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Mr. David P. Turner, RPM (3HS22)
Western PA Section
United States Environmental Protection Agency, Region 3
1650 Arch Street
Philadelphia, PA 19103-2029

November 19, 2012

Reference: LORD-Shope RA Monthly Progress Report

Dear Mr. Turner:

LORD is hereby submitting two copies of the monthly progress report for the period of October 1, 2012 through October 31, 2012.

The following work was conducted during this period:

REMEDIAL ACTION

NPDES Report:

The October report will be submitted under a separate cover.

Thermal Oxidizer:

The thermal oxidizer was shut down as planned, on October 26, 2011. Startup of ISVS was April 24, 2012. As planned, ISVS was shut down again on May 30 and restarted June 27, 2012. ISVS was shut down as planned on August 1, 2012. The oxidizer was restarted on August 29 and was shut down for the year on October 30, 2012 as planned. ISVS influent was 275.2 ppm and the removal efficiency was 99.9%.

Groundwater Treatment:

The groundwater treatment system was operating normally during this interim. The groundwater TOC effluent concentration was 1.2 mg/l.

Sincerely,

LORD Corporation

George M. Kickel
Director, Environment, Safety, Health, and Regulatory Compliance

GMK12027/cmf

cc: (b) (4) [redacted] ARCADIS, Inc.
John Morettini, PADEP

Test America List	May-12		Jul-12		Sep-12		Oct-12	
	Influent ppb(v)	Effluent ppb(v)	Influent ppb(v)	Effluent ppb(v)	Influent ppb(v)	Effluent ppb(v)	Influent ppb(v)	Effluent ppb(v)
Ethylbenzene	ND	ND	ND	0.36	ND	0.18	220	0.14
Styrene	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	0.15	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND
Acrolein	ND	ND	ND	1.5	ND	0.61	ND	0.42
3-Chloropropene	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	ND	ND	ND	1.2	ND	ND	ND	ND
Vinyl acetate	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	ND	ND	ND	3.9	ND	0.91	170	1.1
1,3,5-Trimethylbenzene	ND	ND	ND	1.5	ND	0.12	ND	ND
Toluene	510	1.2	ND	1.5	350	0.75	600	0.67
Chlorobenzene	ND	ND	ND	ND	ND	ND	200	ND
Pentane	ND	ND	ND	0.34	560	0.31	270	0.15
n-Hexane	760	1	ND	0.32	800	ND	1100	0.14
n-Octane	ND	0.71	ND	ND	ND	ND	ND	0.11
Propene	3400	0.83	4100	0.49	1700	0.43	1000	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5300	ND	6200	ND	5200	0.97	8700	0.047
m-Xylene & p-Xylene	1300	ND	ND	1.9	680	0.88	1100	0.62
Ethyl acetate	ND	ND	ND	ND	ND	ND	ND	ND
n-Heptane	ND	ND	ND	0.49	ND	0.16	ND	0.12
cis-1,2-Dichloroethene	92000	ND	110000	0.23	85000	14	140000	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND	400	0.057	470	ND
Methyl tert-butyl ether	ND	ND	ND	ND	ND	ND	ND	ND
2,2,4-Trimethylpentane	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	0.092	ND	0.047	ND	ND
2-Hexanone	ND	ND	ND	3.5	ND	1.6	ND	1.3
4-Ethyltoluene	ND	ND	ND	0.66	ND	ND	ND	0.31

Acetone	ND	ND	ND	43	ND	12	ND	11
Chloroform	540	ND	610	0.44	500	0.32	650	0.12
Benzene	ND	ND	ND	0.26	ND	0.18	250	0.15
1,1,1-Trichloroethane	450	ND	510	ND	420	0.073	500	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	2.2	ND	1.6	ND	0.83	ND	0.27
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	320	0.088	390	ND
Vinyl chloride	100000	ND	140000	0.33	86000	8.2	73000	ND
Acetonitrile	ND	ND	ND	ND	ND	0.24	ND	0.25
Methylene chloride	1300	6	1900	0.38	1300	0.31	1800	0.17
Carbon disulfide	ND	ND	ND	2.3	ND	0.28	ND	0.32
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	490	ND	660	ND	460	0.081	640	ND
1,1-Dichloroethene	820	ND	720	ND	970	0.12	1000	ND
Chlorodifluoromethane	ND	ND	ND	ND	ND	0.055	ND	ND
tert-Butyl alcohol	ND	7.7	ND	44	ND	1.4	ND	9.4
Trichlorofluoromethane	ND	0.67	ND	0.089	ND	0.056	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluor	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloro-1,1,2,2-tetrafluo	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	170	ND
2-Butanone (MEK)	ND	ND	ND	12	ND	3.3	ND	2.8
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	26000	ND	30000	0.14	27000	4.5	42000	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND
Methyl methacrylate	ND	1	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	880	ND	ND	0.81	510	0.43	1000	0.22
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	2.7	ND	0.28	ND	0.3
Cumene	ND	ND	ND	ND	ND	ND	ND	ND
alpha-Methylstyrene	ND	ND	ND	ND	ND	ND	ND	ND
Totals	233,750	21	294,700	126	212,170	54	275,230	30
		99.99%		99.96%		99.97%		99.99%

% Methane Influent	4	2.9	1.7	0.47

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. 2

LORD Shope

Lot #: H2J030417

(b) (4) [redacted]

ARCADIS U.S., Inc.
284 Cramer Creek Court
Dublin, OH 43017

(b) (4) [redacted]

TESTAMERICA LABORATORIES, INC.

