-Dichloroethene	156-59-2	**0.860**	0.500	ug/L	03.28.13 20.22		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.28.13 20.22		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.28.13 20.22		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.28.13 20.22		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.28.13 20.22		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.28.13 20.22		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.28.13 20.22		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.28.13 20.22		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.28.13 20.22		1

Final 1.000

4/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459592

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB108-0101-25148
Lab Sample Id: 459592-003

Matrix: Water
Date Collected: 03.20.13 10.15

Date Received: 03.20.13 14.00

Analytical Method: VOCs by EPA 8260B
Tech: OEM
Analyst: OEM
Seq Number: 910263

Prep Method: SW5030C
% Moisture:

Date Prep: 03.28.13 13.29

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.28.13 20.22		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.28.13 20.22		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.28.13 20.22		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.28.13 20.22		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.28.13 20.22		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.28.13 20.22		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.28.13 20.22		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.28.13 20.22		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.28.13 20.22		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.28.13 20.22		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.28.13 20.22		1
Tetrachloroethylene	127-18-4	**9.75**	0.500	ug/L	03.28.13 20.22		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.28.13 20.22		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.28.13 20.22		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.28.13 20.22		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.28.13 20.22		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.28.13 20.22		1
Trichloroethene	79-01-6	**13.0**	0.500	ug/L	03.28.13 20.22		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.28.13 20.22		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.28.13 20.22		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.28.13 20.22		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.28.13 20.22		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.28.13 20.22		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.28.13 20.22		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.28.13 20.22		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.28.13 20.22		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.28.13 20.22		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	104	%	69-133	03.28.13 20.22	
1,2-Dichloroethane-D4	17060-07-0	112	%	66-139	03.28.13 20.22	
Toluene-D8	2037-26-5	95	%	70-130	03.28.13 20.22	
4-Bromofluorobenzene	460-00-4	83	%	70-135	03.28.13 20.22	

Final 1.000

4/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459592

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB108-0200-18225
Lab Sample Id: 459592-004

Matrix: Water
Date Collected: 03.20.13 10.30

Date Received: 03.20.13 14.00

Analytical Method: VOCs by EPA 8260B
Tech: OEM
Analyst: OEM
Seq Number: 910263

Prep Method: SW5030C
% Moisture:

Date Prep: 03.28.13 13.29

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.28.13 20.46		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.28.13 20.46		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.28.13 20.46		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.28.13 20.46		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.28.13 20.46		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.28.13 20.46		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.28.13 20.46		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.28.13 20.46		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.28.13 20.46		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.28.13 20.46		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.28.13 20.46		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.28.13 20.46		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.28.13 20.46		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.28.13 20.46		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.28.13 20.46		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.28.13 20.46		1
Chloroform	67-66-3	**9.73**	0.500	ug/L	03.28.13 20.46		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.28.13 20.46		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.28.13 20.46		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.28.13 20.46		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.28.13 20.46		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.28.13 20.46		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.28.13 20.46		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.28.13 20.46		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.28.13 20.46		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.28.13 20.46		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.28.13 20.46		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.28.13 20.46		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.28.13 20.46		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.28.13 20.46		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.28.13 20.46		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.28.13 20.46		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.28.13 20.46		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.28.13 20.46		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.28.13 20.46		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.28.13 20.46		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.28.13 20.46		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.28.13 20.46		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.28.13 20.46		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.28.13 20.46		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.28.13 20.46		1

Final 1.000

4/5/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459592

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB108-0200-18225** Matrix: Water Date Received: 03.20.13 14.00
Lab Sample Id: **459592-004** Date Collected: 03.20.13 10.30

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.28.13 13.29
Seq Number: 910263

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.28.13 20.46		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.28.13 20.46		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.28.13 20.46		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.28.13 20.46		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.28.13 20.46		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.28.13 20.46		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.28.13 20.46		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.28.13 20.46		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.28.13 20.46		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.28.13 20.46		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.28.13 20.46		1
Tetrachloroethylene	127-18-4	**3.24**	0.500	ug/L	03.28.13 20.46		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.28.13 20.46		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.28.13 20.46		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.28.13 20.46		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.28.13 20.46		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.28.13 20.46		1
Trichloroethene	79-01-6	**2.77**	0.500	ug/L	03.28.13 20.46		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.28.13 20.46		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.28.13 20.46		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.28.13 20.46		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.28.13 20.46		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.28.13 20.46		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.28.13 20.46		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.28.13 20.46		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.28.13 20.46		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.28.13 20.46		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	107	%	69-133	03.28.13 20.46	
1,2-Dichloroethane-D4	17060-07-0	117	%	66-139	03.28.13 20.46	
Toluene-D8	2037-26-5	94	%	70-130	03.28.13 20.46	
4-Bromofluorobenzene	460-00-4	81	%	70-135	03.28.13 20.46	

4/5/13/13

Final 1.000

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459592

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB112-0500-12160
Lab Sample Id: 459592-005

Matrix: Water
Date Collected: 03.20.13 11.38

Date Received: 03.20.13 14.00

Analytical Method: VOCs by EPA 8260B
Tech: OEM
Analyst: OEM
Seq Number: 910263

Date Prep: 03.28.13 13.29

Prep Method: SW5030C
% Moisture:

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.28.13 21.11		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.28.13 21.11		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.28.13 21.11		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.28.13 21.11		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.28.13 21.11		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.28.13 21.11		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.28.13 21.11		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.28.13 21.11		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.28.13 21.11		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.28.13 21.11		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.28.13 21.11		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.28.13 21.11		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.28.13 21.11		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.28.13 21.11		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.28.13 21.11		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.28.13 21.11		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.28.13 21.11		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.28.13 21.11		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.28.13 21.11		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.28.13 21.11		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.28.13 21.11		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.28.13 21.11		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.28.13 21.11		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.28.13 21.11		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.28.13 21.11		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.28.13 21.11		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.28.13 21.11		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.28.13 21.11		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.28.13 21.11		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.28.13 21.11		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.28.13 21.11		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.28.13 21.11		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.28.13 21.11		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.28.13 21.11		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.28.13 21.11		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.28.13 21.11		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.28.13 21.11		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.28.13 21.11		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.28.13 21.11		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.28.13 21.11		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.28.13 21.11		1

Final 1.000

4/5/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459592

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB112-0500-12160 | Matrix: Water | Date Received: 03.20.13 14.00

Lab Sample Id: **459592-005** | Date Collected: 03.20.13 11.38

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.28.13 13.29

Seq Number: 910263

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.28.13 21.11		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.28.13 21.11		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.28.13 21.11		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.28.13 21.11		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.28.13 21.11		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.28.13 21.11		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.28.13 21.11		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.28.13 21.11		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.28.13 21.11		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.28.13 21.11		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.28.13 21.11		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.28.13 21.11		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.28.13 21.11		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.28.13 21.11		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.28.13 21.11		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.28.13 21.11		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.28.13 21.11		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.28.13 21.11		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.28.13 21.11		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.28.13 21.11		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.28.13 21.11		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.28.13 21.11		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.28.13 21.11		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.28.13 21.11		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.28.13 21.11		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.28.13 21.11		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.28.13 21.11		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	105	%	69-133	03.28.13 21.11	
1,2-Dichloroethane-D4	17060-07-0	118	%	66-139	03.28.13 21.11	
Toluene-D8	2037-26-5	95	%	70-130	03.28.13 21.11	
4-Bromofluorobenzene	460-00-4	84	%	70-135	03.28.13 21.11	

Final 1.000

4/3/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459592

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB93-0100-20137 Matrix: Water Date Received: 03.20.13 14.00
Lab Sample Id: 459592-006 Date Collected: 03.20.13 12.20

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.28.13 13.29
Seq Number: 910263

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.28.13 21.36		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.28.13 21.36		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.28.13 21.36		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.28.13 21.36		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.28.13 21.36		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.28.13 21.36		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.28.13 21.36		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.28.13 21.36		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.28.13 21.36		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.28.13 21.36		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.28.13 21.36		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.28.13 21.36		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.28.13 21.36		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.28.13 21.36		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.28.13 21.36		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.28.13 21.36		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.28.13 21.36		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.28.13 21.36		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.28.13 21.36		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.28.13 21.36		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.28.13 21.36		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.28.13 21.36		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.28.13 21.36		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.28.13 21.36		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.28.13 21.36		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.28.13 21.36		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.28.13 21.36		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.28.13 21.36		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.28.13 21.36		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.28.13 21.36		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.28.13 21.36		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.28.13 21.36		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.28.13 21.36		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.28.13 21.36		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.28.13 21.36		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.28.13 21.36		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.28.13 21.36		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.28.13 21.36		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.28.13 21.36		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.28.13 21.36		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.28.13 21.36		1

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459592

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB93-0100-20137 | Matrix: Water | Date Received: 03.20.13 14.00
Lab Sample Id: **459592-006** | Date Collected: 03.20.13 12.20

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.28.13 13.29
Seq Number: 910263

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.28.13 21.36		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.28.13 21.36		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.28.13 21.36		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.28.13 21.36		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.28.13 21.36		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.28.13 21.36		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.28.13 21.36		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.28.13 21.36		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.28.13 21.36		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.28.13 21.36		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.28.13 21.36		1
Tetrachloroethylene	127-18-4	**8.31**	0.500	ug/L	03.28.13 21.36		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.28.13 21.36		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.28.13 21.36		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.28.13 21.36		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.28.13 21.36		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.28.13 21.36		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.28.13 21.36		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.28.13 21.36		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.28.13 21.36		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.28.13 21.36		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.28.13 21.36		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.28.13 21.36		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.28.13 21.36		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.28.13 21.36		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.28.13 21.36		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.28.13 21.36		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	107	%	69-133	03.28.13 21.36	
1,2-Dichloroethane-D4	17060-07-0	120	%	66-139	03.28.13 21.36	
Toluene-D8	2037-26-5	97	%	70-130	03.28.13 21.36	
4-Bromofluorobenzene	460-00-4	84	%	70-135	03.28.13 21.36	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459592

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB92-0100-19138 | Matrix: Water | Date Received: 03.20.13 14.00
Lab Sample Id: 459592-007 | Date Collected: 03.20.13 13.15

Analytical Method: VOCs by EPA 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.28.13 13.29
Seq Number: 910263

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.28.13 22.01		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.28.13 22.01		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.28.13 22.01		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.28.13 22.01		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.28.13 22.01		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.28.13 22.01		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.28.13 22.01		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.28.13 22.01		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.28.13 22.01		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.28.13 22.01		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.28.13 22.01		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.28.13 22.01		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.28.13 22.01		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.28.13 22.01		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.28.13 22.01		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.28.13 22.01		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.28.13 22.01		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.28.13 22.01		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.28.13 22.01		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.28.13 22.01		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.28.13 22.01		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.28.13 22.01		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.28.13 22.01		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.28.13 22.01		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.28.13 22.01		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.28.13 22.01		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.28.13 22.01		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.28.13 22.01		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.28.13 22.01		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.28.13 22.01		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.28.13 22.01		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.28.13 22.01		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.28.13 22.01		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.28.13 22.01		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.28.13 22.01		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.28.13 22.01		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.28.13 22.01		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.28.13 22.01		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.28.13 22.01		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.28.13 22.01		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.28.13 22.01		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459592

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB92-0100-19138 | Matrix: Water | Date Received: 03.20.13 14.00
Lab Sample Id: 459592-007 | Date Collected: 03.20.13 13.15

Analytical Method: VOCs by EPA 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.28.13 13.29
Seq Number: 910263

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.28.13 22.01		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.28.13 22.01		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.28.13 22.01		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.28.13 22.01		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.28.13 22.01		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.28.13 22.01		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.28.13 22.01		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.28.13 22.01		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.28.13 22.01		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.28.13 22.01		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.28.13 22.01		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.28.13 22.01		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.28.13 22.01		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.28.13 22.01		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.28.13 22.01		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.28.13 22.01		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.28.13 22.01		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.28.13 22.01		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.28.13 22.01		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.28.13 22.01		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.28.13 22.01		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.28.13 22.01		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.28.13 22.01		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.28.13 22.01		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.28.13 22.01		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.28.13 22.01		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.28.13 22.01		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	103	%	69-133	03.28.13 22.01	
1,2-Dichloroethane-D4	17060-07-0	117	%	66-139	03.28.13 22.01	
Toluene-D8	2037-26-5	96	%	70-130	03.28.13 22.01	
4-Bromofluorobenzene	460-00-4	84	%	70-135	03.28.13 22.01	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459592

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB92-0104-1000 Matrix: Water Date Received: 03.20.13 14.00
Lab Sample Id: **459592-008** Date Collected: 03.20.13 13.25

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.28.13 13.29
Seq Number: 910263

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.28.13 22.26		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.28.13 22.26		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.28.13 22.26		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.28.13 22.26		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.28.13 22.26		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.28.13 22.26		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.28.13 22.26		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.28.13 22.26		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.28.13 22.26		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.28.13 22.26		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.28.13 22.26		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.28.13 22.26		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.28.13 22.26		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.28.13 22.26		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.28.13 22.26		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.28.13 22.26		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.28.13 22.26		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.28.13 22.26		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.28.13 22.26		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.28.13 22.26		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.28.13 22.26		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.28.13 22.26		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.28.13 22.26		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.28.13 22.26		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.28.13 22.26		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.28.13 22.26		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.28.13 22.26		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.28.13 22.26		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.28.13 22.26		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.28.13 22.26		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.28.13 22.26		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.28.13 22.26		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.28.13 22.26		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.28.13 22.26		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.28.13 22.26		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.28.13 22.26		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.28.13 22.26		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.28.13 22.26		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.28.13 22.26		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.28.13 22.26		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.28.13 22.26		1

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459592

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB92-0104-1000 Matrix: Water Date Received: 03.20.13 14.00
Lab Sample Id: 459592-008 Date Collected: 03.20.13 13.25

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.28.13 13.29
Seq Number: 910263

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.28.13 22.26		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.28.13 22.26		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.28.13 22.26		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.28.13 22.26		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.28.13 22.26		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.28.13 22.26		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.28.13 22.26		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.28.13 22.26		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.28.13 22.26		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.28.13 22.26		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.28.13 22.26		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.28.13 22.26		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.28.13 22.26		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.28.13 22.26		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.28.13 22.26		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.28.13 22.26		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.28.13 22.26		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.28.13 22.26		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.28.13 22.26		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.28.13 22.26		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.28.13 22.26		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.28.13 22.26		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.28.13 22.26		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.28.13 22.26		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.28.13 22.26		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.28.13 22.26		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.28.13 22.26		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	104	%	69-133	03.28.13 22.26	
1,2-Dichloroethane-D4	17060-07-0	117	%	66-139	03.28.13 22.26	
Toluene-D8	2037-26-5	95	%	70-130	03.28.13 22.26	
4-Bromofluorobenzene	460-00-4	83	%	70-135	03.28.13 22.26	

4/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459592

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB108-0100-25148 Matrix: Water Date Received: 03.20.13 14.00
Lab Sample Id: 459592-002 Date Collected: 03.20.13 10.12

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.26.13 10.40
Seq Number: 909982 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0268**	0.0100	mg/L	03.26.13 20.59		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.26.13 10.40
Seq Number: 909982 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.26.13 22.07		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 04.02.13 14.22
Seq Number: 910456 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.02.13 15.26	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	112	%	75-131	04.02.13 15.26	
1,2-Dichloroethane-D4	17060-07-0	105	%	63-144	04.02.13 15.26	
Toluene-D8	2037-26-5	96	%	80-117	04.02.13 15.26	
4-Bromofluorobenzene	460-00-4	101	%	74-124	04.02.13 15.26	

4/5/13/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459592

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB108-0101-25148 Matrix: Water Date Received: 03.20.13 14.00
Lab Sample Id: 459592-003 Date Collected: 03.20.13 10.15

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.26.13 10.40
Seq Number: 909982 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0318**	0.0100	mg/L	03.26.13 21.27		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.26.13 10.40
Seq Number: 909982 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.26.13 22.13		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 04.02.13 14.24
Seq Number: 910456 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.02.13 15.50	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	118	%	75-131	04.02.13 15.50	
1,2-Dichloroethane-D4	17060-07-0	117	%	63-144	04.02.13 15.50	
Toluene-D8	2037-26-5	92	%	80-117	04.02.13 15.50	
4-Bromofluorobenzene	460-00-4	99	%	74-124	04.02.13 15.50	

Final 1.000

4/5/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459592

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB108-0200-18225 Matrix: Water Date Received: 03.20.13 14.00
Lab Sample Id: 459592-004 Date Collected: 03.20.13 10.30

Analytical Method: 1,4-Dioxane by EPA 8260B Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 04.02.13 14.26
Seq Number: 910456 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.02.13 16.13	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	120	%	75-131	04.02.13 16.13	
1,2-Dichloroethane-D4	17060-07-0	122	%	63-144	04.02.13 16.13	
Toluene-D8	2037-26-5	96	%	80-117	04.02.13 16.13	
4-Bromofluorobenzene	460-00-4	102	%	74-124	04.02.13 16.13	

4/13/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459592

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB112-0500-12160 Matrix: Water Date Received: 03.20.13 14.00
Lab Sample Id: 459592-005 Date Collected: 03.20.13 11.38

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.26.13 10.40
Seq Number: 909982 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0185**	0.0100	mg/L	03.26.13 21.33		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.26.13 10.40
Seq Number: 909982 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0106**	0.0100	mg/L	03.26.13 22.18		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 04.02.13 14.28
Seq Number: 910456 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.02.13 16.37	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	111	%	75-131	04.02.13 16.37	
1,2-Dichloroethane-D4	17060-07-0	113	%	63-144	04.02.13 16.37	
Toluene-D8	2037-26-5	97	%	80-117	04.02.13 16.37	
4-Bromofluorobenzene	460-00-4	108	%	74-124	04.02.13 16.37	

4/5/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459592

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB93-0100-20137 Matrix: Water Date Received: 03.20.13 14.00
Lab Sample Id: 459592-006 Date Collected: 03.20.13 12.20

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.26.13 10.40
Seq Number: 909982 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0295**	0.0100	mg/L	03.26.13 21.50		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.26.13 10.40
Seq Number: 909982 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.26.13 22.24		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 04.02.13 16.30
Seq Number: 910456 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.02.13 17.00	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	116	%	75-131	04.02.13 17.00	
1,2-Dichloroethane-D4	17060-07-0	112	%	63-144	04.02.13 17.00	
Toluene-D8	2037-26-5	96	%	80-117	04.02.13 17.00	
4-Bromofluorobenzene	460-00-4	102	%	74-124	04.02.13 17.00	

4/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459592

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB92-0100-19138 Matrix: Water Date Received: 03.20.13 14.00
Lab Sample Id: **459592-007** Date Collected: 03.20.13 13.15

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.26.13 10.40
Seq Number: 909982 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0575**	0.0100	mg/L	03.26.13 21.56		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.26.13 10.40
Seq Number: 909982 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0115**	0.0100	mg/L	03.26.13 22.30		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 04.02.13 16.32
Seq Number: 910456 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.02.13 17.24	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	114	%	75-131	04.02.13 17.24	
1,2-Dichloroethane-D4	17060-07-0	112	%	63-144	04.02.13 17.24	
Toluene-D8	2037-26-5	98	%	80-117	04.02.13 17.24	
4-Bromofluorobenzene	460-00-4	99	%	74-124	04.02.13 17.24	

4/5/13/13

Certificate of Analytical Results 459592

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB92-0104-1000 Matrix: Water Date Received: 03.20.13 14.00
Lab Sample Id: **459592-008** Date Collected: 03.20.13 13.25

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.26.13 10.40
Seq Number: 909982 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.26.13 22.01		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.26.13 10.40
Seq Number: 909982 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.26.13 22.35		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 04.02.13 16.34
Seq Number: 910456 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.02.13 17.48	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	114	%	75-131	04.02.13 17.48	
1,2-Dichloroethane-D4	17060-07-0	120	%	63-144	04.02.13 17.48	
Toluene-D8	2037-26-5	95	%	80-117	04.02.13 17.48	
4-Bromofluorobenzene	460-00-4	93	%	74-124	04.02.13 17.48	

4/13/13

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	West Van Buren Area
Collection Date:	March 20, 2013
LDC Report Date:	May 7, 2013
Matrix:	Water
Parameters:	Volatiles
Validation Level:	EPA Level III
Laboratory:	Xenco Laboratories
Sample Delivery Group (SDG):	459593

Sample Identification

AVB20-0300-19149

Introduction

This data review covers one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were not within QC limits. Since there were no associated samples, no data were qualified.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

West Van Buren Area
Volatiles - Data Qualification Summary - SDG 459593

No Sample Data Qualified in this SDG

West Van Buren Area
Volatiles - Laboratory Blank Data Qualification Summary - SDG 459593

No Sample Data Qualified in this SDG

West Van Buren Area
Volatiles - Field Blank Data Qualification Summary - SDG 459593

No Sample Data Qualified in this SDG

LDC #: 29578J1a

SDG #: 459593

Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 5/1/13

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/20/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	459504-11 MS/MD no ASS sample
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: water

1	AVB20-0300-19149	11	635920-1-BLK	21		31	
2		12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	West Van Buren Area
Collection Date:	March 20, 2013
LDC Report Date:	May 7, 2013
Matrix:	Water
Parameters:	1,4-Dioxane
Validation Level:	EPA Level III
Laboratory:	Xenco Laboratories
Sample Delivery Group (SDG):	459593

Sample Identification

AVB20-0300-19149

Introduction

This data review covers one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8260B for 1,4-Dioxane.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

West Van Buren Area
1,4-Dioxane - Data Qualification Summary - SDG 459593

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG 459593

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Field Blank Data Qualification Summary - SDG 459593

No Sample Data Qualified in this SDG

LDC #: 29578J1b

SDG #: 459593

Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 5/1/13

Page: 1 of 1

Reviewer: EJ

2nd Reviewer: [illegible]

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/20/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client specific
VIII.	Laboratory control samples	A	ves ID
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: water

1	AVB20-0300-19149	11	636047-1-BLK	21		31	
2		12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	West Van Buren Area
Collection Date:	March 20, 2013
LDC Report Date:	May 7, 2013
Matrix:	Water
Parameters:	Chromium
Validation Level:	EPA Level III
Laboratory:	Xenco Laboratories
Sample Delivery Group (SDG):	459593

Sample Identification

AVB20-0300-19149
AVB20-0300-19149F

Sample IDs appended with "F" were analyzed for dissolved chromium.

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6010B for Chromium.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

ICP-MS was not utilized in this SDG.

III. Calibration

Calibration data were not reviewed for Level III.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No chromium was found in the preparation blanks.

Samples AVB92-0104-1000 and AVB92-0104-1000F (from SDG 459592) were identified as equipment blanks. No chromium was found.

V. ICP Interference Check Sample (ICS) Analysis

ICP interference check data were not reviewed for Level III.

VI. Matrix Spike Analysis

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Internal Standards

ICP-MS was not utilized in this SDG.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution was not performed for this SDG.

XII. Sample Result Verification

Raw data was not reviewed for this SDG.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

West Van Buren Area
Chromium - Data Qualification Summary - SDG 459593

No Sample Data Qualified in this SDG

West Van Buren Area
Chromium - Laboratory Blank Data Qualification Summary - SDG 459593

No Sample Data Qualified in this SDG

West Van Buren Area
Chromium - Field Blank Data Qualification Summary - SDG 459593

No Sample Data Qualified in this SDG

LDC #: 29578J4 **VALIDATION COMPLETENESS WORKSHEET** Date: 4/30/13
SDG #: 459593 Level III Page: 1 of 1
Laboratory: Xenco Laboratories Reviewer: W
2nd Reviewer:

METHOD: Chromium (EPA SW846 Method 6010B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/20/13
II.	Calibration	N	
III.	Blanks	A	
IV.	ICP Interference Check Sample (ICS) Analysis	N	
V.	Matrix Spike Analysis	N	} CS
VI.	Duplicate Sample Analysis	N	
VII.	Laboratory Control Samples (LCS)	A	LCS/D
VIII.	Internal Standard (ICP-MS)	N	Not Within ↓
IX.	Furnace Atomic Absorption QC	N	Not performed
X.	ICP Serial Dilution	N	
XI.	Sample Result Verification	N	
XII.	Overall Assessment of Data	A	
XIII.	Field Duplicates	N	
XIV.	Field Blanks	ND	EB = AVB92-0104-1000 (459592) ↓ F

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: All

1	AVB20-0300-19149	11	MB	21		11	
2	AVB20-0300-19149F	12		22		12	
3		13		23		13	
4		14		24		14	
5		15		25		15	
6		16		26		16	
7		17		27		17	
8		18		28		18	
9		19		29		19	
10		20		30		20	

Notes: Samples appended with "F" were analyzed for dissolved chromium

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459593

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB20-0300-19149 Matrix: Water Date Received: 03.20.13 14.00
Lab Sample Id: **459593-001** Date Collected: 03.20.13 08.30

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.28.13 13.29
Seq Number: 910263

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.29.13 00.56		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.29.13 00.56		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.29.13 00.56		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.29.13 00.56		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.29.13 00.56		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.29.13 00.56		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.29.13 00.56		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.29.13 00.56		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.29.13 00.56		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.29.13 00.56		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.29.13 00.56		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.29.13 00.56		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.29.13 00.56		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.29.13 00.56		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.29.13 00.56		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.29.13 00.56		1
Chloroform	67-66-3	**4.22**	0.500	ug/L	03.29.13 00.56		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.29.13 00.56		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.29.13 00.56		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.29.13 00.56		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.29.13 00.56		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.29.13 00.56		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.29.13 00.56		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.29.13 00.56		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.29.13 00.56		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.29.13 00.56		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.29.13 00.56		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.29.13 00.56		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.29.13 00.56		1
1,1-Dichloroethane	75-34-3	**1.78**	0.500	ug/L	03.29.13 00.56		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.29.13 00.56		1
1,1-Dichloroethene	75-35-4	**2.17**	0.500	ug/L	03.29.13 00.56		1
cis-1,2-Dichloroethene	156-59-2	**6.98**	0.500	ug/L	03.29.13 00.56		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.29.13 00.56		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.29.13 00.56		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.29.13 00.56		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.29.13 00.56		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.29.13 00.56		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.29.13 00.56		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.29.13 00.56		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.29.13 00.56		1

3/13/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459593

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB20-0300-19149 Matrix: Water Date Received: 03.20.13 14.00
Lab Sample Id: 459593-001 Date Collected: 03.20.13 08.30

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.28.13 13.29
Seq Number: 910263

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.29.13 00.56		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.29.13 00.56		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.29.13 00.56		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.29.13 00.56		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.29.13 00.56		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.29.13 00.56		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.29.13 00.56		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.29.13 00.56		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.29.13 00.56		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.29.13 00.56		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.29.13 00.56		1
Tetrachloroethylene	127-18-4	**8.60**	0.500	ug/L	03.29.13 00.56		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.29.13 00.56		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.29.13 00.56		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.29.13 00.56		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.29.13 00.56		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.29.13 00.56		1
Trichloroethene	79-01-6	**47.6**	0.500	ug/L	03.29.13 00.56		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.29.13 00.56		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.29.13 00.56		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.29.13 00.56		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.29.13 00.56		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.29.13 00.56		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.29.13 00.56		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.29.13 00.56		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.29.13 00.56		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.29.13 00.56		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	98	%	69-133	03.29.13 00.56	
1,2-Dichloroethane-D4	17060-07-0	106	%	66-139	03.29.13 00.56	
Toluene-D8	2037-26-5	93	%	70-130	03.29.13 00.56	
4-Bromofluorobenzene	460-00-4	80	%	70-135	03.29.13 00.56	

4/5/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459593

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB20-0300-19149 Matrix: Water Date Received: 03.20.13 14.00
Lab Sample Id: **459593-001** Date Collected: 03.20.13 08.30

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.25.13 07.40
Seq Number: 909838 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.25.13 18.01		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.25.13 07.40
Seq Number: 909838 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.25.13 19.26		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 04.02.13 16.36
Seq Number: 910456 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.02.13 18.11	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	121	%	75-131	04.02.13 18.11	
1,2-Dichloroethane-D4	17060-07-0	114	%	63-144	04.02.13 18.11	
Toluene-D8	2037-26-5	94	%	80-117	04.02.13 18.11	
4-Bromofluorobenzene	460-00-4	104	%	74-124	04.02.13 18.11	

4/13/13

Final 1.000

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 21, 2013

LDC Report Date: May 13, 2013

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459683

Sample Identification

AVB91-0102-1000
AVB91-0100-21138
AVB76-0100-21113
AVB71-0100-25158
AVB74-0100-33098
AVB75-0100-25132
AVB73-0100-23118
AVB135-0100-12138
AVB135-0101-12138
AVB135-0104-1000

Introduction

This data review covers 10 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample AVB91-0102-1000 was identified as trip blank. No volatile contaminants were found.

