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ENVIRONMENTAL

SITE REMEDIATION
WATER RESOURCES
ECOLOGICAL SCIENCES
EHS MANAGEMENT

September 22, 2009

Dennis Harwood
ADEC Technical Services and Risk Assessment
555 Cordova Street
Anchorage, AK 99501

Subject: Vapor Intrusion Data Summary Report; August 2009; Gaffney Road Area Site; Fairbanks, Alaska; NTP 18-4002-11-001

Dear Mr. Harwood:

This submittal contains tables and figures of data collected during vapor intrusion assessments at five buildings in August 2009 for the Gaffney Road Area site. The samples were collected and analyzed in accordance with the procedures outlined in Section 3.2 of *Fiscal Year 2010, Work Plan, Gaffney Road Area, August 2009*.

Attachment 1 contains analytical data tables for the vapor intrusion assessments. Attachment 2 presents figures, which also contain pertinent analytical data. The laboratory data reports for the samples are included as Attachment 3. Finally, Attachment 4 contains a quality assurance review of the laboratory data reports.

Please call me at 258-4880, or email me at b.martich@oasisenviro.com, if you have any questions or comments.

Sincerely,

OASIS Environmental, Inc.

Ben Martich
Project Manager

cc:

Ann Farris, ADEC Project Manager

825 W. 8th Ave., Anchorage, AK 99501
Phone: (907) 258-4880
Fax: (907) 258-4033

www.oasisenviro.com

Attachments:

1. Tables (1-8)
2. Figures (A – C)
3. Laboratory Analytical Reports
4. Laboratory Data Review Checklists

Enclosures: One (1) CD-ROM of electronic files

ATTACHMENT 1

TABLES

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Table 1
Air Sample Summary - August 2009
Gaffney Road Area Long-Term Monitoring

Sample Location	Building	Sample Number	Date	Sample Type	Duration	Description	Comments
AA-1	Good News Bible and Book Store	09GRA308AA	8/25/2009	Outdoor Air	24-hour	South side of store	
IA-1	Good News Bible and Book Store	09GRA309IA 09GRA310IA 09GRA311PA 09GRA312PA		Indoor Air	24-hour	Near CD rack in southwest corner	09GRA310IA is a duplicate of 09GRA309IA 09GRA311PA collected with Radiello passive sampler 09GRA312PA collected with SKC passive sampler
SS-1	Good News Bible and Book Store	09GRA314SS 09GRA315SS	8/25/2009	Sub-Slab Air	30-minute	Boiler Room	Sample 09GRA314SS had a leaky valve 09GRA315SS is a duplicate of 09GRA314SS
SS-2	Good News Bible and Book Store	09GRA313SS	8/25/2009	Sub-Slab Air	30-minute	Southeast corner of storage room	
SS-3	Good News Bible and Book Store	09GRA316SS	8/25/2009	Sub-Slab Air	30-minute	Break room	
AA-2	State Farm	09GRA301AA	8/25/2009	Outdoor Air	24-hour	South side of building	
IA-2	State Farm	09GRA302IA 09GRA303PA 09GRA304PA	8/25/2009	Indoor Air	24-hour	Northwest office	09GRA303PA collected with Radiello passive sampler 09GRA304PA is duplicate of 09GRA303PA
SS-5	State Farm	09GRA305SS	8/25/2009	Sub-Slab Air	30-minute	Northeast corner of basement	
SS-6	State Farm	09GRA306SS	8/25/2009	Sub-Slab Air	30-minute	Northwest corner of basement	
SS-7	State Farm	09GRA307SS	8/25/2009	Sub-Slab Air	30-minute	Center of basement	
IA-3	Forget-Me-Not Books	09GRA330IA 09GRA331IA	8/27/2009	Indoor Air	24-hour	South side of building	09GRA331PA collected with SKC passive sampler
IA-4	Forget-Me-Not Books	09GRA328IA 09GRA329PA	8/27/2009	Indoor Air	24-hour	North side of building	09GRA329PA collected with SKC passive sampler
SS-11	Forget-Me-Not Books	09GRA333SS	8/27/2009	Sub-Slab Air	30-minute	South side of building	
SS-12	Forget-Me-Not Books	09GRA332SS	8/27/2009	Sub-Slab Air	30-minute	Basement boiler room	
SS-13	Forget-Me-Not Books	09GRA334SS	8/27/2009	Sub-Slab Air	30-minute	Main class room	
SS-14	Forget-Me-Not Books	09GRA335SS	8/27/2009	Sub-Slab Air	30-minute	Northeast classroom	
AA-3	Sunshine Alterations	09GRA317AA	8/26/2009	Outdoor Air	24-hour	South side of store	
IA-5	Sunshine Alterations	09GRA322IA 09GRA323PA	8/26/2009	Indoor Air	24-hour	Store front - Behind employee counter	09GRA323PA collected with SKC passive sampler
SS-8	Sunshine Alterations	09GRA325SS	8/26/2009	Sub-Slab Air	30-minute	South side of store	
SS-9	Sunshine Alterations	09GRA326SS	8/26/2009	Sub-Slab Air	30-minute	West side of store	
SS-10	Sunshine Alterations	09GRA324SS	8/26/2009	Sub-Slab Air	30-minute	North side of store	
IA-7	Stone Soup Community Center	09GRA327IA	8/26/2009	Indoor Air	24-hour	Main meeting room	
SS-15	Stone Soup Community Center	09GRA319SS 09GRA320SS	8/26/2009	Sub-Slab Air	30-minute	South side of center	09GRA320SS is a duplicate of 09GRA319SS
SS-16	Stone Soup Community Center	09GRA318SS	8/26/2009	Sub-Slab Air	30-minute	North side of center	
SS-17	Stone Soup Community Center	09GRA321SS	8/26/2009	Sub-Slab Air	30-minute	Middle of center	

Note: All samples collected in summa canisters unless otherwise noted in Comments section.

Table 2
Air Sample Analytical Results - August 2009
Good News Bible and Book Store
Gaffney Road Area Long-Term Monitoring

Compound	Units	Indoor Air Target Level	Indoor Air		Outdoor Air	Sub-Slab Air				Sub-Slab Average	Indoor Air to Sub-Slab Air Attenuation Factor
			IA-1		AA-1	SS-1		SS-2	SS-3		
			Primary	Duplicate		Primary	Duplicate				
Field Parameters											
Total Volatile Hydrocarbons	ppm	---	**---**	**---**	**---**	410	**---**	370	330	**---**	**---**
Oxygen	%	---	**---**	**---**	**---**	19.6	**---**	19.6	20.9	**---**	**---**
Carbon dioxide	%	---	**---**	**---**	**---**	0.7	**---**	0.8	0	**---**	**---**
Helium	%	---	**---**	**---**	**---**	3.4	**---**	2.7	2.6	**---**	**---**
Volatile Organic Compounds											
PCE	µg/m^3	21	**24**	**23**	0.32	10,000 JD	15,000 D	3,600	860	6,487	0.0037
TCE	µg/m^3	1.1	0.43	0.41	ND (0.15)	53 JD	74 D	70	ND (4.7)	NQ	NQ

Notes: Value in parentheses is laboratory reporting limit.

Bolded indoor air values exceed ADEC indoor air target level.

The primary sample at SS-1 had a leaky valve, so the result is likely diluted. Therefore, the duplicate result has been used in calculating the sub-slab average concentration.

Sub-slab average concentrations derived by averaging three primary sub-slab samples.

Attenuation factors are unitless percentages that are calculated by subtracting the outdoor air concentration from the indoor air concentration and dividing by the sub-slab average concentration.

Attenuation factors were not quantified if any of the indoor air concentrations or sub-slab air concentrations were non-detect.

Key:

% = Percent
D = Estimated result due to high relative percent difference with field duplicate
J = Estimated result due to likely dilution
µg/m^3 = Micrograms per cubic meter
ND = Not detected
NQ = Not quantified
PCE = Tetrachloroethene
ppm = Parts per million
TCE = Trichloroethene

Table 3
Air Sample Analytical Results - August 2009
State Farm
Gaffney Road Area Long-Term Monitoring

Compound	Units	Indoor Air Target Level	Indoor Air	Outdoor Air	Sub-Slab Air			Sub-Slab Average	Indoor Air to Sub-Slab Air Attenuation Factor
			IA-2	AA-2	SS-5	SS-6	SS-7		
Field Parameters									
Total Volatile Hydrocarbons	ppm	---	---	---	160	320	130	---	---
Oxygen	%	---	---	---	18.8	18.9	19.2	---	---
Carbon dioxide	%	---	---	---	2.0	1.7	1.5	---	---
Helium	%	---	---	---	0.5	1.0	0	---	---
Volatile Organic Compounds									
PCE	µg/m^3	21	0.74	ND (0.20)	8,000	16,000	2,400	8,800	0.0001
TCE	µg/m^3	1.1	ND (0.18)	ND (0.16)	380	730	120	410	NQ
cis-1,2-DCE	µg/m^3	150	ND (0.13)	ND (0.12)	ND (16)	99	ND (5.9)	NQ	NQ

Notes: Value in parentheses is laboratory reporting limit.

Sub-slab average concentrations derived by averaging three sub-slab samples.

Attenuation factors are unitless percentages: calculated by subtracting the outdoor air concentration from the indoor air concentration and dividing by the sub-slab average.

Attenuation factors were not quantified if any of the indoor air concentrations or sub-slab air concentrations were non-detect.

Key:

% = Percent
DCE = Dichloroethene
µg/m^3 = Micrograms per cubic meter
ND = Not detected
NQ = Not quantified
PCE = Tetrachloroethene
ppm = Parts per million
TCE = Trichloroethene

Table 4
Air Sample Analytical Results - August 2009
Forget-Me-Not Books
Gaffney Road Area Long-Term Monitoring

Compound	Units	Indoor Air Target Level	Indoor Air		Indoor Average	Outdoor Air	Sub-Slab Air				Sub-Slab Average	Indoor Air to Sub-Slab Air Attenuation Factor
			IA-3	IA-4		AA-3	SS-11	SS-12	SS-13	SS-14		
Field Parameters												
Total Volatile Hydrocarbons	ppm	---	---	---	---	---	350	110	260	15	---	**---**
Oxygen	%	---	---	---	---	---	17.3	19.2	20.5	20.7	---	**---**
Carbon dioxide	%	---	---	---	---	---	2.6	1.6	0.1	0.1	---	**---**
Helium	%	---	---	---	---	---	2.0	0	1.9	1.0	---	**---**
Volatile Organic Compounds												
PCE	µg/m^3	21	**28**	**36**	32	2.5	6,000	31,000	5,500	1,000	10,875	0.0027
TCE	µg/m^3	1.1	0.52	0.68	0.60	ND (0.18)	21	910	74	25	258	0.0023

Notes: Value in parentheses is laboratory reporting limit.

Bolded indoor air values exceed ADEC indoor air target level.

Indoor and sub-slab average concentrations derived by averaging indoor and sub-slab samples, respectively.

Attenuation factors are unitless percentages: calculated by subtracting the outdoor air concentration from the average indoor air concentration and dividing by the average sub-slab air concentration.

Key:

% = Percent
µg/m^3 = Micrograms per cubic meter
ND = Not detected
NQ = Not quantified
PCE = Tetrachloroethene
ppm = Parts per million
TCE = Trichloroethene

Table 5
Air Sample Analytical Results - August 2009
Sunshine Alterations
Gaffney Road Area Long-Term Monitoring

Compound	Units	Indoor Air Target Level	Indoor Air IA-5	Outdoor Air AA-3	Sub-Slab Air SS-8	Sub-Slab Air SS-9	Sub-Slab Air SS-10	Sub-Slab Average	Indoor Air to Sub-Slab Air Attenuation Factor
Field Parameters									
Total Volatile Hydrocarbons	ppm	---	**---**	---	25	190	290	---	**---**
Oxygen	%	---	**---**	---	20.9	20.9	19.7	---	**---**
Carbon dioxide	%	---	**---**	---	0	0.1	0.8	---	**---**
Helium	%	---	**---**	---	6.0	1.7	1.8	---	**---**
Volatile Organic Compounds									
PCE	µg/m^3	21	**8,500**	2.5	22,000	3,800	22,000	15,933	0.5333
TCE	µg/m^3	1.1	**140**	ND (0.18)	320	42	240	201	0.6965

Notes: Value in parentheses is laboratory reporting limit.
Bolded indoor air values exceed ADEC indoor air target level.
Sub-slab average concentrations derived by averaging sub-slab samples.
Attenuation factors are unitless percentages: calculated by subtracting the outdoor air concentration from the indoor air concentration and dividing by the average sub-slab air concentration.