(b) (4) [redacted]

Project Manager

October 10, 2012

ANALYTICAL METHODS SUMMARY

H2J030417

PARAMETER	ANALYTICAL METHOD
Method for Analysis of Reformed Gas by GC	ASTM D 1946/E 260
Volatile Organics by TO15	EPA-2 TO-15

References:

ASTM Annual Book Of ASTM Standards.

EPA-2 "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air", EPA-625/R-96/010b, January 1999.

SAMPLE SUMMARY

H2J030417

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MWR5K	001	TOI/100112	10/01/12	12:15
MWR5T	002	TOE/100112	10/01/12	12:20

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

PROJECT NARRATIVE
H2J030417

The results reported herein are applicable to the samples submitted for analysis only. If you have any questions about this report, please call (865) 291-3000 to speak with the TestAmerica project manager listed on the cover page.

This report shall not be reproduced except in full, without the written approval of the laboratory.

The original chain of custody documentation is included with this report.

Sample Receipt

Custody seals were not present.

Quality Control and Data Interpretation

Unless otherwise noted, all holding times and QC criteria were met and the test results shown in this report meet all applicable NELAC requirements.

Volatiles

EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria. Even though the calibration verification analyzed on 10/3/12 exhibited a % difference of > 30% for 1,2-dichlorotetrafluoroethane and acetone, the results were within the LCS acceptance limits.

The concentration of cis-1,2-dichloroethene in sample TOI/100112 exceeded the calibration level of the instrument. The sample was analyzed at a dilution to bring the concentration of the compound into the instrument calibration range. The results for both analyses are reported in order to provide the lowest possible reporting limits.

There is a significant contribution from an interfering non-target analyte to the quantitation of propene in sample TOI/100112. Therefore, the propene results are biased high and should be considered estimated. The result is flagged with "EST".

CERTIFICATION SUMMARY

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Knoxville	ACLASS	DoD ELAP		ADE-1434
TestAmerica Knoxville	Arkansas	State Program	6	88-0688
TestAmerica Knoxville	California	State Program	9	2423
TestAmerica Knoxville	Colorado	State Program	8	N/A
TestAmerica Knoxville	Connecticut	State Program	1	PH-0223
TestAmerica Knoxville	Florida	NELAC	4	E87177
TestAmerica Knoxville	Georgia	State Program	4	906
TestAmerica Knoxville	Hawaii	State Program	9	N/A
TestAmerica Knoxville	Indiana	State Program	5	C-TN-02
TestAmerica Knoxville	Iowa	State Program	7	375
TestAmerica Knoxville	Kansas	NELAC	7	E-10349
TestAmerica Knoxville	Kentucky	State Program	4	90101
TestAmerica Knoxville	Louisiana	NELAC	6	LA110001
TestAmerica Knoxville	Louisiana	NELAC	6	83979
TestAmerica Knoxville	Maryland	State Program	3	277
TestAmerica Knoxville	Michigan	State Program	5	9933
TestAmerica Knoxville	Minnesota	NELAC	5	047-999-429
TestAmerica Knoxville	Nevada	State Program	9	TN00009
TestAmerica Knoxville	New Jersey	NELAC	2	TN001
TestAmerica Knoxville	New York	NELAC	2	10781
TestAmerica Knoxville	North Carolina	North Carolina DENR	4	64
TestAmerica Knoxville	North Carolina	North Carolina PHL	4	21705
TestAmerica Knoxville	Ohio	OVAP	5	CL0059
TestAmerica Knoxville	Oklahoma	State Program	6	9415
TestAmerica Knoxville	Pennsylvania	NELAC	3	68-00576
TestAmerica Knoxville	South Carolina	State Program	4	84001
TestAmerica Knoxville	Tennessee	State Program	4	2014
TestAmerica Knoxville	Texas	NELAC	6	T104704380-TX
TestAmerica Knoxville	USDA	USDA		P330-11-00035
TestAmerica Knoxville	Utah	NELAC	8	QUAN3
TestAmerica Knoxville	Virginia	State Program	3	165
TestAmerica Knoxville	Washington	State Program	10	C593
TestAmerica Knoxville	West Virginia	West Virginia DEP	3	345
TestAmerica Knoxville	West Virginia	West Virginia DHHR (DW)	3	9955C
TestAmerica Knoxville	Wisconsin	State Program	5	998044300

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Sample Data Summary

ARCADIS U.S., Inc.