Sample AVB135-0104-1000 was identified as an equipment blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were not within QC limits. Since there were no associated samples, no data were qualified.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
635798-1-BKS (All samples in SDG 459683)	Bromomethane	192 (58-138)	222 (58-138)	-	J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples AVB135-0100-12138 and AVB135-0101-12138 were identified as field duplicates. No volatiles were detected in any of the samples.

West Van Buren Area
Volatiles - Data Qualification Summary - SDG 459683

SDG	Sample	Compound	Flag	A or P	Reason (Code)
459683	AVB91-0102-1000 AVB91-0100-21138 AVB76-0100-21113 AVB71-0100-25158 AVB74-0100-33098 AVB75-0100-25132 AVB73-0100-23118 AVB135-0100-12138 AVB135-0101-12138 AVB135-0104-1000	Bromomethane	J (all detects)	P	Laboratory control samples (%R) (L1)

West Van Buren Area
Volatiles - Laboratory Blank Data Qualification Summary - SDG 459683

No Sample Data Qualified in this SDG

West Van Buren Area
Volatiles - Field Blank Data Qualification Summary - SDG 459683

No Sample Data Qualified in this SDG

LDC #: 29578K1a

SDG #: 459683

Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 5/1/13

Page: 1 of 1

Reviewer: P

2nd Reviewer:

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/21/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	SW	LCSD
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = 8, 9
XVII.	Field blanks	ND	TB = 1 EB = 10

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Water

1	AVB91-0102-1000 TB	11	635798-1-BLK	21		31	
2	AVB91-0100-21138	12		22		32	
3	AVB96-0100-21113	13		23		33	
4	AVB71-0100-25158	14		24		34	
5	AVB74-0100-33098	15		25		35	
6	AVB75-0100-25132	16		26		36	
7	AVB73-0100-23118	17		27		37	
8	AVB135-0100-12138 D	18		28		38	
9	AVB135-0101-12138 D	19		29		39	
10	AVB135-0104-1000 EB	20		30		40	

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene	BB. 1,1,2,2-Tetrachloroethane	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane	CC. Toluene	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform	EE. Ethylbenzene	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN. Iodomethane
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.1,1-Difluoroethane
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

LDC #: 29578K1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: FT
2nd Reviewer: _____

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		635798-1-BKS	B	192 (58-138)	222 (58-138)	( )	All	J/Pdet L1
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 21, 2012

LDC Report Date: May 10, 2013

Matrix: Water

Parameters: 1,4-Dioxane

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459683

Sample Identification

AVB91-0100-21138
AVB76-0100-21113
AVB71-0100-25158
AVB74-0100-33098
AVB75-0100-25132
AVB73-0100-23118
AVB135-0100-12138
AVB135-0101-12138
AVB135-0104-1000
AVB91-0100-21138MS
AVB91-0100-21138MSD

Introduction

This data review covers 11 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8260B for 1,4-Dioxane.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks

Sample AVB135-0100-12138 was identified as an equipment blank. No 1,4-dioxane was found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples AVB135-0101-12138 and AVB135-0104-1000 were identified as field duplicates. No 1,4-dioxane was detected in any of the samples.

West Van Buren Area
1,4-Dioxane - Data Qualification Summary - SDG 459683

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG 459683

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Field Blank Data Qualification Summary - SDG 459683

No Sample Data Qualified in this SDG

LDC #: 29578K1b **VALIDATION COMPLETENESS WORKSHEET** Date: 5/1/13
SDG #: 459683 Level III Page: 1 of 1
Laboratory: Xenco Laboratories Reviewer: D
2nd Reviewer:

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/21/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	459683-002 MS MD
VIII.	Laboratory control samples	A	LCS LCSD
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = 7, 8
XVII.	Field blanks	ND	EB = 9

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

water

1	AVB91-0100-21138	11	AVB91-0100-21138MSD	21	635986-1-BLK	31	
2	AVB96-0100-21113	12		22		32	
3	AVB71-0100-25158	13		23		33	
4	AVB74-0100-33098	14		24		34	
5	AVB75-0100-25132	15		25		35	
6	AVB73-0100-23118	16		26		36	
7	AVB135-0100-12138 D	17		27		37	
8	AVB135-0101-12138 D	18		28		38	
9	AVB135-0104-1000 EB	19		29		39	
10	AVB91-0100-21138MS	20		30		40	

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 21, 2013

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: Chromium

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459683

Sample Identification

AVB91-0100-21138
AVB76-0100-21113
AVB71-0100-25158
AVB74-0100-33098
AVB75-0100-25132
AVB73-0100-23118
AVB135-0100-12138
AVB135-0101-12138
AVB135-0104-1000
AVB91-0100-21138F
AVB96-0100-21113F
AVB71-0100-25158F
AVB74-0100-33098F
AVB75-0100-25132F
AVB73-0100-23118F
AVB135-0100-12138F
AVB135-0101-12138F
AVB135-0104-1000F
AVB91-0100-21138FMS
AVB91-0100-21138FMSD

Sample IDs appended with "F" were analyzed for dissolved chromium.

Introduction

This data review covers 20 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6010B for Chromium.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

ICP-MS was not utilized in this SDG.

III. Calibration

Calibration data were not reviewed for Level III.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No chromium was found in the preparation blanks.

Samples AVB135-0104-1000 and AVB135-0104-1000F were identified as equipment blanks. No chromium was found.

V. ICP Interference Check Sample (ICS) Analysis

ICP interference check data were not reviewed for Level III.

VI. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Internal Standards

ICP-MS was not utilized in this SDG.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution was not performed for this SDG.

XII. Sample Result Verification

Raw data was not reviewed for this SDG.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

Samples AVB135-0100-12138 and AVB135-0101-12138 and samples AVB135-0100-12138F and AVB135-0101-12138F were identified as field duplicates. No chromium was detected in any of the samples with the following exceptions:

Analyte	Concentration (mg/L)		RPD (Limits)	Flag	A or P
	AVB135-0100-12138	AVB135-0101-12138			
Chromium	0.0754	0.0715	5 (≤20)	-	-

West Van Buren Area
Chromium - Data Qualification Summary - SDG 459683

No Sample Data Qualified in this SDG

West Van Buren Area
Chromium - Laboratory Blank Data Qualification Summary - SDG 459683

No Sample Data Qualified in this SDG

West Van Buren Area
Chromium - Field Blank Data Qualification Summary - SDG 459683

No Sample Data Qualified in this SDG

LDC #: 29578K4
SDG #: 459683
Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 4/30/17
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Chromium (EPA SW846 Method 6010B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/21/17
II.	Calibration	N	
III.	Blanks	A	
IV.	ICP Interference Check Sample (ICS) Analysis	N	
V.	Matrix Spike Analysis	A	3MS/MSD
VI.	Duplicate Sample Analysis	N	
VII.	Laboratory Control Samples (LCS)	A	LCS/D
VIII.	Internal Standard (ICP-MS)	N	Not Utilized
IX.	Furnace Atomic Absorption QC	N	
X.	ICP Serial Dilution	N	Not performed
XI.	Sample Result Verification	N	
XII.	Overall Assessment of Data	A	
XIII.	Field Duplicates	SW	(7, 8), (16, 17)
XIV.	Field Blanks	ND	EB = 9, 18

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: All

1	AVB91-0100-21138	11	AVB96-0100-21113F	21	MB	11	
2	AVB96-0100-21113	12	AVB71-0100-25158F	22		12	
3	AVB71-0100-25158	13	AVB74-0100-33098F	23		13	
4	AVB74-0100-33098	14	AVB75-0100-25132F	24		14	
5	AVB75-0100-25132	15	AVB73-0100-23118F	25		15	
6	AVB73-0100-23118	16	AVB135-0100-12138F	26		16	
7	AVB135-0100-12138	17	AVB135-0101-12138F	27		17	
8	AVB135-0101-12138	18	AVB135-0104-1000F	28		18	
9	AVB135-0104-1000	19	AVB91-0100-21138FMS	29		19	
10	AVB91-0100-21138F	20	AVB91-0100-21138FMSD	30		20	

Notes: Samples appended with "F" were analyzed for dissolved chromium

LDC#: 29578K4

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer:
2nd Reviewer: A

METHOD: Metals (EPA Method 6010B)

Analyte	Concentration (mg/L)		RPD (≤20)	Parent only
	7	8		
Chromium	0.0754	0.0715	5	

V:\FIELD DUPLICATES\FD_inorganic\29578K4.wpd

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB91-0102-1000 Matrix: Water Date Received: 03.21.13 14.13
Lab Sample Id: 459683-001 Date Collected: 03.21.13 08.00

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.27.13 15.15
Seq Number: 910156

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.28.13 02.49		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.28.13 02.49		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.28.13 02.49		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.28.13 02.49		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.28.13 02.49		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.28.13 02.49		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.28.13 02.49	N1	1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.28.13 02.49		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.28.13 02.49		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.28.13 02.49		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.28.13 02.49		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.28.13 02.49		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.28.13 02.49		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.28.13 02.49		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.28.13 02.49		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.28.13 02.49		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.28.13 02.49		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.28.13 02.49		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.28.13 02.49		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.28.13 02.49		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.28.13 02.49		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.28.13 02.49		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.28.13 02.49		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.28.13 02.49		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.28.13 02.49		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.28.13 02.49		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.28.13 02.49		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.28.13 02.49		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.28.13 02.49		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.28.13 02.49		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.28.13 02.49		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.28.13 02.49		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.28.13 02.49		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.28.13 02.49		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.28.13 02.49		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.28.13 02.49		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.28.13 02.49		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.28.13 02.49		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.28.13 02.49		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.28.13 02.49		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.28.13 02.49		1

5/13/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB91-0102-1000 Matrix: Water Date Received: 03.21.13 14.13
Lab Sample Id: **459683-001** Date Collected: 03.21.13 08.00

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.27.13 15.15
Seq Number: 910156

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.28.13 02.49		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.28.13 02.49		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.28.13 02.49		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.28.13 02.49		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.28.13 02.49		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.28.13 02.49		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.28.13 02.49		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.28.13 02.49		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.28.13 02.49		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.28.13 02.49		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.28.13 02.49		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.28.13 02.49		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.28.13 02.49		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.28.13 02.49		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.28.13 02.49		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.28.13 02.49		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.28.13 02.49		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.28.13 02.49		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.28.13 02.49		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.28.13 02.49		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.28.13 02.49		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.28.13 02.49		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.28.13 02.49		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.28.13 02.49		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.28.13 02.49		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.28.13 02.49		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.28.13 02.49		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	93	%	69-133	03.28.13 02.49	
1,2-Dichloroethane-D4	17060-07-0	103	%	66-139	03.28.13 02.49	
Toluene-D8	2037-26-5	88	%	70-130	03.28.13 02.49	
4-Bromofluorobenzene	460-00-4	79	%	70-135	03.28.13 02.49	

5/13/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB91-0100-21138 | Matrix: Water | Date Received: 03.21.13 14.13

Lab Sample Id: **459683-002** | Date Collected: 03.21.13 08.10

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.27.13 15.15

Seq Number: 910156

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.27.13 20.46		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.27.13 20.46		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.27.13 20.46		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.27.13 20.46		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.27.13 20.46		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.27.13 20.46		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.27.13 20.46	N1	1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.27.13 20.46		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.27.13 20.46		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.27.13 20.46		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.27.13 20.46		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.27.13 20.46		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.27.13 20.46		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.27.13 20.46		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.27.13 20.46		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.27.13 20.46		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.27.13 20.46		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.27.13 20.46		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.27.13 20.46		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.27.13 20.46		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.27.13 20.46		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.27.13 20.46		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.27.13 20.46		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.27.13 20.46		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.27.13 20.46		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.27.13 20.46		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.27.13 20.46		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.27.13 20.46		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.27.13 20.46		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.27.13 20.46		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.27.13 20.46		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.27.13 20.46		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.27.13 20.46		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.27.13 20.46		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.27.13 20.46		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.27.13 20.46		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.27.13 20.46		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.27.13 20.46		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.27.13 20.46		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.27.13 20.46		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.27.13 20.46		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB91-0100-21138 Matrix: Water Date Received: 03.21.13 14.13
Lab Sample Id: 459683-002 Date Collected: 03.21.13 08.10

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.27.13 15.15
Seq Number: 910156

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.27.13 20.46		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.27.13 20.46		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.27.13 20.46		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.27.13 20.46		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.27.13 20.46		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.27.13 20.46		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.27.13 20.46		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.27.13 20.46		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.27.13 20.46		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.27.13 20.46		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.27.13 20.46		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.27.13 20.46		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.27.13 20.46		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.27.13 20.46		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.27.13 20.46		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.27.13 20.46		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.27.13 20.46		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.27.13 20.46		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.27.13 20.46		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.27.13 20.46		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.27.13 20.46		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.27.13 20.46		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.27.13 20.46		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.27.13 20.46		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.27.13 20.46		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.27.13 20.46		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.27.13 20.46		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	88	%	69-133	03.27.13 20.46	
1,2-Dichloroethane-D4	17060-07-0	100	%	66-139	03.27.13 20.46	
Toluene-D8	2037-26-5	87	%	70-130	03.27.13 20.46	
4-Bromofluorobenzene	460-00-4	88	%	70-135	03.27.13 20.46	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB76-0100-21113 | Matrix: Water | Date Received: 03.21.13 14.13
Lab Sample Id: **459683-003** | Date Collected: 03.21.13 08.55

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.27.13 15.15
Seq Number: 910156

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.27.13 21.10		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.27.13 21.10		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.27.13 21.10		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.27.13 21.10		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.27.13 21.10		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.27.13 21.10		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.27.13 21.10	N1	1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.27.13 21.10		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.27.13 21.10		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.27.13 21.10		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.27.13 21.10		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.27.13 21.10		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.27.13 21.10		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.27.13 21.10		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.27.13 21.10		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.27.13 21.10		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.27.13 21.10		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.27.13 21.10		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.27.13 21.10		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.27.13 21.10		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.27.13 21.10		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.27.13 21.10		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.27.13 21.10		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.27.13 21.10		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.27.13 21.10		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.27.13 21.10		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.27.13 21.10		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.27.13 21.10		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.27.13 21.10		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.27.13 21.10		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.27.13 21.10		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.27.13 21.10		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.27.13 21.10		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.27.13 21.10		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.27.13 21.10		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.27.13 21.10		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.27.13 21.10		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.27.13 21.10		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.27.13 21.10		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.27.13 21.10		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.27.13 21.10		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB76-0100-21113 Matrix: Water Date Received: 03.21.13 14.13
Lab Sample Id: **459683-003** Date Collected: 03.21.13 08.55

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.27.13 15.15
Seq Number: 910156

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.27.13 21.10		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.27.13 21.10		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.27.13 21.10		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.27.13 21.10		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.27.13 21.10		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.27.13 21.10		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.27.13 21.10		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.27.13 21.10		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.27.13 21.10		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.27.13 21.10		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.27.13 21.10		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.27.13 21.10		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.27.13 21.10		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.27.13 21.10		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.27.13 21.10		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.27.13 21.10		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.27.13 21.10		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.27.13 21.10		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.27.13 21.10		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.27.13 21.10		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.27.13 21.10		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.27.13 21.10		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.27.13 21.10		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.27.13 21.10		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.27.13 21.10		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.27.13 21.10		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.27.13 21.10		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	91	%	69-133	03.27.13 21.10	
1,2-Dichloroethane-D4	17060-07-0	100	%	66-139	03.27.13 21.10	
Toluene-D8	2037-26-5	87	%	70-130	03.27.13 21.10	
4-Bromofluorobenzene	460-00-4	86	%	70-135	03.27.13 21.10	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB71-0100-25158 | Matrix: Water | Date Received: 03.21.13 14.13

Lab Sample Id: **459683-004** | Date Collected: 03.21.13 09.45

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.27.13 15.15

Seq Number: 910156

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.27.13 21.34		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.27.13 21.34		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.27.13 21.34		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.27.13 21.34		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.27.13 21.34		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.27.13 21.34		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.27.13 21.34	N1	1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.27.13 21.34		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.27.13 21.34		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.27.13 21.34		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.27.13 21.34		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.27.13 21.34		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.27.13 21.34		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.27.13 21.34		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.27.13 21.34		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.27.13 21.34		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.27.13 21.34		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.27.13 21.34		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.27.13 21.34		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.27.13 21.34		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.27.13 21.34		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.27.13 21.34		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.27.13 21.34		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.27.13 21.34		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.27.13 21.34		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.27.13 21.34		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.27.13 21.34		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.27.13 21.34		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.27.13 21.34		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.27.13 21.34		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.27.13 21.34		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.27.13 21.34		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.27.13 21.34		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.27.13 21.34		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.27.13 21.34		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.27.13 21.34		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.27.13 21.34		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.27.13 21.34		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.27.13 21.34		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.27.13 21.34		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.27.13 21.34		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB71-0100-25158 | Matrix: Water | Date Received: 03.21.13 14.13
Lab Sample Id: 459683-004 | Date Collected: 03.21.13 09.45

Analytical Method: VOCs by EPA 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.27.13 15.15
Seq Number: 910156

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.27.13 21.34		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.27.13 21.34		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.27.13 21.34		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.27.13 21.34		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.27.13 21.34		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.27.13 21.34		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.27.13 21.34		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.27.13 21.34		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.27.13 21.34		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.27.13 21.34		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.27.13 21.34		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.27.13 21.34		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.27.13 21.34		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.27.13 21.34		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.27.13 21.34		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.27.13 21.34		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.27.13 21.34		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.27.13 21.34		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.27.13 21.34		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.27.13 21.34		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.27.13 21.34		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.27.13 21.34		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.27.13 21.34		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.27.13 21.34		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.27.13 21.34		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.27.13 21.34		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.27.13 21.34		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	95	%	69-133	03.27.13 21.34	
1,2-Dichloroethane-D4	17060-07-0	102	%	66-139	03.27.13 21.34	
Toluene-D8	2037-26-5	87	%	70-130	03.27.13 21.34	
4-Bromofluorobenzene	460-00-4	84	%	70-135	03.27.13 21.34	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB74-0100-33098 Matrix: Water Date Received: 03.21.13 14.13
Lab Sample Id: 459683-005 Date Collected: 03.21.13 10.30

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.27.13 15.15
Seq Number: 910156

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.27.13 21.58		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.27.13 21.58		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.27.13 21.58		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.27.13 21.58		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.27.13 21.58		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.27.13 21.58		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.27.13 21.58	N1	1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.27.13 21.58		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.27.13 21.58		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.27.13 21.58		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.27.13 21.58		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.27.13 21.58		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.27.13 21.58		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.27.13 21.58		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.27.13 21.58		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.27.13 21.58		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.27.13 21.58		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.27.13 21.58		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.27.13 21.58		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.27.13 21.58		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.27.13 21.58		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.27.13 21.58		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.27.13 21.58		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.27.13 21.58		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.27.13 21.58		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.27.13 21.58		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.27.13 21.58		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.27.13 21.58		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.27.13 21.58		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.27.13 21.58		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.27.13 21.58		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.27.13 21.58		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.27.13 21.58		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.27.13 21.58		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.27.13 21.58		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.27.13 21.58		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.27.13 21.58		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.27.13 21.58		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.27.13 21.58		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.27.13 21.58		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.27.13 21.58		1

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB74-0100-33098 Matrix: Water Date Received: 03.21.13 14.13
Lab Sample Id: **459683-005** Date Collected: 03.21.13 10.30

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.27.13 15.15
Seq Number: 910156

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.27.13 21.58		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.27.13 21.58		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.27.13 21.58		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.27.13 21.58		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.27.13 21.58		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.27.13 21.58		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.27.13 21.58		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.27.13 21.58		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.27.13 21.58		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.27.13 21.58		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.27.13 21.58		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.27.13 21.58		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.27.13 21.58		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.27.13 21.58		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.27.13 21.58		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.27.13 21.58		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.27.13 21.58		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.27.13 21.58		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.27.13 21.58		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.27.13 21.58		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.27.13 21.58		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.27.13 21.58		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.27.13 21.58		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.27.13 21.58		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.27.13 21.58		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.27.13 21.58		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.27.13 21.58		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	88	%	69-133	03.27.13 21.58	
1,2-Dichloroethane-D4	17060-07-0	94	%	66-139	03.27.13 21.58	
Toluene-D8	2037-26-5	87	%	70-130	03.27.13 21.58	
4-Bromofluorobenzene	460-00-4	84	%	70-135	03.27.13 21.58	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB75-0100-25132 | Matrix: Water | Date Received: 03.21.13 14.13

Lab Sample Id: **459683-006** | Date Collected: 03.21.13 11.15

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.27.13 15.15

Seq Number: 910156

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.27.13 22.23		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.27.13 22.23		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.27.13 22.23		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.27.13 22.23		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.27.13 22.23		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.27.13 22.23		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.27.13 22.23	N1	1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.27.13 22.23		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.27.13 22.23		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.27.13 22.23		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.27.13 22.23		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.27.13 22.23		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.27.13 22.23		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.27.13 22.23		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.27.13 22.23		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.27.13 22.23		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.27.13 22.23		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.27.13 22.23		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.27.13 22.23		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.27.13 22.23		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.27.13 22.23		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.27.13 22.23		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.27.13 22.23		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.27.13 22.23		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.27.13 22.23		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.27.13 22.23		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.27.13 22.23		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.27.13 22.23		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.27.13 22.23		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.27.13 22.23		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.27.13 22.23		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.27.13 22.23		1
cis-1,2-Dichloroethene	156-59-2	**1.03**	0.500	ug/L	03.27.13 22.23		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.27.13 22.23		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.27.13 22.23		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.27.13 22.23		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.27.13 22.23		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.27.13 22.23		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.27.13 22.23		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.27.13 22.23		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.27.13 22.23		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB75-0100-25132 | Matrix: Water | Date Received: 03.21.13 14.13

Lab Sample Id: **459683-006** | Date Collected: 03.21.13 11.15

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.27.13 15.15

Seq Number: 910156

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.27.13 22.23		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.27.13 22.23		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.27.13 22.23		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.27.13 22.23		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.27.13 22.23		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.27.13 22.23		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.27.13 22.23		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.27.13 22.23		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.27.13 22.23		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.27.13 22.23		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.27.13 22.23		1
Tetrachloroethylene	127-18-4	**13.6**	0.500	ug/L	03.27.13 22.23		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.27.13 22.23		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.27.13 22.23		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.27.13 22.23		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.27.13 22.23		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.27.13 22.23		1
Trichloroethene	79-01-6	**2.29**	0.500	ug/L	03.27.13 22.23		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.27.13 22.23		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.27.13 22.23		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.27.13 22.23		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.27.13 22.23		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.27.13 22.23		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.27.13 22.23		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.27.13 22.23		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.27.13 22.23		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.27.13 22.23		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	88	%	69-133	03.27.13 22.23	
1,2-Dichloroethane-D4	17060-07-0	94	%	66-139	03.27.13 22.23	
Toluene-D8	2037-26-5	86	%	70-130	03.27.13 22.23	
4-Bromofluorobenzene	460-00-4	84	%	70-135	03.27.13 22.23	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB73-0100-23118 Matrix: Water Date Received: 03.21.13 14.13
Lab Sample Id: 459683-007 Date Collected: 03.21.13 11.50

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.27.13 15.15
Seq Number: 910156

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.27.13 22.47		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.27.13 22.47		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.27.13 22.47		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.27.13 22.47		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.27.13 22.47		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.27.13 22.47		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.27.13 22.47	N1	1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.27.13 22.47		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.27.13 22.47		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.27.13 22.47		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.27.13 22.47		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.27.13 22.47		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.27.13 22.47		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.27.13 22.47		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.27.13 22.47		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.27.13 22.47		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.27.13 22.47		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.27.13 22.47		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.27.13 22.47		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.27.13 22.47		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.27.13 22.47		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.27.13 22.47		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.27.13 22.47		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.27.13 22.47		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.27.13 22.47		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.27.13 22.47		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.27.13 22.47		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.27.13 22.47		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.27.13 22.47		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.27.13 22.47		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.27.13 22.47		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.27.13 22.47		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.27.13 22.47		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.27.13 22.47		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.27.13 22.47		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.27.13 22.47		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.27.13 22.47		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.27.13 22.47		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.27.13 22.47		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.27.13 22.47		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.27.13 22.47		1

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB73-0100-23118 | Matrix: Water | Date Received: 03.21.13 14.13
Lab Sample Id: 459683-007 | Date Collected: 03.21.13 11.50

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.27.13 15.15
Seq Number: 910156

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.27.13 22.47		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.27.13 22.47		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.27.13 22.47		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.27.13 22.47		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.27.13 22.47		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.27.13 22.47		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.27.13 22.47		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.27.13 22.47		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.27.13 22.47		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.27.13 22.47		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.27.13 22.47		1
Tetrachloroethylene	127-18-4	**2.05**	0.500	ug/L	03.27.13 22.47		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.27.13 22.47		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.27.13 22.47		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.27.13 22.47		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.27.13 22.47		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.27.13 22.47		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.27.13 22.47		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.27.13 22.47		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.27.13 22.47		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.27.13 22.47		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.27.13 22.47		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.27.13 22.47		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.27.13 22.47		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.27.13 22.47		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.27.13 22.47		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.27.13 22.47		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	89	%	69-133	03.27.13 22.47	
1,2-Dichloroethane-D4	17060-07-0	96	%	66-139	03.27.13 22.47	
Toluene-D8	2037-26-5	86	%	70-130	03.27.13 22.47	
4-Bromofluorobenzene	460-00-4	84	%	70-135	03.27.13 22.47	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB135-0100-12138 | Matrix: Water | Date Received: 03.21.13 14.13
Lab Sample Id: 459683-008 | Date Collected: 03.21.13 12.43

Analytical Method: VOCs by EPA 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 03.27.13 15.15
Seq Number: 910156

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.27.13 23.11		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.27.13 23.11		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.27.13 23.11		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.27.13 23.11		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.27.13 23.11		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.27.13 23.11		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.27.13 23.11	N1	1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.27.13 23.11		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.27.13 23.11		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.27.13 23.11		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.27.13 23.11		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.27.13 23.11		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.27.13 23.11		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.27.13 23.11		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.27.13 23.11		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.27.13 23.11		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.27.13 23.11		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.27.13 23.11		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.27.13 23.11		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.27.13 23.11		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.27.13 23.11		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.27.13 23.11		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.27.13 23.11		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.27.13 23.11		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.27.13 23.11		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.27.13 23.11		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.27.13 23.11		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.27.13 23.11		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.27.13 23.11		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.27.13 23.11		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.27.13 23.11		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.27.13 23.11		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.27.13 23.11		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.27.13 23.11		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.27.13 23.11		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.27.13 23.11		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.27.13 23.11		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.27.13 23.11		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.27.13 23.11		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.27.13 23.11		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.27.13 23.11		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB135-0100-12138 | Matrix: Water | Date Received: 03.21.13 14.13

Lab Sample Id: **459683-008** | Date Collected: 03.21.13 12.43

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 03.27.13 15.15

Seq Number: 910156

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.27.13 23.11		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.27.13 23.11		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.27.13 23.11		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.27.13 23.11		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.27.13 23.11		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.27.13 23.11		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.27.13 23.11		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.27.13 23.11		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.27.13 23.11		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.27.13 23.11		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.27.13 23.11		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.27.13 23.11		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.27.13 23.11		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.27.13 23.11		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.27.13 23.11		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.27.13 23.11		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.27.13 23.11		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.27.13 23.11		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.27.13 23.11		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.27.13 23.11		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.27.13 23.11		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.27.13 23.11		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.27.13 23.11		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.27.13 23.11		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.27.13 23.11		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.27.13 23.11		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.27.13 23.11		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	89	%	69-133	03.27.13 23.11	
1,2-Dichloroethane-D4	17060-07-0	95	%	66-139	03.27.13 23.11	
Toluene-D8	2037-26-5	85	%	70-130	03.27.13 23.11	
4-Bromofluorobenzene	460-00-4	85	%	70-135	03.27.13 23.11	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB135-0101-12138 Matrix: Water Date Received: 03.21.13 14.13
Lab Sample Id: 459683-009 Date Collected: 03.21.13 12.45

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.27.13 15.15
Seq Number: 910156

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.27.13 23.35		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.27.13 23.35		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.27.13 23.35		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.27.13 23.35		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.27.13 23.35		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.27.13 23.35		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.27.13 23.35	NI	1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.27.13 23.35		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.27.13 23.35		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.27.13 23.35		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.27.13 23.35		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.27.13 23.35		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.27.13 23.35		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.27.13 23.35		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.27.13 23.35		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.27.13 23.35		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.27.13 23.35		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.27.13 23.35		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.27.13 23.35		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.27.13 23.35		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.27.13 23.35		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.27.13 23.35		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.27.13 23.35		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.27.13 23.35		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.27.13 23.35		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.27.13 23.35		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.27.13 23.35		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.27.13 23.35		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.27.13 23.35		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.27.13 23.35		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.27.13 23.35		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.27.13 23.35		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.27.13 23.35		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.27.13 23.35		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.27.13 23.35		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.27.13 23.35		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.27.13 23.35		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.27.13 23.35		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.27.13 23.35		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.27.13 23.35		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.27.13 23.35		1