Key:
% = Percent
µg/m^3 = Micrograms per cubic meter
ND = Not detected
NQ = Not quantified
PCE = Tetrachloroethene
ppm = Parts per million
TCE = Trichloroethene

Table 6
Air Sample Analytical Results - August 2009
Stone Soup Community Center
Gaffney Road Area Long-Term Monitoring

Compound	Units	Indoor Air Target Level	Indoor Air IA-7	Outdoor Air AA-3	Sub-Slab Air SS-15 Primary	Sub-Slab Air SS-15 Duplicate	Sub-Slab Air SS-16	Sub-Slab Air SS-17	Sub-Slab Average	Indoor Air to Sub-Slab Air Attenuation Factor
Field Parameters										
Total Volatile Hydrocarbons	ppm	---	---	---	560	**---**	80	20	---	**---**
Oxygen	%	---	---	---	19.3	**---**	20.9	20.9	---	**---**
Carbon dioxide	%	---	---	---	0.9	**---**	0.1	0	---	**---**
Helium	%	---	---	---	4.1	**---**	0.4	0	---	**---**
Volatile Organic Compounds										
PCE	µg/m^3	21	**41**	2.5	17,000	17,000	790	460	6,083	0.0063
TCE	µg/m^3	1.1	0.6	ND (0.18)	78	85	7.4	ND (5.0)	NQ	NQ
cis-1,2-DCE	µg/m^3	150	0.24	ND (0.14)	ND (33)	ND (38)	ND (3.5)	ND (3.7)	NQ	NQ

Notes: Value in parentheses is laboratory reporting limit.

Bolded indoor air values exceed ADEC indoor air target level.

Sub-slab average concentrations derived by averaging sub-slab samples.

Attenuation factors are unitless percentages: calculated by subtracting the outdoor air concentration from the indoor air concentration and dividing by the average sub-slab air concentration.

Attenuation factors were not quantified if any of the indoor air concentrations or sub-slab air concentrations were non-detect.

Key:

% = Percent
DCE = Dichloroethene
µg/m^3 = Micrograms per cubic meter
ND = Not detected
NQ = Not quantified
PCE = Tetrachloroethene
ppm = Parts per million
TCE = Trichloroethene

Table 7

Cumulative Air Sample Analytical Results - August 2009

Gaffney Road Area Long-Term Monitoring

Building	Compound	Sample Date	Heating System On	Temperature Range (˚F)	Sample Location						Sub-Slab Average ($\mu g/m^3$)	Indoor Air to Sub-Slab Air Attenuation Factor
					Indoor Air ($\mu g/m^3$)	Outdoor Air ($\mu g/m^3$)	Sub-Slab ($\mu g/m^3$)	Sub-Slab ($\mu g/m^3$)	Sub-Slab ($\mu g/m^3$)	Sub-Slab ($\mu g/m^3$)		
Good News Bible and Book Store	PCE	8/25/2009	No	48 - 57	**24**	0.32	15,000	3,600	860	NA	6,487	0.0037
		5/12/2009	Yes	42 - 54	16	0.22	5,900	4,400	340	NA	3,547	0.0044
		2/10/2009	Yes	(10) - 3	17	0.70	3,800	2,100	140	NA	2,013	0.0081
		9/17/2008	Yes	36 - 44	**25**	0.31	15,000	3,400	510	NA	6,303	0.0039
		8/2/2007	No	53 - 73	**58**	0.52	25,000	750	150	NA	8,633	0.0067
		2/15/2007	Yes	(13) - 17	**24**	2.4	8,600	80	72	NA	2,917	0.0074
		11/1/2006	Yes	19 - 23	**44**	0.61	9,200	2,400	83	NA	3,894	0.0111
State Farm	PCE	8/25/2009	No	48 - 57	0.74	ND (0.20)	8,000	16,000	2,400	NA	8,800	0.0001
		2/9/2009	Yes	(18) - 3	ND (1.2)	ND (1.0)	6,800	12,000	1,500	NA	6,767	<0.0002
		9/18/2008	Yes	33 - 59	1.1	0.39	7,800	19,000	2,400	NA	9,733	0.0001
Forget-Me-Not Books	PCE	8/27/2009	Yes	51 - 71	**32**	2.5	6,000	31,000	5,500	1,000	10,875	0.0027
		2/10/2009	Yes	(10) - 3	13	1.7	200	19,000	500	62	4,941	0.0023
Sunshine Alterations	PCE	8/26/2009	Yes	45 - 57	**8,500**	2.5	22,000	3,800	22,000	NA	15,933	0.5333
		2/11/2009	Yes	3 - 9	**1,000**	1.7	5,500	620	8,100	NA	4,740	0.2106
	TCE	8/26/2009	Yes	45 - 57	**140**	ND (0.18)	320	42	240	NA	201	0.6965
		2/11/2009	Yes	3 - 9	**57**	ND (0.67)	250	32	200	NA	161	0.3540
Stone Soup Community Center	PCE	8/26/2009	No	45 - 57	**41**	2.5	17,000	790	460	NA	6,083	0.0063
		2/11/2009	Yes	3 - 9	14	1.7	5,600	5,400	49	NA	2,825	0.0044

Notes: Value in paranethesis is laboratory reporting limit.

Bolded indoor air values exceed ADEC indoor air target level.

Indoor air results for Forget-Me-Not Books is an average of two samples.

Sub-slab average concentrations derived by averaging sub-slab samples.

Less than sign (<) indicates that an indoor air result was non-detect.

Attenuation factors are unitless percentages: calculated by subtracting the outdoor air concentration from the indoor air concentration and dividing by the sub-slab average concentration.

Key:

$\mu g/m^3$ = Micrograms per cubic meter

NA = Not applicable

ND = Not detected

NM = Not measured

PCE = Tetrachloroethene

TCE = Trichloroethene

Table 8

Comparison of Indoor Air Samples and Passive Indoor Air Samples - August 2009

Gaffney Road Area Long-Term Monitoring

Building	Sample Location	Compound	Indoor Air (µg/m^3)	Radiello Passive Indoor Air (µg/m^3)		SKC Passive Indoor Air (µg/m^3)
				Primary	Duplicate	
Good News Bible and Book Store	IA-1	PCE	24	32 E	---	30
		TCE	0.43	0.44	---	0.38
State Farm	IA-2	PCE	0.74	0.52	0.80	NS
		TCE	ND (0.18)	ND (0.13)	ND (0.13)	NS
Forget-Me-Not Books	IA-3	PCE	28	NS	NS	31
		TCE	0.52	NS	NS	0.42
	IA-4	PCE	36	NS	NS	47
		TCE	0.68	NS	NS	0.65
Sunshine Alterations	IA-5	PCE	8,500	NS	NS	4,300 S
		TCE	140	NS	NS	110

Notes: Value in paranethesis is laboratory reporting limit.

Passive air samples arrived at laboratory with temperature greater than 6˚C. Anlaytical results are considered estimates.

Key:

DCE = Dichloroethene

E = Exceeds instrument calibration range

µg/m^3 = Micrograms per cubic meter

ND = Not detected

NS = Not sampled

PCE = Tetrachloroethene

S = Saturated peak

TCE = Trichloroethene

ATTACHMENT 2

FIGURES

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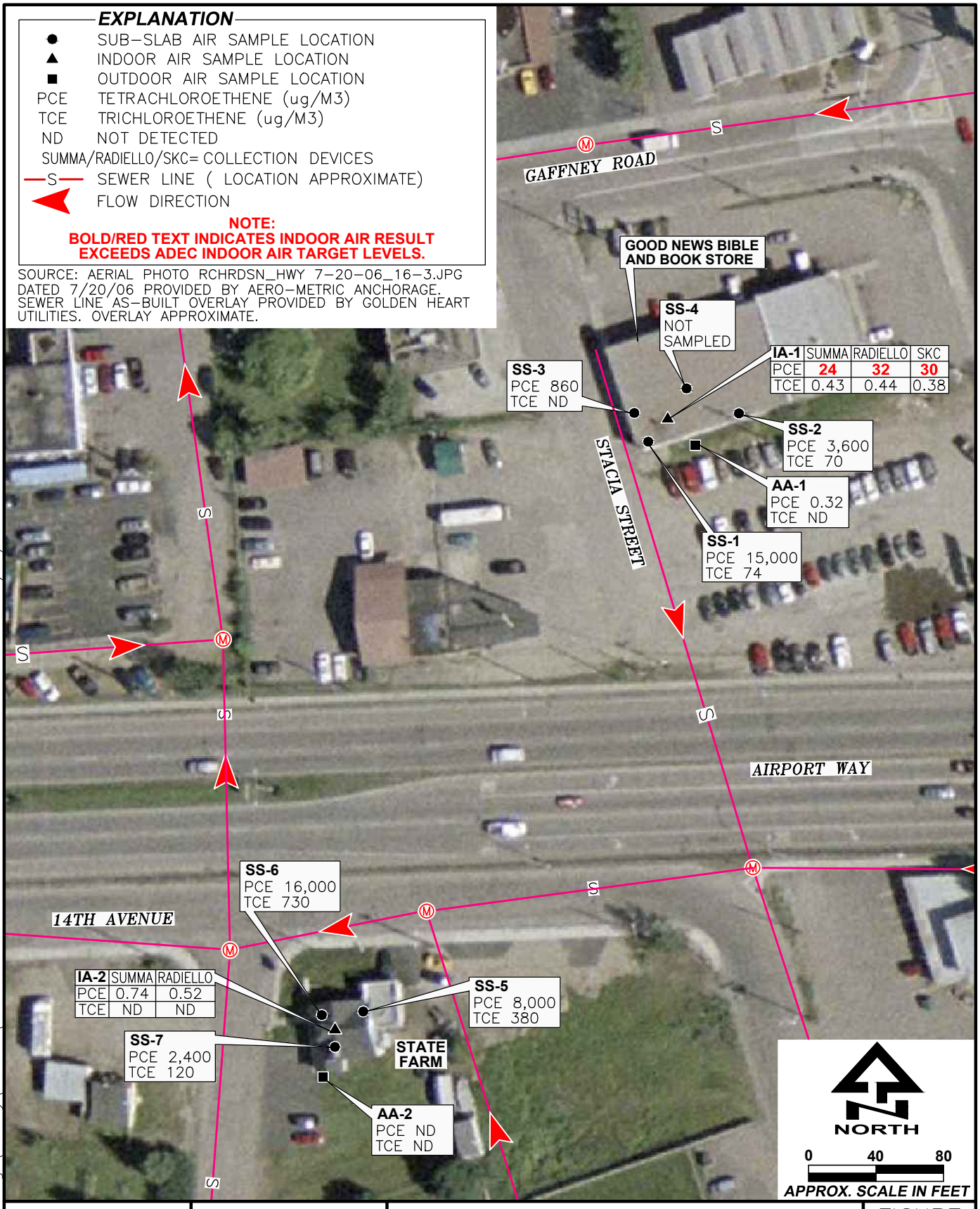

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DATE: SEPT. 2009
CHKD: B.J.M.
DRAWN: C.E.H.
PROJ. No.: 14-166

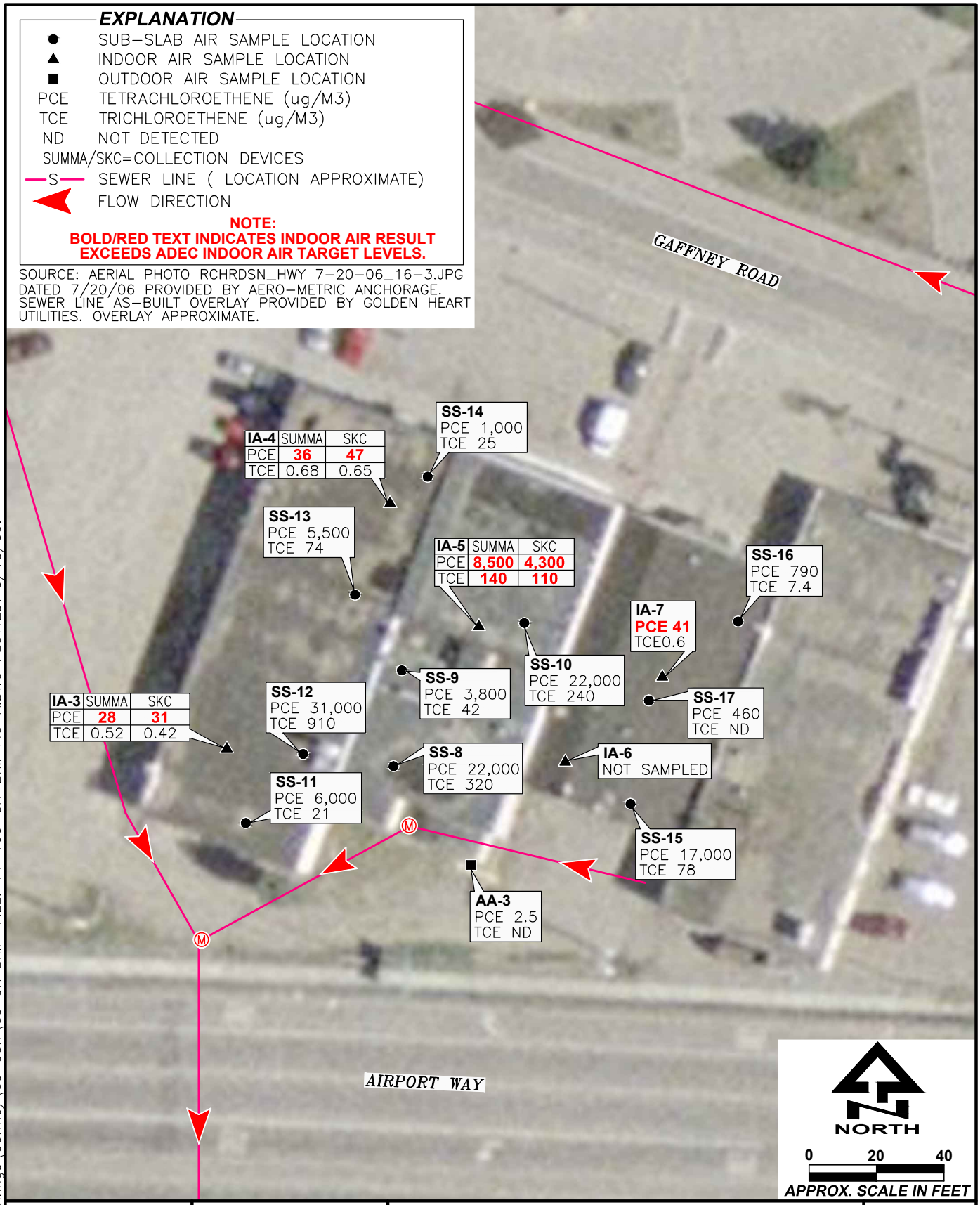
825 W. 8th Ave., Anchorage, AK 99501, (907) 258-4880