Client Sample ID: TOI/100112

GC/MS Volatiles

Lot-Sample # H2J030417 - 001 **Work Order #** MWR5K1AA **Matrix.....:** AIR

Date Sampled...: 10/01/2012 **Date Received..:** 10/03/2012
Prep Date.....: 10/03/2012 **Analysis Date...** 10/03/2012
Prep Batch #.....: 2278030
Dilution Factor.: 3072.8 **Method.....:** TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	ND	610	ND	2800
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	610	ND	4300
Acetone	ND	15000	ND	36000
1,4-Dioxane	ND	1500	ND	5500
Ethyl acetate	ND	6100	ND	22000
Ethylbenzene	**220 J**	**610**	**950 J**	**2700**
Trichlorofluoromethane	ND	610	ND	3500
n-Heptane	ND	1500	ND	6300
Hexachlorobutadiene	ND	3100	ND	33000
n-Hexane	**1100 J**	**1500**	**3800 J**	**5400**
2-Hexanone	ND	1500	ND	6300
2,2,4-Trimethylpentane	ND	1500	ND	7200
Cumene	ND	1200	ND	6000
tert-Butyl alcohol	ND	6100	ND	19000
Methylene chloride	**1800 B**	**1500**	**6100 B**	**5300**
Methyl methacrylate	ND	1500	ND	6300
Benzene	**250 J**	**610**	**800 J**	**2000**
Acetonitrile	ND	3100	ND	5200
n-Octane	ND	1200	ND	5700
Pentane	**270 J**	**3100**	**800 J**	**9100**
Styrene	ND	610	ND	2600
1,1,2,2-Tetrachloroethane	ND	610	ND	4200
Tetrachloroethene	**8700**	**610**	**59000**	**4200**
Toluene	**600 J**	**610**	**2300 J**	**2300**
1,2,4-Trichlorobenzene	ND	3100	ND	23000
1,1,1-Trichloroethane	**500 J**	**610**	**2800 J**	**3400**
1,1,2-Trichloroethane	ND	610	ND	3400
Trichloroethene	**42000**	**610**	**230000**	**3300**
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	610	ND	4700
1,2,4-Trimethylbenzene	ND	610	ND	3000
1,3,5-Trimethylbenzene	ND	610	ND	3000
Vinyl acetate	ND	3100	ND	11000
Vinyl chloride	**73000**	**610**	**190000**	**1600**
o-Xylene	**1000**	**610**	**4500**	**2700**
Methyl tert-butyl ether	ND	3100	ND	11000
alpha-Methylstyrene	ND	1200	ND	5900
Chlorodifluoromethane	ND	610	ND	2200
m-Xylene & p-Xylene	**1100**	**610**	**4700**	**2700**

ARCADIS U.S., Inc.

Client Sample ID: TOI/100112

GC/MS Volatiles

Lot-Sample # H2J030417 - 001 **Work Order #** MWR5K1AA **Matrix.....:** AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
Bromodichloromethane	ND	610	ND	4100
1,2-Dibromoethane (EDB)	ND	610	ND	4700
2-Butanone (MEK)	ND	3100	ND	9100
4-Methyl-2-pentanone (MIBK)	**170 J**	**1500**	**690 J**	**6300**
Bromoform	ND	610	ND	6400
Bromomethane	ND	610	ND	2400
1,3-Butadiene	ND	1200	ND	2700
4-Ethyltoluene	ND	1200	ND	6000
Acrolein	ND	2500	ND	5600
Carbon disulfide	ND	1500	ND	4800
Acrylonitrile	ND	6100	ND	13000
Carbon tetrachloride	ND	610	ND	3900
Chlorobenzene	**200 J**	**610**	**940 J**	**2800**
Dibromochloromethane	ND	610	ND	5200
Chloroethane	**390 J**	**610**	**1000 J**	**1600**
Chloroform	**650**	**610**	**3200**	**3000**
Chloromethane	ND	1500	ND	3200
3-Chloropropene	ND	610	ND	1900
Propene	**1000 J est**	**1500**	**1800 J est**	**2600**
Dibromomethane	ND	1200	ND	8700
1,2-Dichlorobenzene	ND	610	ND	3700
1,3-Dichlorobenzene	ND	610	ND	3700
1,4-Dichlorobenzene	ND	610	ND	3700
Dichlorodifluoromethane	ND	610	ND	3000
1,1-Dichloroethane	**640**	**610**	**2600**	**2500**
1,2-Dichloroethane	ND	610	ND	2500
1,1-Dichloroethene	**1000**	**610**	**4200**	**2400**
cis-1,2-Dichloroethene	**140000 E**	**610**	**560000 E**	**2400**
trans-1,2-Dichloroethene	**470 J**	**610**	**1900 J**	**2400**
1,2-Dichloropropane	**170 J**	**610**	**800 J**	**2800**
cis-1,3-Dichloropropene	ND	610	ND	2800

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	104	60 - 140

ARCADIS U.S., Inc.

Client Sample ID: TOI/100112

GC/MS Volatiles

Lot-Sample #	H2J030417 - 001	**Work Order #**	MWR5K1AA	**Matrix.....:**	AIR

Qualifiers

B	Method blank contamination. The associated method blank contains the target analyte at a reportable level.
E	Estimated result. Result concentration exceeds the calibration range.
est	Estimated value. See narrative for details.
J	Estimated result. Result is less than RL.

'The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

ARCADIS U.S., Inc.

Client Sample ID: TOI/100112

GC/MS Volatiles

Lot-Sample #	H2J030417 - 001	**Work Order #**	MWR5K2AA	**Matrix.....:**	AIR

Date Sampled...:	10/01/2012	**Date Received..:**	10/03/2012
Prep Date.....:	10/03/2012	**Analysis Date...**	10/04/2012
Prep Batch #.....:	2278030		
Dilution Factor.:	5531.12	**Method.....:**	TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
cis-1,2-Dichloroethene	**140000 D**	**1100**	**570000 D**	**4400**

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	105	60 - 140

Qualifiers

D	Result was obtained from the analysis of a dilution.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

ARCADIS U.S., Inc.