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB135-0101-12138 Matrix: Water Date Received: 03.21.13 14.13
Lab Sample Id: 459683-009 Date Collected: 03.21.13 12.45

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.27.13 15.15
Seq Number: 910156

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.27.13 23.35		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.27.13 23.35		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.27.13 23.35		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.27.13 23.35		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.27.13 23.35		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.27.13 23.35		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.27.13 23.35		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.27.13 23.35		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.27.13 23.35		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.27.13 23.35		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.27.13 23.35		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.27.13 23.35		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.27.13 23.35		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.27.13 23.35		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.27.13 23.35		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.27.13 23.35		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.27.13 23.35		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.27.13 23.35		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.27.13 23.35		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.27.13 23.35		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.27.13 23.35		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.27.13 23.35		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.27.13 23.35		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.27.13 23.35		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.27.13 23.35		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.27.13 23.35		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.27.13 23.35		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	98	%	69-133	03.27.13 23.35	
1,2-Dichloroethane-D4	17060-07-0	107	%	66-139	03.27.13 23.35	
Toluene-D8	2037-26-5	89	%	70-130	03.27.13 23.35	
4-Bromofluorobenzene	460-00-4	82	%	70-135	03.27.13 23.35	

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Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB135-0104-1000 Matrix: Water Date Received: 03.21.13 14.13
Lab Sample Id: 459683-010 Date Collected: 03.21.13 13.00

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.27.13 15.15
Seq Number: 910156

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	03.28.13 00.00		1
Benzene	71-43-2	<0.500	0.500	ug/L	03.28.13 00.00		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.28.13 00.00		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.28.13 00.00		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.28.13 00.00		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.28.13 00.00		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.28.13 00.00	N1	1
2-Butanone	78-93-3	<5.00	5.00	ug/L	03.28.13 00.00		1
MTBE	1634-04-4	<2.00	2.00	ug/L	03.28.13 00.00		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.28.13 00.00		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.28.13 00.00		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.28.13 00.00		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.28.13 00.00		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.28.13 00.00		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.28.13 00.00		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.28.13 00.00		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.28.13 00.00		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.28.13 00.00		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.28.13 00.00		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.28.13 00.00		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.28.13 00.00		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.28.13 00.00		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.28.13 00.00		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.28.13 00.00		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.28.13 00.00		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.28.13 00.00		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.28.13 00.00		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.28.13 00.00		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.28.13 00.00		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.28.13 00.00		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.28.13 00.00		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.28.13 00.00		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.28.13 00.00		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.28.13 00.00		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.28.13 00.00		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.28.13 00.00		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.28.13 00.00		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.28.13 00.00		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.28.13 00.00		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.28.13 00.00		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.28.13 00.00		1

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Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB135-0104-1000 Matrix: Water Date Received: 03.21.13 14.13
Lab Sample Id: **459683-010** Date Collected: 03.21.13 13.00

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.27.13 15.15
Seq Number: 910156

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.28.13 00.00		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	03.28.13 00.00		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.28.13 00.00		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.28.13 00.00		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.28.13 00.00		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	03.28.13 00.00		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.28.13 00.00		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.28.13 00.00		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.28.13 00.00		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.28.13 00.00		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.28.13 00.00		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.28.13 00.00		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.28.13 00.00		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.28.13 00.00		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.28.13 00.00		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.28.13 00.00		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.28.13 00.00		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.28.13 00.00		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.28.13 00.00		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.28.13 00.00		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.28.13 00.00		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.28.13 00.00		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.28.13 00.00		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.28.13 00.00		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.28.13 00.00		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.28.13 00.00		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.28.13 00.00		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	96	%	69-133	03.28.13 00.00	
1,2-Dichloroethane-D4	17060-07-0	106	%	66-139	03.28.13 00.00	
Toluene-D8	2037-26-5	90	%	70-130	03.28.13 00.00	
4-Bromofluorobenzene	460-00-4	81	%	70-135	03.28.13 00.00	

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WVBA

Sample Id: AVB91-0100-21138 Matrix: Water Date Received: 03.21.13 14.13
Lab Sample Id: 459683-002 Date Collected: 03.21.13 08.10

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.25.13 09.00
Seq Number: 909855 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.141**	0.0100	mg/L	03.25.13 20.28		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.27.13 08.00
Seq Number: 910086 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0208**	0.0100	mg/L	03.27.13 16.36		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.30.13 16.31
Seq Number: 910368 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.30.13 18.03	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	106	%	75-131	03.30.13 18.03	
1,2-Dichloroethane-D4	17060-07-0	110	%	63-144	03.30.13 18.03	
Toluene-D8	2037-26-5	96	%	80-117	03.30.13 18.03	
4-Bromofluorobenzene	460-00-4	101	%	74-124	03.30.13 18.03	

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Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB76-0100-21113 Matrix: Water Date Received: 03.21.13 14.13
Lab Sample Id: 459683-003 Date Collected: 03.21.13 08.55

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.25.13 09.00
Seq Number: 909855 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.361**	0.0100	mg/L	03.25.13 20.34		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.27.13 08.00
Seq Number: 910086 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0115**	0.0100	mg/L	03.27.13 17.01		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.30.13 16.34
Seq Number: 910368 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.30.13 20.48	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	111	%	75-131	03.30.13 20.48	
1,2-Dichloroethane-D4	17060-07-0	115	%	63-144	03.30.13 20.48	
Toluene-D8	2037-26-5	97	%	80-117	03.30.13 20.48	
4-Bromofluorobenzene	460-00-4	105	%	74-124	03.30.13 20.48	

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Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB71-0100-25158 Matrix: Water Date Received: 03.21.13 14.13
Lab Sample Id: 459683-004 Date Collected: 03.21.13 09.45

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.25.13 09.00
Seq Number: 909855 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**1.21**	0.0100	mg/L	03.25.13 20.50		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.27.13 08.00
Seq Number: 910086 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.27.13 17.07		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.30.13 16.35
Seq Number: 910368 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.30.13 21.12	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	108	%	75-131	03.30.13 21.12	
1,2-Dichloroethane-D4	17060-07-0	116	%	63-144	03.30.13 21.12	
Toluene-D8	2037-26-5	98	%	80-117	03.30.13 21.12	
4-Bromofluorobenzene	460-00-4	100	%	74-124	03.30.13 21.12	

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Terranext, Phoenix, AZ

WVBA

Sample Id: AVB74-0100-33098 Matrix: Water Date Received: 03.21.13 14.13
Lab Sample Id: 459683-005 Date Collected: 03.21.13 10.30

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.25.13 09.00
Seq Number: 909855 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**5.74**	0.0100	mg/L	03.25.13 20.56		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.27.13 08.00
Seq Number: 910086 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0322**	0.0100	mg/L	03.27.13 17.13		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.30.13 16.36
Seq Number: 910368 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.30.13 21.36	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	118	%	75-131	03.30.13 21.36	
1,2-Dichloroethane-D4	17060-07-0	111	%	63-144	03.30.13 21.36	
Toluene-D8	2037-26-5	95	%	80-117	03.30.13 21.36	
4-Bromofluorobenzene	460-00-4	95	%	74-124	03.30.13 21.36	

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Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB75-0100-25132 Matrix: Water Date Received: 03.21.13 14.13
Lab Sample Id: 459683-006 Date Collected: 03.21.13 11.15

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.25.13 09.00
Seq Number: 909855 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**3.84**	0.0100	mg/L	03.25.13 21.02		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.27.13 08.00
Seq Number: 910086 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.27.13 17.31		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.30.13 16.37
Seq Number: 910368 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.30.13 21.59	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	112	%	75-131	03.30.13 21.59	
1,2-Dichloroethane-D4	17060-07-0	119	%	63-144	03.30.13 21.59	
Toluene-D8	2037-26-5	94	%	80-117	03.30.13 21.59	
4-Bromofluorobenzene	460-00-4	101	%	74-124	03.30.13 21.59	

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Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB73-0100-23118 Matrix: Water Date Received: 03.21.13 14.13
Lab Sample Id: 459683-007 Date Collected: 03.21.13 11.50

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.25.13 09.00
Seq Number: 909855 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**2.32**	0.0100	mg/L	03.25.13 21.08		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.27.13 08.00
Seq Number: 910086 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.27.13 17.37		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.30.13 16.38
Seq Number: 910368 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.30.13 22.23	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	119	%	75-131	03.30.13 22.23	
1,2-Dichloroethane-D4	17060-07-0	124	%	63-144	03.30.13 22.23	
Toluene-D8	2037-26-5	96	%	80-117	03.30.13 22.23	
4-Bromofluorobenzene	460-00-4	100	%	74-124	03.30.13 22.23	

4/5/13

Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB135-0100-12138 Matrix: Water Date Received: 03.21.13 14.13
Lab Sample Id: **459683-008** Date Collected: 03.21.13 12.43

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.25.13 09.00
Seq Number: 909855 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0754**	0.0100	mg/L	03.25.13 21.13		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.27.13 08.00
Seq Number: 910086 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.27.13 17.44		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.30.13 16.39
Seq Number: 910368 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.30.13 22.47	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	119	%	75-131	03.30.13 22.47	
1,2-Dichloroethane-D4	17060-07-0	120	%	63-144	03.30.13 22.47	
Toluene-D8	2037-26-5	97	%	80-117	03.30.13 22.47	
4-Bromofluorobenzene	460-00-4	101	%	74-124	03.30.13 22.47	

4/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB135-0101-12138 Matrix: Water Date Received: 03.21.13 14.13
Lab Sample Id: 459683-009 Date Collected: 03.21.13 12.45

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.25.13 09.00
Seq Number: 909855 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0715**	0.0100	mg/L	03.25.13 21.19		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.27.13 08.00
Seq Number: 910086 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.27.13 17.50		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.30.13 16.40
Seq Number: 910368 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.30.13 23.11	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	125	%	75-131	03.30.13 23.11	
1,2-Dichloroethane-D4	17060-07-0	128	%	63-144	03.30.13 23.11	
Toluene-D8	2037-26-5	97	%	80-117	03.30.13 23.11	
4-Bromofluorobenzene	460-00-4	90	%	74-124	03.30.13 23.11	

5/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459683

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB135-0104-1000 Matrix: Water Date Received: 03.21.13 14.13
Lab Sample Id: 459683-010 Date Collected: 03.21.13 13.00

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.25.13 09.00
Seq Number: 909855 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.25.13 21.25		1

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 03.27.13 08.00
Seq Number: 910086 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	03.27.13 17.56		1

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 03.30.13 16.41
Seq Number: 910368 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	03.30.13 23.34	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	112	%	75-131	03.30.13 23.34	
1,2-Dichloroethane-D4	17060-07-0	116	%	63-144	03.30.13 23.34	
Toluene-D8	2037-26-5	100	%	80-117	03.30.13 23.34	
4-Bromofluorobenzene	460-00-4	109	%	74-124	03.30.13 23.34	

4/13/13

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 22, 2013

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459692

Sample Identification

AVB115-0102-1000
AVB115-0100-19127
AVB123-0100-17148
AVB124-0100-17215
AVB116-0200-17205
AVB116-0100-19134
AVB132-0100-13210
AVB132-0101-13210
AVB127-0100-16140
AVB134-0100-12120
AVB134-0200-12230
AVB120-0300-08325
AVB120-0200-19245
AVB120-0100-19120
AVB123-0100-17148MS
AVB123-0100-17148MSD

Introduction

This data review covers 16 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample AVB115-0102-1000 was identified as an equipment blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
AVB123-0100-17148MS/MSD (AVB123-0100-17148)	Chloroethane	-	56 (59-163)	56 (≤20)	J (all detects) UJ (all non-detects)	A
AVB123-0100-17148MS/MSD (AVB123-0100-17148)	1,2-Dichloropropane Chloroform	143 (70-130) -	- 124 (65-123)	26 (≤20) -	J (all detects) J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
635966-1-BKS (AVB115-0100-19127	Chloroethane	-	-	56 (≤24)	J (all detects) UJ (all non-detects)	P
AVB123-0100-17148 AVB124-0100-17215 AVB116-0200-17205 AVB116-0100-19134 AVB132-0100-13210 AVB132-0101-13210 AVB127-0100-16140 AVB134-0100-12120 AVB134-0200-12230 AVB120-0200-19245 AVB120-0100-19120 635966-1-BLK)	1,1-Dichloroethane	155 (66-132)	-	40 (≤24)	J (all detects) UJ (all non-detects)	

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples AVB132-0100-13210 and AVB132-0101-13210 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)	Flag	A or P
	AVB132-0100-13210	AVB132-0101-13210			
Chloroform	1.08	1.40	26 (≤20)	J (all detects)	A
1,1-Dichloroethane	10.4	11.4	9 (≤20)	-	-
1,1-Dichloroethene	23.1	24.4	5 (≤20)	-	-
cis-1,2-Dichloroethene	31.7	33.0	4 (≤20)	-	-
Tetrachloroethene	8.36	8.10	3 (≤20)	-	-
Trichloroethene	177	182	3 (≤20)	-	-

West Van Buren Area
Volatiles - Data Qualification Summary - SDG 459692

SDG	Sample	Compound	Flag	A or P	Reason (Code)
459692	AVB123-0100-17148	Chloroethane	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (M2, R5)
459692	AVB123-0100-17148	1,2-Dichloropropane	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (M1, R5)
459692	AVB123-0100-17148	Chloroform	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (M1)
459692	AVB115-0100-19127 AVB123-0100-17148 AVB124-0100-17215 AVB116-0200-17205 AVB116-0100-19134 AVB132-0100-13210 AVB132-0101-13210 AVB127-0100-16140 AVB134-0100-12120 AVB134-0200-12230 AVB120-0300-08325 AVB120-0100-19120	Chloroethane	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (R7)
459692	AVB115-0100-19127 AVB123-0100-17148 AVB124-0100-17215 AVB116-0200-17205 AVB116-0100-19134 AVB132-0100-13210 AVB132-0101-13210 AVB127-0100-16140 AVB134-0100-12120 AVB134-0200-12230 AVB120-0200-19245 AVB120-0100-19120	1,1-Dichloroethane	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L1, R7)
459692	AVB132-0100-13210 AVB132-0101-13210	Chloroform	J (all detects)	A	Field duplicates (RPD) (R8)

West Van Buren Area
Volatiles - Laboratory Blank Data Qualification Summary - SDG 459692

No Sample Data Qualified in this SDG

West Van Buren Area
Volatiles - Field Blank Data Qualification Summary - SDG 459692

No Sample Data Qualified in this SDG

LDC #: 29578L1a

SDG #: 459692

Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 5/1/13

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/22/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	459504-011 MS/D
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 7, 8
XVII.	Field blanks	ND	TB = 1

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: water

1 1	AVB115-0102-1000 TB	11 2	AVB134-0200-12230	21 1		31	635920-1-BLK
2 2	AVB115-0100-19127	12 3	AVB120-0300-08325	22		32	635966-1-BLK
3 2	AVB123-0100-17148	13 3	AVB120-0200-19245	23		33	636034-1-BLK
4 2	AVB124-0100-17215	14 2	AVB120-0100-19120	24		34	
5 2	AVB116-0200-17205	15	AVB123-0100-17148MS	25		35	
6 2	AVB116-0100-19134	16	AVB123-0100-17148MSD	26		36	
7 2	AVB132-0100-13210 D	17		27		37	
8 2	AVB132-0101-13210 D	18		28		38	
9 2	AVB127-0100-16140	19		29		39	
10 2	AVB134-0100-12120	20		30		40	

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene	BB. 1,1,2,2-Tetrachloroethane	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane	CC. Toluene	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform	EE. Ethylbenzene	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN. Iodomethane
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.1,1-Difluoroethane
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

LDC #: 29578L/a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer: Q

METHOD : GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A — Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

(Y) N N/A — Was a MS/MSD analyzed every 20 samples of each matrix?

Y (N) N/A — Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		15, 16	D	( )	56 (59-153)	56 (20)	3	J/UJ/A M2, R5
			Q	143 (70-130)	( )	26 (20)	↓	J/A det M1, R5
			K	( )	124 (65-123)	( )	↓	J/A det M1
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		

LDC #: 29578L1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: FT
2nd Reviewer: [signature]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		635966-1-BKS	D	( )	( )	56 (24)	635966-1-BLK,	J/UJ/P (R7)
			I	155 (66-132)	( )	40 (20)	2-11, 14, 13	J/UJ/P (L1, R7)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		

LDC#: 29578L1a

VALIDATION FINDINGS WORKSHEET

Field Duplicates

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N NA Were field duplicate pairs identified in this SDG?

Y N NA Were target analytes detected in the field duplicate pairs?

Compound	Concentration (ug/L)		≤20 RPD	
	7	8		
K	1.08	1.40	26	J/Adet R 8
I	10.4	11.4	9	
H	23.1	24.4	5	
QQQ	31.7	33.0	4	
AA	8.36	8.10	3	
S	177	182	3	

V:\FIELD DUPLICATES\templates\29578L1a.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 22, 2013

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: 1,4-Dioxane

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459692

Sample Identification

AVB115-0100-19127
AVB123-0100-17148
AVB124-0100-17215
AVB116-0200-17205
AVB116-0100-19134
AVB132-0100-13210
AVB132-0101-13210
AVB127-0100-16140
AVB134-0100-12120
AVB134-0200-12230
AVB120-0300-08325
AVB120-0200-19245
AVB120-0100-19120
AVB115-0100-19127MS
AVB115-0100-19127MSD

Introduction

This data review covers 15 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8260B for 1,4-Dioxane.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples AVB132-0100-13210 and AVB132-0101-13210 were identified as field duplicates. No 1,4-dioxane was detected in any of the samples.

West Van Buren Area
1,4-Dioxane - Data Qualification Summary - SDG 459692

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG 459692

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Field Blank Data Qualification Summary - SDG 459692

No Sample Data Qualified in this SDG

LDC #: 29578L1b

SDG #: 459692

Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 5/1/13

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/22/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	459938-002 MS/D
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = 6, 7
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Water

1	AVB115-0100-19127	11	AVB120-0300-08325	21	636190-1-BLK	31	
2	AVB123-0100-17148	12	AVB120-0200-19245	22	636192-1-BLK	32	
3	AVB124-0100-17215	13	AVB120-0100-19120	23		33	
4	AVB116-0200-17205	14	AVB115-0100-19127MS	24		34	
5	AVB116-0100-19134	15	AVB115-0100-19127MSD	25		35	
6	AVB132-0100-13210 D	16		26		36	
7	AVB132-0101-13210 D	17		27		37	
8	AVB127-0100-16140	18		28		38	
9	AVB134-0100-12120	19		29		39	
10	AVB134-0200-12230	20		30		40	

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB115-0102-1000 Matrix: Water Date Received: 03.22.13 14.30
Lab Sample Id: 459692-001 Date Collected: 03.22.13 07.30

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.28.13 13.29
Seq Number: 910263

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	03.29.13 01.22		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	03.29.13 01.22		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	03.29.13 01.22		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	03.29.13 01.22		1
Bromoform	75-25-2	<1.00	1.00	ug/L	03.29.13 01.22		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	03.29.13 01.22		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	03.29.13 01.22		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	03.29.13 01.22		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	03.29.13 01.22		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	03.29.13 01.22		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	03.29.13 01.22		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	03.29.13 01.22		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	03.29.13 01.22		1
Chloroform	67-66-3	<0.500	0.500	ug/L	03.29.13 01.22		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	03.29.13 01.22		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	03.29.13 01.22		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	03.29.13 01.22		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	03.29.13 01.22		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	03.29.13 01.22		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	03.29.13 01.22		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	03.29.13 01.22		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	03.29.13 01.22		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	03.29.13 01.22		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	03.29.13 01.22		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	03.29.13 01.22		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	03.29.13 01.22		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	03.29.13 01.22		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	03.29.13 01.22		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	03.29.13 01.22		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	03.29.13 01.22		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	03.29.13 01.22		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	03.29.13 01.22		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	03.29.13 01.22		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	03.29.13 01.22		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	03.29.13 01.22		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	03.29.13 01.22		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	03.29.13 01.22		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	03.29.13 01.22		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	03.29.13 01.22		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	03.29.13 01.22		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	03.29.13 01.22		1

Final 1.000

6/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB115-0102-1000 Matrix: Water Date Received: 03.22.13 14.30
Lab Sample Id: **459692-001** Date Collected: 03.22.13 07.30

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 03.28.13 13.29
Seq Number: 910263

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	03.29.13 01.22		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	03.29.13 01.22		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	03.29.13 01.22		1
Styrene	100-42-5	<1.00	1.00	ug/L	03.29.13 01.22		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	03.29.13 01.22		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	03.29.13 01.22		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	03.29.13 01.22		1
Toluene	108-88-3	<2.00	2.00	ug/L	03.29.13 01.22		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	03.29.13 01.22		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	03.29.13 01.22		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	03.29.13 01.22		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	03.29.13 01.22		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	03.29.13 01.22		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	03.29.13 01.22		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	03.29.13 01.22		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	03.29.13 01.22		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	03.29.13 01.22		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	03.29.13 01.22		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	03.29.13 01.22		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	03.29.13 01.22		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	03.29.13 01.22		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	03.29.13 01.22		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	100	%	69-133	03.29.13 01.22	
1,2-Dichloroethane-D4	17060-07-0	108	%	66-139	03.29.13 01.22	
Toluene-D8	2037-26-5	93	%	70-130	03.29.13 01.22	
4-Bromofluorobenzene	460-00-4	80	%	70-135	03.29.13 01.22	

4/5/13/17

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB115-0100-19127 | Matrix: Water | Date Received: 03.22.13 14.30
Lab Sample Id: **459692-002** | Date Collected: 03.22.13 07.45

Analytical Method: **VOCs by SW 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.01.13 12.31
Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.01.13 13.56		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.01.13 13.56		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.01.13 13.56		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.01.13 13.56		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.01.13 13.56		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.01.13 13.56		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.01.13 13.56		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.01.13 13.56		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.01.13 13.56		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.01.13 13.56		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.01.13 13.56		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.01.13 13.56		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.01.13 13.56	UJ (R7)	1
Chloroform	67-66-3	**1.20**	0.500	ug/L	04.01.13 13.56		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.01.13 13.56		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.01.13 13.56		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.01.13 13.56		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.01.13 13.56		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.01.13 13.56		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.01.13 13.56		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.01.13 13.56		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.01.13 13.56		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.01.13 13.56		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.01.13 13.56		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.01.13 13.56		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.01.13 13.56		1
1,1-Dichloroethane	75-34-3	**4.14**	0.500	ug/L	04.01.13 13.56	L1 J (L1 R7)	1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.01.13 13.56		1
1,1-Dichloroethene	75-35-4	**6.02**	0.500	ug/L	04.01.13 13.56		1
cis-1,2-Dichloroethene	156-59-2	**8.90**	0.500	ug/L	04.01.13 13.56		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.01.13 13.56		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.01.13 13.56		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.01.13 13.56		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.01.13 13.56		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.01.13 13.56		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.01.13 13.56		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.01.13 13.56		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.01.13 13.56		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.01.13 13.56		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.01.13 13.56		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.01.13 13.56		1

Final 1.000

4/5/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB115-0100-19127 | Matrix: Water | Date Received: 03.22.13 14.30

Lab Sample Id: **459692-002** | Date Collected: 03.22.13 07.45

Analytical Method: **VOCs by SW 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 04.01.13 12.31

Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.01.13 13.56		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.01.13 13.56		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.01.13 13.56		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.01.13 13.56		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.01.13 13.56		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.01.13 13.56		1
Tetrachloroethylene	127-18-4	**1.51**	0.500	ug/L	04.01.13 13.56		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.01.13 13.56		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.01.13 13.56		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.01.13 13.56		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.01.13 13.56		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.01.13 13.56		1
Trichloroethene	79-01-6	**40.8**	0.500	ug/L	04.01.13 13.56		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.01.13 13.56		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.01.13 13.56		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.01.13 13.56		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.01.13 13.56		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.01.13 13.56		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.01.13 13.56		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.01.13 13.56		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.01.13 13.56		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.01.13 13.56		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	97	%	69-133	04.01.13 13.56	
1,2-Dichloroethane-D4	17060-07-0	105	%	66-139	04.01.13 13.56	
Toluene-D8	2037-26-5	91	%	70-130	04.01.13 13.56	
4-Bromofluorobenzene	460-00-4	80	%	70-135	04.01.13 13.56	

5/13/13

Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB123-0100-17148 | Matrix: Water | Date Received: 03.22.13 14.30
Lab Sample Id: 459692-003 | Date Collected: 03.22.13 08.10

Analytical Method: **VOCs by SW 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.01.13 12.31
Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.01.13 14.21		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.01.13 14.21		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.01.13 14.21		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.01.13 14.21		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.01.13 14.21		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.01.13 14.21		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.01.13 14.21		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.01.13 14.21		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.01.13 14.21		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.01.13 14.21		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.01.13 14.21		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.01.13 14.21		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.01.13 14.21	M2	1 UJ(M2,R5,R7)
Chloroform	67-66-3	<0.500	0.500	ug/L	04.01.13 14.21	M1	1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.01.13 14.21		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.01.13 14.21		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.01.13 14.21		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.01.13 14.21		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.01.13 14.21		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.01.13 14.21		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.01.13 14.21		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.01.13 14.21		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.01.13 14.21		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.01.13 14.21		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.01.13 14.21		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.01.13 14.21		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.01.13 14.21	L1	UJ 1 (L1,R7)
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.01.13 14.21		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.01.13 14.21		1
cis-1,2-Dichloroethene	156-59-2	**1.03**	0.500	ug/L	04.01.13 14.21		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.01.13 14.21		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.01.13 14.21	M1	1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.01.13 14.21		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.01.13 14.21		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.01.13 14.21		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.01.13 14.21		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.01.13 14.21		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.01.13 14.21		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.01.13 14.21		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.01.13 14.21		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.01.13 14.21		1

Final 1.000

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB123-0100-17148 | Matrix: Water | Date Received: 03.22.13 14.30
Lab Sample Id: 459692-003 | Date Collected: 03.22.13 08.10

Analytical Method: **VOCs by SW 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.01.13 12.31
Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.01.13 14.21		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.01.13 14.21		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.01.13 14.21		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.01.13 14.21		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.01.13 14.21		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.01.13 14.21		1
Tetrachloroethylene	127-18-4	**0.710**	0.500	ug/L	04.01.13 14.21		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.01.13 14.21		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.01.13 14.21		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.01.13 14.21		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.01.13 14.21		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.01.13 14.21		1
Trichloroethene	79-01-6	**7.47**	0.500	ug/L	04.01.13 14.21		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.01.13 14.21		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.01.13 14.21		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.01.13 14.21		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.01.13 14.21		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.01.13 14.21		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.01.13 14.21		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.01.13 14.21		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.01.13 14.21		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.01.13 14.21		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	96	%	69-133	04.01.13 14.21	
1,2-Dichloroethane-D4	17060-07-0	103	%	66-139	04.01.13 14.21	
Toluene-D8	2037-26-5	89	%	70-130	04.01.13 14.21	
4-Bromofluorobenzene	460-00-4	80	%	70-135	04.01.13 14.21	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB124-0100-17215 | Matrix: Water | Date Received: 03.22.13 14.30
Lab Sample Id: 459692-004 | Date Collected: 03.22.13 08.45

Analytical Method: **VOCs by SW 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.01.13 12.31
Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.01.13 14.46		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.01.13 14.46		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.01.13 14.46		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.01.13 14.46		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.01.13 14.46		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.01.13 14.46		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.01.13 14.46		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.01.13 14.46		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.01.13 14.46		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.01.13 14.46		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.01.13 14.46		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.01.13 14.46		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.01.13 14.46	UJ (RT)	1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.01.13 14.46		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.01.13 14.46		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.01.13 14.46		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.01.13 14.46		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.01.13 14.46		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.01.13 14.46		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.01.13 14.46		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.01.13 14.46		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.01.13 14.46		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.01.13 14.46		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.01.13 14.46		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.01.13 14.46		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.01.13 14.46		1
1,1-Dichloroethane	75-34-3	**3.53**	0.500	ug/L	04.01.13 14.46	L1 J (L1, RT)	1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.01.13 14.46		1
1,1-Dichloroethene	75-35-4	**13.4**	0.500	ug/L	04.01.13 14.46		1
cis-1,2-Dichloroethene	156-59-2	**16.7**	0.500	ug/L	04.01.13 14.46		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.01.13 14.46		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.01.13 14.46		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.01.13 14.46		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.01.13 14.46		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.01.13 14.46		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.01.13 14.46		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.01.13 14.46		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.01.13 14.46		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.01.13 14.46		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.01.13 14.46		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.01.13 14.46		1

