

Mike Schmoller Project Manager Wisconsin Department of Natural Resources South Central Region 3911 Fish Hatchery Rd Fitchburg WI 53711

Subject:

Summary of Vapor Sampling Activities, Madison-Kipp Corporation Site, 201 Waubesa Street, Madison, Wisconsin.

Dear Mr. Schmoller:

On behalf of Madison-Kipp Corporation, this letter provides a summary of the vapor sampling activities performed during the Spring of 2012 at neighboring residences to the Madison-Kipp site located at 201 Waubesa Street in Madison, Wisconsin (site). Vapor sampling activities were performed per discussions with the Wisconsin Department of Natural Resources (WDNR) and the tasks listed in the *Draft #9 - Environmental Response Activity Scope of Work (Draft SOW)* dated March 27, 2012. The *Draft SOW* task included the collection of sub-slab vapor and indoor air samples at 11 residences adjacent to the site, subject to access approval. Access was provided to ARCADIS, on behalf of Madison-Kipp Corporation, to perform vapor sampling activities at 9 of the 11 residences. Despite repeated requests, the home owners of 106 South Marquette Street and 138 Marquette Street denied access to perform vapor sampling activities. The following provides a list of the residences that provided access for vapor sampling activities:

102 South Marquette Street 110 South Marquette Street 114 South Marquette Street 118 South Marquette Street 126 South Marquette Street 128 South Marquette Street 130 South Marquette Street 134 South Marquette Street 142 South Marquette Street

Prior to the implementation of vapor sampling activities, ARCADIS provided Standard Operating Procedures (SOPs) for indoor air/ambient air sampling, soil gas sampling

ARCADIS U.S., Inc. 126 North Jefferson Street Suite 400 Milwaukee Wisconsin 53202 Tel 414 276 7742 Fax 414 276 7603 www.arcadis-us.com

ENVIRONMENT

Date: May 7, 2012

Contact: Jennine Trask

Phone: 414.277.6203

^{Email:} Jennine.Trask@arcadis-<u>us.com</u>

Our ref: WI001283.0001

ARCADIS

Mr. Mike Schmoller May 7, 2012

using sub-slab ports, and tracer gas leak testing to the WDNR on February 20, 2012. The WDNR approved these SOPs via electronic correspondence on February 21, 2012, and the SOPs are included as Attachment A. Following access approval from the 9 residences, a building survey and chemical inventory was performed at each residence and two sub-slab vapor probes were installed in the basement of each residence in accordance with the SOP. Copies of the building survey and chemical inventory performed at each residence are included in Attachment B.

In accordance with the SOP, following installation, the sub-slab vapor probes were allowed to equilibrate for a minimum of 24 hours prior to sampling. A total of two indoor air samples (a sample collected from the basement of the residence and a sample collected from the first floor of the residence) were collected from each residence. The indoor air samples were collected over a 24-hour period using 6-liter summa canisters. Following the collection of the indoor air samples, a sub-slab vapor sample was collected from each of the two sub-slab vapor probes at each residence. Leak detection testing was performed at the sub-slab vapor probe sample locations in accordance with the SOP. The sub-slab vapor samples were collected over an approximate 30-minute time period using 6-liter summa canisters. The indoor air and sub-slab vapor samples were submitted to Air Toxics, Inc. laboratory for analysis of five volatile organic compounds (VOCs) by EPA Method TO-15. The five VOCs analyzed include tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene, trans-1,2-dichloroethene, and vinyl chloride, as outlined in the Draft SOW. For quality control purposes, ambient air samples were collected at the same time (over a 24-hour period) each day indoor air samples were collected. Duplicate samples, from approximately 10% of the samples, were also collected for quality assurance purposes.

A summary of the indoor air and sub-slab vapor analytical results is presented in Table 1 and shown on Figure 1. The indoor air analytical results were compared to the Wisconsin residential vapor action levels for indoor air, and the sub-slab vapor analytical results were compared to calculated screening levels for sub-slab vapor to indoor air in accordance with the guidelines presented in the WDNR's *Addressing Vapor Intrusion at Remediation and Redevelopment Sites in Wisconsin* dated December 2010. The action levels and calculated residential screening levels are based on the U.S. Environmental Protection Agency (U.S. EPA) Residential Air Screening Levels that represent health-protective concentrations that an individual can be exposed to for 30 years for 24 hours a day. The U.S. EPA provided their Final Toxicological Review for PCE on February 10, 2012 and the revised values for PCE are included in Table 1.