Client Sample ID: TOE/100112

GC/MS Volatiles

Lot-Sample # H2J030417 - 002 **Work Order #** MWR5T1AA **Matrix.....:** AIR

Date Sampled...: 10/01/2012 **Date Received..:** 10/03/2012
Prep Date.....: 10/03/2012 **Analysis Date...** 10/03/2012
Prep Batch #.....: 2278030
Dilution Factor.: 1 **Method.....:** TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	ND	0.20	ND	0.91
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.20	ND	1.4
Acetone	**11**	**5.0**	**26**	**12**
1,4-Dioxane	ND	0.50	ND	1.8
Ethyl acetate	ND	2.0	ND	7.2
Ethylbenzene	**0.14 J**	**0.20**	**0.60 J**	**0.87**
Trichlorofluoromethane	ND	0.20	ND	1.1
n-Heptane	**0.12 J**	**0.50**	**0.48 J**	**2.0**
Hexachlorobutadiene	ND	1.0	ND	11
n-Hexane	**0.14 J**	**0.50**	**0.49 J**	**1.8**
2-Hexanone	**1.3**	**0.50**	**5.4**	**2.0**
2,2,4-Trimethylpentane	ND	0.50	ND	2.3
Cumene	ND	0.40	ND	2.0
tert-Butyl alcohol	**9.4**	**2.0**	**28**	**6.1**
Methylene chloride	**0.17 J B**	**0.50**	**0.57 J B**	**1.7**
Methyl methacrylate	ND	0.50	ND	2.0
Benzene	**0.15 J**	**0.20**	**0.47 J**	**0.64**
Acetonitrile	**0.25 J**	**1.0**	**0.42 J**	**1.7**
n-Octane	**0.11 J**	**0.40**	**0.50 J**	**1.9**
Pentane	**0.15 J**	**1.0**	**0.44 J**	**3.0**
Styrene	ND	0.20	ND	0.85
1,1,2,2-Tetrachloroethane	ND	0.20	ND	1.4
Tetrachloroethene	**0.047 J**	**0.20**	**0.32 J**	**1.4**
Toluene	**0.67**	**0.20**	**2.5**	**0.75**
1,2,4-Trichlorobenzene	ND	1.0	ND	7.4
1,1,1-Trichloroethane	ND	0.20	ND	1.1
1,1,2-Trichloroethane	ND	0.20	ND	1.1
Trichloroethene	ND	0.20	ND	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	ND	1.5
1,2,4-Trimethylbenzene	**0.30**	**0.20**	**1.5**	**0.98**
1,3,5-Trimethylbenzene	ND	0.20	ND	0.98
Vinyl acetate	ND	1.0	ND	3.5
Vinyl chloride	ND	0.20	ND	0.51
o-Xylene	**0.22**	**0.20**	**0.97**	**0.87**
Methyl tert-butyl ether	ND	1.0	ND	3.6
alpha-Methylstyrene	ND	0.40	ND	1.9
Chlorodifluoromethane	ND	0.20	ND	0.71
m-Xylene & p-Xylene	**0.62**	**0.20**	**2.7**	**0.87**

ARCADIS U.S., Inc.

Client Sample ID: TOE/100112

GC/MS Volatiles

Lot-Sample # H2J030417 - 002 **Work Order #** MWR5T1AA **Matrix.....:** AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
Bromodichloromethane	ND	0.20	ND	1.3
1,2-Dibromoethane (EDB)	ND	0.20	ND	1.5
2-Butanone (MEK)	**2.8**	**1.0**	**8.2**	**2.9**
4-Methyl-2-pentanone (MIBK)	**1.1**	**0.50**	**4.3**	**2.0**
Bromoform	ND	0.20	ND	2.1
Bromomethane	ND	0.20	ND	0.78
1,3-Butadiene	ND	0.40	ND	0.88
4-Ethyltoluene	**0.31 J**	**0.40**	**1.5 J**	**2.0**
Acrolein	**0.42 J**	**0.80**	**0.96 J**	**1.8**
Carbon disulfide	**0.32 J**	**0.50**	**0.99 J**	**1.6**
Acrylonitrile	ND	2.0	ND	4.3
Carbon tetrachloride	ND	0.20	ND	1.3
Chlorobenzene	ND	0.20	ND	0.92
Dibromochloromethane	ND	0.20	ND	1.7
Chloroethane	ND	0.20	ND	0.53
Chloroform	**0.12 J**	**0.20**	**0.58 J**	**0.98**
Chloromethane	**0.27 J**	**0.50**	**0.56 J**	**1.0**
3-Chloropropene	ND	0.20	ND	0.63
Propene	ND	0.50	ND	0.86
Dibromomethane	ND	0.40	ND	2.8
1,2-Dichlorobenzene	ND	0.20	ND	1.2
1,3-Dichlorobenzene	ND	0.20	ND	1.2
1,4-Dichlorobenzene	ND	0.20	ND	1.2
Dichlorodifluoromethane	ND	0.20	ND	0.99
1,1-Dichloroethane	ND	0.20	ND	0.81
1,2-Dichloroethane	ND	0.20	ND	0.81
1,1-Dichloroethene	ND	0.20	ND	0.79
cis-1,2-Dichloroethene	ND	0.20	ND	0.79
trans-1,2-Dichloroethene	ND	0.20	ND	0.79
1,2-Dichloropropane	ND	0.20	ND	0.92
cis-1,3-Dichloropropene	ND	0.20	ND	0.91

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	102	60 - 140

Qualifiers

B	Method blank contamination. The associated method blank contains the target analyte at a reportable level.
J	Estimated result. Result is less than RL.