Final 1.000

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB124-0100-17215
Lab Sample Id: **459692-004**

Matrix: Water
Date Collected: 03.22.13 08.45

Date Received: 03.22.13 14.30

Analytical Method: **VOCs by SW 8260B**
Tech: OEM
Analyst: OEM
Seq Number: 910399

Prep Method: SW5030C
% Moisture:

Date Prep: 04.01.13 12.31

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.01.13 14.46		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.01.13 14.46		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.01.13 14.46		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.01.13 14.46		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.01.13 14.46		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.01.13 14.46		1
Tetrachloroethylene	127-18-4	**7.39**	0.500	ug/L	04.01.13 14.46		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.01.13 14.46		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.01.13 14.46		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.01.13 14.46		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.01.13 14.46		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.01.13 14.46		1
Trichloroethene	79-01-6	**99.5**	0.500	ug/L	04.01.13 14.46		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.01.13 14.46		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.01.13 14.46		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.01.13 14.46		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.01.13 14.46		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.01.13 14.46		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.01.13 14.46		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.01.13 14.46		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.01.13 14.46		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.01.13 14.46		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	97	%	69-133	04.01.13 14.46	
1,2-Dichloroethane-D4	17060-07-0	102	%	66-139	04.01.13 14.46	
Toluene-D8	2037-26-5	90	%	70-130	04.01.13 14.46	
4-Bromofluorobenzene	460-00-4	80	%	70-135	04.01.13 14.46	

Final 1.000

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB116-0200-17205 | Matrix: Water | Date Received: 03.22.13 14.30
Lab Sample Id: 459692-006 | Date Collected: 03.22.13 09.35

Analytical Method: VOCs by SW 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.01.13 12.31
Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.01.13 15.11		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.01.13 15.11		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.01.13 15.11		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.01.13 15.11		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.01.13 15.11		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.01.13 15.11		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.01.13 15.11		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.01.13 15.11		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.01.13 15.11		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.01.13 15.11		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.01.13 15.11		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.01.13 15.11		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.01.13 15.11	UJ(RT)	1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.01.13 15.11		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.01.13 15.11		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.01.13 15.11		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.01.13 15.11		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.01.13 15.11		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.01.13 15.11		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.01.13 15.11		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.01.13 15.11		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.01.13 15.11		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.01.13 15.11		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.01.13 15.11		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.01.13 15.11		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.01.13 15.11		1
1,1-Dichloroethane	75-34-3	**2.40**	0.500	ug/L	04.01.13 15.11	LI J(LI,RT)	1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.01.13 15.11		1
1,1-Dichloroethene	75-35-4	**3.48**	0.500	ug/L	04.01.13 15.11		1
cis-1,2-Dichloroethene	156-59-2	**2.66**	0.500	ug/L	04.01.13 15.11		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.01.13 15.11		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.01.13 15.11		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.01.13 15.11		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.01.13 15.11		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.01.13 15.11		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.01.13 15.11		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.01.13 15.11		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.01.13 15.11		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.01.13 15.11		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.01.13 15.11		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.01.13 15.11		1

Final 1.000

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB116-0200-17205
Lab Sample Id: 459692-006

Matrix: Water
Date Collected: 03.22.13 09.35

Date Received: 03.22.13 14.30

Analytical Method: VOCs by SW 8260B
Tech: OEM
Analyst: OEM
Seq Number: 910399

Prep Method: SW5030C
% Moisture:

Date Prep: 04.01.13 12.31

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.01.13 15.11		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.01.13 15.11		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.01.13 15.11		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.01.13 15.11		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.01.13 15.11		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.01.13 15.11		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	04.01.13 15.11		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.01.13 15.11		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.01.13 15.11		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.01.13 15.11		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.01.13 15.11		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.01.13 15.11		1
Trichloroethene	79-01-6	**12.3**	0.500	ug/L	04.01.13 15.11		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.01.13 15.11		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.01.13 15.11		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.01.13 15.11		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.01.13 15.11		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.01.13 15.11		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.01.13 15.11		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.01.13 15.11		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.01.13 15.11		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.01.13 15.11		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	97	%	69-133	04.01.13 15.11	
1,2-Dichloroethane-D4	17060-07-0	104	%	66-139	04.01.13 15.11	
Toluene-D8	2037-26-5	91	%	70-130	04.01.13 15.11	
4-Bromofluorobenzene	460-00-4	81	%	70-135	04.01.13 15.11	

Final 1.000

4/5/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB116-0100-19134 | Matrix: Water | Date Received: 03.22.13 14.30
Lab Sample Id: 459692-007 | Date Collected: 03.22.13 10.05

Analytical Method: **VOCs by SW 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.01.13 12.31
Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.01.13 15.36		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.01.13 15.36		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.01.13 15.36		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.01.13 15.36		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.01.13 15.36		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.01.13 15.36		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.01.13 15.36		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.01.13 15.36		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.01.13 15.36		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.01.13 15.36		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.01.13 15.36		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.01.13 15.36		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.01.13 15.36	UJ (RT)	1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.01.13 15.36		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.01.13 15.36		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.01.13 15.36		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.01.13 15.36		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.01.13 15.36		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.01.13 15.36		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.01.13 15.36		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.01.13 15.36		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.01.13 15.36		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.01.13 15.36		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.01.13 15.36		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.01.13 15.36		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.01.13 15.36		1
1,1-Dichloroethane	75-34-3	**0.790**	0.500	ug/L	04.01.13 15.36	L1 J (H1, RT)	1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.01.13 15.36		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.01.13 15.36		1
cis-1,2-Dichloroethene	156-59-2	**0.660**	0.500	ug/L	04.01.13 15.36		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.01.13 15.36		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.01.13 15.36		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.01.13 15.36		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.01.13 15.36		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.01.13 15.36		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.01.13 15.36		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.01.13 15.36		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.01.13 15.36		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.01.13 15.36		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.01.13 15.36		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.01.13 15.36		1

Final 1.000

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB116-0100-19134 | Matrix: Water | Date Received: 03.22.13 14.30
Lab Sample Id: **459692-007** | Date Collected: 03.22.13 10.05

Analytical Method: **VOCs by SW 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.01.13 12.31
Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.01.13 15.36		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.01.13 15.36		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.01.13 15.36		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.01.13 15.36		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.01.13 15.36		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.01.13 15.36		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	04.01.13 15.36		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.01.13 15.36		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.01.13 15.36		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.01.13 15.36		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.01.13 15.36		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.01.13 15.36		1
Trichloroethene	79-01-6	**3.51**	0.500	ug/L	04.01.13 15.36		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.01.13 15.36		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.01.13 15.36		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.01.13 15.36		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.01.13 15.36		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.01.13 15.36		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.01.13 15.36		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.01.13 15.36		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.01.13 15.36		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.01.13 15.36		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	98	%	69-133	04.01.13 15.36	
1,2-Dichloroethane-D4	17060-07-0	105	%	66-139	04.01.13 15.36	
Toluene-D8	2037-26-5	91	%	70-130	04.01.13 15.36	
4-Bromofluorobenzene	460-00-4	82	%	70-135	04.01.13 15.36	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB132-0100-13210 Matrix: Water Date Received: 03.22.13 14.30
Lab Sample Id: **459692-008** Date Collected: 03.22.13 10.30

Analytical Method: **VOCs by SW 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.01.13 12.31
Seq Number: 910399

Dilution Analysis:
Seq#: 910516 Date Analyzed: 04/02/13 20:48 Date Prep: 04/02/13 10:38

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.01.13 16.01		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.01.13 16.01		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.01.13 16.01		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.01.13 16.01		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.01.13 16.01		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.01.13 16.01		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.01.13 16.01		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.01.13 16.01		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.01.13 16.01		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.01.13 16.01		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.01.13 16.01		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.01.13 16.01		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.01.13 16.01	UJ (R7)	1
Chloroform	67-66-3	**1.08**	0.500	ug/L	04.01.13 16.01	J (R8)	1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.01.13 16.01		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.01.13 16.01		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.01.13 16.01		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.01.13 16.01		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.01.13 16.01		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.01.13 16.01		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.01.13 16.01		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.01.13 16.01		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.01.13 16.01		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.01.13 16.01		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.01.13 16.01		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.01.13 16.01		1
1,1-Dichloroethane	75-34-3	**10.4**	0.500	ug/L	04.01.13 16.01	L1 J (L1, R7)	1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.01.13 16.01		1
1,1-Dichloroethene	75-35-4	**23.1**	0.500	ug/L	04.01.13 16.01		1
cis-1,2-Dichloroethene	156-59-2	**31.7**	0.500	ug/L	04.01.13 16.01		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.01.13 16.01		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.01.13 16.01		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.01.13 16.01		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.01.13 16.01		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.01.13 16.01		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.01.13 16.01		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.01.13 16.01		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.01.13 16.01		1

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB132-0100-13210 | Matrix: Water | Date Received: 03.22.13 14.30

Lab Sample Id: **459692-008** | Date Collected: 03.22.13 10.30

Analytical Method: **VOCs by SW 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 04.01.13 12.31

Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.01.13 16.01		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.01.13 16.01		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.01.13 16.01		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.01.13 16.01		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.01.13 16.01		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.01.13 16.01		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.01.13 16.01		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.01.13 16.01		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.01.13 16.01		1
Tetrachloroethylene	127-18-4	**8.36**	0.500	ug/L	04.01.13 16.01		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.01.13 16.01		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.01.13 16.01		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.01.13 16.01		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.01.13 16.01		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.01.13 16.01		1
Trichloroethene	79-01-6	**177**	5.00	ug/L	04.02.13 20.48	D2	10
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.01.13 16.01		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.01.13 16.01		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.01.13 16.01		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.01.13 16.01		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.01.13 16.01		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.01.13 16.01		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.01.13 16.01		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.01.13 16.01		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.01.13 16.01		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	99	%	69-133	04.01.13 16.01	
1,2-Dichloroethane-D4	17060-07-0	105	%	66-139	04.01.13 16.01	
Toluene-D8	2037-26-5	89	%	70-130	04.01.13 16.01	
4-Bromofluorobenzene	460-00-4	80	%	70-135	04.01.13 16.01	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB132-0101-13210
Lab Sample Id: 459692-009

Matrix: Water
Date Collected: 03.22.13 10.35

Date Received: 03.22.13 14.30

Analytical Method: VOCs by SW 8260B
Tech: OEM
Analyst: OEM
Seq Number: 910399

Prep Method: SW5030C
% Moisture:

Date Prep: 04.01.13 12.31

Dilution Analysis:
Seq#: 910516 Date Analyzed: 04/02/13 21:13 Date Prep: 04/02/13 10:38

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.01.13 16.26		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.01.13 16.26		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.01.13 16.26		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.01.13 16.26		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.01.13 16.26		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.01.13 16.26		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.01.13 16.26		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.01.13 16.26		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.01.13 16.26		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.01.13 16.26		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.01.13 16.26		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.01.13 16.26		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.01.13 16.26	UJ (R7)	1
Chloroform	67-66-3	**1.40**	0.500	ug/L	04.01.13 16.26	J (R8)	1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.01.13 16.26		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.01.13 16.26		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.01.13 16.26		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.01.13 16.26		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.01.13 16.26		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.01.13 16.26		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.01.13 16.26		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.01.13 16.26		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.01.13 16.26		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.01.13 16.26		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.01.13 16.26		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.01.13 16.26		1
1,1-Dichloroethane	75-34-3	**11.4**	0.500	ug/L	04.01.13 16.26	L1 J(L1, R7)	1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.01.13 16.26		1
1,1-Dichloroethene	75-35-4	**24.4**	0.500	ug/L	04.01.13 16.26		1
cis-1,2-Dichloroethene	156-59-2	**33.0**	0.500	ug/L	04.01.13 16.26		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.01.13 16.26		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.01.13 16.26		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.01.13 16.26		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.01.13 16.26		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.01.13 16.26		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.01.13 16.26		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.01.13 16.26		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.01.13 16.26		1

Final 1.000

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB132-0101-13210 | Matrix: Water | Date Received: 03.22.13 14.30
Lab Sample Id: 459692-009 | Date Collected: 03.22.13 10.35

Analytical Method: **VOCs by SW 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.01.13 12.31
Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.01.13 16.26		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.01.13 16.26		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.01.13 16.26		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.01.13 16.26		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.01.13 16.26		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.01.13 16.26		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.01.13 16.26		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.01.13 16.26		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.01.13 16.26		1
Tetrachloroethylene	127-18-4	**8.10**	0.500	ug/L	04.01.13 16.26		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.01.13 16.26		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.01.13 16.26		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.01.13 16.26		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.01.13 16.26		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.01.13 16.26		1
Trichloroethene	79-01-6	**182**	5.00	ug/L	04.02.13 21.13	D2	10
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.01.13 16.26		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.01.13 16.26		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.01.13 16.26		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.01.13 16.26		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.01.13 16.26		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.01.13 16.26		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.01.13 16.26		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.01.13 16.26		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.01.13 16.26		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	98	%	69-133	04.01.13 16.26	
1,2-Dichloroethane-D4	17060-07-0	105	%	66-139	04.01.13 16.26	
Toluene-D8	2037-26-5	91	%	70-130	04.01.13 16.26	
4-Bromofluorobenzene	460-00-4	79	%	70-135	04.01.13 16.26	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB127-0100-16140 | Matrix: Water | Date Received: 03.22.13 14.30

Lab Sample Id: 459692-010 | Date Collected: 03.22.13 11.05

Analytical Method: VOCs by SW 8260B | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 04.01.13 12.31

Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.01.13 16.51		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.01.13 16.51		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.01.13 16.51		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.01.13 16.51		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.01.13 16.51		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.01.13 16.51		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.01.13 16.51		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.01.13 16.51		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.01.13 16.51		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.01.13 16.51		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.01.13 16.51		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.01.13 16.51		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.01.13 16.51	UJ (R7)	1
Chloroform	67-66-3	**4.08**	0.500	ug/L	04.01.13 16.51		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.01.13 16.51		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.01.13 16.51		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.01.13 16.51		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.01.13 16.51		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.01.13 16.51		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.01.13 16.51		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.01.13 16.51		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.01.13 16.51		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.01.13 16.51		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.01.13 16.51		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.01.13 16.51		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.01.13 16.51		1
1,1-Dichloroethane	75-34-3	**1.44**	0.500	ug/L	04.01.13 16.51	LI J(LI R7)	1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.01.13 16.51		1
1,1-Dichloroethene	75-35-4	**1.31**	0.500	ug/L	04.01.13 16.51		1
cis-1,2-Dichloroethene	156-59-2	**6.20**	0.500	ug/L	04.01.13 16.51		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.01.13 16.51		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.01.13 16.51		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.01.13 16.51		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.01.13 16.51		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.01.13 16.51		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.01.13 16.51		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.01.13 16.51		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.01.13 16.51		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.01.13 16.51		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.01.13 16.51		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.01.13 16.51		1

Final 1.000

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB127-0100-16140 Matrix: Water Date Received: 03.22.13 14.30
Lab Sample Id: **459692-010** Date Collected: 03.22.13 11.05

Analytical Method: **VOCs by SW 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.01.13 12.31
Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.01.13 16.51		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.01.13 16.51		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.01.13 16.51		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.01.13 16.51		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.01.13 16.51		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.01.13 16.51		1
Tetrachloroethylene	127-18-4	**3.16**	0.500	ug/L	04.01.13 16.51		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.01.13 16.51		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.01.13 16.51		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.01.13 16.51		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.01.13 16.51		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.01.13 16.51		1
Trichloroethene	79-01-6	**33.2**	0.500	ug/L	04.01.13 16.51		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.01.13 16.51		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.01.13 16.51		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.01.13 16.51		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.01.13 16.51		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.01.13 16.51		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.01.13 16.51		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.01.13 16.51		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.01.13 16.51		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.01.13 16.51		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	114	%	69-133	04.01.13 16.51	
1,2-Dichloroethane-D4	17060-07-0	124	%	66-139	04.01.13 16.51	
Toluene-D8	2037-26-5	104	%	70-130	04.01.13 16.51	
4-Bromofluorobenzene	460-00-4	89	%	70-135	04.01.13 16.51	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB134-0100-12120 | Matrix: Water | Date Received: 03.22.13 14.30

Lab Sample Id: **459692-011** | Date Collected: 03.22.13 11.30

Analytical Method: **VOCs by SW 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 04.01.13 12.31

Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.01.13 17.16		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.01.13 17.16		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.01.13 17.16		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.01.13 17.16		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.01.13 17.16		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.01.13 17.16		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.01.13 17.16		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.01.13 17.16		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.01.13 17.16		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.01.13 17.16		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.01.13 17.16		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.01.13 17.16		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.01.13 17.16	UJ (R7)	1
Chloroform	67-66-3	**1.12**	0.500	ug/L	04.01.13 17.16		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.01.13 17.16		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.01.13 17.16		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.01.13 17.16		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.01.13 17.16		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.01.13 17.16		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.01.13 17.16		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.01.13 17.16		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.01.13 17.16		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.01.13 17.16		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.01.13 17.16		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.01.13 17.16		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.01.13 17.16		1
1,1-Dichloroethane	75-34-3	**8.62**	0.500	ug/L	04.01.13 17.16	LI J (LI, R7)	1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.01.13 17.16		1
1,1-Dichloroethene	75-35-4	**13.3**	0.500	ug/L	04.01.13 17.16		1
cis-1,2-Dichloroethene	156-59-2	**18.9**	0.500	ug/L	04.01.13 17.16		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.01.13 17.16		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.01.13 17.16		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.01.13 17.16		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.01.13 17.16		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.01.13 17.16		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.01.13 17.16		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.01.13 17.16		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.01.13 17.16		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.01.13 17.16		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.01.13 17.16		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.01.13 17.16		1

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB134-0100-12120 | Matrix: Water | Date Received: 03.22.13 14.30

Lab Sample Id: **459692-011** | Date Collected: 03.22.13 11.30

Analytical Method: **VOCs by SW 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 04.01.13 12.31

Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.01.13 17.16		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.01.13 17.16		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.01.13 17.16		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.01.13 17.16		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.01.13 17.16		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.01.13 17.16		1
Tetrachloroethylene	127-18-4	**5.05**	0.500	ug/L	04.01.13 17.16		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.01.13 17.16		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.01.13 17.16		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.01.13 17.16		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.01.13 17.16		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.01.13 17.16		1
Trichloroethene	79-01-6	**77.7**	0.500	ug/L	04.01.13 17.16		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.01.13 17.16		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.01.13 17.16		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.01.13 17.16		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.01.13 17.16		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.01.13 17.16		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.01.13 17.16		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.01.13 17.16		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.01.13 17.16		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.01.13 17.16		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	113	%	69-133	04.01.13 17.16	
1,2-Dichloroethane-D4	17060-07-0	123	%	66-139	04.01.13 17.16	
Toluene-D8	2037-26-5	102	%	70-130	04.01.13 17.16	
4-Bromofluorobenzene	460-00-4	89	%	70-135	04.01.13 17.16	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB134-0200-12230 Matrix: Water Date Received: 03.22.13 14.30
Lab Sample Id: 459692-012 Date Collected: 03.22.13 11.50

Analytical Method: VOCs by SW 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.01.13 12.31
Seq Number: 910399

Dilution Analysis:
Seq#: 910516 Date Analyzed: 04/02/13 21:38 Date Prep: 04/02/13 10:38

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.01.13 17.41		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.01.13 17.41		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.01.13 17.41		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.01.13 17.41		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.01.13 17.41		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.01.13 17.41		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.01.13 17.41		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.01.13 17.41		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.01.13 17.41		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.01.13 17.41		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.01.13 17.41		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.01.13 17.41		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.01.13 17.41	UJ(R7)	1
Chloroform	67-66-3	**1.38**	0.500	ug/L	04.01.13 17.41		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.01.13 17.41		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.01.13 17.41		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.01.13 17.41		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.01.13 17.41		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.01.13 17.41		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.01.13 17.41		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.01.13 17.41		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.01.13 17.41		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.01.13 17.41		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.01.13 17.41		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.01.13 17.41		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.01.13 17.41		1
1,1-Dichloroethane	75-34-3	**10.3**	0.500	ug/L	04.01.13 17.41	L1 J(L1, R7)	1
1,2-Dichloroethane	107-06-2	**0.500**	0.500	ug/L	04.01.13 17.41		1
1,1-Dichloroethene	75-35-4	**24.5**	0.500	ug/L	04.01.13 17.41		1
cis-1,2-Dichloroethene	156-59-2	**27.6**	0.500	ug/L	04.01.13 17.41		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.01.13 17.41		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.01.13 17.41		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.01.13 17.41		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.01.13 17.41		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.01.13 17.41		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.01.13 17.41		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.01.13 17.41		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.01.13 17.41		1

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB134-0200-12230 Matrix: Water Date Received: 03.22.13 14.30
Lab Sample Id: **459692-012** Date Collected: 03.22.13 11.50

Analytical Method: **VOCs by SW 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.01.13 12.31
Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.01.13 17.41		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.01.13 17.41		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.01.13 17.41		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.01.13 17.41		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.01.13 17.41		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.01.13 17.41		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.01.13 17.41		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.01.13 17.41		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.01.13 17.41		1
Tetrachloroethylene	127-18-4	**9.88**	0.500	ug/L	04.01.13 17.41		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.01.13 17.41		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.01.13 17.41		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.01.13 17.41		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.01.13 17.41		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.01.13 17.41		1
Trichloroethene	79-01-6	**168**	5.00	ug/L	04.02.13 21.38	D2	10
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.01.13 17.41		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.01.13 17.41		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.01.13 17.41		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.01.13 17.41		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.01.13 17.41		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.01.13 17.41		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.01.13 17.41		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.01.13 17.41		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.01.13 17.41		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	112	%	69-133	04.01.13 17.41	
1,2-Dichloroethane-D4	17060-07-0	122	%	66-139	04.01.13 17.41	
Toluene-D8	2037-26-5	100	%	70-130	04.01.13 17.41	
4-Bromofluorobenzene	460-00-4	88	%	70-135	04.01.13 17.41	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB120-0300-08325 Matrix: Water Date Received: 03.22.13 14.30
Lab Sample Id: **459692-013** Date Collected: 03.22.13 13.00

Analytical Method: **VOCs by SW 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.02.13 12.30		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.02.13 12.30		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.02.13 12.30		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.02.13 12.30		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.02.13 12.30		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.02.13 12.30		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.02.13 12.30		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.02.13 12.30		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.02.13 12.30		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.02.13 12.30		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.02.13 12.30		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.02.13 12.30		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.02.13 12.30	~~HJ (RT)~~	1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.02.13 12.30		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.02.13 12.30		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.02.13 12.30		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.02.13 12.30		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.02.13 12.30		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.02.13 12.30		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.02.13 12.30		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.02.13 12.30		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.02.13 12.30		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.02.13 12.30		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.02.13 12.30		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.02.13 12.30		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.02.13 12.30		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.02.13 12.30	~~HJ (LL,RT)~~	1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.02.13 12.30		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.02.13 12.30		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.02.13 12.30		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.02.13 12.30		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.02.13 12.30		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.02.13 12.30		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.02.13 12.30		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.02.13 12.30		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.02.13 12.30		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.02.13 12.30		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.02.13 12.30		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.02.13 12.30		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.02.13 12.30		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.02.13 12.30		1

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB120-0300-08325 Matrix: Water Date Received: 03.22.13 14.30
Lab Sample Id: 459692-013 Date Collected: 03.22.13 13.00

Analytical Method: **VOCs by SW 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.02.13 12.30		1
Naphthalene	91-20-3	**67.7**	5.00	ug/L	04.02.13 12.30		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.02.13 12.30		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.02.13 12.30		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.02.13 12.30		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.02.13 12.30		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	04.02.13 12.30		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.02.13 12.30		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.02.13 12.30		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.02.13 12.30		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.02.13 12.30		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.02.13 12.30		1
Trichloroethene	79-01-6	**1.03**	0.500	ug/L	04.02.13 12.30		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.02.13 12.30		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.02.13 12.30		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.02.13 12.30		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.02.13 12.30		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.02.13 12.30		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.02.13 12.30		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.02.13 12.30		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.02.13 12.30		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.02.13 12.30		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	102	%	69-133	04.02.13 12.30	
1,2-Dichloroethane-D4	17060-07-0	105	%	66-139	04.02.13 12.30	
Toluene-D8	2037-26-5	95	%	70-130	04.02.13 12.30	
4-Bromofluorobenzene	460-00-4	79	%	70-135	04.02.13 12.30	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB120-0200-19245 Matrix: Water Date Received: 03.22.13 14.30
Lab Sample Id: 459692-014 Date Collected: 03.22.13 13.15

Analytical Method: **VOCs by SW 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.01.13 12.31
Seq Number: 910399

Dilution Analysis:
Seq#: 910516 Date Analyzed: 04/02/13 22:03 Date Prep: 04/02/13 10:38

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.01.13 20.11		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.01.13 20.11		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.01.13 20.11		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.01.13 20.11		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.01.13 20.11		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.01.13 20.11		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.01.13 20.11		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.01.13 20.11		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.01.13 20.11		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.01.13 20.11		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.01.13 20.11		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.01.13 20.11		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.01.13 20.11	UJ (R7)	1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.01.13 20.11		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.01.13 20.11		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.01.13 20.11		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.01.13 20.11		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.01.13 20.11		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.01.13 20.11		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.01.13 20.11		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.01.13 20.11		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.01.13 20.11		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.01.13 20.11		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.01.13 20.11		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.01.13 20.11		1
Dichlorodifluoromethane	75-71-8	**4.63**	2.00	ug/L	04.01.13 20.11		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.01.13 20.11	L1 UJ	1 (L1, R7)
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.01.13 20.11		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.01.13 20.11		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.01.13 20.11		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.01.13 20.11		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.01.13 20.11		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.01.13 20.11		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.01.13 20.11		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.01.13 20.11		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.01.13 20.11		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.01.13 20.11		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.01.13 20.11		1

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB120-0200-19245 Matrix: Water Date Received: 03.22.13 14.30
Lab Sample Id: **459692-014** Date Collected: 03.22.13 13.15

Analytical Method: **VOCs by SW 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.01.13 12.31
Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.01.13 20.11		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.01.13 20.11		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.01.13 20.11		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.01.13 20.11		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.01.13 20.11		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.01.13 20.11		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.01.13 20.11		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.01.13 20.11		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.01.13 20.11		1
Tetrachloroethylene	127-18-4	**35.5**	0.500	ug/L	04.01.13 20.11		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.01.13 20.11		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.01.13 20.11		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.01.13 20.11		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.01.13 20.11		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.01.13 20.11		1
Trichloroethene	79-01-6	**130**	5.00	ug/L	04.02.13 22.03	D2	10
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.01.13 20.11		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.01.13 20.11		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.01.13 20.11		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.01.13 20.11		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.01.13 20.11		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.01.13 20.11		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.01.13 20.11		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.01.13 20.11		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.01.13 20.11		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	108	%	69-133	04.01.13 20.11	
1,2-Dichloroethane-D4	17060-07-0	116	%	66-139	04.01.13 20.11	
Toluene-D8	2037-26-5	100	%	70-130	04.01.13 20.11	
4-Bromofluorobenzene	460-00-4	86	%	70-135	04.01.13 20.11	

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB120-0100-19120 | Matrix: Water | Date Received: 03.22.13 14.30

Lab Sample Id: **459692-015** | Date Collected: 03.22.13 13.40

Analytical Method: **VOCs by SW 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 04.01.13 12.31

Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.01.13 20.36		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.01.13 20.36		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.01.13 20.36		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.01.13 20.36		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.01.13 20.36		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.01.13 20.36		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.01.13 20.36		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.01.13 20.36		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.01.13 20.36		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.01.13 20.36		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.01.13 20.36		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.01.13 20.36		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.01.13 20.36	UJ (R7)	1
Chloroform	67-66-3	**3.00**	0.500	ug/L	04.01.13 20.36		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.01.13 20.36		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.01.13 20.36		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.01.13 20.36		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.01.13 20.36		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.01.13 20.36		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.01.13 20.36		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.01.13 20.36		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.01.13 20.36		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.01.13 20.36		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.01.13 20.36		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.01.13 20.36		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.01.13 20.36		1
1,1-Dichloroethane	75-34-3	**3.11**	0.500	ug/L	04.01.13 20.36	L1 J(L1, R7)	1
1,2-Dichloroethane	107-06-2	**0.500**	0.500	ug/L	04.01.13 20.36		1
1,1-Dichloroethene	75-35-4	**4.32**	0.500	ug/L	04.01.13 20.36		1
cis-1,2-Dichloroethene	156-59-2	**12.3**	0.500	ug/L	04.01.13 20.36		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.01.13 20.36		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.01.13 20.36		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.01.13 20.36		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.01.13 20.36		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.01.13 20.36		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.01.13 20.36		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.01.13 20.36		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.01.13 20.36		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.01.13 20.36		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.01.13 20.36		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.01.13 20.36		1