AIR SAMPLE ANALYTICAL RESULTS GAFFNEY ROAD AREA - WEST

LONG-TERM MONITORING
GAFFNEY ROAD AREA
Fairbanks, Alaska

FIGURE

A



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oasis ENVIRONMENTAL

DATE: SEPT. 2009
CHKD: B.J.M.
DRAWN: C.E.H.
PROJ. No.: 14-166

825 W. 8th Ave., Anchorage, AK 99501, (907) 258-4880

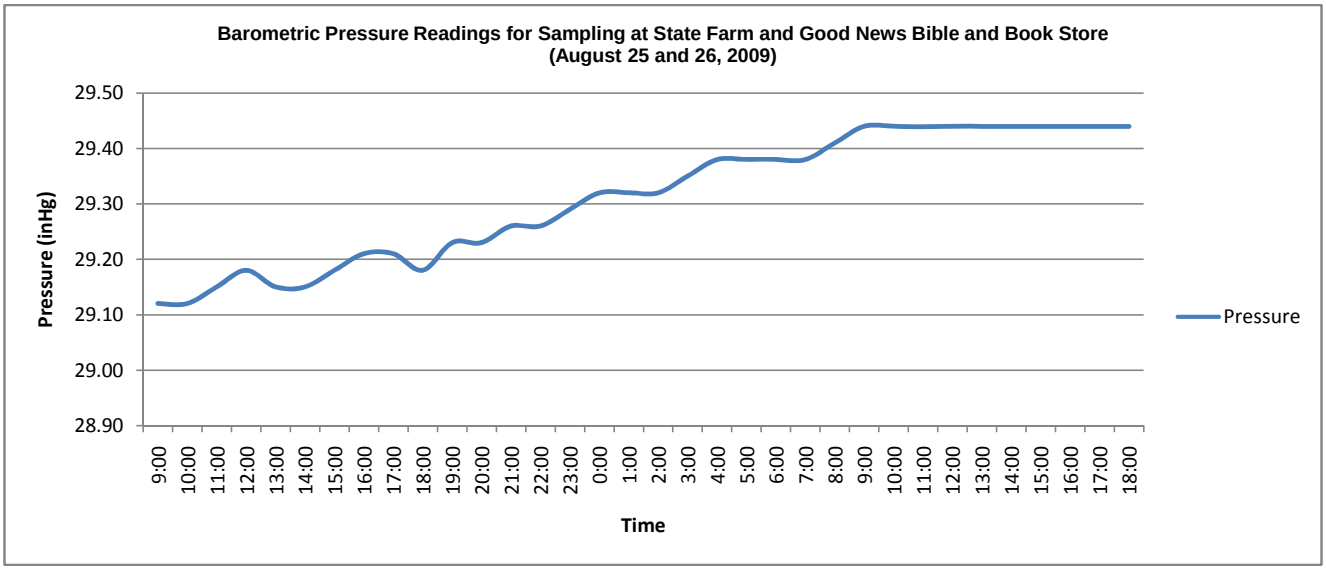
AIR SAMPLE ANALYTICAL RESULTS GAFFNEY ROAD AREA - EAST

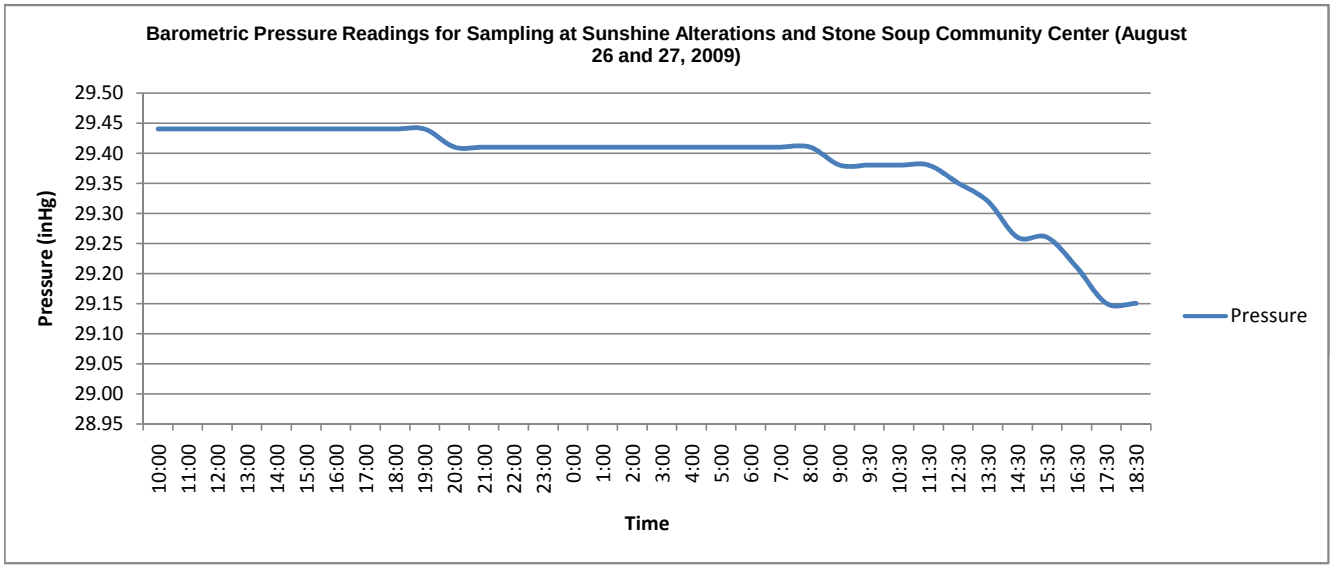
LONG-TERM MONITORING
GAFFNEY ROAD AREA
Fairbanks, Alaska

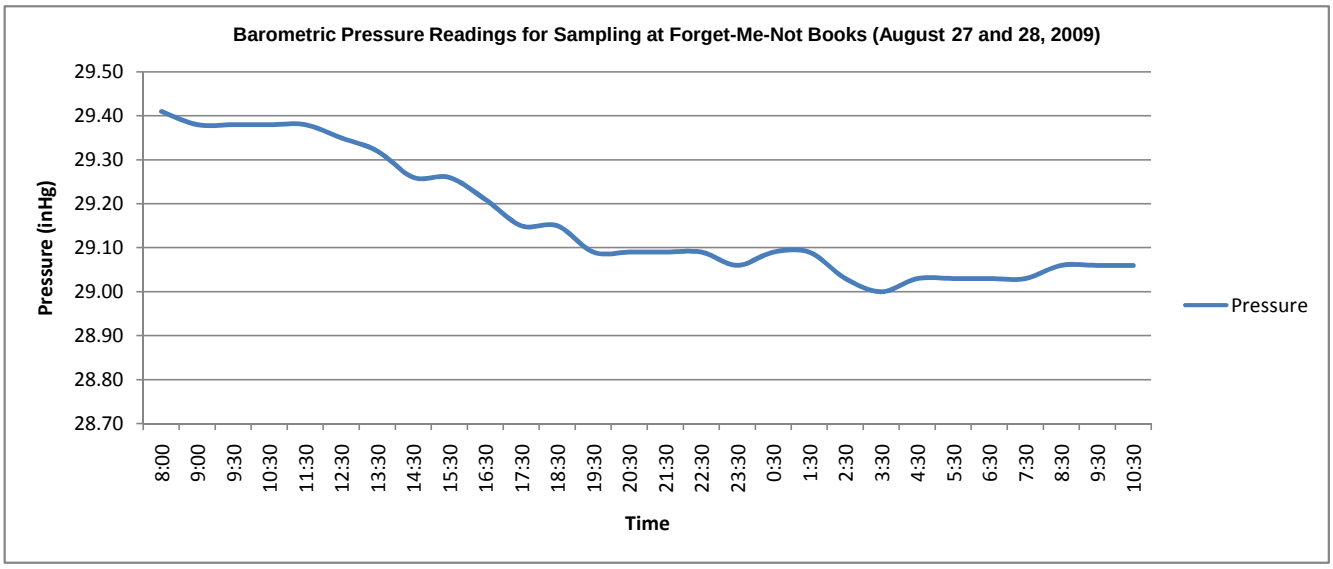
FIGURE

B

Figure C. Barometric Pressure Readings During Air Sampling
Gaffney Road Area Long-Term Monitoring







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ATTACHMENT 3

Laboratory Analytical Reports

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Air Toxics LTD.
Laboratory Services Since 1989

9/14/2009

Mr. Ben Martich
Oasis Environmental, Inc.
825 W. 8th Avenue
Suite 200
Anchorage AK 99501

Project Name: Gaffney Rd
Project #: 14-166 Phase 3 Task 1
Workorder #: 0908660A

Dear Mr. Ben Martich

The following report includes the data for the above referenced project for sample(s) received on 8/31/2009 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 SIM are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kelly Buettner
Project Manager

WORK ORDER #: 0908660A

Work Order Summary

CLIENT:	Mr. Ben Martich Oasis Environmental, Inc. 825 W. 8th Avenue Suite 200 Anchorage, AK 99501	**BILL TO:**	Mr. Ben Martich Oasis Environmental, Inc. 825 W. 8th Avenue Suite 200 Anchorage, AK 99501
PHONE:	907-258-4880	**P.O. #**	
FAX:		**PROJECT #**	14-166 Phase 3 Task 1 Gaffney Rd
DATE RECEIVED:	08/31/2009	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	09/14/2009		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	09GRA301AA	Modified TO-15 SIM	2.4 "Hg	5 psi
02A	09GRA302IA	Modified TO-15 SIM	6.2 "Hg	5 psi
06A	09GRA308AA	Modified TO-15 SIM	1.4 "Hg	5 psi
07A	09GRA309IA	Modified TO-15 SIM	4.0 "Hg	5 psi
08A	09GRA310IA	Modified TO-15 SIM	5.6 "Hg	5 psi
13A	09GRA317AA	Modified TO-15 SIM	6.6 "Hg	5 psi
18A	09GRA322IA	Modified TO-15 SIM	5.4 "Hg	5 psi
22A	09GRA327IA	Modified TO-15 SIM	4.4 "Hg	5 psi
22AA	09GRA327IA Lab Duplicate	Modified TO-15 SIM	4.4 "Hg	5 psi
23A	09GRA328IA	Modified TO-15 SIM	5.0 "Hg	5 psi
24A	09GRA330IA	Modified TO-15 SIM	5.6 "Hg	5 psi
29A	09GRA336TB	Modified TO-15 SIM	29.2 "Hg	5 psi
30A	Lab Blank	Modified TO-15 SIM	NA	NA
30B	Lab Blank	Modified TO-15 SIM	NA	NA
30C	Lab Blank	Modified TO-15 SIM	NA	NA
30D	Lab Blank	Modified TO-15 SIM	NA	NA
30E	Lab Blank	Modified TO-15 SIM	NA	NA

Continued on next page

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 0908660A

Work Order Summary

CLIENT:	Mr. Ben Martich Oasis Environmental, Inc. 825 W. 8th Avenue Suite 200 Anchorage, AK 99501	**BILL TO:**	Mr. Ben Martich Oasis Environmental, Inc. 825 W. 8th Avenue Suite 200 Anchorage, AK 99501
PHONE:	907-258-4880	**P.O. #**	
FAX:		**PROJECT #**	14-166 Phase 3 Task 1 Gaffney Rd
DATE RECEIVED:	08/31/2009	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	09/14/2009		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
31A	CCV	Modified TO-15 SIM	NA	NA
31B	CCV	Modified TO-15 SIM	NA	NA
31C	CCV	Modified TO-15 SIM	NA	NA
31D	CCV	Modified TO-15 SIM	NA	NA
31E	CCV	Modified TO-15 SIM	NA	NA
32A	LCS	Modified TO-15 SIM	NA	NA
32B	LCS	Modified TO-15 SIM	NA	NA
32C	LCS	Modified TO-15 SIM	NA	NA
32D	LCS	Modified TO-15 SIM	NA	NA
32E	LCS	Modified TO-15 SIM	NA	NA

CERTIFIED BY: Linda D. Fruman DATE: 09/14/09

Laboratory Director

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LABORATORY NARRATIVE
Modified TO-15 SIM
Oasis Environmental, Inc.
Workorder# 0908660A

Eleven 6 Liter Summa Canister (SIM Certified) samples were received on August 31, 2009. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the SIM acquisition mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-15***	***ATL Modifications***
ICAL %RSD acceptance criteria	</=30% RSD with 2 compounds allowed out to < 40% RSD	Project specific; default criteria is </=30% RSD with 10% of compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	Project specific; default criteria is </= 30% Difference with 10% of compounds allowed out up to </=40%.; flag and narrate outliers
Blank and standards	Zero air	Nitrogen
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

Sample collection date was incomplete on the Chain of Custody for all samples. The year of collection was assumed to be 2009.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV
N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM

Client Sample ID: 09GRA301AA

Lab ID#: 0908660A-01A

No Detections Were Found.