ARCADIS U.S., Inc.

Client Sample ID: TOE/100112

GC/MS Volatiles

Lot-Sample #	H2J030417 - 002	**Work Order #**	MWR5T1AA	**Matrix.....:**	AIR

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

ARCADIS U.S., Inc.

Client Sample ID: INTRA-LAB BLANK

GC/MS Volatiles

Lot-Sample # H2J040000 - 030B **Work Order #** MWTEW1AA **Matrix.....:** AIR

	10/01/2012	**Date Received..:**	10/03/2012
Prep Date.....:	10/03/2012	**Analysis Date...**	10/03/2012
Prep Batch #.....:	2278030		
Dilution Factor.:	1	**Method.....:**	TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	ND	0.20	ND	0.91
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.20	ND	1.4
Acetone	ND	5.0	ND	12
1,4-Dioxane	ND	0.50	ND	1.8
Ethyl acetate	ND	2.0	ND	7.2
Ethylbenzene	ND	0.20	ND	0.87
Trichlorofluoromethane	ND	0.20	ND	1.1
n-Heptane	ND	0.50	ND	2.0
Hexachlorobutadiene	ND	1.0	ND	11
n-Hexane	ND	0.50	ND	1.8
2-Hexanone	ND	0.50	ND	2.0
2,2,4-Trimethylpentane	ND	0.50	ND	2.3
Cumene	ND	0.40	ND	2.0
tert-Butyl alcohol	ND	2.0	ND	6.1
Methylene chloride	**0.056 J**	**0.50**	**0.19 J**	**1.7**
Methyl methacrylate	ND	0.50	ND	2.0
Benzene	ND	0.20	ND	0.64
Acetonitrile	ND	1.0	ND	1.7
n-Octane	ND	0.40	ND	1.9
Pentane	ND	1.0	ND	3.0
Styrene	ND	0.20	ND	0.85
1,1,2,2-Tetrachloroethane	ND	0.20	ND	1.4
Tetrachloroethene	ND	0.20	ND	1.4
Toluene	ND	0.20	ND	0.75
1,2,4-Trichlorobenzene	ND	1.0	ND	7.4
1,1,1-Trichloroethane	ND	0.20	ND	1.1
1,1,2-Trichloroethane	ND	0.20	ND	1.1
Trichloroethene	ND	0.20	ND	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	ND	1.5
1,2,4-Trimethylbenzene	ND	0.20	ND	0.98
1,3,5-Trimethylbenzene	ND	0.20	ND	0.98
Vinyl acetate	ND	1.0	ND	3.5
Vinyl chloride	ND	0.20	ND	0.51
o-Xylene	ND	0.20	ND	0.87
Methyl tert-butyl ether	ND	1.0	ND	3.6
alpha-Methylstyrene	ND	0.40	ND	1.9
Chlorodifluoromethane	ND	0.20	ND	0.71

ARCADIS U.S., Inc.

Client Sample ID: INTRA-LAB BLANK

GC/MS Volatiles

Lot-Sample # H2J040000 - 030B **Work Order #** MWTEW1AA **Matrix.....:** AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
m-Xylene & p-Xylene	ND	0.20	ND	0.87
Bromodichloromethane	ND	0.20	ND	1.3
1,2-Dibromoethane (EDB)	ND	0.20	ND	1.5
2-Butanone (MEK)	ND	1.0	ND	2.9
4-Methyl-2-pentanone (MIBK)	ND	0.50	ND	2.0
Bromoform	ND	0.20	ND	2.1
Bromomethane	ND	0.20	ND	0.78
1,3-Butadiene	ND	0.40	ND	0.88
4-Ethyltoluene	ND	0.40	ND	2.0
Acrolein	ND	0.80	ND	1.8
Carbon disulfide	ND	0.50	ND	1.6
Acrylonitrile	ND	2.0	ND	4.3
Carbon tetrachloride	ND	0.20	ND	1.3
Chlorobenzene	ND	0.20	ND	0.92
Dibromochloromethane	ND	0.20	ND	1.7
Chloroethane	ND	0.20	ND	0.53
Chloroform	ND	0.20	ND	0.98
Chloromethane	ND	0.50	ND	1.0
3-Chloropropene	ND	0.20	ND	0.63
Propene	ND	0.50	ND	0.86
Dibromomethane	ND	0.40	ND	2.8
1,2-Dichlorobenzene	ND	0.20	ND	1.2
1,3-Dichlorobenzene	ND	0.20	ND	1.2
1,4-Dichlorobenzene	ND	0.20	ND	1.2
Dichlorodifluoromethane	ND	0.20	ND	0.99
1,1-Dichloroethane	ND	0.20	ND	0.81
1,2-Dichloroethane	ND	0.20	ND	0.81
1,1-Dichloroethene	ND	0.20	ND	0.79
cis-1,2-Dichloroethene	ND	0.20	ND	0.79
trans-1,2-Dichloroethene	ND	0.20	ND	0.79
1,2-Dichloropropane	ND	0.20	ND	0.92
cis-1,3-Dichloropropene	ND	0.20	ND	0.91

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	104	60 - 140

Qualifiers

J Estimated result. Result is less than RL.

ARCADIS U.S., Inc.