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Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB120-0100-19120 Matrix: Water Date Received: 03.22.13 14.30
Lab Sample Id: **459692-015** Date Collected: 03.22.13 13.40

Analytical Method: **VOCs by SW 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.01.13 12.31
Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.01.13 20.36		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.01.13 20.36		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.01.13 20.36		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.01.13 20.36		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.01.13 20.36		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.01.13 20.36		1
Tetrachloroethylene	127-18-4	**9.53**	0.500	ug/L	04.01.13 20.36		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.01.13 20.36		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.01.13 20.36		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.01.13 20.36		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.01.13 20.36		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.01.13 20.36		1
Trichloroethene	79-01-6	**74.0**	0.500	ug/L	04.01.13 20.36		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.01.13 20.36		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.01.13 20.36		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.01.13 20.36		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.01.13 20.36		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.01.13 20.36		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.01.13 20.36		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.01.13 20.36		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.01.13 20.36		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.01.13 20.36		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	109	%	69-133	04.01.13 20.36	
1,2-Dichloroethane-D4	17060-07-0	117	%	66-139	04.01.13 20.36	
Toluene-D8	2037-26-5	102	%	70-130	04.01.13 20.36	
4-Bromofluorobenzene	460-00-4	86	%	70-135	04.01.13 20.36	

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WVBA

Sample Id: AVB115-0100-19127 | Matrix: Water | Date Received: 03.22.13 14.30
Lab Sample Id: **459692-002** | Date Collected: 03.22.13 07.45

Analytical Method: **1,4-Dioxane by SW 8260B** | Prep Method: SW5030B
Tech: MCH | % Moisture:
Analyst: MCH | Date Prep: 04.04.13 11.40
Seq Number: 910694 | SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.04.13 13.09	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	119	%	75-131	04.04.13 13.09	
1,2-Dichloroethane-D4	17060-07-0	119	%	63-144	04.04.13 13.09	
Toluene-D8	2037-26-5	97	%	80-117	04.04.13 13.09	
4-Bromofluorobenzene	460-00-4	100	%	74-124	04.04.13 13.09	

Final 1.000

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WVBA

Sample Id: AVB123-0100-17148 Matrix: Water Date Received: 03.22.13 14.30
Lab Sample Id: 459692-003 Date Collected: 03.22.13 08.10

Analytical Method: **1,4-Dioxane by SW 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 04.04.13 14.52
Seq Number: 910694 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.04.13 16.19	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	110	%	75-131	04.04.13 16.19	
1,2-Dichloroethane-D4	17060-07-0	116	%	63-144	04.04.13 16.19	
Toluene-D8	2037-26-5	97	%	80-117	04.04.13 16.19	
4-Bromofluorobenzene	460-00-4	103	%	74-124	04.04.13 16.19	

Final 1.000

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WVBA

Sample Id: AVB124-0100-17215 Matrix: Water Date Received: 03.22.13 14.30
Lab Sample Id: **459692-004** Date Collected: 03.22.13 08.45

Analytical Method: **1,4-Dioxane by SW 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 04.04.13 14.54
Seq Number: 910694 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.04.13 16.42	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	113	%	75-131	04.04.13 16.42	
1,2-Dichloroethane-D4	17060-07-0	108	%	63-144	04.04.13 16.42	
Toluene-D8	2037-26-5	98	%	80-117	04.04.13 16.42	
4-Bromofluorobenzene	460-00-4	101	%	74-124	04.04.13 16.42	

Final 1.000

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WVBA

Sample Id: AVB116-0200-17205 Matrix: Water Date Received: 03.22.13 14.30

Lab Sample Id: **459692-006** Date Collected: 03.22.13 09.35

Analytical Method: **1,4-Dioxane by SW 8260B** Prep Method: SW5030B

Tech: MCH % Moisture:

Analyst: MCH Date Prep: 04.04.13 17.10

Seq Number: 910694 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.04.13 17.47	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	115	%	75-131	04.04.13 17.47	
1,2-Dichloroethane-D4	17060-07-0	104	%	63-144	04.04.13 17.47	
Toluene-D8	2037-26-5	97	%	80-117	04.04.13 17.47	
4-Bromofluorobenzene	460-00-4	98	%	74-124	04.04.13 17.47	

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Sample Id: AVB116-0100-19134 Matrix: Water Date Received: 03.22.13 14.30
Lab Sample Id: **459692-007** Date Collected: 03.22.13 10.05

Analytical Method: **1,4-Dioxane by SW 8260B** Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 04.04.13 17.12
Seq Number: 910694 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.04.13 18.02	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	116	%	75-131	04.04.13 18.02	
1,2-Dichloroethane-D4	17060-07-0	122	%	63-144	04.04.13 18.02	
Toluene-D8	2037-26-5	97	%	80-117	04.04.13 18.02	
4-Bromofluorobenzene	460-00-4	100	%	74-124	04.04.13 18.02	

Final 1.000

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Sample Id: AVB132-0100-13210 Matrix: Water Date Received: 03.22.13 14.30
Lab Sample Id: 459692-008 Date Collected: 03.22.13 10.30

Analytical Method: 1,4-Dioxane by SW 8260B Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 04.04.13 17.14
Seq Number: 910694 SUB: AZ0765

Dilution Analysis:
Seq#: 910516 Date Analyzed: 04/02/13 20:48 Date Prep: 04/02/13 10:38

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.04.13 18.26	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	116	%	75-131	04.04.13 18.26	
1,2-Dichloroethane-D4	17060-07-0	103	%	63-144	04.04.13 18.26	
Toluene-D8	2037-26-5	98	%	80-117	04.04.13 18.26	
4-Bromofluorobenzene	460-00-4	99	%	74-124	04.04.13 18.26	

Final 1.000

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Terranext, Phoenix, AZ

WVBA

Sample Id: AVB132-0101-13210 Matrix: Water Date Received: 03.22.13 14.30
Lab Sample Id: 459692-009 Date Collected: 03.22.13 10.35

Analytical Method: 1,4-Dioxane by SW 8260B Prep Method: SW5030B
Tech: MCH % Moisture:
Analyst: MCH Date Prep: 04.04.13 17.16
Seq Number: 910694 SUB: AZ0765

Dilution Analysis:
Seq#: 910516 Date Analyzed: 04/02/13 21:13 Date Prep: 04/02/13 10:38

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.04.13 18.49	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	128	%	75-131	04.04.13 18.49	
1,2-Dichloroethane-D4	17060-07-0	113	%	63-144	04.04.13 18.49	
Toluene-D8	2037-26-5	94	%	80-117	04.04.13 18.49	
4-Bromofluorobenzene	460-00-4	96	%	74-124	04.04.13 18.49	

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Terranext, Phoenix, AZ

WVBA

Sample Id: AVB127-0100-16140 | Matrix: Water | Date Received: 03.22.13 14.30

Lab Sample Id: **459692-010** | Date Collected: 03.22.13 11.05

Analytical Method: **1,4-Dioxane by SW 8260B** | Prep Method: SW5030B

Tech: MCH | % Moisture:

Analyst: MCH | Date Prep: 04.04.13 17.18

Seq Number: 910694 | SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.04.13 19.13	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	123	%	75-131	04.04.13 19.13	
1,2-Dichloroethane-D4	17060-07-0	122	%	63-144	04.04.13 19.13	
Toluene-D8	2037-26-5	96	%	80-117	04.04.13 19.13	
4-Bromofluorobenzene	460-00-4	101	%	74-124	04.04.13 19.13	

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Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB134-0100-12120 Matrix: Water Date Received: 03.22.13 14.30

Lab Sample Id: **459692-011** Date Collected: 03.22.13 11.30

Analytical Method: **1,4-Dioxane by SW 8260B** Prep Method: SW5030B

Tech: MCH % Moisture:

Analyst: MCH Date Prep: 04.04.13 17.20

Seq Number: 910694 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.04.13 19.37	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	126	%	75-131	04.04.13 19.37	
1,2-Dichloroethane-D4	17060-07-0	121	%	63-144	04.04.13 19.37	
Toluene-D8	2037-26-5	100	%	80-117	04.04.13 19.37	
4-Bromofluorobenzene	460-00-4	96	%	74-124	04.04.13 19.37	

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Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB134-0200-12230 Matrix: Water Date Received: 03.22.13 14.30
Lab Sample Id: 459692-012 Date Collected: 03.22.13 11.50

Analytical Method: 1,4-Dioxane by SW 8260B Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 04.04.13 17.22
Seq Number: 910697 SUB: AZ0765

Dilution Analysis:
Seq#: 910516 Date Analyzed: 04/02/13 21:38 Date Prep: 04/02/13 10:38

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 00.05	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	121	%	75-131	04.05.13 00.05	
1,2-Dichloroethane-D4	17060-07-0	116	%	63-144	04.05.13 00.05	
Toluene-D8	2037-26-5	92	%	80-117	04.05.13 00.05	
4-Bromofluorobenzene	460-00-4	99	%	74-124	04.05.13 00.05	

4/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB120-0300-08325 Matrix: Water Date Received: 03.22.13 14.30
Lab Sample Id: 459692-013 Date Collected: 03.22.13 13.00

Analytical Method: 1,4-Dioxane by SW 8260B Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 04.04.13 17.24
Seq Number: 910697 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 00.29	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	126	%	75-131	04.05.13 00.29	
1,2-Dichloroethane-D4	17060-07-0	121	%	63-144	04.05.13 00.29	
Toluene-D8	2037-26-5	94	%	80-117	04.05.13 00.29	
4-Bromofluorobenzene	460-00-4	98	%	74-124	04.05.13 00.29	

4/5/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB120-0200-19245 Matrix: Water Date Received: 03.22.13 14.30
Lab Sample Id: 459692-014 Date Collected: 03.22.13 13.15

Analytical Method: 1,4-Dioxane by SW 8260B Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 04.04.13 17.26
Seq Number: 910697 SUB: AZ0765

Dilution Analysis:
Seq#: 910516 Date Analyzed: 04/02/13 22:03 Date Prep: 04/02/13 10:38

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 00.53	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	125	%	75-131	04.05.13 00.53	
1,2-Dichloroethane-D4	17060-07-0	120	%	63-144	04.05.13 00.53	
Toluene-D8	2037-26-5	94	%	80-117	04.05.13 00.53	
4-Bromofluorobenzene	460-00-4	100	%	74-124	04.05.13 00.53	

4/5/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459692

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB120-0100-19120 Matrix: Water Date Received: 03.22.13 14.30
Lab Sample Id: 459692-015 Date Collected: 03.22.13 13.40

Analytical Method: 1,4-Dioxane by SW 8260B Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 04.04.13 17.28
Seq Number: 910697 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 01.17	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	127	%	75-131	04.05.13 01.17	
1,2-Dichloroethane-D4	17060-07-0	123	%	63-144	04.05.13 01.17	
Toluene-D8	2037-26-5	96	%	80-117	04.05.13 01.17	
4-Bromofluorobenzene	460-00-4	103	%	74-124	04.05.13 01.17	

4/5/13/13

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 25, 2013

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459871

Sample Identification

AVB18-0102-1000
AVB18-0100-35108
AVB68-0400-24255
AVB68-0401-24255
AVB68-0200-24110
AVB128-0100-17279
AVB107-0100-22118
AVB121-0100-19132
AVB122-0100-19152
AVB122-0200-19245
AVB38-05X110
AVB81-0100-23295
AVB81-0200-22118
AVB98-0100-21287
AVB60-0100-31473
AVB129-0200-16310
AVB129-0100-17152
AVB129-0101-17152
AVB121-0100-19132MS
AVB121-0100-19132MSD

Introduction

This data review covers 20 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample AVB18-0102-1000 was identified as trip blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were not within QC limits. Since there were no associated samples, no data were qualified.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
635911-1-BKS (AVB18-0102-1000 AVB18-0100-35108 AVB68-0400-24255 AVB68-0401-24255 635966-1-BLK)	Chloroethane	-	-	56 (≤24)	J (all detects) UJ (all non-detects)	P
	1,1-Dichloroethane	155 (66-132)	-	40 (≤20)	J (all detects) UJ (all non-detects)	

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples AVB68-0400-24255 and AVB68-0401-24255 and samples AVB129-0100-17152 and AVB129-0101-17152 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)	Flag	A or P
	AVB68-0400-24255	AVB68-0401-24255			
Carbon disulfide	0.5U	0.620	21 (≤20)	J (all detects) UJ (all non-detects)	A

West Van Buren Area
Volatiles - Data Qualification Summary - SDG 459871

SDG	Sample	Compound	Flag	A or P	Reason (Code)
459871	AVB18-0102-1000 AVB18-0100-35108 AVB68-0400-24255 AVB68-0401-24255	Chloroethane	J (all detects) UJ (all non-detects)	P	Laboratory control samples (RPD (R7)
459871	AVB18-0102-1000 AVB18-0100-35108 AVB68-0400-24255 AVB68-0401-24255	1,1-Dichloroethane	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R)(RPD) (L1, R7)
459871	AVB68-0400-24255 AVB68-0401-24255	Carbon disulfide	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (R8)

West Van Buren Area
Volatiles - Laboratory Blank Data Qualification Summary - SDG 459871

No Sample Data Qualified in this SDG

West Van Buren Area
Volatiles - Field Blank Data Qualification Summary - SDG 459871

No Sample Data Qualified in this SDG

LDC #: 29578M1a

SDG #: 459871

Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 5/2/13

Page: 1 of 1

Reviewer:

2nd Reviewer:

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/25/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	459692-003 MS/D no Assoc sample
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 3, 4 *17, 18
XVII.	Field blanks	NA	TB = 1

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
* ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: water

1	AVB18-0102-1000 TB	11	AVB38-05X110	21	635966-1-BLK	31	
2	AVB18-0100-35108	12	AVB81-0100-23295	22	636034-1-BLK	32	
3	AVB68-0400-24255 P	13	AVB81-0200-22118	23		33	
4	AVB68-0401-24255 D	14	AVB98-0100-21287	24		34	
5	AVB68-0200-24110	15	AVB60-0100-31473	25		35	
6	AVB128-0100-17279	16	AVB129-0200-16310	26		36	
7	AVB107-0100-22118	17	AVB129-0100-17152 D	27		37	
8	AVB121-0100-19132	18	AVB129-0101-17152 V	28		38	
9	AVB122-0100-19152	19	AVB121-0100-19132MS	29		39	
10	AVB122-0200-19245	20	AVB121-0100-19132MSD	30		40	

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene	BB. 1,1,2,2-Tetrachloroethane	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane	CC. Toluene	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform	EE. Ethylbenzene	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN. Iodomethane
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.1,1-Difluoroethane
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

LDC #: 29578M1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [signature]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		635966-1-BKS	D	( )	( )	56 (24)	635966-1-BLK,	J/UJ/P R7
			I	155 (66-132)	( )	40 (20)	1→4	J/UJ/P L1, R7
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 29578M1a

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: FT
2nd reviewer: [signature]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

(Y) N N/A Were field duplicate pairs identified in this SDG?
(Y) N N/A Were target compounds detected in the field duplicate pairs?

Compound	Concentration (ug/L)		±20 RPD
	3	4	
G	0.54	0.620	21 J/UJ/A R8

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 25, 2012

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: 1,4-Dioxane

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459871

Sample Identification

AVB18-0100-35108
AVB68-0400-24255
AVB68-0401-24255
AVB68-0200-24110
AVB128-0100-17279
AVB107-0100-22118
AVB121-0100-19132
AVB122-0100-19152
AVB122-0200-19245
AVB38-05X110
AVB81-0100-23295
AVB81-0200-22118
AVB98-0100-21287
AVB60-0100-31473
AVB129-0200-16310
AVB129-0100-17152
AVB129-0101-17152
AVB18-0100-35108MS
AVB18-0100-35108MSD

Introduction

This data review covers 19 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8260B for 1,4-Dioxane.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples AVB68-0400-24255 and AVB68-0401-24255 and samples AVB129-0100-17152and AVB129-0101-17152 were identified as field duplicates. No 1,4-dioxane was detected in any of the samples.

West Van Buren Area
1,4-Dioxane - Data Qualification Summary - SDG 459871

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG 459871

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Field Blank Data Qualification Summary - SDG 459871

No Sample Data Qualified in this SDG

LDC #: 29578M1b **VALIDATION COMPLETENESS WORKSHEET** Date: 5/2/13
SDG #: 459871 Level III Page: 1 of 1
Laboratory: Xenco Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/25/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	459938-002 MS/D
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = 2, 3 16, 17
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: water

1	AVB18-0100-35108	11	AVB81-0100-23295	21	636192-1-BLK	31	
2	AVB68-0400-24255 D	12	AVB81-0200-22118	22	636335-1-BLK	32	
3	AVB68-0401-24255 D	13	AVB98-0100-21287	23		33	
4	AVB68-0200-24110	14	AVB60-0100-31473	24		34	
5	AVB128-0100-17279	15	AVB129-0200-16310	25		35	
6	AVB107-0100-22118	16	AVB129-0100-17152	26		36	
7	AVB121-0100-19132	17	AVB129-0101-17152	27		37	
8	AVB122-0100-19152	18	AVB18-0100-35108MS	28		38	
9	AVB122-0200-19245	19	AVB18-0100-35108MSD	29		39	
10	AVB38-05X110	20		30		40	

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB18-0102-1000 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-001 Date Collected: 03.25.13 07.30

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.01.13 12.31
Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.01.13 21.01		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.01.13 21.01		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.01.13 21.01		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.01.13 21.01		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.01.13 21.01		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.01.13 21.01		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.01.13 21.01		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.01.13 21.01		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.01.13 21.01		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.01.13 21.01		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.01.13 21.01		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.01.13 21.01		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.01.13 21.01	UJ (RT)	1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.01.13 21.01		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.01.13 21.01		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.01.13 21.01		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.01.13 21.01		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.01.13 21.01		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.01.13 21.01		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.01.13 21.01		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.01.13 21.01		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.01.13 21.01		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.01.13 21.01		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.01.13 21.01		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.01.13 21.01		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.01.13 21.01		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.01.13 21.01	LI UJ	1 (LI, RT)
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.01.13 21.01		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.01.13 21.01		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.01.13 21.01		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.01.13 21.01		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.01.13 21.01		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.01.13 21.01		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.01.13 21.01		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.01.13 21.01		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.01.13 21.01		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.01.13 21.01		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.01.13 21.01		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.01.13 21.01		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.01.13 21.01		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.01.13 21.01		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB18-0102-1000 | Matrix: Water | Date Received: 03.25.13 15.33
Lab Sample Id: **459871-001** | Date Collected: 03.25.13 07.30

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.01.13 12.31
Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.01.13 21.01		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.01.13 21.01		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.01.13 21.01		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.01.13 21.01		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.01.13 21.01		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.01.13 21.01		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	04.01.13 21.01		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.01.13 21.01		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.01.13 21.01		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.01.13 21.01		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.01.13 21.01		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.01.13 21.01		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	04.01.13 21.01		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.01.13 21.01		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.01.13 21.01		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.01.13 21.01		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.01.13 21.01		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.01.13 21.01		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.01.13 21.01		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.01.13 21.01		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.01.13 21.01		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.01.13 21.01		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	109	%	69-133	04.01.13 21.01	
1,2-Dichloroethane-D4	17060-07-0	119	%	66-139	04.01.13 21.01	
Toluene-D8	2037-26-5	101	%	70-130	04.01.13 21.01	
4-Bromofluorobenzene	460-00-4	88	%	70-135	04.01.13 21.01	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB18-0100-35108 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-002 Date Collected: 03.25.13 07.55

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.01.13 12.31
Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.01.13 21.27		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.01.13 21.27		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.01.13 21.27		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.01.13 21.27		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.01.13 21.27		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.01.13 21.27		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.01.13 21.27		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.01.13 21.27		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.01.13 21.27		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.01.13 21.27		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.01.13 21.27		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.01.13 21.27		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.01.13 21.27	UJ(RT)	1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.01.13 21.27		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.01.13 21.27		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.01.13 21.27		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.01.13 21.27		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.01.13 21.27		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.01.13 21.27		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.01.13 21.27		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.01.13 21.27		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.01.13 21.27		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.01.13 21.27		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.01.13 21.27		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.01.13 21.27		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.01.13 21.27		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.01.13 21.27	L1 UJ	1(L1,RT)
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.01.13 21.27		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.01.13 21.27		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.01.13 21.27		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.01.13 21.27		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.01.13 21.27		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.01.13 21.27		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.01.13 21.27		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.01.13 21.27		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.01.13 21.27		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.01.13 21.27		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.01.13 21.27		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.01.13 21.27		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.01.13 21.27		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.01.13 21.27		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB18-0100-35108 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-002 Date Collected: 03.25.13 07.55

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.01.13 12.31
Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.01.13 21.27		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.01.13 21.27		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.01.13 21.27		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.01.13 21.27		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.01.13 21.27		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.01.13 21.27		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	04.01.13 21.27		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.01.13 21.27		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.01.13 21.27		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.01.13 21.27		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.01.13 21.27		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.01.13 21.27		1
Trichloroethene	79-01-6	**0.680**	0.500	ug/L	04.01.13 21.27		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.01.13 21.27		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.01.13 21.27		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.01.13 21.27		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.01.13 21.27		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.01.13 21.27		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.01.13 21.27		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.01.13 21.27		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.01.13 21.27		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.01.13 21.27		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	113	%	69-133	04.01.13 21.27	
1,2-Dichloroethane-D4	17060-07-0	120	%	66-139	04.01.13 21.27	
Toluene-D8	2037-26-5	103	%	70-130	04.01.13 21.27	
4-Bromofluorobenzene	460-00-4	87	%	70-135	04.01.13 21.27	

Final 1.000

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB68-0400-24255 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-003 Date Collected: 03.25.13 08.20

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.01.13 12.31
Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.01.13 21.54		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.01.13 21.54		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.01.13 21.54		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.01.13 21.54		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.01.13 21.54		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.01.13 21.54		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.01.13 21.54		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.01.13 21.54		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.01.13 21.54		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.01.13 21.54	UJ(R8)	1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.01.13 21.54		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.01.13 21.54		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.01.13 21.54	UJ(R7)	1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.01.13 21.54		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.01.13 21.54		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.01.13 21.54		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.01.13 21.54		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.01.13 21.54		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.01.13 21.54		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.01.13 21.54		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.01.13 21.54		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.01.13 21.54		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.01.13 21.54		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.01.13 21.54		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.01.13 21.54		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.01.13 21.54		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.01.13 21.54	L1 UJ	1 (L1,R7)
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.01.13 21.54		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.01.13 21.54		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.01.13 21.54		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.01.13 21.54		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.01.13 21.54		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.01.13 21.54		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.01.13 21.54		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.01.13 21.54		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.01.13 21.54		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.01.13 21.54		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.01.13 21.54		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.01.13 21.54		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.01.13 21.54		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.01.13 21.54		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB68-0400-24255 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-003 Date Collected: 03.25.13 08.20

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.01.13 12.31
Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.01.13 21.54		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.01.13 21.54		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.01.13 21.54		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.01.13 21.54		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.01.13 21.54		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.01.13 21.54		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	04.01.13 21.54		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.01.13 21.54		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.01.13 21.54		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.01.13 21.54		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.01.13 21.54		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.01.13 21.54		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	04.01.13 21.54		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.01.13 21.54		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.01.13 21.54		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.01.13 21.54		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.01.13 21.54		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.01.13 21.54		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.01.13 21.54		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.01.13 21.54		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.01.13 21.54		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.01.13 21.54		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	112	%	69-133	04.01.13 21.54	
1,2-Dichloroethane-D4	17060-07-0	121	%	66-139	04.01.13 21.54	
Toluene-D8	2037-26-5	103	%	70-130	04.01.13 21.54	
4-Bromofluorobenzene	460-00-4	86	%	70-135	04.01.13 21.54	

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Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB68-0401-24255 | Matrix: Water | Date Received: 03.25.13 15.33
Lab Sample Id: 459871-004 | Date Collected: 03.25.13 08.30

Analytical Method: VOCs by EPA 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.01.13 12.31
Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.01.13 22.18		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.01.13 22.18		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.01.13 22.18		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.01.13 22.18		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.01.13 22.18		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.01.13 22.18		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.01.13 22.18		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.01.13 22.18		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.01.13 22.18		1
Carbon Disulfide	75-15-0	**0.620**	0.500	ug/L	04.01.13 22.18	J (R8)	1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.01.13 22.18		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.01.13 22.18		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.01.13 22.18	UJ (R7)	1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.01.13 22.18		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.01.13 22.18		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.01.13 22.18		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.01.13 22.18		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.01.13 22.18		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.01.13 22.18		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.01.13 22.18		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.01.13 22.18		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.01.13 22.18		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.01.13 22.18		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.01.13 22.18		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.01.13 22.18		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.01.13 22.18		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.01.13 22.18	L1 UJ	1 (L1,R7)
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.01.13 22.18		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.01.13 22.18		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.01.13 22.18		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.01.13 22.18		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.01.13 22.18		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.01.13 22.18		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.01.13 22.18		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.01.13 22.18		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.01.13 22.18		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.01.13 22.18		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.01.13 22.18		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.01.13 22.18		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.01.13 22.18		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.01.13 22.18		1

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Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB68-0401-24255 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: **459871-004** Date Collected: 03.25.13 08.30

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.01.13 12.31
Seq Number: 910399

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.01.13 22.18		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.01.13 22.18		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.01.13 22.18		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.01.13 22.18		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.01.13 22.18		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.01.13 22.18		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	04.01.13 22.18		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.01.13 22.18		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.01.13 22.18		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.01.13 22.18		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.01.13 22.18		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.01.13 22.18		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	04.01.13 22.18		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.01.13 22.18		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.01.13 22.18		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.01.13 22.18		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.01.13 22.18		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.01.13 22.18		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.01.13 22.18		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.01.13 22.18		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.01.13 22.18		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.01.13 22.18		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	111	%	69-133	04.01.13 22.18	
1,2-Dichloroethane-D4	17060-07-0	120	%	66-139	04.01.13 22.18	
Toluene-D8	2037-26-5	103	%	70-130	04.01.13 22.18	
4-Bromofluorobenzene	460-00-4	86	%	70-135	04.01.13 22.18	

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Final 1.000

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB68-0200-24110 | Matrix: Water | Date Received: 03.25.13 15.33
Lab Sample Id: 459871-005 | Date Collected: 03.25.13 09.00

Analytical Method: VOCs by EPA 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.02.13 12.55		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.02.13 12.55		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.02.13 12.55		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.02.13 12.55		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.02.13 12.55		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.02.13 12.55		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.02.13 12.55		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.02.13 12.55		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.02.13 12.55		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.02.13 12.55		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.02.13 12.55		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.02.13 12.55		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.02.13 12.55		1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.02.13 12.55		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.02.13 12.55		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.02.13 12.55		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.02.13 12.55		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.02.13 12.55		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.02.13 12.55		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.02.13 12.55		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.02.13 12.55		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.02.13 12.55		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.02.13 12.55		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.02.13 12.55		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.02.13 12.55		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.02.13 12.55		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.02.13 12.55		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.02.13 12.55		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.02.13 12.55		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.02.13 12.55		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.02.13 12.55		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.02.13 12.55		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.02.13 12.55		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.02.13 12.55		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.02.13 12.55		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.02.13 12.55		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.02.13 12.55		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.02.13 12.55		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.02.13 12.55		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.02.13 12.55		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.02.13 12.55		1

Final 1.000

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB68-0200-24110 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-005 Date Collected: 03.25.13 09.00

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.02.13 12.55		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.02.13 12.55		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.02.13 12.55		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.02.13 12.55		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.02.13 12.55		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.02.13 12.55		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	04.02.13 12.55		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.02.13 12.55		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.02.13 12.55		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.02.13 12.55		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.02.13 12.55		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.02.13 12.55		1
Trichloroethene	79-01-6	**1.27**	0.500	ug/L	04.02.13 12.55		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.02.13 12.55		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.02.13 12.55		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.02.13 12.55		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.02.13 12.55		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.02.13 12.55		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.02.13 12.55		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.02.13 12.55		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.02.13 12.55		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.02.13 12.55		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	101	%	69-133	04.02.13 12.55	
1,2-Dichloroethane-D4	17060-07-0	105	%	66-139	04.02.13 12.55	
Toluene-D8	2037-26-5	94	%	70-130	04.02.13 12.55	
4-Bromofluorobenzene	460-00-4	79	%	70-135	04.02.13 12.55	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB128-0100-17279 | Matrix: Water | Date Received: 03.25.13 15.33
Lab Sample Id: **459871-006** | Date Collected: 03.25.13 09.55