Client Sample ID: 09GRA302IA

Lab ID#: 0908660A-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.034	0.11	0.23	0.74

Client Sample ID: 09GRA308AA

Lab ID#: 0908660A-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.028	0.048	0.19	0.32

Client Sample ID: 09GRA309IA

Lab ID#: 0908660A-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.031	0.080	0.17	0.43
Tetrachloroethene	0.031	3.5	0.21	24

Client Sample ID: 09GRA310IA

Lab ID#: 0908660A-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.033	0.076	0.18	0.41
Tetrachloroethene	0.033	3.5	0.22	23

Client Sample ID: 09GRA317AA

Lab ID#: 0908660A-13A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.034	0.37	0.23	2.5

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS

Client Sample ID: 09GRA322IA

Lab ID#: 0908660A-18A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	5.4	26	29	140
Tetrachloroethene	5.4	1200	37	8500

Client Sample ID: 09GRA327IA

Lab ID#: 0908660A-22A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.031	0.062	0.12	0.24
Trichloroethene	0.031	0.11	0.17	0.60
Tetrachloroethene	0.031	6.1	0.21	41

Client Sample ID: 09GRA327IA Lab Duplicate

Lab ID#: 0908660A-22AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.031	0.050	0.12	0.20
Trichloroethene	0.031	0.11	0.17	0.58
Tetrachloroethene	0.031	6.0	0.21	41

Client Sample ID: 09GRA328IA

Lab ID#: 0908660A-23A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.032	0.13	0.17	0.68
Tetrachloroethene	0.032	5.4	0.22	36

Client Sample ID: 09GRA330IA

Lab ID#: 0908660A-24A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.033	0.097	0.18	0.52
Tetrachloroethene	0.033	4.1	0.22	28

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM

Client Sample ID: 09GRA336TB

Lab ID#: 0908660A-29A

No Detections Were Found.

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA301AA

Lab ID#: 0908660A-01A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e090917sim**	**Date of Collection: 8/26/09 10:00:00 AM**	
Dil. Factor:	**1.46**	**Date of Analysis: 9/10/09 06:48 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.015	Not Detected	0.037	Not Detected
cis-1,2-Dichloroethene	0.029	Not Detected	0.12	Not Detected
Trichloroethene	0.029	Not Detected	0.16	Not Detected
Tetrachloroethene	0.029	Not Detected	0.20	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	0.58	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	101	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA302IA

Lab ID#: 0908660A-02A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e090918sim**	**Date of Collection: 8/26/09 10:10:00 AM**	
Dil. Factor:	**1.69**	**Date of Analysis: 9/10/09 07:38 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.017	Not Detected	0.043	Not Detected
cis-1,2-Dichloroethene	0.034	Not Detected	0.13	Not Detected
Trichloroethene	0.034	Not Detected	0.18	Not Detected
Tetrachloroethene	0.034	0.11	0.23	0.74
trans-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	101	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA308AA

Lab ID#: 0908660A-06A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e090919sim**	**Date of Collection:**	**8/26/09 1:15:00 PM**
Dil. Factor:	**1.41**	**Date of Analysis:**	**9/10/09 08:18 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.014	Not Detected	0.036	Not Detected
cis-1,2-Dichloroethene	0.028	Not Detected	0.11	Not Detected
Trichloroethene	0.028	Not Detected	0.15	Not Detected
Tetrachloroethene	0.028	0.048	0.19	0.32
trans-1,2-Dichloroethene	0.14	Not Detected	0.56	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	100	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA309IA

Lab ID#: 0908660A-07A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e091023sim**	**Date of Collection: 8/26/09 1:45:00 PM**	
Dil. Factor:	**1.55**	**Date of Analysis: 9/11/09 06:28 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	Not Detected	0.040	Not Detected
cis-1,2-Dichloroethene	0.031	Not Detected	0.12	Not Detected
Trichloroethene	0.031	0.080	0.17	0.43
Tetrachloroethene	0.031	3.5	0.21	24
trans-1,2-Dichloroethene	0.16	Not Detected	0.61	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	100	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA310IA

Lab ID#: 0908660A-08A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e091024sim**	**Date of Collection: 8/26/09 2:00:00 PM**	
Dil. Factor:	**1.65**	**Date of Analysis: 9/11/09 07:16 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	Not Detected	0.042	Not Detected
cis-1,2-Dichloroethene	0.033	Not Detected	0.13	Not Detected
Trichloroethene	0.033	0.076	0.18	0.41
Tetrachloroethene	0.033	3.5	0.22	23
trans-1,2-Dichloroethene	0.16	Not Detected	0.65	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	100	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA317AA

Lab ID#: 0908660A-13A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e091025sim**	**Date of Collection: 8/27/09 10:45:00 AM**	
Dil. Factor:	**1.72**	**Date of Analysis: 9/11/09 07:56 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.017	Not Detected	0.044	Not Detected
cis-1,2-Dichloroethene	0.034	Not Detected	0.14	Not Detected
Trichloroethene	0.034	Not Detected	0.18	Not Detected
Tetrachloroethene	0.034	0.37	0.23	2.5
trans-1,2-Dichloroethene	0.17	Not Detected	0.68	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	100	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA322IA

Lab ID#: 0908660A-18A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**y091421**	**Date of Collection: 8/27/09 12:55:00 PM**	
Dil. Factor:	**10.9**	**Date of Analysis: 9/14/09 08:55 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	5.4	Not Detected	14	Not Detected
cis-1,2-Dichloroethene	5.4	Not Detected	22	Not Detected
Trichloroethene	5.4	26	29	140
Tetrachloroethene	5.4	1200	37	8500
trans-1,2-Dichloroethene	5.4	Not Detected	22	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	103	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA327IA

Lab ID#: 0908660A-22A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e091108sim**	**Date of Collection: 8/27/09 10:55:00 AM**	
Dil. Factor:	**1.57**	**Date of Analysis: 9/11/09 05:52 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	Not Detected	0.040	Not Detected
cis-1,2-Dichloroethene	0.031	0.062	0.12	0.24
Trichloroethene	0.031	0.11	0.17	0.60
Tetrachloroethene	0.031	6.1	0.21	41
trans-1,2-Dichloroethene	0.16	Not Detected	0.62	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	102	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA327IA Lab Duplicate

Lab ID#: 0908660A-22AA

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e091109sim**	**Date of Collection: 8/27/09 10:55:00 AM**	
Dil. Factor:	**1.57**	**Date of Analysis: 9/11/09 06:56 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	Not Detected	0.040	Not Detected
cis-1,2-Dichloroethene	0.031	0.050	0.12	0.20
Trichloroethene	0.031	0.11	0.17	0.58
Tetrachloroethene	0.031	6.0	0.21	41
trans-1,2-Dichloroethene	0.16	Not Detected	0.62	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	102	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA328IA

Lab ID#: 0908660A-23A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e091110sim**	**Date of Collection: 8/28/09 9:40:00 AM**	
Dil. Factor:	**1.61**	**Date of Analysis: 9/11/09 07:43 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	Not Detected	0.041	Not Detected
cis-1,2-Dichloroethene	0.032	Not Detected	0.13	Not Detected
Trichloroethene	0.032	0.13	0.17	0.68
Tetrachloroethene	0.032	5.4	0.22	36
trans-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	100	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA330IA

Lab ID#: 0908660A-24A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e091111sim**	**Date of Collection: 8/28/09 9:30:00 AM**	
Dil. Factor:	**1.65**	**Date of Analysis: 9/11/09 08:39 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	Not Detected	0.042	Not Detected
cis-1,2-Dichloroethene	0.033	Not Detected	0.13	Not Detected
Trichloroethene	0.033	0.097	0.18	0.52
Tetrachloroethene	0.033	4.1	0.22	28
trans-1,2-Dichloroethene	0.16	Not Detected	0.65	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	102	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA336TB

Lab ID#: 0908660A-29A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e091408sim**	**Date of Collection: 8/28/09 8:00:00 AM**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/14/09 02:03 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.010	Not Detected	0.026	Not Detected
cis-1,2-Dichloroethene	0.020	Not Detected	0.079	Not Detected
Trichloroethene	0.020	Not Detected	0.11	Not Detected
Tetrachloroethene	0.020	Not Detected	0.14	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	99	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0908660A-30A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e090907sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/9/09 12:35 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.010	Not Detected	0.026	Not Detected
cis-1,2-Dichloroethene	0.020	Not Detected	0.079	Not Detected
Trichloroethene	0.020	Not Detected	0.11	Not Detected
Tetrachloroethene	0.020	Not Detected	0.14	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	101	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0908660A-30B

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e091005sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/10/09 12:32 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.010	Not Detected	0.026	Not Detected
cis-1,2-Dichloroethene	0.020	Not Detected	0.079	Not Detected
Trichloroethene	0.020	Not Detected	0.11	Not Detected
Tetrachloroethene	0.020	Not Detected	0.14	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0908660A-30C

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e091105sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/11/09 02:23 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.010	Not Detected	0.026	Not Detected
cis-1,2-Dichloroethene	0.020	Not Detected	0.079	Not Detected
Trichloroethene	0.020	Not Detected	0.11	Not Detected
Tetrachloroethene	0.020	Not Detected	0.14	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	99	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0908660A-30D

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e091405sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/14/09 11:57 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.010	Not Detected	0.026	Not Detected
cis-1,2-Dichloroethene	0.020	Not Detected	0.079	Not Detected
Trichloroethene	0.020	Not Detected	0.11	Not Detected
Tetrachloroethene	0.020	Not Detected	0.14	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	100	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0908660A-30E

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**y091407**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/14/09 11:26 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	102	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 0908660A-31A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e090903sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/9/09 09:16 AM**	

Compound	%Recovery
Vinyl Chloride	83
cis-1,2-Dichloroethene	82
Trichloroethene	77
Tetrachloroethene	77
trans-1,2-Dichloroethene	84

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	105	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 0908660A-31B

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e091002sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/10/09 10:02 AM**	

Compound	%Recovery
Vinyl Chloride	77
cis-1,2-Dichloroethene	77
Trichloroethene	74
Tetrachloroethene	72
trans-1,2-Dichloroethene	78

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	104	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 0908660A-31C

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e091102sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/11/09 11:47 AM**	

Compound	%Recovery
Vinyl Chloride	77
cis-1,2-Dichloroethene	76
Trichloroethene	74
Tetrachloroethene	72
trans-1,2-Dichloroethene	78

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	104	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 0908660A-31D

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e091402sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/14/09 09:52 AM**	

Compound	%Recovery
Vinyl Chloride	87
cis-1,2-Dichloroethene	86
Trichloroethene	82
Tetrachloroethene	83
trans-1,2-Dichloroethene	89

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	103	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 0908660A-31E

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**y091402**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/14/09 07:43 AM**	

Compound	%Recovery
Vinyl Chloride	97
cis-1,2-Dichloroethene	108
Trichloroethene	102
Tetrachloroethene	96
trans-1,2-Dichloroethene	105

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	115	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0908660A-32A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e090904sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/9/09 09:56 AM**	

Compound	%Recovery
Vinyl Chloride	95
cis-1,2-Dichloroethene	98
Trichloroethene	90
Tetrachloroethene	90
trans-1,2-Dichloroethene	98

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	102	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0908660A-32B

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e091003sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/10/09 10:38 AM**	

Compound	%Recovery
Vinyl Chloride	92
cis-1,2-Dichloroethene	95
Trichloroethene	89
Tetrachloroethene	89
trans-1,2-Dichloroethene	96

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	103	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0908660A-32C

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e091103sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/11/09 12:50 PM**	

Compound	%Recovery
Vinyl Chloride	93
cis-1,2-Dichloroethene	95
Trichloroethene	88
Tetrachloroethene	88
trans-1,2-Dichloroethene	96

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	103	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0908660A-32D

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**e091403sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/14/09 10:31 AM**	

Compound	%Recovery
Vinyl Chloride	86
cis-1,2-Dichloroethene	88
Trichloroethene	81
Tetrachloroethene	82
trans-1,2-Dichloroethene	88