Client Sample ID: INTRA-LAB BLANK

GC/MS Volatiles

Lot-Sample #	H2J040000 - 030B	**Work Order #**	MWTEW1AA	**Matrix.....:**	AIR

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

ARCADIS U.S., Inc.

Client Sample ID: CHECK SAMPLE

GC/MS Volatiles

Lot-Sample # H2J040000 - 030C **Work Order #** MWTEW1AC **Matrix.....:** AIR

	10/01/2012	**Date Received..:**	10/03/2012
Prep Date.....:	10/03/2012	**Analysis Date...**	10/03/2012
Prep Batch #.....:	2278030		
Dilution Factor.:	1	**Method.....:**	TO-15

PARAMETER	SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUNT (ug/m3)	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS
trans-1,3-Dichloropropene	5.00	4.98	23	22.6	100	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	5.00	6.53	35	45.6	131	60 - 140
Acetone	5.00	3.36	12	7.97	67	60 - 140
1,4-Dioxane	5.00	4.79	18	17.3	96	60 - 140
Ethyl acetate	5.00	3.90	18	14.1	78	60 - 140
Ethylbenzene	5.00	4.79	22	20.8	96	70 - 130
Trichlorofluoromethane	5.00	6.06	28	34.0	121	60 - 140
n-Heptane	5.00	5.06	20	20.7	101	70 - 130
Hexachlorobutadiene	5.00	4.69	53	50.1	94	60 - 140
n-Hexane	5.00	4.99	18	17.6	100	70 - 130
2-Hexanone	5.00	5.19	20	21.3	104	60 - 140
2,2,4-Trimethylpentane	5.00	5.09	23	23.8	102	70 - 130
Cumene	5.00	4.69	25	23.0	94	70 - 130
tert-Butyl alcohol	5.00	4.85	15	14.7	97	60 - 140
Methylene chloride	5.00	5.74	17	19.9	115	70 - 130
Methyl methacrylate	5.00	3.82	20	15.6	76	60 - 140
Benzene	5.00	4.83	16	15.4	97	70 - 130
Acetonitrile	5.00	4.23	8.4	7.11	85	60 - 140
n-Octane	5.00	5.19	23	24.3	104	70 - 130
Pentane	5.00	5.97	15	17.6	119	70 - 130
Styrene	5.00	4.97	21	21.2	99	70 - 130
1,1,2,2-Tetrachloroethane	5.00	5.52	34	37.9	110	70 - 130
Tetrachloroethene	5.00	5.47	34	37.1	109	70 - 130
Toluene	5.00	4.80	19	18.1	96	70 - 130
1,2,4-Trichlorobenzene	5.00	6.37	37	47.3	127	60 - 140
1,1,1-Trichloroethane	5.00	5.13	27	28.0	103	70 - 130
1,1,2-Trichloroethane	5.00	5.21	27	28.4	104	70 - 130
Trichloroethene	5.00	5.48	27	29.5	110	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	5.00	6.14	38	47.1	123	70 - 130
1,2,4-Trimethylbenzene	5.00	5.22	25	25.7	104	70 - 130
1,3,5-Trimethylbenzene	5.00	4.83	25	23.7	97	70 - 130
Vinyl acetate	5.00	3.69	18	13.0	74	60 - 140
Vinyl chloride	5.00	5.98	13	15.3	120	70 - 130
o-Xylene	5.00	4.76	22	20.7	95	70 - 130
Methyl tert-butyl ether	5.00	4.28	18	15.4	86	60 - 140
alpha-Methylstyrene	5.00	5.14	24	24.9	103	60 - 140

ARCADIS U.S., Inc.

Client Sample ID: CHECK SAMPLE

GC/MS Volatiles

Lot-Sample # H2J040000 - 030C **Work Order #** MWTEW1AC **Matrix.....:** AIR

PARAMETER	SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUNT (ug/m3)	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS
Chlorodifluoromethane	5.00	5.72	18	20.2	114	60 - 140
m-Xylene & p-Xylene	10.0	9.79	43	42.5	98	70 - 130
Bromodichloromethane	5.00	5.32	34	35.6	106	70 - 130
1,2-Dibromoethane (EDB)	5.00	5.11	38	39.2	102	70 - 130
2-Butanone (MEK)	5.00	3.89	15	11.5	78	60 - 140
4-Methyl-2-pentanone (MIBK)	5.00	4.72	20	19.4	94	60 - 140
Bromoform	5.00	5.83	52	60.2	117	60 - 140
Bromomethane	5.00	5.88	19	22.8	118	70 - 130
1,3-Butadiene	5.00	5.80	11	12.8	116	60 - 140
4-Ethyltoluene	5.00	4.95	25	24.4	99	70 - 130
Acrolein	5.00	4.56	11	10.5	91	60 - 140
Carbon disulfide	5.00	5.82	16	18.1	116	70 - 130
Acrylonitrile	5.00	4.36	11	9.47	87	60 - 140
Carbon tetrachloride	5.00	6.12	31	38.5	122	70 - 130
Chlorobenzene	5.00	5.25	23	24.2	105	70 - 130
Dibromochloromethane	5.00	5.41	43	46.1	108	70 - 130
Chloroethane	5.00	5.40	13	14.2	108	70 - 130
Chloroform	5.00	5.18	24	25.3	104	70 - 130
Chloromethane	5.00	5.84	10	12.1	117	60 - 140
3-Chloropropene	5.00	4.99	16	15.6	100	60 - 140
Propene	5.00	5.28	8.6	9.09	106	60 - 140
Dibromomethane	5.00	5.45	36	38.8	109	70 - 130
1,2-Dichlorobenzene	5.00	5.22	30	31.4	104	70 - 130
1,3-Dichlorobenzene	5.00	5.10	30	30.7	102	70 - 130
1,4-Dichlorobenzene	5.00	5.33	30	32.1	107	70 - 130
Dichlorodifluoromethane	5.00	6.31	25	31.2	126	60 - 140
1,1-Dichloroethane	5.00	5.44	20	22.0	109	70 - 130
1,2-Dichloroethane	5.00	4.91	20	19.9	98	70 - 130
1,1-Dichloroethene	5.00	5.84	20	23.1	117	70 - 130
cis-1,2-Dichloroethene	5.00	5.41	20	21.5	108	70 - 130
trans-1,2-Dichloroethene	5.00	5.68	20	22.5	114	70 - 130
1,2-Dichloropropane	5.00	5.04	23	23.3	101	70 - 130
cis-1,3-Dichloropropene	5.00	4.93	23	22.4	99	70 - 130