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.02.13 13.20		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.02.13 13.20		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.02.13 13.20		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.02.13 13.20		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.02.13 13.20		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.02.13 13.20		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.02.13 13.20		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.02.13 13.20		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.02.13 13.20		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.02.13 13.20		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.02.13 13.20		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.02.13 13.20		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.02.13 13.20		1
Chloroform	67-66-3	**3.08**	0.500	ug/L	04.02.13 13.20		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.02.13 13.20		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.02.13 13.20		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.02.13 13.20		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.02.13 13.20		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.02.13 13.20		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.02.13 13.20		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.02.13 13.20		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.02.13 13.20		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.02.13 13.20		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.02.13 13.20		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.02.13 13.20		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.02.13 13.20		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.02.13 13.20		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.02.13 13.20		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.02.13 13.20		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.02.13 13.20		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.02.13 13.20		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.02.13 13.20		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.02.13 13.20		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.02.13 13.20		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.02.13 13.20		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.02.13 13.20		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.02.13 13.20		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.02.13 13.20		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.02.13 13.20		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.02.13 13.20		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.02.13 13.20		1

Final 1.000

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB128-0100-17279 | Matrix: Water | Date Received: 03.25.13 15.33
Lab Sample Id: **459871-006** | Date Collected: 03.25.13 09.55

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.02.13 13.20		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.02.13 13.20		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.02.13 13.20		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.02.13 13.20		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.02.13 13.20		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.02.13 13.20		1
Tetrachloroethylene	127-18-4	**1.44**	0.500	ug/L	04.02.13 13.20		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.02.13 13.20		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.02.13 13.20		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.02.13 13.20		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.02.13 13.20		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.02.13 13.20		1
Trichloroethene	79-01-6	**1.18**	0.500	ug/L	04.02.13 13.20		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.02.13 13.20		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.02.13 13.20		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.02.13 13.20		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.02.13 13.20		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.02.13 13.20		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.02.13 13.20		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.02.13 13.20		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.02.13 13.20		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.02.13 13.20		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	101	%	69-133	04.02.13 13.20	
1,2-Dichloroethane-D4	17060-07-0	103	%	66-139	04.02.13 13.20	
Toluene-D8	2037-26-5	93	%	70-130	04.02.13 13.20	
4-Bromofluorobenzene	460-00-4	81	%	70-135	04.02.13 13.20	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB107-0100-22118 | Matrix: Water | Date Received: 03.25.13 15.33
Lab Sample Id: 459871-007 | Date Collected: 03.25.13 10.15

Analytical Method: VOCs by EPA 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.02.13 13.44		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.02.13 13.44		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.02.13 13.44		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.02.13 13.44		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.02.13 13.44		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.02.13 13.44		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.02.13 13.44		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.02.13 13.44		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.02.13 13.44		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.02.13 13.44		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.02.13 13.44		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.02.13 13.44		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.02.13 13.44		1
Chloroform	67-66-3	**3.39**	0.500	ug/L	04.02.13 13.44		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.02.13 13.44		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.02.13 13.44		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.02.13 13.44		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.02.13 13.44		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.02.13 13.44		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.02.13 13.44		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.02.13 13.44		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.02.13 13.44		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.02.13 13.44		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.02.13 13.44		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.02.13 13.44		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.02.13 13.44		1
1,1-Dichloroethane	75-34-3	**2.49**	0.500	ug/L	04.02.13 13.44		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.02.13 13.44		1
1,1-Dichloroethene	75-35-4	**3.27**	0.500	ug/L	04.02.13 13.44		1
cis-1,2-Dichloroethene	156-59-2	**5.21**	0.500	ug/L	04.02.13 13.44		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.02.13 13.44		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.02.13 13.44		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.02.13 13.44		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.02.13 13.44		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.02.13 13.44		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.02.13 13.44		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.02.13 13.44		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.02.13 13.44		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.02.13 13.44		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.02.13 13.44		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.02.13 13.44		1

Final 1.000

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB107-0100-22118 | Matrix: Water | Date Received: 03.25.13 15.33
Lab Sample Id: 459871-007 | Date Collected: 03.25.13 10.15

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.02.13 13.44		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.02.13 13.44		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.02.13 13.44		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.02.13 13.44		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.02.13 13.44		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.02.13 13.44		1
Tetrachloroethylene	127-18-4	**3.53**	0.500	ug/L	04.02.13 13.44		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.02.13 13.44		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.02.13 13.44		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.02.13 13.44		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.02.13 13.44		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.02.13 13.44		1
Trichloroethene	79-01-6	**20.1**	0.500	ug/L	04.02.13 13.44		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.02.13 13.44		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.02.13 13.44		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.02.13 13.44		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.02.13 13.44		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.02.13 13.44		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.02.13 13.44		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.02.13 13.44		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.02.13 13.44		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.02.13 13.44		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	101	%	69-133	04.02.13 13.44	
1,2-Dichloroethane-D4	17060-07-0	104	%	66-139	04.02.13 13.44	
Toluene-D8	2037-26-5	94	%	70-130	04.02.13 13.44	
4-Bromofluorobenzene	460-00-4	80	%	70-135	04.02.13 13.44	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB121-0100-19132 | Matrix: Water | Date Received: 03.25.13 15.33
Lab Sample Id: 459871-008 | Date Collected: 03.25.13 10.35

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.02.13 14.09		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.02.13 14.09		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.02.13 14.09		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.02.13 14.09		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.02.13 14.09		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.02.13 14.09		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.02.13 14.09		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.02.13 14.09		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.02.13 14.09		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.02.13 14.09		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.02.13 14.09		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.02.13 14.09		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.02.13 14.09		1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.02.13 14.09		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.02.13 14.09		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.02.13 14.09		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.02.13 14.09		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.02.13 14.09		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.02.13 14.09		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.02.13 14.09		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.02.13 14.09		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.02.13 14.09		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.02.13 14.09		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.02.13 14.09		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.02.13 14.09		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.02.13 14.09		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.02.13 14.09		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.02.13 14.09		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.02.13 14.09		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.02.13 14.09		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.02.13 14.09		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.02.13 14.09		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.02.13 14.09		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.02.13 14.09		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.02.13 14.09		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.02.13 14.09		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.02.13 14.09		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.02.13 14.09		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.02.13 14.09		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.02.13 14.09		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.02.13 14.09		1

Final 1.000

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB121-0100-19132 | Matrix: Water | Date Received: 03.25.13 15.33
Lab Sample Id: 459871-008 | Date Collected: 03.25.13 10.35

Analytical Method: VOCs by EPA 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.02.13 14.09		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.02.13 14.09		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.02.13 14.09		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.02.13 14.09		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.02.13 14.09		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.02.13 14.09		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	04.02.13 14.09		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.02.13 14.09		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.02.13 14.09		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.02.13 14.09		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.02.13 14.09		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.02.13 14.09		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	04.02.13 14.09		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.02.13 14.09		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.02.13 14.09		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.02.13 14.09		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.02.13 14.09		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.02.13 14.09		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.02.13 14.09		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.02.13 14.09		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.02.13 14.09		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.02.13 14.09		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	101	%	69-133	04.02.13 14.09	
1,2-Dichloroethane-D4	17060-07-0	110	%	66-139	04.02.13 14.09	
Toluene-D8	2037-26-5	98	%	70-130	04.02.13 14.09	
4-Bromofluorobenzene	460-00-4	78	%	70-135	04.02.13 14.09	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB122-0100-19152 | Matrix: Water | Date Received: 03.25.13 15.33
Lab Sample Id: **459871-009** | Date Collected: 03.25.13 11.00

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.02.13 14.34		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.02.13 14.34		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.02.13 14.34		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.02.13 14.34		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.02.13 14.34		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.02.13 14.34		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.02.13 14.34		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.02.13 14.34		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.02.13 14.34		1
Carbon Disulfide	75-15-0	**0.630**	0.500	ug/L	04.02.13 14.34		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.02.13 14.34		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.02.13 14.34		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.02.13 14.34		1
Chloroform	67-66-3	**4.77**	0.500	ug/L	04.02.13 14.34		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.02.13 14.34		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.02.13 14.34		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.02.13 14.34		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.02.13 14.34		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.02.13 14.34		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.02.13 14.34		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.02.13 14.34		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.02.13 14.34		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.02.13 14.34		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.02.13 14.34		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.02.13 14.34		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.02.13 14.34		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.02.13 14.34		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.02.13 14.34		1
1,1-Dichloroethene	75-35-4	**0.930**	0.500	ug/L	04.02.13 14.34		1
cis-1,2-Dichloroethene	156-59-2	**0.560**	0.500	ug/L	04.02.13 14.34		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.02.13 14.34		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.02.13 14.34		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.02.13 14.34		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.02.13 14.34		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.02.13 14.34		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.02.13 14.34		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.02.13 14.34		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.02.13 14.34		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.02.13 14.34		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.02.13 14.34		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.02.13 14.34		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB122-0100-19152 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-009 Date Collected: 03.25.13 11.00

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.02.13 14.34		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.02.13 14.34		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.02.13 14.34		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.02.13 14.34		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.02.13 14.34		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.02.13 14.34		1
Tetrachloroethylene	127-18-4	**13.4**	0.500	ug/L	04.02.13 14.34		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.02.13 14.34		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.02.13 14.34		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.02.13 14.34		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.02.13 14.34		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.02.13 14.34		1
Trichloroethene	79-01-6	**9.13**	0.500	ug/L	04.02.13 14.34		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.02.13 14.34		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.02.13 14.34		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.02.13 14.34		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.02.13 14.34		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.02.13 14.34		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.02.13 14.34		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.02.13 14.34		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.02.13 14.34		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.02.13 14.34		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	103	%	69-133	04.02.13 14.34	
1,2-Dichloroethane-D4	17060-07-0	110	%	66-139	04.02.13 14.34	
Toluene-D8	2037-26-5	95	%	70-130	04.02.13 14.34	
4-Bromofluorobenzene	460-00-4	81	%	70-135	04.02.13 14.34	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB122-0200-19245 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-010 Date Collected: 03.25.13 11.15

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.02.13 14.59		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.02.13 14.59		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.02.13 14.59		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.02.13 14.59		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.02.13 14.59		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.02.13 14.59		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.02.13 14.59		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.02.13 14.59		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.02.13 14.59		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.02.13 14.59		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.02.13 14.59		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.02.13 14.59		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.02.13 14.59		1
Chloroform	67-66-3	**2.12**	0.500	ug/L	04.02.13 14.59		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.02.13 14.59		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.02.13 14.59		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.02.13 14.59		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.02.13 14.59		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.02.13 14.59		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.02.13 14.59		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.02.13 14.59		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.02.13 14.59		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.02.13 14.59		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.02.13 14.59		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.02.13 14.59		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.02.13 14.59		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.02.13 14.59		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.02.13 14.59		1
1,1-Dichloroethene	75-35-4	**2.13**	0.500	ug/L	04.02.13 14.59		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.02.13 14.59		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.02.13 14.59		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.02.13 14.59		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.02.13 14.59		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.02.13 14.59		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.02.13 14.59		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.02.13 14.59		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.02.13 14.59		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.02.13 14.59		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.02.13 14.59		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.02.13 14.59		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.02.13 14.59		1

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB122-0200-19245 | Matrix: Water | Date Received: 03.25.13 15.33

Lab Sample Id: 459871-010 | Date Collected: 03.25.13 11.15

Analytical Method: VOCs by EPA 8260B | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 04.02.13 10.38

Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.02.13 14.59		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.02.13 14.59		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.02.13 14.59		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.02.13 14.59		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.02.13 14.59		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.02.13 14.59		1
Tetrachloroethylene	127-18-4	**8.83**	0.500	ug/L	04.02.13 14.59		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.02.13 14.59		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.02.13 14.59		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.02.13 14.59		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.02.13 14.59		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.02.13 14.59		1
Trichloroethene	79-01-6	**7.49**	0.500	ug/L	04.02.13 14.59		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.02.13 14.59		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.02.13 14.59		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.02.13 14.59		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.02.13 14.59		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.02.13 14.59		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.02.13 14.59		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.02.13 14.59		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.02.13 14.59		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.02.13 14.59		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	103	%	69-133	04.02.13 14.59	
1,2-Dichloroethane-D4	17060-07-0	111	%	66-139	04.02.13 14.59	
Toluene-D8	2037-26-5	95	%	70-130	04.02.13 14.59	
4-Bromofluorobenzene	460-00-4	79	%	70-135	04.02.13 14.59	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB38-05X110 | Matrix: Water | Date Received: 03.25.13 15.33
Lab Sample Id: **459871-011** | Date Collected: 03.25.13 11.50

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.02.13 15.24		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.02.13 15.24		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.02.13 15.24		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.02.13 15.24		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.02.13 15.24		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.02.13 15.24		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.02.13 15.24		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.02.13 15.24		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.02.13 15.24		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.02.13 15.24		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.02.13 15.24		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.02.13 15.24		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.02.13 15.24		1
Chloroform	67-66-3	**2.47**	0.500	ug/L	04.02.13 15.24		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.02.13 15.24		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.02.13 15.24		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.02.13 15.24		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.02.13 15.24		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.02.13 15.24		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.02.13 15.24		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.02.13 15.24		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.02.13 15.24		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.02.13 15.24		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.02.13 15.24		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.02.13 15.24		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.02.13 15.24		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.02.13 15.24		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.02.13 15.24		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.02.13 15.24		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.02.13 15.24		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.02.13 15.24		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.02.13 15.24		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.02.13 15.24		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.02.13 15.24		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.02.13 15.24		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.02.13 15.24		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.02.13 15.24		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.02.13 15.24		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.02.13 15.24		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.02.13 15.24		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.02.13 15.24		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB38-05X110 | Matrix: Water | Date Received: 03.25.13 15.33
Lab Sample Id: **459871-011** | Date Collected: 03.25.13 11.50

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.02.13 15.24		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.02.13 15.24		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.02.13 15.24		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.02.13 15.24		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.02.13 15.24		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.02.13 15.24		1
Tetrachloroethylene	127-18-4	**2.01**	0.500	ug/L	04.02.13 15.24		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.02.13 15.24		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.02.13 15.24		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.02.13 15.24		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.02.13 15.24		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.02.13 15.24		1
Trichloroethene	79-01-6	**0.810**	0.500	ug/L	04.02.13 15.24		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.02.13 15.24		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.02.13 15.24		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.02.13 15.24		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.02.13 15.24		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.02.13 15.24		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.02.13 15.24		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.02.13 15.24		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.02.13 15.24		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.02.13 15.24		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	104	%	69-133	04.02.13 15.24	
1,2-Dichloroethane-D4	17060-07-0	114	%	66-139	04.02.13 15.24	
Toluene-D8	2037-26-5	95	%	70-130	04.02.13 15.24	
4-Bromofluorobenzene	460-00-4	83	%	70-135	04.02.13 15.24	

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Final 1.000

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Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB81-0100-23295 | Matrix: Water | Date Received: 03.25.13 15.33
Lab Sample Id: 459871-012 | Date Collected: 03.25.13 12.40

Analytical Method: **VOCs by EPA 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.02.13 15.49		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.02.13 15.49		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.02.13 15.49		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.02.13 15.49		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.02.13 15.49		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.02.13 15.49		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.02.13 15.49		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.02.13 15.49		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.02.13 15.49		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.02.13 15.49		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.02.13 15.49		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.02.13 15.49		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.02.13 15.49		1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.02.13 15.49		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.02.13 15.49		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.02.13 15.49		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.02.13 15.49		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.02.13 15.49		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.02.13 15.49		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.02.13 15.49		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.02.13 15.49		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.02.13 15.49		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.02.13 15.49		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.02.13 15.49		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.02.13 15.49		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.02.13 15.49		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.02.13 15.49		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.02.13 15.49		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.02.13 15.49		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.02.13 15.49		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.02.13 15.49		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.02.13 15.49		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.02.13 15.49		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.02.13 15.49		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.02.13 15.49		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.02.13 15.49		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.02.13 15.49		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.02.13 15.49		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.02.13 15.49		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.02.13 15.49		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.02.13 15.49		1

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Final 1.000

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Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB81-0100-23295 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: **459871-012** Date Collected: 03.25.13 12.40

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.02.13 15.49		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.02.13 15.49		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.02.13 15.49		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.02.13 15.49		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.02.13 15.49		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.02.13 15.49		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	04.02.13 15.49		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.02.13 15.49		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.02.13 15.49		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.02.13 15.49		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.02.13 15.49		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.02.13 15.49		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	04.02.13 15.49		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.02.13 15.49		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.02.13 15.49		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.02.13 15.49		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.02.13 15.49		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.02.13 15.49		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.02.13 15.49		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.02.13 15.49		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.02.13 15.49		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.02.13 15.49		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	104	%	69-133	04.02.13 15.49	
1,2-Dichloroethane-D4	17060-07-0	113	%	66-139	04.02.13 15.49	
Toluene-D8	2037-26-5	94	%	70-130	04.02.13 15.49	
4-Bromofluorobenzene	460-00-4	81	%	70-135	04.02.13 15.49	

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Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB81-0200-22118 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-013 Date Collected: 03.25.13 13.00

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.02.13 16.13		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.02.13 16.13		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.02.13 16.13		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.02.13 16.13		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.02.13 16.13		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.02.13 16.13		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.02.13 16.13		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.02.13 16.13		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.02.13 16.13		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.02.13 16.13		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.02.13 16.13		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.02.13 16.13		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.02.13 16.13		1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.02.13 16.13		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.02.13 16.13		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.02.13 16.13		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.02.13 16.13		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.02.13 16.13		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.02.13 16.13		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.02.13 16.13		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.02.13 16.13		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.02.13 16.13		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.02.13 16.13		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.02.13 16.13		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.02.13 16.13		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.02.13 16.13		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.02.13 16.13		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.02.13 16.13		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.02.13 16.13		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.02.13 16.13		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.02.13 16.13		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.02.13 16.13		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.02.13 16.13		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.02.13 16.13		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.02.13 16.13		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.02.13 16.13		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.02.13 16.13		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.02.13 16.13		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.02.13 16.13		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.02.13 16.13		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.02.13 16.13		1

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Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB81-0200-22118 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-013 Date Collected: 03.25.13 13.00

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.02.13 16.13		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.02.13 16.13		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.02.13 16.13		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.02.13 16.13		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.02.13 16.13		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.02.13 16.13		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	04.02.13 16.13		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.02.13 16.13		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.02.13 16.13		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.02.13 16.13		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.02.13 16.13		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.02.13 16.13		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	04.02.13 16.13		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.02.13 16.13		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.02.13 16.13		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.02.13 16.13		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.02.13 16.13		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.02.13 16.13		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.02.13 16.13		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.02.13 16.13		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.02.13 16.13		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.02.13 16.13		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	105	%	69-133	04.02.13 16.13	
1,2-Dichloroethane-D4	17060-07-0	114	%	66-139	04.02.13 16.13	
Toluene-D8	2037-26-5	96	%	70-130	04.02.13 16.13	
4-Bromofluorobenzene	460-00-4	82	%	70-135	04.02.13 16.13	

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB98-0100-21287 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-014 Date Collected: 03.25.13 13.30

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.02.13 16.38		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.02.13 16.38		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.02.13 16.38		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.02.13 16.38		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.02.13 16.38		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.02.13 16.38		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.02.13 16.38		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.02.13 16.38		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.02.13 16.38		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.02.13 16.38		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.02.13 16.38		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.02.13 16.38		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.02.13 16.38		1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.02.13 16.38		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.02.13 16.38		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.02.13 16.38		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.02.13 16.38		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.02.13 16.38		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.02.13 16.38		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.02.13 16.38		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.02.13 16.38		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.02.13 16.38		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.02.13 16.38		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.02.13 16.38		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.02.13 16.38		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.02.13 16.38		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.02.13 16.38		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.02.13 16.38		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.02.13 16.38		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.02.13 16.38		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.02.13 16.38		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.02.13 16.38		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.02.13 16.38		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.02.13 16.38		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.02.13 16.38		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.02.13 16.38		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.02.13 16.38		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.02.13 16.38		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.02.13 16.38		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.02.13 16.38		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.02.13 16.38		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB98-0100-21287 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: **459871-014** Date Collected: 03.25.13 13.30

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.02.13 16.38		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.02.13 16.38		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.02.13 16.38		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.02.13 16.38		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.02.13 16.38		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.02.13 16.38		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	04.02.13 16.38		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.02.13 16.38		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.02.13 16.38		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.02.13 16.38		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.02.13 16.38		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.02.13 16.38		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	04.02.13 16.38		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.02.13 16.38		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.02.13 16.38		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.02.13 16.38		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.02.13 16.38		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.02.13 16.38		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.02.13 16.38		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.02.13 16.38		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.02.13 16.38		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.02.13 16.38		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	105	%	69-133	04.02.13 16.38	
1,2-Dichloroethane-D4	17060-07-0	115	%	66-139	04.02.13 16.38	
Toluene-D8	2037-26-5	96	%	70-130	04.02.13 16.38	
4-Bromofluorobenzene	460-00-4	84	%	70-135	04.02.13 16.38	

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB60-0100-31473 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-015 Date Collected: 03.25.13 14.10

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.02.13 17.03		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.02.13 17.03		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.02.13 17.03		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.02.13 17.03		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.02.13 17.03		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.02.13 17.03		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.02.13 17.03		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.02.13 17.03		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.02.13 17.03		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.02.13 17.03		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.02.13 17.03		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.02.13 17.03		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.02.13 17.03		1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.02.13 17.03		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.02.13 17.03		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.02.13 17.03		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.02.13 17.03		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.02.13 17.03		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.02.13 17.03		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.02.13 17.03		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.02.13 17.03		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.02.13 17.03		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.02.13 17.03		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.02.13 17.03		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.02.13 17.03		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.02.13 17.03		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.02.13 17.03		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.02.13 17.03		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.02.13 17.03		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.02.13 17.03		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.02.13 17.03		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.02.13 17.03		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.02.13 17.03		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.02.13 17.03		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.02.13 17.03		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.02.13 17.03		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.02.13 17.03		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.02.13 17.03		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.02.13 17.03		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.02.13 17.03		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.02.13 17.03		1

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB60-0100-31473 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-015 Date Collected: 03.25.13 14.10

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.02.13 17.03		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.02.13 17.03		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.02.13 17.03		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.02.13 17.03		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.02.13 17.03		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.02.13 17.03		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	04.02.13 17.03		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.02.13 17.03		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.02.13 17.03		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.02.13 17.03		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.02.13 17.03		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.02.13 17.03		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	04.02.13 17.03		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.02.13 17.03		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.02.13 17.03		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.02.13 17.03		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.02.13 17.03		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.02.13 17.03		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.02.13 17.03		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.02.13 17.03		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.02.13 17.03		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.02.13 17.03		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	103	%	69-133	04.02.13 17.03	
1,2-Dichloroethane-D4	17060-07-0	113	%	66-139	04.02.13 17.03	
Toluene-D8	2037-26-5	96	%	70-130	04.02.13 17.03	
4-Bromofluorobenzene	460-00-4	81	%	70-135	04.02.13 17.03	

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB129-0200-16310 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-016 Date Collected: 03.25.13 14.35

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.02.13 17.28		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.02.13 17.28		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.02.13 17.28		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.02.13 17.28		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.02.13 17.28		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.02.13 17.28		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.02.13 17.28		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.02.13 17.28		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.02.13 17.28		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.02.13 17.28		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.02.13 17.28		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.02.13 17.28		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.02.13 17.28		1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.02.13 17.28		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.02.13 17.28		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.02.13 17.28		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.02.13 17.28		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.02.13 17.28		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.02.13 17.28		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.02.13 17.28		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.02.13 17.28		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.02.13 17.28		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.02.13 17.28		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.02.13 17.28		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.02.13 17.28		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.02.13 17.28		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.02.13 17.28		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.02.13 17.28		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.02.13 17.28		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.02.13 17.28		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.02.13 17.28		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.02.13 17.28		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.02.13 17.28		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.02.13 17.28		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.02.13 17.28		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.02.13 17.28		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.02.13 17.28		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.02.13 17.28		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.02.13 17.28		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.02.13 17.28		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.02.13 17.28		1

Final 1.000

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB129-0200-16310 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-016 Date Collected: 03.25.13 14.35

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.02.13 17.28		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.02.13 17.28		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.02.13 17.28		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.02.13 17.28		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.02.13 17.28		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.02.13 17.28		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	04.02.13 17.28		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.02.13 17.28		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.02.13 17.28		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.02.13 17.28		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.02.13 17.28		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.02.13 17.28		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	04.02.13 17.28		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.02.13 17.28		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.02.13 17.28		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.02.13 17.28		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.02.13 17.28		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.02.13 17.28		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.02.13 17.28		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.02.13 17.28		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.02.13 17.28		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.02.13 17.28		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	106	%	69-133	04.02.13 17.28	
1,2-Dichloroethane-D4	17060-07-0	115	%	66-139	04.02.13 17.28	
Toluene-D8	2037-26-5	96	%	70-130	04.02.13 17.28	
4-Bromofluorobenzene	460-00-4	81	%	70-135	04.02.13 17.28	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB129-0100-17152 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-017 Date Collected: 03.25.13 14.40

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.02.13 17.53		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.02.13 17.53		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.02.13 17.53		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.02.13 17.53		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.02.13 17.53		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.02.13 17.53		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.02.13 17.53		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.02.13 17.53		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.02.13 17.53		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.02.13 17.53		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.02.13 17.53		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.02.13 17.53		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.02.13 17.53		1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.02.13 17.53		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.02.13 17.53		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.02.13 17.53		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.02.13 17.53		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.02.13 17.53		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.02.13 17.53		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.02.13 17.53		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.02.13 17.53		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.02.13 17.53		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.02.13 17.53		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.02.13 17.53		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.02.13 17.53		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.02.13 17.53		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.02.13 17.53		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.02.13 17.53		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.02.13 17.53		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.02.13 17.53		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.02.13 17.53		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.02.13 17.53		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.02.13 17.53		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.02.13 17.53		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.02.13 17.53		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.02.13 17.53		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.02.13 17.53		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.02.13 17.53		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.02.13 17.53		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.02.13 17.53		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.02.13 17.53		1

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB129-0100-17152 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-017 Date Collected: 03.25.13 14.40

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.02.13 17.53		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.02.13 17.53		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.02.13 17.53		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.02.13 17.53		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.02.13 17.53		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.02.13 17.53		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	04.02.13 17.53		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.02.13 17.53		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.02.13 17.53		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.02.13 17.53		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.02.13 17.53		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.02.13 17.53		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	04.02.13 17.53		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.02.13 17.53		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.02.13 17.53		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.02.13 17.53		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.02.13 17.53		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.02.13 17.53		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.02.13 17.53		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.02.13 17.53		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.02.13 17.53		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.02.13 17.53		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	106	%	69-133	04.02.13 17.53	
1,2-Dichloroethane-D4	17060-07-0	115	%	66-139	04.02.13 17.53	
Toluene-D8	2037-26-5	95	%	70-130	04.02.13 17.53	
4-Bromofluorobenzene	460-00-4	83	%	70-135	04.02.13 17.53	

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Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB129-0101-17152 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-018 Date Collected: 03.25.13 14.45

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.02.13 18.18		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.02.13 18.18		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.02.13 18.18		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.02.13 18.18		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.02.13 18.18		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.02.13 18.18		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.02.13 18.18		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.02.13 18.18		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.02.13 18.18		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.02.13 18.18		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.02.13 18.18		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.02.13 18.18		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.02.13 18.18		1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.02.13 18.18		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.02.13 18.18		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.02.13 18.18		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.02.13 18.18		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.02.13 18.18		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.02.13 18.18		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.02.13 18.18		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.02.13 18.18		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.02.13 18.18		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.02.13 18.18		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.02.13 18.18		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.02.13 18.18		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.02.13 18.18		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.02.13 18.18		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.02.13 18.18		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.02.13 18.18		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.02.13 18.18		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.02.13 18.18		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.02.13 18.18		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.02.13 18.18		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.02.13 18.18		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.02.13 18.18		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.02.13 18.18		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.02.13 18.18		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.02.13 18.18		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.02.13 18.18		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.02.13 18.18		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.02.13 18.18		1

Final 1.000

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Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB129-0101-17152 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: **459871-018** Date Collected: 03.25.13 14.45

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.02.13 18.18		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.02.13 18.18		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.02.13 18.18		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.02.13 18.18		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.02.13 18.18		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.02.13 18.18		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	04.02.13 18.18		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.02.13 18.18		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.02.13 18.18		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.02.13 18.18		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.02.13 18.18		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.02.13 18.18		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	04.02.13 18.18		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.02.13 18.18		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.02.13 18.18		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.02.13 18.18		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.02.13 18.18		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.02.13 18.18		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.02.13 18.18		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.02.13 18.18		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.02.13 18.18		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.02.13 18.18		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	104	%	69-133	04.02.13 18.18	
1,2-Dichloroethane-D4	17060-07-0	114	%	66-139	04.02.13 18.18	
Toluene-D8	2037-26-5	97	%	70-130	04.02.13 18.18	
4-Bromofluorobenzene	460-00-4	83	%	70-135	04.02.13 18.18	

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Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB18-0100-35108 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-002 Date Collected: 03.25.13 07.55