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	103	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0908660A-32E

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**y091403**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/14/09 08:26 AM**	

Compound	%Recovery
Vinyl Chloride	91
cis-1,2-Dichloroethene	120
Trichloroethene	100
Tetrachloroethene	96
trans-1,2-Dichloroethene	102

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	113	70-130

Air Toxics LTD.
Laboratory Services Since 1989

9/13/2009

Mr. Ben Martich
Oasis Environmental, Inc.
825 W. 8th Avenue
Suite 200
Anchorage AK 99501

Project Name: Gaffney Rd
Project #: 14-166 Phase 3 Task 1
Workorder #: 0908660B

Dear Mr. Ben Martich

The following report includes the data for the above referenced project for sample(s) received on 8/31/2009 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kelly Buettner
Project Manager

WORK ORDER #: 0908660B

Work Order Summary

CLIENT:	Mr. Ben Martich Oasis Environmental, Inc. 825 W. 8th Avenue Suite 200 Anchorage, AK 99501	**BILL TO:**	Mr. Ben Martich Oasis Environmental, Inc. 825 W. 8th Avenue Suite 200 Anchorage, AK 99501
PHONE:	907-258-4880	**P.O. #**	
FAX:		**PROJECT #**	14-166 Phase 3 Task 1 Gaffney Rd
DATE RECEIVED:	08/31/2009	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	09/11/2009		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
03A	09GRA305SS	Modified TO-15	13.5 "Hg	5 psi
04A	09GRA306SS	Modified TO-15	9.5 "Hg	5 psi
05A	09GRA307SS	Modified TO-15	8.5 "Hg	5 psi
09A	09GRA313SS	Modified TO-15	7.5 "Hg	5 psi
10A	09GRA314SS	Modified TO-15	0.0 "Hg	5 psi
11A	09GRA315SS	Modified TO-15	8.5 "Hg	5 psi
12A	09GRA316SS	Modified TO-15	7.0 "Hg	5 psi
14A	09GRA318SS	Modified TO-15	7.5 "Hg	5 psi
14AA	09GRA318SS Lab Duplicate	Modified TO-15	7.5 "Hg	5 psi
15A	09GRA319SS	Modified TO-15	6.0 "Hg	5 psi
16A	09GRA320SS	Modified TO-15	5.5 "Hg	5 psi
17A	09GRA321SS	Modified TO-15	8.5 "Hg	5 psi
19A	09GRA324SS	Modified TO-15	10.0 "Hg	5 psi
20A	09GRA325SS	Modified TO-15	10.0 "Hg	5 psi
21A	09GRA326SS	Modified TO-15	6.0 "Hg	5 psi
25A	09GRA332SS	Modified TO-15	8.5 "Hg	5 psi
26A	09GRA333SS	Modified TO-15	7.0 "Hg	5 psi

Continued on next page

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 0908660B

Work Order Summary

CLIENT:	Mr. Ben Martich Oasis Environmental, Inc. 825 W. 8th Avenue Suite 200 Anchorage, AK 99501	**BILL TO:**	Mr. Ben Martich Oasis Environmental, Inc. 825 W. 8th Avenue Suite 200 Anchorage, AK 99501
PHONE:	907-258-4880	**P.O. #**	
FAX:		**PROJECT #**	14-166 Phase 3 Task 1 Gaffney Rd
DATE RECEIVED:	08/31/2009	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	09/11/2009		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
27A	09GRA334SS	Modified TO-15	8.5 "Hg	5 psi
28A	09GRA335SS	Modified TO-15	7.5 "Hg	5 psi
29A	Lab Blank	Modified TO-15	NA	NA
29B	Lab Blank	Modified TO-15	NA	NA
29C	Lab Blank	Modified TO-15	NA	NA
30A	CCV	Modified TO-15	NA	NA
30B	CCV	Modified TO-15	NA	NA
30C	CCV	Modified TO-15	NA	NA
31A	LCS	Modified TO-15	NA	NA
31B	LCS	Modified TO-15	NA	NA
31C	LCS	Modified TO-15	NA	NA

CERTIFIED BY: Linda D. Fruman DATE: 09/13/09

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/10
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-15
Oasis Environmental, Inc.
Workorder# 0908660B

Eighteen 6 Liter Summa Canister (100% Certified) samples were received on August 31, 2009. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-15***	***ATL Modifications***
Daily CCV	</= 30% Difference	</= 30% Difference; Compounds exceeding this criterion and associated data are flagged and narrated.
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

Sample collection date was incomplete on the Chain of Custody for all samples. The year of collection was assumed to be 2009.

The Summa canister for sample 09GRA314SS was leaking upon arrival. The client was notified and the analysis proceeded. Reported analyte concentrations are considered to be estimated.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the reporting limit.
UJ- Non-detected compound associated with low bias in the CCV
N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS

Client Sample ID: 09GRA305SS

Lab ID#: 0908660B-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	4.1	72	22	380
Tetrachloroethene	4.1	1200	28	8000

Client Sample ID: 09GRA306SS

Lab ID#: 0908660B-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	7.8	25	31	99
Trichloroethene	7.8	140	42	730
Tetrachloroethene	7.8	2400	53	16000

Client Sample ID: 09GRA307SS

Lab ID#: 0908660B-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	1.5	22	8.0	120
Tetrachloroethene	1.5	360	10	2400

Client Sample ID: 09GRA313SS

Lab ID#: 0908660B-09A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	1.8	13	9.6	70
Tetrachloroethene	1.8	540	12	3600

Client Sample ID: 09GRA314SS

Lab ID#: 0908660B-10A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	5.4	9.9	29	53
Tetrachloroethene	5.4	1600	36	10000

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS

Client Sample ID: 09GRA315SS

Lab ID#: 0908660B-11A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	7.5	14	40	74
Tetrachloroethene	7.5	2200	51	15000

Client Sample ID: 09GRA316SS

Lab ID#: 0908660B-12A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.88	130	5.9	860

Client Sample ID: 09GRA318SS

Lab ID#: 0908660B-14A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.90	1.4	4.8	7.4
Tetrachloroethene	0.90	120	6.1	790

Client Sample ID: 09GRA318SS Lab Duplicate

Lab ID#: 0908660B-14AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.90	1.3	4.8	7.0
Tetrachloroethene	0.90	120	6.1	780

Client Sample ID: 09GRA319SS

Lab ID#: 0908660B-15A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	8.4	14	45	78
Tetrachloroethene	8.4	2500	57	17000

Client Sample ID: 09GRA320SS

Lab ID#: 0908660B-16A

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS

Client Sample ID: 09GRA320SS

Lab ID#: 0908660B-16A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	9.6	16	52	85
Tetrachloroethene	9.6	2500	65	17000

Client Sample ID: 09GRA321SS

Lab ID#: 0908660B-17A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.94	67	6.3	460

Client Sample ID: 09GRA324SS

Lab ID#: 0908660B-19A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	13	45	72	240
Tetrachloroethene	13	3200	91	22000

Client Sample ID: 09GRA325SS

Lab ID#: 0908660B-20A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	10	59	54	320
Tetrachloroethene	10	3200	68	22000

Client Sample ID: 09GRA326SS

Lab ID#: 0908660B-21A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	2.2	7.9	12	42
Tetrachloroethene	2.2	560	15	3800

Client Sample ID: 09GRA332SS

Lab ID#: 0908660B-25A

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS

Client Sample ID: 09GRA332SS

Lab ID#: 0908660B-25A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	19	170	100	910
Tetrachloroethene	19	4600	130	31000

Client Sample ID: 09GRA333SS

Lab ID#: 0908660B-26A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	3.5	3.9	19	21
Tetrachloroethene	3.5	880	24	6000

Client Sample ID: 09GRA334SS

Lab ID#: 0908660B-27A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	2.5	14	13	74
Tetrachloroethene	2.5	820	17	5500

Client Sample ID: 09GRA335SS

Lab ID#: 0908660B-28A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.90	4.7	4.8	25
Tetrachloroethene	0.90	150	6.1	1000

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA305SS

Lab ID#: 0908660B-03A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**r090818**	**Date of Collection:**	**8/25/09 11:25:00 AM**
Dil. Factor:	**8.13**	**Date of Analysis:**	**9/8/09 08:03 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	4.1	Not Detected	10	Not Detected
cis-1,2-Dichloroethene	4.1	Not Detected	16	Not Detected
Trichloroethene	4.1	72	22	380
Tetrachloroethene	4.1	1200	28	8000
trans-1,2-Dichloroethene	4.1	Not Detected	16	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	90	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA306SS

Lab ID#: 0908660B-04A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**r090819**	**Date of Collection: 8/25/09 12:05:00 PM**	
Dil. Factor:	**15.7**	**Date of Analysis: 9/8/09 08:44 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	7.8	Not Detected	20	Not Detected
cis-1,2-Dichloroethene	7.8	25	31	99
Trichloroethene	7.8	140	42	730
Tetrachloroethene	7.8	2400	53	16000
trans-1,2-Dichloroethene	7.8	Not Detected	31	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	90	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA307SS

Lab ID#: 0908660B-05A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**r090820**	**Date of Collection: 8/25/09 12:30:00 PM**	
Dil. Factor:	**2.99**	**Date of Analysis: 9/8/09 09:37 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.5	Not Detected	3.8	Not Detected
cis-1,2-Dichloroethene	1.5	Not Detected	5.9	Not Detected
Trichloroethene	1.5	22	8.0	120
Tetrachloroethene	1.5	360	10	2400
trans-1,2-Dichloroethene	1.5	Not Detected	5.9	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	92	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA313SS

Lab ID#: 0908660B-09A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**r090908**	**Date of Collection:**	**8/25/09 2:55:00 PM**
Dil. Factor:	**3.58**	**Date of Analysis:**	**9/9/09 12:22 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.8	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.8	Not Detected	7.1	Not Detected
Trichloroethene	1.8	13	9.6	70
Tetrachloroethene	1.8	540	12	3600
trans-1,2-Dichloroethene	1.8	Not Detected	7.1	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	91	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA314SS

Lab ID#: 0908660B-10A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**r090821**	**Date of Collection: 8/25/09 3:55:00 PM**	
Dil. Factor:	**10.7**	**Date of Analysis: 9/8/09 10:20 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	5.4	Not Detected	14	Not Detected
cis-1,2-Dichloroethene	5.4	Not Detected	21	Not Detected
Trichloroethene	5.4	9.9	29	53
Tetrachloroethene	5.4	1600	36	10000
trans-1,2-Dichloroethene	5.4	Not Detected	21	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	91	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA315SS

Lab ID#: 0908660B-11A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**r090822**	**Date of Collection: 8/25/09 4:00:00 PM**	
Dil. Factor:	**15.0**	**Date of Analysis: 9/8/09 10:58 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	7.5	Not Detected	19	Not Detected
cis-1,2-Dichloroethene	7.5	Not Detected	30	Not Detected
Trichloroethene	7.5	14	40	74
Tetrachloroethene	7.5	2200	51	15000
trans-1,2-Dichloroethene	7.5	Not Detected	30	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	87	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA316SS

Lab ID#: 0908660B-12A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**r090823**	**Date of Collection: 8/25/09 4:25:00 PM**	
Dil. Factor:	**1.75**	**Date of Analysis: 9/8/09 11:47 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.88	Not Detected	2.2	Not Detected
cis-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Trichloroethene	0.88	Not Detected	4.7	Not Detected
Tetrachloroethene	0.88	130	5.9	860
trans-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	94	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA318SS

Lab ID#: 0908660B-14A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**r090905**	**Date of Collection:**	**8/26/09 11:50:00 AM**
Dil. Factor:	**1.79**	**Date of Analysis:**	**9/9/09 10:10 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.90	Not Detected	2.3	Not Detected
cis-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Trichloroethene	0.90	1.4	4.8	7.4
Tetrachloroethene	0.90	120	6.1	790
trans-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	95	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA318SS Lab Duplicate

Lab ID#: 0908660B-14AA

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**r090906**	**Date of Collection:**	**8/26/09 11:50:00 AM**
Dil. Factor:	**1.79**	**Date of Analysis:**	**9/9/09 10:59 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.90	Not Detected	2.3	Not Detected
cis-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Trichloroethene	0.90	1.3	4.8	7.0
Tetrachloroethene	0.90	120	6.1	780
trans-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	95	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA319SS

Lab ID#: 0908660B-15A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**x090823**	**Date of Collection:**	**8/26/09 12:10:00 PM**
Dil. Factor:	**16.8**	**Date of Analysis:**	**9/9/09 05:30 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	8.4	Not Detected	21	Not Detected
cis-1,2-Dichloroethene	8.4	Not Detected	33	Not Detected
Trichloroethene	8.4	14	45	78
Tetrachloroethene	8.4	2500	57	17000
trans-1,2-Dichloroethene	8.4	Not Detected	33	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	93	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA320SS