> Page: 2/3

ARCADIS

Mr. Mike Schmoller May 7, 2012

As presented in Table 1, none of the VOC detections in the indoor air or sub-slab vapor samples exceeded the Wisconsin residential vapor action levels or calculated residential screening levels. Thus, the sample results indicate that there is not a risk to human health due to vapor intrusion at these residences. Copies of the laboratory analytical reports are included as Attachment C.

Upon receipt of the laboratory analytical results, a letter was sent to each resident that included a summary of the sampling activities, building survey and chemical inventory, sample logs, and laboratory reports. Copies of each of the resident letters and documentation packages are included as Attachment B.

If you have any questions or require any additional information, please contact us at 414.276.7742.

Sincerely, ARCADIS U.S., Inc.

uto Skill

Christopher D. Kubacki, PE Project Engineer

rast

Jennine L. Trask, PE Project Manager

Attachments: Table 1 - Summary of Residential Vapor Sampling Figure 1 - Summary of Vapor Sampling PCE Analytical Results A Standard Operating Procedures B Resident Letters and Documentation Packages

C Laboratory Reports

Copies: David Crass – Michael Best Mark Meunier – Madison Kipp Steve Tinker – Wisconsin Department of Justice

> Page: **3/3**



Address	Wisconsin Vapor Action Level (WI AL) ^{1,2}	Calculated Screening Levels ³	1	02 S. Marc	uette Stre	et	1	10 S. Marc	uette Stre	et
Sample Name	Residential	Residential	IAB-1	IAF-1	SSV-1-1	SSV-2-1	IAB-3	IAF-3	SSV-1-3	SSV-2-3
Sample Date	Indoor Air	SubSlab	3/16/12	3/16/12	4/13/12	4/13/12	3/15/12	3/15/12	3/17/12	3/16/12
VOC										
cis-1,2-Dichloroethene	NE	NE	<0.033	<0.033	<0.15	<0.15	<0.032	<0.033	<0.16	<0.16
Tetrachloroethene	6	60	<0.033	<0.033	0.96	0.18	0.06	0.06	1.5	0.28
trans-1,2-Dichloroethene	15.9	159	<0.16	<0.16	<0.15	<0.15	<0.16	<0.16	<0.16	<0.16
Trichloroethene	0.39	4	<0.033	<0.033	<0.15	<0.15	<0.032	<0.033	<0.16	<0.16
Vinyl Chloride	0.63	6	<0.016	<0.016	<0.15	<0.15	<0.016	<0.016	<0.16	<0.16



Address	Wisconsin Vapor Action Level (WI AL) ^{1,2}	Calculated Screening Levels ³	1	14 S. Marc	quette Stree	et	1	18 S. Marc	uette Stree	ət
Sample Name	Residential	Residential	IAB-4	IAF-4	SSV-1-4	SSV-2-4	IAB-5	IAF-5	SSV-1-5	SSV-2-5
Sample Date	Indoor Air	SubSlab	3/29/12	3/29/12	3/29/12	3/29/12	3/13/12	3/13/12	3/13/12	3/13/12
VOC										
cis-1,2-Dichloroethene	NE	NE	<0.027	<0.03	<0.16	<0.16	<0.034	<0.04	<0.16	<0.16
Tetrachloroethene	6	60	0.084	0.092	1.7	0.5	0.14	0.061	1.4	0.32
trans-1,2-Dichloroethene	15.9	159	<0.14	<0.15	<0.16	<0.16	<0.17	<0.2	<0.16	<0.16
Trichloroethene	0.39	4	<0.027	< 0.03	<0.16	0.27	<0.034	<0.04	<0.16	<0.16
Vinyl Chloride	0.63	6	<0.014	<0.015	<0.16	<0.16	<0.017	<0.02	<0.16	<0.16