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	107	60 - 140

ARCADIS U.S., Inc.

Client Sample ID: CHECK SAMPLE

GC/MS Volatiles

Lot-Sample #	H2J040000 - 030C	**Work Order #**	MWTEW1AC	**Matrix.....:**	AIR

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

Sample Data Summary

ARCADIS U.S., Inc.

Client Sample ID: TOI/100112

GC Volatiles

Lot-Sample #...: H2J030417-001 Work Order #...: MWR5K1AC Matrix.....: AIR
Date Sampled...: 10/01/12 Date Received..: 10/03/12
Prep Date.....: 10/09/12 Analysis Date..: 10/09/12
Prep Batch #...: 2283017
Dilution Factor: 1.97 Method.....: ASTM D 1946/E 260

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Methane	0.47	0.20	%

ARCADIS U.S., Inc.

Client Sample ID: TOE/100112

GC Volatiles

Lot-Sample #...: H2J030417-002 Work Order #...: MWR5T1AC Matrix.....: AIR
Date Sampled...: 10/01/12 Date Received..: 10/03/12
Prep Date.....: 10/09/12 Analysis Date..: 10/09/12
Prep Batch #...: 2283017
Dilution Factor: 2.26 Method.....: ASTM D 1946/E 260

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Methane	ND	0.23	%

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: H2J030417 Work Order #...: MWVXE1AA Matrix.....: AIR
MB Lot-Sample #: H2J090000-017

Prep Date.....: 10/09/12
Analysis Date..: 10/09/12 Prep Batch #...: 2283017
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Methane	ND	0.10	%	ASTM D 1946/E 260

NOTE(S):

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: H2J030417 Work Order #...: MWVXE1AC Matrix.....: AIR
LCS Lot-Sample#: H2J090000-017
Prep Date.....: 10/09/12 Analysis Date..: 10/09/12
Prep Batch #...: 2283017
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Methane	**99**	**(70 - 130)**	**ASTM D 1946/E 260**

NOTE(S):

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

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: H2J030417 Work Order #...: MWVXE1AC Matrix.....: AIR
LCS Lot-Sample#: H2J090000-017
Prep Date.....: 10/09/12 Analysis Date..: 10/09/12
Prep Batch #...: 2283017
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Methane	4.00	3.97	%	99	ASTM D 1946/E

NOTE(S):

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

Bold print denotes control parameters

Sample Receipt Documentation

TAL Knoxville H2J030417
5815 Middlebrook Pike
Knoxville, TN 37921
phone 865-291-3000 fax 865-584-4315

Canister Samples Chain of Custody Record

TestAmerica assumes no liability with respect to the collection and shipment of these samples.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Contact Information: ARCADIS US Inc
Company: ARCADIS US Inc
Address: 284 CRAMER CREEK COURT
City/State/Zip: DUBLIN OH 43017
Phone: 614-764-2310
FAX:
Project Name: LORD-SHOPE
Site/location: GIRARD PA
PO #

Project Manager: (b)(4) [redacted]
Phone:
Site Contact:
TAL Contact:

Analysis Turnaround Time
Standard (Specify) X
Rush (Specify)

Sampled By: (b)(4) [redacted]

1 of 2 COCs

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-15	TO-14A	EPA 3C	EPA 25C	ASTM D-1946	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)
TOI/100112	10/1/12		12:15				12270	X					X						
TOE/100112	10/1/12		12:20				03841	X											

Sampled by :

Temperature (Fahrenheit)	Interior	Ambient	
Start			
Stop			

Pressure (inches of Hg)	Interior	Ambient	
Start			
Stop			

X - METHANE EPA 18

1 Box Rec'd @ Ambient Temp without custody seal ~~[illegible]~~ 10/2/12
1 Box UPS # 1Z 183 X76 03 6667 9884

Special Instructions/QC Requirements & Comments:

2 cans / NO Flows

Canisters Shipped by:	Date/Time:	Canisters [redacted] 13/12	1246
Samples Relinquished by:	Date/Time:	~~Received~~ by:	
Relinquished by:	Date/Time:	Received by:	