Lab ID#: 0908660B-16A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**r090910**	**Date of Collection: 8/26/09 12:30:00 PM**	
Dil. Factor:	**19.3**	**Date of Analysis: 9/9/09 01:59 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	9.6	Not Detected	25	Not Detected
cis-1,2-Dichloroethene	9.6	Not Detected	38	Not Detected
Trichloroethene	9.6	16	52	85
Tetrachloroethene	9.6	2500	65	17000
trans-1,2-Dichloroethene	9.6	Not Detected	38	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	95	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA321SS

Lab ID#: 0908660B-17A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**r090909**	**Date of Collection:**	**8/26/09 1:05:00 PM**
Dil. Factor:	**1.87**	**Date of Analysis:**	**9/9/09 01:08 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.94	Not Detected	2.4	Not Detected
cis-1,2-Dichloroethene	0.94	Not Detected	3.7	Not Detected
Trichloroethene	0.94	Not Detected	5.0	Not Detected
Tetrachloroethene	0.94	67	6.3	460
trans-1,2-Dichloroethene	0.94	Not Detected	3.7	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	96	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA324SS

Lab ID#: 0908660B-19A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**x090819**	**Date of Collection:**	**8/26/09 2:32:00 PM**
Dil. Factor:	**26.8**	**Date of Analysis:**	**9/8/09 09:22 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	13	Not Detected	34	Not Detected
cis-1,2-Dichloroethene	13	Not Detected	53	Not Detected
Trichloroethene	13	45	72	240
Tetrachloroethene	13	3200	91	22000
trans-1,2-Dichloroethene	13	Not Detected	53	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	96	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA325SS

Lab ID#: 0908660B-20A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**x090817**	**Date of Collection: 8/26/09 5:10:00 PM**	
Dil. Factor:	**20.1**	**Date of Analysis: 9/8/09 07:47 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	10	Not Detected	26	Not Detected
cis-1,2-Dichloroethene	10	Not Detected	40	Not Detected
Trichloroethene	10	59	54	320
Tetrachloroethene	10	3200	68	22000
trans-1,2-Dichloroethene	10	Not Detected	40	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	96	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA326SS

Lab ID#: 0908660B-21A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**x090816**	**Date of Collection: 8/26/09 5:30:00 PM**	
Dil. Factor:	**4.48**	**Date of Analysis: 9/8/09 07:10 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	2.2	Not Detected	5.7	Not Detected
cis-1,2-Dichloroethene	2.2	Not Detected	8.9	Not Detected
Trichloroethene	2.2	7.9	12	42
Tetrachloroethene	2.2	560	15	3800
trans-1,2-Dichloroethene	2.2	Not Detected	8.9	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	97	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA332SS

Lab ID#: 0908660B-25A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**x090822**	**Date of Collection:**	**8/27/09 11:08:00 AM**
Dil. Factor:	**37.4**	**Date of Analysis:**	**9/8/09 11:55 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	19	Not Detected	48	Not Detected
cis-1,2-Dichloroethene	19	Not Detected	74	Not Detected
Trichloroethene	19	170	100	910
Tetrachloroethene	19	4600	130	31000
trans-1,2-Dichloroethene	19	Not Detected	74	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	99	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA333SS

Lab ID#: 0908660B-26A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**x090814**	**Date of Collection: 8/27/09 12:20:00 PM**	
Dil. Factor:	**7.00**	**Date of Analysis: 9/8/09 05:42 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	3.5	Not Detected	8.9	Not Detected
cis-1,2-Dichloroethene	3.5	Not Detected	14	Not Detected
Trichloroethene	3.5	3.9	19	21
Tetrachloroethene	3.5	880	24	6000
trans-1,2-Dichloroethene	3.5	Not Detected	14	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	96	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA334SS

Lab ID#: 0908660B-27A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**x090813**	**Date of Collection:**	**8/27/09 2:12:00 PM**
Dil. Factor:	**4.99**	**Date of Analysis:**	**9/8/09 04:50 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	2.5	Not Detected	6.4	Not Detected
cis-1,2-Dichloroethene	2.5	Not Detected	9.9	Not Detected
Trichloroethene	2.5	14	13	74
Tetrachloroethene	2.5	820	17	5500
trans-1,2-Dichloroethene	2.5	Not Detected	9.9	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	91	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA335SS

Lab ID#: 0908660B-28A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**x090812**	**Date of Collection: 8/27/09 3:40:00 PM**	
Dil. Factor:	**1.79**	**Date of Analysis: 9/8/09 03:30 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.90	Not Detected	2.3	Not Detected
cis-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Trichloroethene	0.90	4.7	4.8	25
Tetrachloroethene	0.90	150	6.1	1000
trans-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	91	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	99	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0908660B-29A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**r090804**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/8/09 08:13 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	92	70-130
4-Bromofluorobenzene	94	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0908660B-29B

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**x090808**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/8/09 10:55 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	91	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	100	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0908660B-29C

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**r090904**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/9/09 08:41 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	93	70-130
4-Bromofluorobenzene	92	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 0908660B-30A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**r090802**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/8/09 06:09 AM**	

Compound	%Recovery
Vinyl Chloride	95
cis-1,2-Dichloroethene	102
Trichloroethene	108
Tetrachloroethene	118
trans-1,2-Dichloroethene	96

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	101	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 0908660B-30B

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**x090802**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/8/09 06:21 AM**	

Compound	%Recovery
Vinyl Chloride	109
cis-1,2-Dichloroethene	104
Trichloroethene	108
Tetrachloroethene	111
trans-1,2-Dichloroethene	101

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	89	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	104	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 0908660B-30C

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**r090902**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/9/09 07:20 AM**	

Compound	%Recovery
Vinyl Chloride	90
cis-1,2-Dichloroethene	100
Trichloroethene	107
Tetrachloroethene	116
trans-1,2-Dichloroethene	92

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	102	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0908660B-31A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**r090803**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/8/09 06:46 AM**	

Compound	%Recovery
Vinyl Chloride	99
cis-1,2-Dichloroethene	129
Trichloroethene	116
Tetrachloroethene	120
trans-1,2-Dichloroethene	108

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	104	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0908660B-31B

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**x090803**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/8/09 06:57 AM**	

Compound	%Recovery
Vinyl Chloride	89
cis-1,2-Dichloroethene	103
Trichloroethene	102
Tetrachloroethene	110
trans-1,2-Dichloroethene	97

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	104	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0908660B-31C

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**r090903**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/9/09 07:53 AM**	

Compound	%Recovery
Vinyl Chloride	93
cis-1,2-Dichloroethene	117
Trichloroethene	106
Tetrachloroethene	115
trans-1,2-Dichloroethene	94

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	103	70-130

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

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Project Manager: Ben Martich

Collected by: (Print and Sign) Andrew Wells / [signature] 907-590-7979

Company OASIS Enviro Email: bmartich@oasisenviro

Address _____ City _____ State ___ Zip _____

Phone 907-258-4880 Fax _____

Project Info:
P.O. # _____
Project # 14-166 phase 3 Task 1
Project Name Gaffney

Turn Around Time:
[X] Normal
[ ] Rush
___ ___ specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psig)
01A	096RA301AA	34321	8/26	1000	TO-15 SIM	30	4		
02A	096RA302IA	5564	8/26	1010	TO-15 SIM	30	6.5		
	096RA305SS	R-2	8/25	1125	TO-15	30	14		
	096RA306SS	23890	8/25	1205	TO-15	30	10		
	096RA307SS	4342	8/25	1230	TO-15	30	9		
06A	096RA308AA	5556	8/26	1315	TO-15 SIM	30	2		
07A	096RA309IA	12019	8/26	1345	TO-15 SIM	30	4		
08A	096RA310IA	33968	8/26	1400	TO-15 SIM	30	6		
	096RA313SS	30933	8/25	1455	TO-15	30	9		
	096RA314SS	33547	8/25	1555	TO-15	30	7		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Andrew Wells	8/28/09 1100	[signature]	8/31/09 0915 AM
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes: Short List for all samples (PCE, TCE, cis-1, 2-DCE, trans-1, 2-DCE, vinyl chloride)

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fed Ex	7453 3013 6446	NA	Good	(Yes) No None	0908660

MK 9/1/09

Received samples MK 9/1/09

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager Ben Martich
Collected by: (Print and Sign) Andrew Weller /Andrew Weller 907-590-7[illegible]
Company OASIS Email
Address City State Zip
Phone 907-258-4880 Fax

Project Info:
P.O. #
Project # 14-166, Phase 3, Task 1
Project Name Gaffney Rd

Turn Around Time:
X Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
	096RA315SS	34462	8/25	1600	TO-15	30	9.5		
	096RA316SS	5687	8/25	1625	TO-15	30	8		
13A	096RA317AA	33964	8/27	1045	TO-15 SIM	30	6.5		
	096RA318SS	34338	8/26	1150	TO-15	30	8		
	096RA319SS	12008	8/26	1210	TO-15	30	6.5		
	096RA320SS	34349	8/26	1230	TO-15	30	6		
	096RA321SS	5575	8/26	1305	TO-15	30	6		
18A	096RA322IA	05703	8/27	1255	TO-15 SIM	30	5.5		
	096RA324SS	02245	8/26	1432	TO-15	30	10		
	096RA325SS	1054	8/26	1710	TO-15	30	11.5		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Andrew Weller	8/28/09 1100	[signature]	8/31/09 AM 0915
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes:
short list for all Samples

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fedex	7455 3013 0446	N/A	Good	Yes / No / None	0908660

[signature] 9/1/09

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hot line (800) 457-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager Ben Marsh

Collected by: (Print and Sign) Andrea Wells 907-590-7979

Company CASIS Email

Address City State Zip

Phone 907-258-4880 Fax

Project Info:
P.O. #
Project # 14-166 Phase 3 Task 1
Project Name Gaffney Rd

Turn Around Time:
[X] Normal
[ ] Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested (forget to send)	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
	096RA326SS	12693	8/26	1730	TO-15	30	6.5		
22A	096RA327IA	24484	8/27	1055	TO-15 SIM		5		
23A	096RA328IA	11300	8/28	0940	TO-15 SIM	30	5		
24A	096RA330IA	5768	8/28	0930	TO-15 SIM	30	6		
	096RA332SS	33877	8/27	1108	TO-15	30	9		
	096RA333SS	905	8/27	1220	TO-15	30	7.5		
	096RA334SS	12717	8/27	1412	TO-15	30	8.5		
	096RA335SS	14015	8/27	1540	TO-15	30	8		
29A	096RA336TB	5634	8/28	0800	TO-15 SIM	—	—		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Andrea Wells	8/28/09 1100	[signature]	8/31/09 0915 A+C A+
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes:
Short list for all samples

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx	7957 3413 0940	N/A	Good	Yes No (None) 9/1/09 MC	0908660

Air Toxics LTD.
Laboratory Services Since 1989

9/11/2009
Mr. Ben Martich
Oasis Environmental, Inc.
825 W. 8th Avenue
Suite 200
Anchorage AK 99501

Project Name: Gaffney Rd
Project #: 14-166, Phase 3, Task 1
Workorder #: 0908660C

Dear Mr. Ben Martich

The following report includes the data for the above referenced project for sample(s) received on 8/31/2009 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-17 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kelly Buettner
Project Manager

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 0908660C

Work Order Summary

CLIENT:	Mr. Ben Martich Oasis Environmental, Inc. 825 W. 8th Avenue Suite 200 Anchorage, AK 99501	**BILL TO:**	Mr. Ben Martich Oasis Environmental, Inc. 825 W. 8th Avenue Suite 200 Anchorage, AK 99501
PHONE:	907-258-4880	**P.O. #**	
FAX:		**PROJECT #**	14-166, Phase 3, Task 1 Gaffney Rd
DATE RECEIVED:	08/31/2009	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	09/10/2009		

FRACTION #	NAME	TEST
30A	09GRA303PA	Modified TO-17
31A	09GRA304PA	Modified TO-17
32A	09GRA311PA	Modified TO-17
33A	09GRA312PA	Modified TO-17
34A	09GRA323PA	Modified TO-17
35A	09GRA329PA	Modified TO-17
36A	09GRA331PA	Modified TO-17
37A	Lab Blank	Modified TO-17
37B	Lab Blank	Modified TO-17
38A	CCV	Modified TO-17
38B	CCV	Modified TO-17
39A	LCS	Modified TO-17
39B	LCS	Modified TO-17

CERTIFIED BY: Linda D. Frumarx DATE: 09/11/09

Laboratory Director

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
TO-17 - Markes ATD
Oasis Environmental, Inc.
Workorder# 0908660C

Three TO-17 Radiello - Thermal Desorption and four TO-17 SKC Badges samples were received on August 31, 2009. The laboratory performed the analysis via modified EPA Method TO-17 using GC/MS in the full scan mode. TO-17 sorbent tubes are thermally desorbed onto a secondary trap. The trap is thermally desorbed to elute the components into the GC/MS system for further separation.

Method modifications taken to run these samples are summarized in the below table. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-17***	***ATL Modifications***
Laboratory Blank	At least 2 tubes from the same cleaning batch as the samples are analyzed at the beginning and end of the analytical sequence. Do not dry purge Lab Blanks.	Tubes used for daily lab blank may or may not be from the same batch or sampling media. Only 1 lab blank is analyzed prior to sample analysis. Lab blanks are dry purged to eliminate the possibility of sample anomaly attributed to dry purge process.
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-17 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

A Temperature Blank was included with the shipment. Temperature was measured and was not within 4±2 °C. Coolant in the form of blue ice was present. Analysis proceeded.