Address	Wisconsin Vapor Action Level (WI AL) ^{1,2}	Calculated Screening Levels ³	1	26 S. Marc	uette Stree	et	1	28 S. Marc	uette Stree	et
Sample Name	Residential	Residential	IAB-6	IAF-6	SSV-1-6	SSV-2-6	IAB-7	IAF-7	SSV-1-7	SSV-2-7
Sample Date	Indoor Air	SubSlab	3/15/12	3/15/12	3/16/12	3/16/12	3/13/12	3/13/12	3/14/12	3/14/12
VOC										
cis-1,2-Dichloroethene	NE	NE	<0.036	<0.036	<0.16	<0.17	<0.033	<0.038	<0.16	<0.15
Tetrachloroethene	6	60	0.046	0.045	5.8	0.79	<0.033	<0.038	0.18	<0.15
trans-1,2-Dichloroethene	15.9	159	<0.18	<0.18	<0.16	<0.17	<0.16	<0.19	<0.16	<0.15
Trichloroethene	0.39	4	<0.036	<0.036	<0.16	<0.17	<0.033	<0.038	<0.16	<0.15
Vinyl Chloride	0.63	6	<0.018	<0.018	<0.16	<0.17	<0.016	<0.019	<0.16	<0.15



Address	Wisconsin Vapor Action Level (WI AL) ^{1,2}	Calculated Screening Levels ³	1	30 S. Marc	uette Stree	et	1	34 S. Marc	uette Stree	et
Sample Name	Residential	Residential	IAB-8	IAF-8	SSV-1-8	SSV-2-8	IAB-9	IAF-9	SSV-1-9	SSV-2-9
Sample Date	Indoor Air	SubSlab	3/14/12	3/14/12	3/14/12	3/14/12	3/15/12	3/15/12	3/16/12	3/16/12
VOC										
cis-1,2-Dichloroethene	NE	NE	<0.036	<0.043	<0.17	<0.16	<0.073	<0.035	<0.17	<0.16
Tetrachloroethene	6	60	0.036	<0.043	2.4	0.46	0.14	0.035	6.2	1.6
trans-1,2-Dichloroethene	15.9	159	<0.18	<0.21	<0.17	<0.16	5.5	0.54	<0.17	<0.16
Trichloroethene	0.39	4	<0.036	<0.043	<0.17	<0.16	<0.073	<0.035	<0.17	<0.16
Vinyl Chloride	0.63	6	<0.018	<0.021	<0.17	<0.16	<0.036	<0.018	<0.17	<0.16



	Wisconsin Vapor Action	Calculated				
Address	Level (WI AL) ^{1,2}	Screening Levels ³	1	42 S. Marc	uette Stree	et.
Sample Name	Residential	Residential	IAB-11	IAF-11	SSV-1-11	SSV-2-11
Sample Date	Indoor Air	SubSlab	3/14/12	3/14/12	3/14/12	3/14/12
VOC						
cis-1,2-Dichloroethene	NE	NE	<0.035	<0.036	<0.16	<0.16
Tetrachloroethene	6	60	<0.035	<0.036	1.4	0.52
trans-1,2-Dichloroethene	15.9	159	<0.18	<0.18	<0.16	<0.16
Trichloroethene	0.39	4	<0.035	<0.036	<0.16	<0.16
Vinyl Chloride	0.63	6	<0.018	<0.018	<0.16	<0.16

All units presented in parts per billion by volume (ppbv)

1 - WI ALs are the lower of the United States Environmental Protection Agency (USEPA) Residential Screening Levels (RSLs) based on either a target cancer risk of 10-5 or a noncancer HQ of 1.

2 - Section VI A 1 of Addressing Vapor Intrusion at Remediation and Redevelopment Sites in Wisconsin (WDNR, 2010), accessed at: http://dnr.wi.gov/files/PDF/pubs/rr/RR800.pdf

3 - For residential, the following attenuation factor was used: 0.1 for sub-slab vapor to indoor air [Section VI A 2 of WDNR (2010)].