Analytical Method: 1,4-Dioxane by EPA 8260B Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 04.04.13 21.20
Seq Number: 910908 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 02.55	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	98	%	75-131	04.05.13 02.55	
1,2-Dichloroethane-D4	17060-07-0	96	%	63-144	04.05.13 02.55	
Toluene-D8	2037-26-5	102	%	80-117	04.05.13 02.55	
4-Bromofluorobenzene	460-00-4	91	%	74-124	04.05.13 02.55	

Final 1.000

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Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id:	**AVB68-0400-24255**	Matrix: Water	Date Received: 03.25.13 15.33
Lab Sample Id:	**459871-003**	Date Collected: 03.25.13 08.20	
Analytical Method:	**1,4-Dioxane by EPA 8260B**		Prep Method: SW5030B
Tech:	ZHO		% Moisture:
Analyst:	ZHO	Date Prep: 04.04.13 21.24	
Seq Number:	910908		SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 04.32	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	94	%	75-131	04.05.13 04.32	
1,2-Dichloroethane-D4	17060-07-0	89	%	63-144	04.05.13 04.32	
Toluene-D8	2037-26-5	105	%	80-117	04.05.13 04.32	
4-Bromofluorobenzene	460-00-4	96	%	74-124	04.05.13 04.32	

Final 1.000

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Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB68-0401-24255 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-004 Date Collected: 03.25.13 08.30

Analytical Method: 1,4-Dioxane by EPA 8260B Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 04.04.13 21.25
Seq Number: 910908 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 04.56	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	97	%	75-131	04.05.13 04.56	
1,2-Dichloroethane-D4	17060-07-0	92	%	63-144	04.05.13 04.56	
Toluene-D8	2037-26-5	105	%	80-117	04.05.13 04.56	
4-Bromofluorobenzene	460-00-4	93	%	74-124	04.05.13 04.56	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB68-0200-24110 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-005 Date Collected: 03.25.13 09.00

Analytical Method: 1,4-Dioxane by EPA 8260B Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 04.04.13 21.26
Seq Number: 910908 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 05.20	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	98	%	75-131	04.05.13 05.20	
1,2-Dichloroethane-D4	17060-07-0	93	%	63-144	04.05.13 05.20	
Toluene-D8	2037-26-5	104	%	80-117	04.05.13 05.20	
4-Bromofluorobenzene	460-00-4	95	%	74-124	04.05.13 05.20	

Final 1.000

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Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB128-0100-17279 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: **459871-006** Date Collected: 03.25.13 09.55

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 04.04.13 21.27
Seq Number: 910908 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 05.44	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	99	%	75-131	04.05.13 05.44	
1,2-Dichloroethane-D4	17060-07-0	93	%	63-144	04.05.13 05.44	
Toluene-D8	2037-26-5	105	%	80-117	04.05.13 05.44	
4-Bromofluorobenzene	460-00-4	95	%	74-124	04.05.13 05.44	

Final 1.000

4/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB107-0100-22118 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-007 Date Collected: 03.25.13 10.15

Analytical Method: 1,4-Dioxane by EPA 8260B Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 04.04.13 21.28
Seq Number: 910908 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 06.09	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	104	%	75-131	04.05.13 06.09	
1,2-Dichloroethane-D4	17060-07-0	101	%	63-144	04.05.13 06.09	
Toluene-D8	2037-26-5	102	%	80-117	04.05.13 06.09	
4-Bromofluorobenzene	460-00-4	95	%	74-124	04.05.13 06.09	

Final 1.000

5/13/13

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Certificate of Analytical Results 459871

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WVBA

Sample Id: AVB121-0100-19132 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-008 Date Collected: 03.25.13 10.35

Analytical Method: 1,4-Dioxane by EPA 8260B Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 04.04.13 21.29
Seq Number: 910908 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 06.33	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	98	%	75-131	04.05.13 06.33	
1,2-Dichloroethane-D4	17060-07-0	94	%	63-144	04.05.13 06.33	
Toluene-D8	2037-26-5	105	%	80-117	04.05.13 06.33	
4-Bromofluorobenzene	460-00-4	94	%	74-124	04.05.13 06.33	

Final 1.000

4/5/13/13

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Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB122-0100-19152 | Matrix: Water | Date Received: 03.25.13 15.33

Lab Sample Id: **459871-009** | Date Collected: 03.25.13 11.00

Analytical Method: **1,4-Dioxane by EPA 8260B** | Prep Method: SW5030B

Tech: ZHO | % Moisture:

Analyst: ZHO | Date Prep: 04.04.13 21.30

Seq Number: 910908 | SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 06.57	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	98	%	75-131	04.05.13 06.57	
1,2-Dichloroethane-D4	17060-07-0	89	%	63-144	04.05.13 06.57	
Toluene-D8	2037-26-5	104	%	80-117	04.05.13 06.57	
4-Bromofluorobenzene	460-00-4	95	%	74-124	04.05.13 06.57	

4/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB122-0200-19245 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: **459871-010** Date Collected: 03.25.13 11.15

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 04.04.13 21.31
Seq Number: 910908 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 07.21	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	97	%	75-131	04.05.13 07.21	
1,2-Dichloroethane-D4	17060-07-0	95	%	63-144	04.05.13 07.21	
Toluene-D8	2037-26-5	104	%	80-117	04.05.13 07.21	
4-Bromofluorobenzene	460-00-4	98	%	74-124	04.05.13 07.21	

5/13/13

XENCO Laboratories
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Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id:	**AVB38-05X110**	Matrix: Water	Date Received: 03.25.13 15.33
Lab Sample Id:	**459871-011**	Date Collected: 03.25.13 11.50	
Analytical Method:	**1,4-Dioxane by EPA 8260B**		Prep Method: SW5030B
Tech:	ZHO		% Moisture:
Analyst:	ZHO	Date Prep: 04.04.13 21.32	
Seq Number:	910908		SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 07.45	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	93	%	75-131	04.05.13 07.45	
1,2-Dichloroethane-D4	17060-07-0	91	%	63-144	04.05.13 07.45	
Toluene-D8	2037-26-5	106	%	80-117	04.05.13 07.45	
4-Bromofluorobenzene	460-00-4	101	%	74-124	04.05.13 07.45	

Final 1.000

5/13/13

XENCO Laboratories
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Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB81-0100-23295 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-012 Date Collected: 03.25.13 12.40

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 04.04.13 21.33
Seq Number: 910908 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 08.09	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	95	%	75-131	04.05.13 08.09	
1,2-Dichloroethane-D4	17060-07-0	91	%	63-144	04.05.13 08.09	
Toluene-D8	2037-26-5	108	%	80-117	04.05.13 08.09	
4-Bromofluorobenzene	460-00-4	99	%	74-124	04.05.13 08.09	

4/13/13

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Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB81-0200-22118 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: **459871-013** Date Collected: 03.25.13 13.00

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 04.04.13 21.34
Seq Number: 910908 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 08.35	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	93	%	75-131	04.05.13 08.35	
1,2-Dichloroethane-D4	17060-07-0	91	%	63-144	04.05.13 08.35	
Toluene-D8	2037-26-5	103	%	80-117	04.05.13 08.35	
4-Bromofluorobenzene	460-00-4	104	%	74-124	04.05.13 08.35	

4/13/13

Final 1.000

XENCO Laboratories
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Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB98-0100-21287 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-014 Date Collected: 03.25.13 13.30

Analytical Method: **1,4-Dioxane by EPA 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 04.04.13 21.35
Seq Number: 910908 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 08.59	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	104	%	75-131	04.05.13 08.59	
1,2-Dichloroethane-D4	17060-07-0	90	%	63-144	04.05.13 08.59	
Toluene-D8	2037-26-5	95	%	80-117	04.05.13 08.59	
4-Bromofluorobenzene	460-00-4	104	%	74-124	04.05.13 08.59	

4/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB60-0100-31473 | Matrix: Water | Date Received: 03.25.13 15.33
Lab Sample Id: 459871-015 | Date Collected: 03.25.13 14.10

Analytical Method: **1,4-Dioxane by EPA 8260B** | Prep Method: SW5030B
Tech: ZHO | % Moisture:
Analyst: ZHO | Date Prep: 04.04.13 21.36
Seq Number: 910908 | SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 09.24	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	106	%	75-131	04.05.13 09.24	
1,2-Dichloroethane-D4	17060-07-0	99	%	63-144	04.05.13 09.24	
Toluene-D8	2037-26-5	95	%	80-117	04.05.13 09.24	
4-Bromofluorobenzene	460-00-4	103	%	74-124	04.05.13 09.24	

4/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB129-0200-16310 Matrix: Water Date Received: 03.25.13 15.33
Lab Sample Id: 459871-016 Date Collected: 03.25.13 14.35

Analytical Method: 1,4-Dioxane by EPA 8260B Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 04.04.13 21.37
Seq Number: 910908 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 09.48	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	102	%	75-131	04.05.13 09.48	
1,2-Dichloroethane-D4	17060-07-0	92	%	63-144	04.05.13 09.48	
Toluene-D8	2037-26-5	98	%	80-117	04.05.13 09.48	
4-Bromofluorobenzene	460-00-4	102	%	74-124	04.05.13 09.48	

5/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id:	**AVB129-0100-17152**	Matrix: Water	Date Received: 03.25.13 15.33
Lab Sample Id:	**459871-017**	Date Collected: 03.25.13 14.40	
Analytical Method:	**1,4-Dioxane by EPA 8260B**		Prep Method: SW5030B
Tech:	ZHO		% Moisture:
Analyst:	ZHO	Date Prep: 04.04.13 21.38	
Seq Number:	910908		SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 10.12	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	100	%	75-131	04.05.13 10.12	
1,2-Dichloroethane-D4	17060-07-0	91	%	63-144	04.05.13 10.12	
Toluene-D8	2037-26-5	95	%	80-117	04.05.13 10.12	
4-Bromofluorobenzene	460-00-4	105	%	74-124	04.05.13 10.12	

4/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459871

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB129-0101-17152 | Matrix: Water | Date Received: 03.25.13 15.33

Lab Sample Id: **459871-018** | Date Collected: 03.25.13 14.45

Analytical Method: **1,4-Dioxane by EPA 8260B** | Prep Method: SW5030B

Tech: ZHO | % Moisture:

Analyst: ZHO | Date Prep: 04.04.13 20.57

Seq Number: 910697 | SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 01.40	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	123	%	75-131	04.05.13 01.40	
1,2-Dichloroethane-D4	17060-07-0	114	%	63-144	04.05.13 01.40	
Toluene-D8	2037-26-5	96	%	80-117	04.05.13 01.40	
4-Bromofluorobenzene	460-00-4	105	%	74-124	04.05.13 01.40	

4/5/13/13

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 26, 2013

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: Volatiles

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459938

Sample Identification

AVB95-0102-1000
AVB95-0100-21138
AVB95-0200-X230
AVB95-0201-X230
AVB117-0100-19149
AVB94-0200-21260
AVB94-0100-17138
AVB130-0100-17159
AVB119-0100-19144
AVB92-0200-XXX
AVB96-0200-21332
AVB96-0100-20121
AVB91-0200-21191
AVB95-0200-X230MS
AVB95-0200-X230MSD

Introduction

This data review covers 15 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

Sample AVB95-0102-1000 was identified as trip blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
AVB95-0200-X230MS/MSD (AVB95-0200-X230)	Bromomethane	-	-	30 (≤22)	J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
636092-1-BKS (AVB95-0100-21138 AVB95-0200-X230 AVB95-0201-X230 AVB117-0100-19149 AVB94-0200-21260 AVB94-0100-17138 AVB130-0100-17159 AVB119-0100-19144 AVB92-0200-XXX AVB96-0200-21332 AVB96-0100-20121 AVB91-0200-21191 636092-1-BLK)	Chloroethane	-	-	29 (≤24)	J (all detects) UJ (all non-detects)	P
	Iodomethane	-	-	36 (≤22)	J (all detects) UJ (all non-detects)	

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples AVB95-0200-X230 and AVB95-0201-X230 were identified as field duplicates. No volatiles were detected in any of the samples.

West Van Buren Area
Volatiles - Data Qualification Summary - SDG 459938

SDG	Sample	Compound	Flag	A or P	Reason (Code)
459938	AVB95-0200-X230	Bromomethane	J (all detects)	A	Matrix spike/Matrix spike duplicate (RPD) (R5)
459938	AVB95-0100-21138 AVB95-0200-X230 AVB95-0201-X230 AVB117-0100-19149 AVB94-0200-21260 AVB94-0100-17138 AVB130-0100-17159 AVB119-0100-19144 AVB92-0200-XXX AVB96-0200-21332 AVB96-0100-20121 AVB91-0200-21191	Chloroethane Iodomethane	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P	Laboratory control samples (RPD) (R7)

West Van Buren Area
Volatiles - Laboratory Blank Data Qualification Summary - SDG 459938

No Sample Data Qualified in this SDG

West Van Buren Area
Volatiles - Field Blank Data Qualification Summary - SDG 459938

No Sample Data Qualified in this SDG

LDC #: 29578N1a

SDG #: 459938

Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 5/2/13

Page: 1 of 1

Reviewer: EF

2nd Reviewer:

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/26/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	459871-8 MS/MD
VIII.	Laboratory control samples	SW	LCS/LCD
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = 3, 4
XVII.	Field blanks	ND	TB = 1

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	AVB95-0102-1000 TB	11	AVB96-0200-21332	21	636034-1-BLK	31	
2	AVB95-0100-21138	12	AVB96-0100-20121	22	636092-1-BLK	32	
3	AVB95-0200-X230 D	13	AVB91-0200-21191	23		33	
4	AVB95-0201-X230 D	14	AVB95-0200-X230MS	24		34	
5	AVB117-0100-19149	15	AVB95-0200-X230MSD	25		35	
6	AVB94-0200-21260	16		26		36	
7	AVB94-0100-17138	17		27		37	
8	AVB130-0100-17159	18		28		38	
9	AVB119-0100-19144	19		29		39	
10	AVB92-0200-XXX	20		30		40	

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene	BB. 1,1,2,2-Tetrachloroethane	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane	CC. Toluene	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform	EE. Ethylbenzene	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN. Iodomethane
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.1,1-Difluoroethane
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

LDC #: 29578N/a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer:

METHOD : GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		14 + 15	B	( )	( )	30 (22)	3	J/Adt R5
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 29578N19

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		636092-1-BKS	D	( )	( )	29 (24)	636092-1-BLK,	J/UJ/P R7
			Iodomethane	( )	( )	36 (22)	2 → 13	↓ ↓
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: West Van Buren Area

Collection Date: March 26, 2013

LDC Report Date: May 7, 2013

Matrix: Water

Parameters: 1,4-Dioxane

Validation Level: EPA Level III

Laboratory: Xenco Laboratories

Sample Delivery Group (SDG): 459938

Sample Identification

AVB95-0100-21138
AVB95-0200-X230
AVB95-0201-X230
AVB117-0100-19149
AVB94-0200-21260
AVB94-0100-17138
AVB130-0100-17159
AVB119-0100-19144
AVB92-0200-XXX
AVB96-0200-21332
AVB96-0100-20121
AVB91-0200-21191
AVB95-0100-21138MS
AVB95-0100-21138MSD

Introduction

This data review covers 14 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8260B for 1,4-Dioxane.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Level III.

III. Initial Calibration

Initial calibration data were not reviewed for Level III.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Level III.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

Internal standard data were not reviewed for Level III.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples AVB95-0200-X230 and AVB95-0201-X230 were identified as field duplicates. No 1,4-dioxane was detected in any of the samples.

West Van Buren Area
1,4-Dioxane - Data Qualification Summary - SDG 459938

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG 459938

No Sample Data Qualified in this SDG

West Van Buren Area
1,4-Dioxane - Field Blank Data Qualification Summary - SDG 459938

No Sample Data Qualified in this SDG

LDC #: 29578N1b

SDG #: 459938

Laboratory: Xenco Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 5/2/13

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/26/13
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration/ICV	N	
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/RL/LOQ/LODs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = 2 + 3
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

water

1	AVB95-0100-21138	11	AVB96-0100-20121	21	636209-1-BLK	31	
2	AVB95-0200-X230 D	12	AVB91-0200-21191	22	636192-1-BLK	32	
3	AVB95-0201-X230 D	13	AVB95-0100-21138MS	23		33	
4	AVB117-0100-19149	14	AVB95-0100-21138MSD	24		34	
5	AVB94-0200-21260	15		25		35	
6	AVB94-0100-17138	16		26		36	
7	AVB130-0100-17159	17		27		37	
8	AVB119-0100-19144	18		28		38	
9	AVB92-0200-XXX	19		29		39	
10	AVB96-0200-21332	20		30		40	

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459938

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB95-0102-1000 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: 459938-001 Date Collected: 03.26.13 08.00

Analytical Method: VOAs by SW 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.02.13 18.43		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.02.13 18.43		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.02.13 18.43		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.02.13 18.43		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.02.13 18.43		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.02.13 18.43		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.02.13 18.43		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.02.13 18.43		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.02.13 18.43		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.02.13 18.43		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.02.13 18.43		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.02.13 18.43		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.02.13 18.43		1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.02.13 18.43		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.02.13 18.43		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.02.13 18.43		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.02.13 18.43		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.02.13 18.43		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.02.13 18.43		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.02.13 18.43		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.02.13 18.43		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.02.13 18.43		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.02.13 18.43		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.02.13 18.43		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.02.13 18.43		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.02.13 18.43		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.02.13 18.43		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.02.13 18.43		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.02.13 18.43		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.02.13 18.43		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.02.13 18.43		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.02.13 18.43		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.02.13 18.43		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.02.13 18.43		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.02.13 18.43		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.02.13 18.43		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.02.13 18.43		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.02.13 18.43		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.02.13 18.43		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.02.13 18.43		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.02.13 18.43		1

4/5/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459938

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB95-0102-1000 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: **459938-001** Date Collected: 03.26.13 08.00

Analytical Method: **VOAs by SW 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.02.13 10.38
Seq Number: 910516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.02.13 18.43		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.02.13 18.43		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.02.13 18.43		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.02.13 18.43		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.02.13 18.43		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.02.13 18.43		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	04.02.13 18.43		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.02.13 18.43		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.02.13 18.43		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.02.13 18.43		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.02.13 18.43		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.02.13 18.43		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	04.02.13 18.43		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.02.13 18.43		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.02.13 18.43		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.02.13 18.43		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.02.13 18.43		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.02.13 18.43		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.02.13 18.43		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.02.13 18.43		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.02.13 18.43		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.02.13 18.43		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	107	%	69-133	04.02.13 18.43	
1,2-Dichloroethane-D4	17060-07-0	113	%	66-139	04.02.13 18.43	
Toluene-D8	2037-26-5	95	%	70-130	04.02.13 18.43	
4-Bromofluorobenzene	460-00-4	82	%	70-135	04.02.13 18.43	

4/5/13/13

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459938

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB95-0100-21138 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: 459938-002 Date Collected: 03.26.13 08.55

Analytical Method: VOAs by SW 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.03.13 10.20
Seq Number: 910587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.03.13 13.33		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.03.13 13.33		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.03.13 13.33		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.03.13 13.33		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.03.13 13.33		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.03.13 13.33		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.03.13 13.33		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.03.13 13.33		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.03.13 13.33		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.03.13 13.33		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.03.13 13.33		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.03.13 13.33		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.03.13 13.33	UJ (CR7)	1
Chloroform	67-66-3	**1.12**	0.500	ug/L	04.03.13 13.33		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.03.13 13.33		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.03.13 13.33		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.03.13 13.33		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.03.13 13.33		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.03.13 13.33		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.03.13 13.33		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.03.13 13.33		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.03.13 13.33		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.03.13 13.33		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.03.13 13.33		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.03.13 13.33		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.03.13 13.33		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.03.13 13.33		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.03.13 13.33		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.03.13 13.33		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.03.13 13.33		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.03.13 13.33		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.03.13 13.33		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.03.13 13.33		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.03.13 13.33		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.03.13 13.33		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.03.13 13.33		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.03.13 13.33		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.03.13 13.33		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.03.13 13.33		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.03.13 13.33		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.03.13 13.33		1

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459938

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB95-0100-21138 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: **459938-002** Date Collected: 03.26.13 08.55

Analytical Method: **VOAs by SW 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.03.13 10.20
Seq Number: 910587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.03.13 13.33	UJ(R7)	1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.03.13 13.33		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.03.13 13.33		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.03.13 13.33		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.03.13 13.33		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.03.13 13.33		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	04.03.13 13.33		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.03.13 13.33		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.03.13 13.33		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.03.13 13.33		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.03.13 13.33		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.03.13 13.33		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	04.03.13 13.33		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.03.13 13.33		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.03.13 13.33		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.03.13 13.33		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.03.13 13.33		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.03.13 13.33		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.03.13 13.33		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.03.13 13.33		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.03.13 13.33		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.03.13 13.33		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	102	%	69-133	04.03.13 13.33	
1,2-Dichloroethane-D4	17060-07-0	112	%	66-139	04.03.13 13.33	
Toluene-D8	2037-26-5	95	%	70-130	04.03.13 13.33	
4-Bromofluorobenzene	460-00-4	83	%	70-135	04.03.13 13.33	

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Certificate of Analytical Results 459938

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB95-0200-X230 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: 459938-003 Date Collected: 03.26.13 09.10

Analytical Method: **VOAs by SW 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.03.13 10.20
Seq Number: 910587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.03.13 13.58		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.03.13 13.58		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.03.13 13.58		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.03.13 13.58		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.03.13 13.58		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.03.13 13.58		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.03.13 13.58		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.03.13 13.58		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.03.13 13.58		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.03.13 13.58		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.03.13 13.58		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.03.13 13.58		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.03.13 13.58	UJ (RT)	1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.03.13 13.58		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.03.13 13.58		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.03.13 13.58		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.03.13 13.58		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.03.13 13.58		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.03.13 13.58		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.03.13 13.58		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.03.13 13.58		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.03.13 13.58		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.03.13 13.58		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.03.13 13.58		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.03.13 13.58		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.03.13 13.58		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.03.13 13.58		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.03.13 13.58		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.03.13 13.58		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.03.13 13.58		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.03.13 13.58		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.03.13 13.58		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.03.13 13.58		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.03.13 13.58		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.03.13 13.58		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.03.13 13.58		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.03.13 13.58		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.03.13 13.58		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.03.13 13.58		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.03.13 13.58		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.03.13 13.58		1

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Certificate of Analytical Results 459938

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB95-0200-X230 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: **459938-003** Date Collected: 03.26.13 09.10

Analytical Method: **VOAs by SW 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.03.13 10.20
Seq Number: 910587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.03.13 13.58	UJ (R7)	1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.03.13 13.58		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.03.13 13.58		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.03.13 13.58		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.03.13 13.58		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.03.13 13.58		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	04.03.13 13.58		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.03.13 13.58		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.03.13 13.58		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.03.13 13.58		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.03.13 13.58		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.03.13 13.58		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	04.03.13 13.58		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.03.13 13.58		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.03.13 13.58		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.03.13 13.58		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.03.13 13.58		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.03.13 13.58		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.03.13 13.58		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.03.13 13.58		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.03.13 13.58		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.03.13 13.58		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	102	%	69-133	04.03.13 13.58	
1,2-Dichloroethane-D4	17060-07-0	109	%	66-139	04.03.13 13.58	
Toluene-D8	2037-26-5	95	%	70-130	04.03.13 13.58	
4-Bromofluorobenzene	460-00-4	78	%	70-135	04.03.13 13.58	

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Certificate of Analytical Results 459938

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB95-0201-X230 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: 459938-004 Date Collected: 03.26.13 09.15

Analytical Method: VOAs by SW 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.03.13 10.20
Seq Number: 910587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.03.13 14.23		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.03.13 14.23		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.03.13 14.23		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.03.13 14.23		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.03.13 14.23		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.03.13 14.23		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.03.13 14.23		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.03.13 14.23		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.03.13 14.23		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.03.13 14.23		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.03.13 14.23		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.03.13 14.23		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.03.13 14.23	UJ(R7)	1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.03.13 14.23		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.03.13 14.23		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.03.13 14.23		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.03.13 14.23		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.03.13 14.23		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.03.13 14.23		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.03.13 14.23		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.03.13 14.23		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.03.13 14.23		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.03.13 14.23		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.03.13 14.23		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.03.13 14.23		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.03.13 14.23		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.03.13 14.23		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.03.13 14.23		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.03.13 14.23		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.03.13 14.23		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.03.13 14.23		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.03.13 14.23		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.03.13 14.23		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.03.13 14.23		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.03.13 14.23		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.03.13 14.23		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.03.13 14.23		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.03.13 14.23		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.03.13 14.23		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.03.13 14.23		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.03.13 14.23		1

Final 1.000

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Certificate of Analytical Results 459938

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB95-0201-X230 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: 459938-004 Date Collected: 03.26.13 09.15

Analytical Method: **VOAs by SW 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.03.13 10.20
Seq Number: 910587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.03.13 14.23	UJ(R7)	1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.03.13 14.23		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.03.13 14.23		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.03.13 14.23		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.03.13 14.23		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.03.13 14.23		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	04.03.13 14.23		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.03.13 14.23		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.03.13 14.23		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.03.13 14.23		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.03.13 14.23		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.03.13 14.23		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	04.03.13 14.23		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.03.13 14.23		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.03.13 14.23		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.03.13 14.23		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.03.13 14.23		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.03.13 14.23		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.03.13 14.23		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.03.13 14.23		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.03.13 14.23		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.03.13 14.23		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	102	%	69-133	04.03.13 14.23	
1,2-Dichloroethane-D4	17060-07-0	115	%	66-139	04.03.13 14.23	
Toluene-D8	2037-26-5	93	%	70-130	04.03.13 14.23	
4-Bromofluorobenzene	460-00-4	83	%	70-135	04.03.13 14.23	

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459938

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB117-0100-19149 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: 459938-005 Date Collected: 03.26.13 09.45

Analytical Method: **VOAs by SW 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.03.13 10.20
Seq Number: 910587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.03.13 14.48		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.03.13 14.48		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.03.13 14.48		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.03.13 14.48		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.03.13 14.48		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.03.13 14.48		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.03.13 14.48		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.03.13 14.48		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.03.13 14.48		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.03.13 14.48		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.03.13 14.48		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.03.13 14.48		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.03.13 14.48	U J (RZ)	1
Chloroform	67-66-3	**1.96**	0.500	ug/L	04.03.13 14.48		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.03.13 14.48		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.03.13 14.48		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.03.13 14.48		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.03.13 14.48		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.03.13 14.48		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.03.13 14.48		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.03.13 14.48		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.03.13 14.48		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.03.13 14.48		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.03.13 14.48		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.03.13 14.48		1
Dichlorodifluoromethane	75-71-8	**2.17**	2.00	ug/L	04.03.13 14.48		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.03.13 14.48		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.03.13 14.48		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.03.13 14.48		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.03.13 14.48		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.03.13 14.48		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.03.13 14.48		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.03.13 14.48		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.03.13 14.48		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.03.13 14.48		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.03.13 14.48		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.03.13 14.48		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.03.13 14.48		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.03.13 14.48		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.03.13 14.48		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.03.13 14.48		1

Final 1.000

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459938

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB117-0100-19149 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: **459938-005** Date Collected: 03.26.13 09.45

Analytical Method: **VOAs by SW 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.03.13 10.20
Seq Number: 910587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.03.13 14.48	UJ(R7)	1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.03.13 14.48		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.03.13 14.48		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.03.13 14.48		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.03.13 14.48		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.03.13 14.48		1
Tetrachloroethylene	127-18-4	**1.72**	0.500	ug/L	04.03.13 14.48		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.03.13 14.48		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.03.13 14.48		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.03.13 14.48		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.03.13 14.48		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.03.13 14.48		1
Trichloroethene	79-01-6	**0.620**	0.500	ug/L	04.03.13 14.48		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.03.13 14.48		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.03.13 14.48		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.03.13 14.48		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.03.13 14.48		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.03.13 14.48		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.03.13 14.48		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.03.13 14.48		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.03.13 14.48		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.03.13 14.48		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	101	%	69-133	04.03.13 14.48	
1,2-Dichloroethane-D4	17060-07-0	115	%	66-139	04.03.13 14.48	
Toluene-D8	2037-26-5	90	%	70-130	04.03.13 14.48	
4-Bromofluorobenzene	460-00-4	82	%	70-135	04.03.13 14.48	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459938

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB94-0200-21260 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: 459938-006 Date Collected: 03.26.13 10.20