Sample collection date was incomplete on the Chain of Custody for samples 09GRA303RA, 09GRA304PA, 09GRA311PA, 09GRA312PA, 09GRA323PA, 09GRA329PA and 09GRA331PA. The year of collection was assumed to be 2009.

Sample identification for samples 09GRA303RA, 09GRA304PA and 09GRA311PA were not provided on the sample tags. Therefore the information on the Chain of Custody was used to process and report the sample.

Analytical Notes

Results were calculated based on 25 deg C without temperature correction.

The actual exposure time was used to calculate sample concentrations and reporting limits. An exposure time of 1440 minutes was used for the QC samples.

Sampling rates were either provided by the manufacturer or were estimated based on Graham's Law using the sampling rate of Trichloroethene as the reference.

Uptake rates for Radiello passive samplers are listed as follows:

Trans-1,2-Dichloroethene = 31.6 mL/min
Cis-1,2-Dichloroethene = 31.6 mL/min
Trichloroethene = 27.1 mL/min
Tetrachloroethene = 25.4 mL/min

Uptake rates for the SKC passive badges are listed as follows:

Trans-1,2-Dichloroethene = 10.2 mL/min
Cis-1,2-Dichloroethene = 10.7 mL/min
Trichloroethene = 10.2 mL/min
Tetrachloroethene = 9.40 mL/min

Results reported for Tetrachloroethene in sample 09GRA323PA may be biased low due to saturation.

Results reported for Tetrachloroethene in samples 09GRA329PA and 09GRA331PA may be biased high due to carry over from the analytical system. Carry over, if present, was caused by the analysis of sample 09GRA323PA which was analyzed immediately preceding these samples.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction no performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED METHOD TO-17-PASSIVE

Client Sample ID: 09GRA303PA

Lab ID#: 0908660C-30A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.14	0.52

Client Sample ID: 09GRA304PA

Lab ID#: 0908660C-31A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.14	0.80

Client Sample ID: 09GRA311PA

Lab ID#: 0908660C-32A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.13	0.44
Tetrachloroethene	0.14	32 E

Client Sample ID: 09GRA312PA

Lab ID#: 0908660C-33A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.34	0.38
Tetrachloroethene	0.37	30

Client Sample ID: 09GRA323PA

Lab ID#: 0908660C-34A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.34	110
Tetrachloroethene	0.37	>4300 S

Client Sample ID: 09GRA329PA

Lab ID#: 0908660C-35A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED METHOD TO-17-PASSIVE

Client Sample ID: 09GRA329PA

Lab ID#: 0908660C-35A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.34	0.65
Tetrachloroethene	0.37	47

Client Sample ID: 09GRA331PA

Lab ID#: 0908660C-36A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.34	0.42
Tetrachloroethene	0.37	31

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Client Sample ID: 09GRA303PA

Lab ID#: 0908660C-30A

MODIFIED METHOD TO-17-PASSIVE

File Name:	**n090406**	**Date of Collection: 8/26/09 10:15:00 AM**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/4/09 12:13 PM**	

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.11	Not Detected
Trichloroethene	0.13	Not Detected
Tetrachloroethene	0.14	0.52
trans-1,2-Dichloroethene	0.11	Not Detected

Container Type: TO-17 Radiello - Thermal Desorption

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	99	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA304PA

Lab ID#: 0908660C-31A

MODIFIED METHOD TO-17-PASSIVE

File Name:	**n090407**	**Date of Collection: 8/26/09 10:20:00 AM**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/4/09 12:47 PM**	

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.11	Not Detected
Trichloroethene	0.13	Not Detected
Tetrachloroethene	0.14	0.80
trans-1,2-Dichloroethene	0.11	Not Detected

Container Type: TO-17 Radiello - Thermal Desorption

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	100	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA311PA

Lab ID#: 0908660C-32A

MODIFIED METHOD TO-17-PASSIVE

File Name:	**n090408**	**Date of Collection: 8/26/09 1:55:00 PM**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/4/09 01:21 PM**	

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.11	Not Detected
Trichloroethene	0.13	0.44
Tetrachloroethene	0.14	32 E
trans-1,2-Dichloroethene	0.11	Not Detected

E = Exceeds instrument calibration range.

Container Type: TO-17 Radiello - Thermal Desorption

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA312PA

Lab ID#: 0908660C-33A

MODIFIED METHOD TO-17-PASSIVE

File Name:	**n090917**	**Date of Collection: 8/26/09 2:05:00 PM**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/9/09 06:40 PM**	

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.32	Not Detected
Trichloroethene	0.34	0.38
Tetrachloroethene	0.37	30
trans-1,2-Dichloroethene	0.34	Not Detected

Container Type: TO-17 SKC Badges

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	82	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	98	70-130

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Laboratory Services Since 1989

Client Sample ID: 09GRA323PA

Lab ID#: 0908660C-34A

MODIFIED METHOD TO-17-PASSIVE

File Name:	**n090918**	**Date of Collection: 8/27/09 1:00:00 PM**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/9/09 07:14 PM**	

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.32	Not Detected
Trichloroethene	0.34	110
Tetrachloroethene	0.37	>4300 S
trans-1,2-Dichloroethene	0.34	Not Detected

S = Saturated peak; data reported as estimated.

Container Type: TO-17 SKC Badges

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	78	70-130
Toluene-d8	113	70-130
4-Bromofluorobenzene	97	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA329PA

Lab ID#: 0908660C-35A

MODIFIED METHOD TO-17-PASSIVE

File Name:	**n090919**	**Date of Collection: 8/28/09 9:45:00 AM**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/9/09 07:48 PM**	

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.32	Not Detected
Trichloroethene	0.34	0.65
Tetrachloroethene	0.37	47
trans-1,2-Dichloroethene	0.34	Not Detected

Container Type: TO-17 SKC Badges

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	74	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	95	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 09GRA331PA

Lab ID#: 0908660C-36A

MODIFIED METHOD TO-17-PASSIVE

File Name:	**n090920**	**Date of Collection:**	**8/28/09 9:35:00 AM**
Dil. Factor:	**1.00**	**Date of Analysis:**	**9/9/09 08:21 PM**

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.32	Not Detected
Trichloroethene	0.34	0.42
Tetrachloroethene	0.37	31
trans-1,2-Dichloroethene	0.34	Not Detected

Container Type: TO-17 SKC Badges

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	73	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	95	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0908660C-37A

MODIFIED METHOD TO-17-PASSIVE

File Name:	**n090405**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/4/09 11:14 AM**	

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.32	Not Detected
Trichloroethene	0.34	Not Detected
Tetrachloroethene	0.37	Not Detected
trans-1,2-Dichloroethene	0.34	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0908660C-37B

MODIFIED METHOD TO-17-PASSIVE

File Name:	**n090916**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/9/09 05:48 PM**	

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.32	Not Detected
Trichloroethene	0.34	Not Detected
Tetrachloroethene	0.37	Not Detected
trans-1,2-Dichloroethene	0.34	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	84	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	96	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 0908660C-38A

MODIFIED METHOD TO-17-PASSIVE

File Name:	**n090403**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/4/09 10:07 AM**	

Compound	%Recovery
cis-1,2-Dichloroethene	96
Trichloroethene	96
Tetrachloroethene	87
trans-1,2-Dichloroethene	94

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	88	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	99	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 0908660C-38B

MODIFIED METHOD TO-17-PASSIVE

File Name:	**n090903**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/9/09 09:58 AM**	

Compound	%Recovery
cis-1,2-Dichloroethene	106
Trichloroethene	95
Tetrachloroethene	94
trans-1,2-Dichloroethene	101

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	84	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	100	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0908660C-39A

MODIFIED METHOD TO-17-PASSIVE

File Name:	**n090404**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/4/09 10:40 AM**	

Compound	%Recovery
cis-1,2-Dichloroethene	112
Trichloroethene	117
Tetrachloroethene	100
trans-1,2-Dichloroethene	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	77	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0908660C-39B

MODIFIED METHOD TO-17-PASSIVE

File Name:	**n090904**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/9/09 10:32 AM**	

Compound	%Recovery
cis-1,2-Dichloroethene	92
Trichloroethene	90
Tetrachloroethene	90
trans-1,2-Dichloroethene	89

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	84	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	101	70-130

SORBENT SAMPLE COLLECTION

95630

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
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180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager Ben Martich
Collected by: (Print and Sign) Andrew Weller/Tech 2 Lab 907-590-7979
Company OASIS Email
Address City State Zip
Phone 907-258-4880 Fax

Project Info:
P.O. #
Project # M-1166, Phase 3, Task 1
Project Name Gaffney Rd

Turn Around Time:
[X] Normal
[ ] Rush
specify

Circle Reporting Units:
ppbv ppmv ug/m³ mg/m³

Lab I.D. WL-[illegible]69	Field Sample I.D. (Location)	Tube # / Cartridge #	Date of Collection	Start Time	End Time	Duration	Final Volume	Analysis Requested
30A	096RA303PA	Tube N082018	8/26		1015	24hrs		TO-17 Short List
31A	096RA304PA	Tube N082019	8/26		1020	24hrs		TO-17
32A	096RA311PA	Tube N082016	8/26		1355	24hrs		
33A	096RA312PA	vial N081933	8/26		1465			
34A	096RA323PA	vial N081935	8/27		1300			
35A	096RA329PA	vial N081934	8/28		0945			
36A	096RA331PA	vial N081936	8/28		0935			
	Did not use vial	N082017						

Relinquished by: (signature) Andrew Weller Date/Time 8/28/09 1100
Received by: (signature) Date/Time 8/31/09 AM 0915

Relinquished by: (signature) Date/Time
Received by: (signature) Date/Time

Relinquished by: (signature) Date/Time
Received by: (signature) Date/Time

Pump Calibration Information
Pre-test Flow Rate:
Post-test Flow Rate:
Average Flow Rate:
Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fedex	7955 3013 0946	15°C	See SDR	(Yes) No None	0908660

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ATTACHMENT 4

Laboratory Data Review Checklists

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Laboratory Data Review Checklist For Air Samples

Completed by:	Melissa Connor
Title:	Associate Environmental Scientist I
Date:	09/17/09
CS Report Name:	Gaffney Road
Report Date:	09/14/09
Consultant Firm:	OASIS Environmental Inc
Laboratory Name:	Air Toxics LTD
Laboratory Report Number:	0908660A
ADEC File Number:	
ADEC Hazard ID:	

1. Laboratory

   a. Did a NELAP certified laboratory receive and perform all of the submitted sample analyses?

   ☉ Yes ☐ No Comments:

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses NELAP approved?

   ☐ Yes ☐ No Comments:

   Yes.

2. Chain of Custody (COC)

   a. COC information completed, signed, and dated (including released/received by)?

   ☐ Yes ☐ No Comments:

   Yes.

b. Correct analyses requested?

☐ Yes ☐ No Comments:

Yes.

3. Laboratory Sample Receipt Documentation

a. Sample condition documented–Samples collected in gas tight, opaque/dark Summa canisters or other ADEC approved container? Canister vacuum/pressure checked, recorded upon receipt and contained no open valves?

☐ Yes ☐ No Comments:

Yes.

b. If there were any discrepancies, were they documented? For example, incorrect sample containers, sample holding times outside of acceptable range, insufficient or missing samples, canister not holding a vacuum etc.?

☐ Yes ☐ No Comments:

Yes. Sample collection date was incomplete on the Chain of Custody for all samples. The year of collection was assumed to be 2009.

c. Data quality or usability affected? Explain.

Comments:

Data quality or usability is not affected with respect to the laboratory sample receipt documentation.

4. Case Narrative

a. Present and understandable?

☐ Yes ☐ No Comments:

Yes.

b. Discrepancies, errors or QC failures identified by the lab?

☐ Yes ☐ No Comments:

Yes.

c. Were all corrective actions documented?

☐ Yes ☐ No Comments:

Yes.

d. What is the effect on data quality/usability according to the case narrative?

Comments:

Data quality and usability is not affected with respect to the case narrative report.

5. Samples Results

a. Correct analyses performed/reported as requested on COC?

☐ Yes ☐ No Comments:

Yes.

b. Samples analyzed within 30 days of collection or within the time required by the method?

☐ Yes ☐ No Comments:

Yes.

c. Is the data reported in micrograms per meter cube volume ($\mu g/m^3$)?

☐ Yes ☐ No Comments:

Yes.

d. Are the reported PQLs less than the Target Screening Level or the minimum required detection level for the project?

☐ Yes ☐ No Comments:

Yes.

e. Data quality or usability affected? Explain.

Comments:

Data quality or usability is not affected with respect to the sample results.

6. QC Samples

a. Method Blank

i. One method blank reported per analysis and 20 samples?

☐ Yes ☐ No Comments:

Yes.

ii. All method blank results less than PQL?

☐ Yes ☐ No Comments:

Yes.

iii. If above PQL, what samples are affected?