H2J030417

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: KNOXVILLE
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: ARCADIS US INC	Client Project Manager: (b) (4) [redacted]	Site Contact: (b) (4) [redacted]	Lab Contact:	COC No: 027469
Address: 284 CRAMER CREEK COURT	Telephone: 614-764-2310	Telephone: 814-720-1212	Telephone:	2 of 2 COCs
City/State/Zip: DUBLIN OH 43017	Email:	Analysis Turnaround Time (In BUS days)		For lab use only
Phone: 614-764-2310		TAT if different from below ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Walk-in client ☐ Lab pickup ☐ Date sampling commenced: Job/SDG No.:
Project Name: LORD-SHOPE L.F.	Method of Shipment/Carrier: UPS			
Project Number:	Shipping/Tracking No:			
PO#:				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other: SUMMA	Filtered Sample (Y/N)	Composite C/Grab G	Analyses: TO-15		METHANE-EPA18								Sample Specific Notes / Special Instructions:
TOI/100112	10/1/12	12:15	X											X	N	G	X		X								
TOE/100112	10/1/12	12:20	X											X	N	G	X										

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For ____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
(b) (4) [redacted]	[redacted]	10/1/12 4:00PM	(b) (4) [redacted]	[redacted]	10/3/12 1246
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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TAL 0018- 1 (04/10)

TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Lot Number: H2J030417

Review Items	Yes	No	NA	If No, what was the problem?	Comments/Actions Taken
1. Do sample container labels match COC? (IDs, Dates, Times)	✓			☐ 1a Do not match COC ☐ 1b Incomplete information ☐ 1c Marking smeared ☐ 1d Label torn ☐ 1e No label ☐ 1f COC not received ☐ 1g Other:	NA
2. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C)	✓			☐ 2a Temp Blank = _____ ☐ 2b Cooler Temp = _____ ☐ 2c Cooling initiated for recently collected samples, ice present.	
3. Were samples received with correct chemical preservative (excluding Encore)?			✓	☐ 3a Sample preservative =	
4. Were custody seals present/intact on cooler and/or containers?		✓		☐ 4a Not present ☐ 4b Not intact ☐ 4c Other:	
5. Were all of the samples listed on the COC received?	✓			☐ 5a Samples received-not on COC ☐ 5b Samples not received-on COC	
6. Were all of the sample containers received intact?	✓			☐ 6a Leaking ☐ 6b Broken	
7. Were VOA samples received without headspace?			✓	☐ 7a Headspace (VOA only)	
8. Were samples received in appropriate containers?	✓			☐ 8a Improper container	
9. Did you check for residual chlorine, if necessary?			✓	☐ 9a Could not be determined due to matrix interference	
10. Were samples received within holding time?	✓			☐ 10a Holding time expired	
11. For rad samples, was sample activity info. provided?			✓	☐ Incomplete information	
12. For 1613B water samples is pH<9?			✓	If no, was pH adjusted to pH 7 - 9 with sulfuric acid? _____	
13. Are the shipping containers intact?	✓			☐ 13a Leaking ☐ 13b Other:	
14. Was COC relinquished? (Signed/Dated/Timed)	✓			☐ 14a Not relinquished	
15. Are tests/parameters listed for each sample?	✓			☐ 15a Incomplete information	
16. Is the matrix of the samples noted?	✓			☐ 15a Incomplete information	
17. Is the date/time of sample collection noted?	✓			☐ 15a Incomplete information	
18. Is the client and project name/# identified?	✓			☐ 15a Incomplete information	
19. Was the sampler identified on the COC?	✓			☐ 19a Other	

Quote #: 79678 PM Instructions: _____

Sample Receiving Associate: [redacted] (b) (6) Date: 10/3/12

QA026R23.doc, 022812

Test America - Knoxville ---- Air Canister Dilution Log

Lot Number: *H2J030417* TO15

Initial Can Pressure							Subsequent Dilutions											
Analyst/Date	Tedlar Bag Time	Pbarr (in)	Sample ID	Can #	Pres. upon receipt (-in or + psig)	Adj. Initial Pres. (-in or + psig)	Analyst/Date	I / S	Pbarr (in)	Initial Pres. Pi (in)	Final Pres. Pf (psig)	First InCan Final Pres. Pf (psig)	Second In-can Final Pres. Pf (psig)	Third InCan Final Pres. Pf (psig)	Serial Dilution Can #	Vol (mL)	Final Pres. Pf (psig)	Comments
[redacted]/3/12	NA	28.96	MWR5K	12270 ✓	-2.4	+11.5	[redacted]/3/12	S	28.96						12624	5	+2.4	10099
↓	↓	↓	MWR5T	03841 ✓	-7.3	+9.8												↓

Test America - Knoxville ---- Air Canister Dilution Log

Permbag

Lot Number: *H2J030417*

Methane

Initial Can Pressure							Subsequent Dilutions											
Analyst/Date	Tedlar Bag Time	Pbarr (in)	Sample ID	Can #	Pres. upon receipt (-in or + psig)	Adj. Initial Pres. (-in or + psig)	Analyst/Date	I / S	Pbarr (in)	Initial Pres. Pi (in)	Final Pres. Pf (psig)	First InCan Final Pres. Pf (psig)	Second In-can Final Pres. Pf (psig)	Third InCan Final Pres. Pf (psig)	Serial Dilution Can #	Vol (mL)	Final Pres. Pf (psig)	Comments
[redacted]/3/12	NA	28.96	MWR5K	12270 ✓	-2.4	+11.5	[redacted]/3/12	S	28.96						12624	5	+2.4	10099
↓	↓	↓	MWR5T	03841 ✓	-7.3	+9.8												↓

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