Analytical Method: **VOAs by SW 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.03.13 10.20
Seq Number: 910587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.03.13 15.13		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.03.13 15.13		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.03.13 15.13		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.03.13 15.13		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.03.13 15.13		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.03.13 15.13		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.03.13 15.13		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.03.13 15.13		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.03.13 15.13		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.03.13 15.13		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.03.13 15.13		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.03.13 15.13		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.03.13 15.13	UJ(R7)	1
Chloroform	67-66-3	**0.570**	0.500	ug/L	04.03.13 15.13		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.03.13 15.13		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.03.13 15.13		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.03.13 15.13		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.03.13 15.13		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.03.13 15.13		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.03.13 15.13		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.03.13 15.13		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.03.13 15.13		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.03.13 15.13		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.03.13 15.13		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.03.13 15.13		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.03.13 15.13		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.03.13 15.13		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.03.13 15.13		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.03.13 15.13		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.03.13 15.13		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.03.13 15.13		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.03.13 15.13		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.03.13 15.13		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.03.13 15.13		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.03.13 15.13		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.03.13 15.13		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.03.13 15.13		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.03.13 15.13		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.03.13 15.13		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.03.13 15.13		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.03.13 15.13		1

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Final 1.000

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459938

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB94-0200-21260 | Matrix: Water | Date Received: 03.26.13 14.38

Lab Sample Id: **459938-006** | Date Collected: 03.26.13 10.20

Analytical Method: **VOAs by SW 8260B** | Prep Method: SW5030C

Tech: OEM | % Moisture:

Analyst: OEM | Date Prep: 04.03.13 10.20

Seq Number: 910587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.03.13 15.13	UJ(R7)	1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.03.13 15.13		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.03.13 15.13		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.03.13 15.13		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.03.13 15.13		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.03.13 15.13		1
Tetrachloroethylene	127-18-4	**2.76**	0.500	ug/L	04.03.13 15.13		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.03.13 15.13		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.03.13 15.13		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.03.13 15.13		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.03.13 15.13		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.03.13 15.13		1
Trichloroethene	79-01-6	**4.19**	0.500	ug/L	04.03.13 15.13		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.03.13 15.13		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.03.13 15.13		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.03.13 15.13		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.03.13 15.13		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.03.13 15.13		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.03.13 15.13		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.03.13 15.13		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.03.13 15.13		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.03.13 15.13		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	102	%	69-133	04.03.13 15.13	
1,2-Dichloroethane-D4	17060-07-0	124	%	66-139	04.03.13 15.13	
Toluene-D8	2037-26-5	95	%	70-130	04.03.13 15.13	
4-Bromofluorobenzene	460-00-4	84	%	70-135	04.03.13 15.13	

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459938

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB94-0100-17138 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: **459938-007** Date Collected: 03.26.13 10.40

Analytical Method: **VOAs by SW 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.03.13 10.20
Seq Number: 910587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.03.13 15.38		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.03.13 15.38		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.03.13 15.38		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.03.13 15.38		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.03.13 15.38		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.03.13 15.38		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.03.13 15.38		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.03.13 15.38		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.03.13 15.38		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.03.13 15.38		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.03.13 15.38		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.03.13 15.38		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.03.13 15.38	UJ(R7)	1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.03.13 15.38		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.03.13 15.38		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.03.13 15.38		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.03.13 15.38		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.03.13 15.38		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.03.13 15.38		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.03.13 15.38		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.03.13 15.38		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.03.13 15.38		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.03.13 15.38		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.03.13 15.38		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.03.13 15.38		1
Dichlorodifluoromethane	75-71-8	**11.9**	2.00	ug/L	04.03.13 15.38		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.03.13 15.38		1
1,2-Dichloroethane	107-06-2	**1.57**	0.500	ug/L	04.03.13 15.38		1
1,1-Dichloroethene	75-35-4	**1.43**	0.500	ug/L	04.03.13 15.38		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.03.13 15.38		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.03.13 15.38		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.03.13 15.38		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.03.13 15.38		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.03.13 15.38		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.03.13 15.38		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.03.13 15.38		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.03.13 15.38		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.03.13 15.38		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.03.13 15.38		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.03.13 15.38		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.03.13 15.38		1

Final 1.000

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459938

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB94-0100-17138 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: 459938-007 Date Collected: 03.26.13 10.40

Analytical Method: VOAs by SW 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.03.13 10.20
Seq Number: 910587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.03.13 15.38	UJ(R7)	1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.03.13 15.38		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.03.13 15.38		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.03.13 15.38		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.03.13 15.38		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.03.13 15.38		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	04.03.13 15.38		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.03.13 15.38		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.03.13 15.38		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.03.13 15.38		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.03.13 15.38		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.03.13 15.38		1
Trichloroethene	79-01-6	**27.8**	0.500	ug/L	04.03.13 15.38		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.03.13 15.38		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.03.13 15.38		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.03.13 15.38		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.03.13 15.38		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.03.13 15.38		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.03.13 15.38		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.03.13 15.38		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.03.13 15.38		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.03.13 15.38		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	108	%	69-133	04.03.13 15.38	
1,2-Dichloroethane-D4	17060-07-0	125	%	66-139	04.03.13 15.38	
Toluene-D8	2037-26-5	98	%	70-130	04.03.13 15.38	
4-Bromofluorobenzene	460-00-4	87	%	70-135	04.03.13 15.38	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459938

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB130-0100-17159 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: 459938-008 Date Collected: 03.26.13 11.15

Analytical Method: **VOAs by SW 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.03.13 10.20
Seq Number: 910587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.03.13 16.03		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.03.13 16.03		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.03.13 16.03		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.03.13 16.03		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.03.13 16.03		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.03.13 16.03		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.03.13 16.03		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.03.13 16.03		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.03.13 16.03		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.03.13 16.03		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.03.13 16.03		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.03.13 16.03		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.03.13 16.03	UJ(R7)	1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.03.13 16.03		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.03.13 16.03		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.03.13 16.03		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.03.13 16.03		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.03.13 16.03		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.03.13 16.03		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.03.13 16.03		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.03.13 16.03		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.03.13 16.03		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.03.13 16.03		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.03.13 16.03		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.03.13 16.03		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.03.13 16.03		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.03.13 16.03		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.03.13 16.03		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.03.13 16.03		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.03.13 16.03		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.03.13 16.03		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.03.13 16.03		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.03.13 16.03		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.03.13 16.03		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.03.13 16.03		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.03.13 16.03		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.03.13 16.03		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.03.13 16.03		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.03.13 16.03		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.03.13 16.03		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.03.13 16.03		1

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459938

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB130-0100-17159 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: 459938-008 Date Collected: 03.26.13 11.15

Analytical Method: VOAs by SW 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.03.13 10.20
Seq Number: 910587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.03.13 16.03	U (R7)	1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.03.13 16.03		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.03.13 16.03		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.03.13 16.03		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.03.13 16.03		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.03.13 16.03		1
Tetrachloroethylene	127-18-4	**1.40**	0.500	ug/L	04.03.13 16.03		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.03.13 16.03		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.03.13 16.03		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.03.13 16.03		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.03.13 16.03		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.03.13 16.03		1
Trichloroethene	79-01-6	**8.40**	0.500	ug/L	04.03.13 16.03		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.03.13 16.03		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.03.13 16.03		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.03.13 16.03		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.03.13 16.03		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.03.13 16.03		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.03.13 16.03		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.03.13 16.03		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.03.13 16.03		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.03.13 16.03		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	106	%	69-133	04.03.13 16.03	
1,2-Dichloroethane-D4	17060-07-0	119	%	66-139	04.03.13 16.03	
Toluene-D8	2037-26-5	96	%	70-130	04.03.13 16.03	
4-Bromofluorobenzene	460-00-4	85	%	70-135	04.03.13 16.03	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459938

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB119-0100-19144 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: 459938-009 Date Collected: 03.26.13 11.35

Analytical Method: VOAs by SW 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.03.13 10.20
Seq Number: 910587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.03.13 16.28		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.03.13 16.28		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.03.13 16.28		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.03.13 16.28		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.03.13 16.28		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.03.13 16.28		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.03.13 16.28		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.03.13 16.28		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.03.13 16.28		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.03.13 16.28		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.03.13 16.28		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.03.13 16.28		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.03.13 16.28	UJ(R7)	1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.03.13 16.28		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.03.13 16.28		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.03.13 16.28		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.03.13 16.28		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.03.13 16.28		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.03.13 16.28		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.03.13 16.28		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.03.13 16.28		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.03.13 16.28		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.03.13 16.28		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.03.13 16.28		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.03.13 16.28		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.03.13 16.28		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.03.13 16.28		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.03.13 16.28		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.03.13 16.28		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.03.13 16.28		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.03.13 16.28		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.03.13 16.28		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.03.13 16.28		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.03.13 16.28		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.03.13 16.28		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.03.13 16.28		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.03.13 16.28		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.03.13 16.28		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.03.13 16.28		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.03.13 16.28		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.03.13 16.28		1

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459938

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB119-0100-19144 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: 459938-009 Date Collected: 03.26.13 11.35

Analytical Method: VOAs by SW 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.03.13 10.20
Seq Number: 910587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.03.13 16.28	UJ(R7)	1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.03.13 16.28		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.03.13 16.28		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.03.13 16.28		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.03.13 16.28		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.03.13 16.28		1
Tetrachloroethylene	127-18-4	**87.5**	0.500	ug/L	04.03.13 16.28		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.03.13 16.28		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.03.13 16.28		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.03.13 16.28		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.03.13 16.28		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.03.13 16.28		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	04.03.13 16.28		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.03.13 16.28		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.03.13 16.28		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.03.13 16.28		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.03.13 16.28		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.03.13 16.28		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.03.13 16.28		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.03.13 16.28		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.03.13 16.28		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.03.13 16.28		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	105	%	69-133	04.03.13 16.28	
1,2-Dichloroethane-D4	17060-07-0	119	%	66-139	04.03.13 16.28	
Toluene-D8	2037-26-5	95	%	70-130	04.03.13 16.28	
4-Bromofluorobenzene	460-00-4	82	%	70-135	04.03.13 16.28	

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459938

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB92-0200-XXX | Matrix: Water | Date Received: 03.26.13 14.38
Lab Sample Id: **459938-012** | Date Collected: 03.26.13 12.25

Analytical Method: **VOAs by SW 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.03.13 10.20
Seq Number: 910587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.03.13 16.53		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.03.13 16.53		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.03.13 16.53		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.03.13 16.53		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.03.13 16.53		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.03.13 16.53		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.03.13 16.53		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.03.13 16.53		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.03.13 16.53		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.03.13 16.53		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.03.13 16.53		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.03.13 16.53		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.03.13 16.53	UJ(R7)	1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.03.13 16.53		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.03.13 16.53		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.03.13 16.53		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.03.13 16.53		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.03.13 16.53		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.03.13 16.53		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.03.13 16.53		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.03.13 16.53		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.03.13 16.53		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.03.13 16.53		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.03.13 16.53		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.03.13 16.53		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.03.13 16.53		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.03.13 16.53		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.03.13 16.53		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.03.13 16.53		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.03.13 16.53		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.03.13 16.53		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.03.13 16.53		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.03.13 16.53		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.03.13 16.53		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.03.13 16.53		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.03.13 16.53		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.03.13 16.53		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.03.13 16.53		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.03.13 16.53		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.03.13 16.53		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.03.13 16.53		1

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Final 1.000

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459938

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB92-0200-XXX | Matrix: Water | Date Received: 03.26.13 14.38
Lab Sample Id: **459938-012** | Date Collected: 03.26.13 12.25

Analytical Method: **VOAs by SW 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.03.13 10.20
Seq Number: 910587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.03.13 16.53	UJ(R7)	1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.03.13 16.53		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.03.13 16.53		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.03.13 16.53		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.03.13 16.53		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.03.13 16.53		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	04.03.13 16.53		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.03.13 16.53		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.03.13 16.53		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.03.13 16.53		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.03.13 16.53		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.03.13 16.53		1
Trichloroethene	79-01-6	**13.5**	0.500	ug/L	04.03.13 16.53		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.03.13 16.53		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.03.13 16.53		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.03.13 16.53		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.03.13 16.53		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.03.13 16.53		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.03.13 16.53		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.03.13 16.53		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.03.13 16.53		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.03.13 16.53		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	106	%	69-133	04.03.13 16.53	
1,2-Dichloroethane-D4	17060-07-0	118	%	66-139	04.03.13 16.53	
Toluene-D8	2037-26-5	96	%	70-130	04.03.13 16.53	
4-Bromofluorobenzene	460-00-4	83	%	70-135	04.03.13 16.53	

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459938

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB96-0200-21332 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: **459938-013** Date Collected: 03.26.13 13.05

Analytical Method: **VOAs by SW 8260B** Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.03.13 10.20
Seq Number: 910587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.03.13 17.18		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.03.13 17.18		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.03.13 17.18		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.03.13 17.18		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.03.13 17.18		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.03.13 17.18		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.03.13 17.18		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.03.13 17.18		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.03.13 17.18		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.03.13 17.18		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.03.13 17.18		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.03.13 17.18		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.03.13 17.18	UJ(R7)	1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.03.13 17.18		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.03.13 17.18		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.03.13 17.18		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.03.13 17.18		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.03.13 17.18		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.03.13 17.18		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.03.13 17.18		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.03.13 17.18		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.03.13 17.18		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.03.13 17.18		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.03.13 17.18		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.03.13 17.18		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.03.13 17.18		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.03.13 17.18		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.03.13 17.18		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.03.13 17.18		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.03.13 17.18		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.03.13 17.18		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.03.13 17.18		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.03.13 17.18		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.03.13 17.18		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.03.13 17.18		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.03.13 17.18		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.03.13 17.18		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.03.13 17.18		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.03.13 17.18		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.03.13 17.18		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.03.13 17.18		1

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459938

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB96-0200-21332 | Matrix: Water | Date Received: 03.26.13 14.38
Lab Sample Id: 459938-013 | Date Collected: 03.26.13 13.05

Analytical Method: VOAs by SW 8260B | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.03.13 10.20
Seq Number: 910587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.03.13 17.18	UJ(R7)	1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.03.13 17.18		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.03.13 17.18		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.03.13 17.18		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.03.13 17.18		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.03.13 17.18		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	04.03.13 17.18		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.03.13 17.18		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.03.13 17.18		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.03.13 17.18		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.03.13 17.18		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.03.13 17.18		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	04.03.13 17.18		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.03.13 17.18		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.03.13 17.18		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.03.13 17.18		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.03.13 17.18		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.03.13 17.18		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.03.13 17.18		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.03.13 17.18		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.03.13 17.18		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.03.13 17.18		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	105	%	69-133	04.03.13 17.18	
1,2-Dichloroethane-D4	17060-07-0	119	%	66-139	04.03.13 17.18	
Toluene-D8	2037-26-5	95	%	70-130	04.03.13 17.18	
4-Bromofluorobenzene	460-00-4	83	%	70-135	04.03.13 17.18	

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Trans West Analytical Services, LLC

Certificate of Analytical Results 459938

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB96-0100-20121 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: 459938-014 Date Collected: 03.26.13 13.25

Analytical Method: VOAs by SW 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.03.13 10.20
Seq Number: 910587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.03.13 17.43		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.03.13 17.43		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.03.13 17.43		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.03.13 17.43		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.03.13 17.43		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.03.13 17.43		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.03.13 17.43		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.03.13 17.43		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.03.13 17.43		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.03.13 17.43		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.03.13 17.43		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.03.13 17.43		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.03.13 17.43	UJ(R7)	1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.03.13 17.43		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.03.13 17.43		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.03.13 17.43		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.03.13 17.43		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.03.13 17.43		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.03.13 17.43		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.03.13 17.43		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.03.13 17.43		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.03.13 17.43		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.03.13 17.43		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.03.13 17.43		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.03.13 17.43		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.03.13 17.43		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.03.13 17.43		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.03.13 17.43		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.03.13 17.43		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.03.13 17.43		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.03.13 17.43		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.03.13 17.43		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.03.13 17.43		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.03.13 17.43		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.03.13 17.43		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.03.13 17.43		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.03.13 17.43		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.03.13 17.43		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.03.13 17.43		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.03.13 17.43		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.03.13 17.43		1

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XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 459938

Terranext, Phoenix, AZ

WVBA

Sample Id: AVB96-0100-20121 | Matrix: Water | Date Received: 03.26.13 14.38
Lab Sample Id: **459938-014** | Date Collected: 03.26.13 13.25

Analytical Method: **VOAs by SW 8260B** | Prep Method: SW5030C
Tech: OEM | % Moisture:
Analyst: OEM | Date Prep: 04.03.13 10.20
Seq Number: 910587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.03.13 17.43	U5(R7)	1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.03.13 17.43		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.03.13 17.43		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.03.13 17.43		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.03.13 17.43		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.03.13 17.43		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	04.03.13 17.43		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.03.13 17.43		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.03.13 17.43		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.03.13 17.43		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.03.13 17.43		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.03.13 17.43		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	04.03.13 17.43		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.03.13 17.43		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.03.13 17.43		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.03.13 17.43		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.03.13 17.43		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.03.13 17.43		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.03.13 17.43		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.03.13 17.43		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.03.13 17.43		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.03.13 17.43		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	105	%	69-133	04.03.13 17.43	
1,2-Dichloroethane-D4	17060-07-0	122	%	66-139	04.03.13 17.43	
Toluene-D8	2037-26-5	93	%	70-130	04.03.13 17.43	
4-Bromofluorobenzene	460-00-4	84	%	70-135	04.03.13 17.43	

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WVBA

Sample Id: AVB91-0200-21191 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: 459938-015 Date Collected: 03.26.13 13.50

Analytical Method: VOAs by SW 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.03.13 10.20
Seq Number: 910587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.500	0.500	ug/L	04.03.13 18.08		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	04.03.13 18.08		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	04.03.13 18.08		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	04.03.13 18.08		1
Bromoform	75-25-2	<1.00	1.00	ug/L	04.03.13 18.08		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	04.03.13 18.08		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	04.03.13 18.08		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	04.03.13 18.08		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	04.03.13 18.08		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	04.03.13 18.08		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	04.03.13 18.08		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	04.03.13 18.08		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	04.03.13 18.08	UJ(R7)	1
Chloroform	67-66-3	<0.500	0.500	ug/L	04.03.13 18.08		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	04.03.13 18.08		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	04.03.13 18.08		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	04.03.13 18.08		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	04.03.13 18.08		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	04.03.13 18.08		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	04.03.13 18.08		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	04.03.13 18.08		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	04.03.13 18.08		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	04.03.13 18.08		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	04.03.13 18.08		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	04.03.13 18.08		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	04.03.13 18.08		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	04.03.13 18.08		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	04.03.13 18.08		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	04.03.13 18.08		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	04.03.13 18.08		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	04.03.13 18.08		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	04.03.13 18.08		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	04.03.13 18.08		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	04.03.13 18.08		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	04.03.13 18.08		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	04.03.13 18.08		1
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	04.03.13 18.08		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	04.03.13 18.08		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	04.03.13 18.08		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	04.03.13 18.08		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	04.03.13 18.08		1

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WVBA

Sample Id: AVB91-0200-21191 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: 459938-015 Date Collected: 03.26.13 13.50

Analytical Method: VOAs by SW 8260B Prep Method: SW5030C
Tech: OEM % Moisture:
Analyst: OEM Date Prep: 04.03.13 10.20
Seq Number: 910587

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	04.03.13 18.08	UJ(R7)	1
Naphthalene	91-20-3	<5.00	5.00	ug/L	04.03.13 18.08		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	04.03.13 18.08		1
Styrene	100-42-5	<1.00	1.00	ug/L	04.03.13 18.08		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	04.03.13 18.08		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	04.03.13 18.08		1
Tetrachloroethylene	127-18-4	**3.13**	0.500	ug/L	04.03.13 18.08		1
Toluene	108-88-3	<2.00	2.00	ug/L	04.03.13 18.08		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	04.03.13 18.08		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	04.03.13 18.08		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	04.03.13 18.08		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	04.03.13 18.08		1
Trichloroethene	79-01-6	**1.24**	0.500	ug/L	04.03.13 18.08		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	04.03.13 18.08		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	04.03.13 18.08		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	04.03.13 18.08		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	04.03.13 18.08		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	04.03.13 18.08		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	04.03.13 18.08		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	04.03.13 18.08		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	04.03.13 18.08		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	04.03.13 18.08		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	108	%	69-133	04.03.13 18.08	
1,2-Dichloroethane-D4	17060-07-0	124	%	66-139	04.03.13 18.08	
Toluene-D8	2037-26-5	96	%	70-130	04.03.13 18.08	
4-Bromofluorobenzene	460-00-4	84	%	70-135	04.03.13 18.08	

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Sample Id: AVB95-0100-21138 | Matrix: Water | Date Received: 03.26.13 14.38
Lab Sample Id: 459938-002 | Date Collected: 03.26.13 08.55

Analytical Method: 1,4-Dioxane by SW 8260B | Prep Method: SW5030B
Tech: ZHO | % Moisture:
Analyst: ZHO | Date Prep: 04.04.13 20.40
Seq Number: 910697 | SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.04.13 22.31	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	125	%	75-131	04.04.13 22.31	
1,2-Dichloroethane-D4	17060-07-0	119	%	63-144	04.04.13 22.31	
Toluene-D8	2037-26-5	87	%	80-117	04.04.13 22.31	
4-Bromofluorobenzene	460-00-4	96	%	74-124	04.04.13 22.31	

Final 1.000

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Sample Id: AVB95-0200-X230 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: 459938-003 Date Collected: 03.26.13 09.10

Analytical Method: 1,4-Dioxane by SW 8260B Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 04.04.13 20.44
Seq Number: 910697 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 02.04	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	127	%	75-131	04.05.13 02.04	
1,2-Dichloroethane-D4	17060-07-0	124	%	63-144	04.05.13 02.04	
Toluene-D8	2037-26-5	91	%	80-117	04.05.13 02.04	
4-Bromofluorobenzene	460-00-4	96	%	74-124	04.05.13 02.04	

Final 1.000

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Sample Id: AVB95-0201-X230 | Matrix: Water | Date Received: 03.26.13 14.38

Lab Sample Id: 459938-004 | Date Collected: 03.26.13 09.15

Analytical Method: 1,4-Dioxane by SW 8260B | Prep Method: SW5030B

Tech: ZHO | % Moisture:

Analyst: ZHO | Date Prep: 04.04.13 20.45

Seq Number: 910697 | SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 02.28	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	136	%	75-131	04.05.13 02.28	S4
1,2-Dichloroethane-D4	17060-07-0	131	%	63-144	04.05.13 02.28	
Toluene-D8	2037-26-5	92	%	80-117	04.05.13 02.28	
4-Bromofluorobenzene	460-00-4	91	%	74-124	04.05.13 02.28	

Final 1.000

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Sample Id: AVB117-0100-19149 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: 459938-005 Date Collected: 03.26.13 09.45

Analytical Method: 1,4-Dioxane by SW 8260B Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 04.04.13 20.46
Seq Number: 910697 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 02.51	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	123	%	75-131	04.05.13 02.51	
1,2-Dichloroethane-D4	17060-07-0	124	%	63-144	04.05.13 02.51	
Toluene-D8	2037-26-5	96	%	80-117	04.05.13 02.51	
4-Bromofluorobenzene	460-00-4	105	%	74-124	04.05.13 02.51	

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Sample Id: AVB94-0200-21260 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: **459938-006** Date Collected: 03.26.13 10.20

Analytical Method: **1,4-Dioxane by SW 8260B** Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 04.04.13 20.47
Seq Number: 910697 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 03.15	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	128	%	75-131	04.05.13 03.15	
1,2-Dichloroethane-D4	17060-07-0	117	%	63-144	04.05.13 03.15	
Toluene-D8	2037-26-5	91	%	80-117	04.05.13 03.15	
4-Bromofluorobenzene	460-00-4	96	%	74-124	04.05.13 03.15	

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Sample Id: AVB94-0100-17138 | Matrix: Water | Date Received: 03.26.13 14.38
Lab Sample Id: **459938-007** | Date Collected: 03.26.13 10.40

Analytical Method: **1,4-Dioxane by SW 8260B** | Prep Method: SW5030B
Tech: ZHO | % Moisture:
Analyst: ZHO | Date Prep: 04.04.13 20.48
Seq Number: 910697 | SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 03.39	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	137	%	75-131	04.05.13 03.39	S4
1,2-Dichloroethane-D4	17060-07-0	127	%	63-144	04.05.13 03.39	
Toluene-D8	2037-26-5	93	%	80-117	04.05.13 03.39	
4-Bromofluorobenzene	460-00-4	91	%	74-124	04.05.13 03.39	

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Sample Id:	**AVB130-0100-17159**	Matrix: Water	Date Received: 03.26.13 14.38
Lab Sample Id:	**459938-008**	Date Collected: 03.26.13 11.15	
Analytical Method:	**1,4-Dioxane by SW 8260B**		Prep Method: SW5030B
Tech:	ZHO		% Moisture:
Analyst:	ZHO	Date Prep: 04.04.13 20.49	
Seq Number:	910697		SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 04.02	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	133	%	75-131	04.05.13 04.02	S4
1,2-Dichloroethane-D4	17060-07-0	137	%	63-144	04.05.13 04.02	
Toluene-D8	2037-26-5	97	%	80-117	04.05.13 04.02	
4-Bromofluorobenzene	460-00-4	99	%	74-124	04.05.13 04.02	

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Sample Id: AVB119-0100-19144 | Matrix: Water | Date Received: 03.26.13 14.38

Lab Sample Id: **459938-009** | Date Collected: 03.26.13 11.35

Analytical Method: **1,4-Dioxane by SW 8260B** | Prep Method: SW5030B

Tech: ZHO | % Moisture:

Analyst: ZHO | Date Prep: 04.04.13 20.50

Seq Number: 910697 | SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 04.26	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	131	%	75-131	04.05.13 04.26	
1,2-Dichloroethane-D4	17060-07-0	133	%	63-144	04.05.13 04.26	
Toluene-D8	2037-26-5	98	%	80-117	04.05.13 04.26	
4-Bromofluorobenzene	460-00-4	101	%	74-124	04.05.13 04.26	

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Sample Id: AVB92-0200-XXX | Matrix: Water | Date Received: 03.26.13 14.38
Lab Sample Id: **459938-012** | Date Collected: 03.26.13 12.25

Analytical Method: **1,4-Dioxane by SW 8260B** | Prep Method: SW5030B
Tech: ZHO | % Moisture:
Analyst: ZHO | Date Prep: 04.04.13 20.53
Seq Number: 910697 | SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 05.36	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	135	%	75-131	04.05.13 05.36	S4
1,2-Dichloroethane-D4	17060-07-0	133	%	63-144	04.05.13 05.36	
Toluene-D8	2037-26-5	108	%	80-117	04.05.13 05.36	
4-Bromofluorobenzene	460-00-4	100	%	74-124	04.05.13 05.36	

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WVBA

Sample Id: AVB96-0200-21332 | Matrix: Water | Date Received: 03.26.13 14.38
Lab Sample Id: 459938-013 | Date Collected: 03.26.13 13.05

Analytical Method: 1,4-Dioxane by SW 8260B | Prep Method: SW5030B
Tech: ZHO | % Moisture:
Analyst: ZHO | Date Prep: 04.04.13 20.54
Seq Number: 910697 | SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 06.00	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	136	%	75-131	04.05.13 06.00	S4
1,2-Dichloroethane-D4	17060-07-0	141	%	63-144	04.05.13 06.00	
Toluene-D8	2037-26-5	100	%	80-117	04.05.13 06.00	
4-Bromofluorobenzene	460-00-4	105	%	74-124	04.05.13 06.00	

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Sample Id:	**AVB96-0100-20121**	Matrix: Water	Date Received: 03.26.13 14.38
Lab Sample Id:	**459938-014**	Date Collected: 03.26.13 13.25	
Analytical Method:	**1,4-Dioxane by SW 8260B**		Prep Method: SW5030B
Tech:	ZHO		% Moisture:
Analyst:	ZHO	Date Prep: 04.05.13 15.33	
Seq Number:	910730		SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 15.50	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	91	%	75-131	04.05.13 15.50	
1,2-Dichloroethane-D4	17060-07-0	80	%	63-144	04.05.13 15.50	
Toluene-D8	2037-26-5	96	%	80-117	04.05.13 15.50	
4-Bromofluorobenzene	460-00-4	105	%	74-124	04.05.13 15.50	

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WVBA

Sample Id: AVB91-0200-21191 Matrix: Water Date Received: 03.26.13 14.38
Lab Sample Id: 459938-015 Date Collected: 03.26.13 13.50

Analytical Method: 1,4-Dioxane by SW 8260B Prep Method: SW5030B
Tech: ZHO % Moisture:
Analyst: ZHO Date Prep: 04.05.13 15.34
Seq Number: 910730 SUB: AZ0765

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
1,4-Dioxane	123-91-1	<4.00	50.0	4.00	ug/L	04.05.13 16.14	E8	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	92	%	75-131	04.05.13 16.14	
1,2-Dichloroethane-D4	17060-07-0	85	%	63-144	04.05.13 16.14	
Toluene-D8	2037-26-5	86	%	80-117	04.05.13 16.14	
4-Bromofluorobenzene	460-00-4	104	%	74-124	04.05.13 16.14	

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