Comments:

Not applicable.

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

☐ Yes ☐ No Comments:

Not applicable.

v. Data quality or usability affected? Explain.

Comments:

Data quality or usability is not affected with respect to QC sample results.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – One LCS/LCSD or one LCS and a sample/sample duplicate pair reported per analysis and 20 samples?

☐ Yes ☐ No Comments:

Yes.

ii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable.

☐ Yes ☐ No Comments:

Yes.

iii. Precision – All relative percent differences (RPD) reported and less than method or laboratory limits? And project specified DQOs, if applicable.

☐ Yes ☐ No Comments:

Yes.

iv. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments:

Not applicable.

v. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

☐ Yes ☐ No Comments:

Not applicable.

vi. Data quality or usability affected? Explain.

Data quality or usability is not affected with respect to the LCS/LCSD results.

c. Surrogates – Organics Only

i. Are surrogate recoveries reported for organic analyses – QC and laboratory samples?

☐ Yes ☐ No Comments:

Yes.

ii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable.

☐ Yes ☐ No Comments:

Yes.

iii. Do the sample results with failed surrogate recoveries have data flags? If so, are the data flags clearly defined?

☐ Yes ☐ No Comments:

Not applicable. There are no sample results with failed surrogate recoveries.

iv. Data quality or usability affected? Explain.

Comments:

Data quality or usability is not affected with respect to the surrogate data.

d. Field Duplicate

i. One field duplicate submitted per analysis and 10 soil gas samples. For indoor air, was one duplicate collected per analysis and building?

☐ Yes ☐ No Comments:

Yes.

ii. Submitted blind to lab?

☐ Yes ☐ No Comments:

Yes.

iii. Precision – All relative percent differences (RPD) less than specified DQOs? (Recommended: 25 %)

RPD (%) = Absolute value of: $\frac{(R_1-R_2)}{((R_1+R_2)/2)} \times 100$

Where R_1 = Sample Concentration
R_2 = Field Duplicate Concentration

☐ Yes ☐ No Comments:

Yes.

iv. Data quality or usability affected? Explain.

Comments:

Data quality or usability is not affected with respect to the field duplicate results.

7. Other Data Flags/Qualifiers

a. Defined and appropriate?

☐ Yes ☐ No Comments:

Yes.

Laboratory Data Review Checklist For Air Samples

Completed by: Melissa Connor

Title: Associate Environmental Scientist I

Date: 17 September 2009

CS Report Name: Gaffney Road

Report Date: 09/13/09

Consultant Firm: OASIS Environmental Inc.

Laboratory Name: Air Toxics LTD

Laboratory Report Number: 0908660B

ADEC File Number:

ADEC Hazard ID:

1. Laboratory

   a. Did a NELAP certified laboratory receive and perform all of the submitted sample analyses?

      ☉ Yes ☐ No Comments:

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses NELAP approved?

      ☐ Yes ☐ No Comments:

      Yes.

2. Chain of Custody (COC)

   a. COC information completed, signed, and dated (including released/received by)?

      ☐ Yes ☐ No Comments:

      Yes.

b. Correct analyses requested?

☐ Yes ☐ No Comments:

Yes.

3. Laboratory Sample Receipt Documentation

a. Sample condition documented–Samples collected in gas tight, opaque/dark Summa canisters or other ADEC approved container? Canister vacuum/pressure checked, recorded upon receipt and contained no open valves?

☐ Yes ☐ No Comments:

Yes. Sample collection date was incomplete on the Chain of Custody for all samples. The year of collection was assumed to be 2009.

b. If there were any discrepancies, were they documented? For example, incorrect sample containers, sample holding times outside of acceptable range, insufficient or missing samples, canister not holding a vacuum etc.?

Yes. The Summa canister for sample 09GRA314SS was leaking upon arrival. The client was notified and analysis proceeded.

☐ Yes ☐ No Comments:

c. Data quality or usability affected? Explain.

Comments:

Data quality is somewhat affected as associated analyate concentration results to sample 09GRA314SS were flagged as estimated due to Summa canister leakage. All data is suitable for use and no data is rejected as a result of the laboratory receipt documentation.

4. Case Narrative

a. Present and understandable?

☐ Yes ☐ No Comments:

Yes.

b. Discrepancies, errors or QC failures identified by the lab?

☐ Yes ☐ No Comments:

Yes.

c. Were all corrective actions documented?

Yes.

☐ Yes ☐ No Comments:

d. What is the effect on data quality/usability according to the case narrative?
Comments:

Data quality and usability is not affected with respect to the case narrative report.

5. Samples Results

a. Correct analyses performed/reported as requested on COC?
☐ Yes ☐ No Comments:

Yes.

b. Samples analyzed within 30 days of collection or within the time required by the method?
☐ Yes ☐ No Comments:

Yes.

c. Is the data reported in micrograms per meter cube volume ($\mu g/m^3$)?
☐ Yes ☐ No Comments:

Yes.

d. Are the reported PQLs less than the Target Screening Level or the minimum required detection level for the project?

Yes.

☐ Yes ☐ No Comments:

e. Data quality or usability affected? Explain.
Comments:

Data quality and usability is not affected with respect to the reported sample results.

6. QC Samples

a. Method Blank
   i. One method blank reported per analysis and 20 samples?
☐ Yes ☐ No Comments:

Yes.

ii. All method blank results less than PQL?

☐ Yes ☐ No Comments:

Yes.

iii. If above PQL, what samples are affected?

Comments:

Not applicable.

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Not applicable.

☐ Yes ☐ No Comments:

v. Data quality or usability affected? Explain.

Comments:

Data quality and usability is not affected with respect to the QC sample results.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – One LCS/LCSD or one LCS and a sample/sample duplicate pair reported per analysis and 20 samples?

☐ Yes ☐ No Comments:

Yes.

ii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable.

☐ Yes ☐ No Comments:

Yes.

iii. Precision – All relative percent differences (RPD) reported and less than method or laboratory limits? And project specified DQOs, if applicable.

☐ Yes ☐ No Comments:

Yes.

iv. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments:

Not applicable.

v. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

☐ Yes ☐ No Comments:

Not applicable.

vi. Data quality or usability affected? Explain.

Comments:

Data quality or usability is not affected with respect to the LCS/LCSD results.

c. Surrogates – Organics Only

i. Are surrogate recoveries reported for organic analyses – QC and laboratory samples?

☐ Yes ☐ No Comments:

Yes.

ii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable.

☐ Yes ☐ No Comments:

Yes.

iii. Do the sample results with failed surrogate recoveries have data flags? If so, are the data flags clearly defined?

Not applicable. There are no sample results with failed surrogate recoveries.

☐ Yes ☐ No Comments:

iv. Data quality or usability affected? Explain.

Comments:

Data quality or usability is not affected with respect to the surrogate results.

d. Field Duplicate

i. One field duplicate submitted per analysis and 10 soil gas samples. For indoor air, was one duplicate collected per analysis and building?

☐ Yes ☐ No Comments:

Yes.

ii. Submitted blind to lab?

☐ Yes ☐ No Comments:

Yes.

iii. Precision – All relative percent differences (RPD) less than specified DQOs? (Recommended: 25 %)

RPD (%) = Absolute value of: $\frac{(R_1-R_2)}{((R_1+R_2)/2)} \times 100$

Where R_1 = Sample Concentration
R_2 = Field Duplicate Concentration

No, primary sample 09GRA314SS and duplicate sample 09GRA315SS exceeded the recommended RPD of 25% for trichloroethene and tetrachloroethene. Associated results have been flagged as estimated.

☐ Yes ☐ No Comments:

iv. Data quality or usability affected? Explain.

Comments:

Data quality and usability is not affected with respect to field duplicate results.

7. Other Data Flags/Qualifiers

a. Defined and appropriate?

☐ Yes ☐ No Comments:

Yes.

Laboratory Data Review Checklist For Air Samples

Completed by: Melissa Connor

Title: Associate Environmental Scientist I

Date: 17 September 2009

CS Report Name: Gaffney Road

Report Date: 09/11/09

Consultant Firm: OASIS Environmental Inc

Laboratory Name: Air Toxics LTD

Laboratory Report Number: 0908660C

ADEC File Number:

ADEC Hazard ID:

1. Laboratory

   a. Did a NELAP certified laboratory receive and perform all of the submitted sample analyses?

   ☉ Yes ☐ No Comments:

   Yes.

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses NELAP approved?

   ☐ Yes ☐ No Comments:

   Yes

2. Chain of Custody (COC)

   a. COC information completed, signed, and dated (including released/received by)?

   ☐ Yes ☐ No Comments:

   Yes.

b. Correct analyses requested?

☐ Yes ☐ No Comments:

Yes.

3. Laboratory Sample Receipt Documentation

a. Sample condition documented–Samples collected in gas tight, opaque/dark Summa canisters or other ADEC approved container? Canister vacuum/pressure checked, recorded upon receipt and contained no open valves?

☐ Yes ☐ No Comments:

Yes.

b. If there were any discrepancies, were they documented? For example, incorrect sample containers, sample holding times outside of acceptable range, insufficient or missing samples, canister not holding a vacuum etc.?

Yes, Sample collection date was incomplete on the COC for samples 09GRA303RA, 09GRA304PA, 09GRA311PA, 09GRA312PA, 09GRA329PA and 09GRA331PA. The year of collection was assumed to be 2009. Temperature was not within 4 $\pm$ 2^{o}C upon arrival.

☐ Yes ☐ No Comments:

c. Data quality or usability affected? Explain.

Comments:

Data quality or usability is not impacted, as ice was still present within the shipment.

4. Case Narrative

a. Present and understandable?

☐ Yes ☐ No Comments:

Yes.

b. Discrepancies, errors or QC failures identified by the lab?

☐ Yes ☐ No Comments:

Yes.

c. Were all corrective actions documented?

☐ Yes ☐ No Comments:

Yes.

d. What is the effect on data quality/usability according to the case narrative?

Comments:

Data quality and usability is not affected with respect to the case narrative.

5. Samples Results

a. Correct analyses performed/reported as requested on COC?

☐ Yes ☐ No Comments:

Yes.

b. Samples analyzed within 30 days of collection or within the time required by the method?

☐ Yes ☐ No Comments:

Yes.

c. Is the data reported in micrograms per meter cube volume ($\mu g/m^3$)?

☐ Yes ☐ No Comments:

Yes.

d. Are the reported PQLs less than the Target Screening Level or the minimum required detection level for the project?

Yes.

☐ Yes ☐ No Comments:

e. Data quality or usability affected? Explain.

Comments:

Data quality and usability is not affected with respect to the sample results.

6. QC Samples

a. Method Blank

i. One method blank reported per analysis and 20 samples?

☐ Yes ☐ No Comments:

Yes.

ii. All method blank results less than PQL?

☐ Yes ☐ No Comments:

Yes.

iii. If above PQL, what samples are affected?

Comments:

Not applicable.

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Not applicable.

☐ Yes ☐ No Comments:

v. Data quality or usability affected? Explain.

Comments:

Data quality and usability is not affected with respect to the QC sample results.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – One LCS/LCSD or one LCS and a sample/sample duplicate pair reported per analysis and 20 samples?

☐ Yes ☐ No Comments:

Yes.

ii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable.

☐ Yes ☐ No Comments:

Yes.

iii. Precision – All relative percent differences (RPD) reported and less than method or laboratory limits? And project specified DQOs, if applicable.

☐ Yes ☐ No Comments:

Yes.

iv. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments:

Not applicable.

v. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

☐ Yes ☐ No Comments:

Not applicable.

vi. Data quality or usability affected? Explain.

Comments:

Data quality and usability is not affected with respect to the LCS/LCSD results.

c. Surrogates – Organics Only

i. Are surrogate recoveries reported for organic analyses – QC and laboratory samples?

☐ Yes ☐ No Comments:

Yes.

ii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable.

☐ Yes ☐ No Comments:

Yes.

iii. Do the sample results with failed surrogate recoveries have data flags? If so, are the data flags clearly defined?

Not applicable.

☐ Yes ☐ No Comments:

iv. Data quality or usability affected? Explain.

Comments:

Data quality or usability is not affected with respect to the surrogate results.

d. Field Duplicate

i. One field duplicate submitted per analysis and 10 soil gas samples. For indoor air, was one duplicate collected per analysis and building?

☐ Yes ☐ No Comments:

Yes

ii. Submitted blind to lab?

☐ Yes ☐ No Comments:

Yes.

iii. Precision – All relative percent differences (RPD) less than specified DQOs? (Recommended: 25 %)

RPD (%) = Absolute value of: $\frac{(R_1-R_2)}{((R_1+R_2)/2)} \times 100$

Where R_1 = Sample Concentration
R_2 = Field Duplicate Concentration

No. RPD was 42.4% for tetrachloroethene. Associated results have been flagged "J-D" and are estimated.

☐ Yes ☐ No Comments:

iv. Data quality or usability affected? Explain.

Comments:

Data quality and usability are not affected due to the fact that

7. Other Data Flags/Qualifiers

a. Defined and appropriate?

☐ Yes ☐ No Comments:

Yes.