NE Not Established

IAB Indoor Air Sample collected from the basement of the residence

IAF Indoor Air Sample collected from the first floor of the residence

SSV Sub-slab Vapor Sample

VOC Volatile organic compound

						~				B-1	IAF-1	quette S SSV-1-	-1 SSV-2-1	
							\searrow	P		1 6/12 ID	3/16/12 ND	4/13/1 0.96		
	134 S. Marquette Street					102								
	IAB-9 IAF-10 SSV-1-9 SSV-2-9 3/15/12 3/15/12 3/16/12 3/16/12				//	106				110	S. Marc	quette S	treet	
	PCE 0.14 0.035 6.2 1.6		,	ļ		110 🗶 -				B-3	IAF-3		-3 SSV-2-3	
						114 🗮 🖷		P		.06	0.06	1.5	0.28	
	142 S. Marquette Street					126 🗮 🖷				114	S. Marc	quette S	treet	
	IAB-11 IAF-11 SSV-1-11 SSV-2-11 3/14/12 3/14/12 3/14/12 3/14/12	Ŵ				130				B-4 29/12		SSV-1- 3/29/1		
	PCE ND ND 1.4 0.52	Ì				134		P		.084	0.092		0.5	
						138								
						142 🗶 🖷				118	S. Marc	quette S	treet	
						146	STREE			B-5 3/12		SSV-1- 3/13/1		
						150 154		P		.14	0.061		0.32	
			233			162	QUETTE				_			
		STREET	237		I	168	MARQ			126	S. Marc	quette S	treet	
		STR	241			202	≥			B-6 5/12	IAF-6 3/15/12			
Legend		UBESA	245			206		P	CE 0.	.046	0.045	5.8	0.79	
	Subject Property	WAUE	249 253			210	-							
\mathbf{X}	Sub-Slab Vapor Probe Samples Collected		253			214				128	S. Marc	quette S	treet	
	Indoor Air Samples Collected		261			222				B-7 3/12		SSV-1- 3/14/1		
	House With Installed Mitigation System		265			226		P	CE N	ID	ND	0.18	ND	
PCE	Tetrachloroethene (concentrations presented in parts per billion by volume (ppbv))		266			230								_
ND	not detected									130	S. Marc	quette S		
IAB	Indoor Air Sample collected from basement of residence.		 			·				B-8 4/12	IAF-8 3/14/12	SSV-1 3/141		
IAF	Indoor Air Sample collected from first floor of residence.		A		AVEN	JE	_	P	CE 0.	.036	ND	2.4	0.46	
SSV	Sub-Slab Vapor Probe Sample	AVE.				ġ								MADISON KIPP CORPORATION AND
	PCE concentration exceeds the Wisconsin vapor action level	LER A				EBLVD								NEIGHBORING PROPERTIES
	for residential indoor air (6 ppbv) or the calculated screening level for residential sub-slab vapor (60 ppbv).		I			 ELMSIDE							I	SUMMARY OF VAPOR SAMPLING
Note:	None of the indoor air or sub-slab vapor samples collected	~				ELN								PCE ANALYTICAL RESULTS SPRING 2012
	during the Spring 2012 monitoring event contained concentrations in exceedance of the Wisconsin vapor action levels or calculated screening levels.												-(N)-	ARCADIS FIGURE 1

Soil Gas Sampling Using Single Ports

I. Scope and Application

This document describes the procedures for installing semi-permanent or permanent single soil-gas ports and collecting soil-gas samples. Samples are collected for the analysis of volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method TO-15 (TO-15). Method TO-15 uses a 1-liter, 3-liter of 6-liter SUMMA® passivated stainless steel canister. An evacuated SUMMA canister (less than 28 inches of mercury [Hg]) will provide a recoverable whole-gas sample of approximately 5 liters when allowed to fill to a vacuum of 6 inches of Hg. The whole-air sample is then analyzed for VOCs using a quadrupole or ion-trap gas chromatograph/mass spectrometer (GS/MS) system to provide compound detection limits of 0.5 parts per billion volume (ppbv). Optionally, the whole air sample can also be analyzed for permanent gasses such as oxygen and carbon dioxide.

The following sections list the necessary equipment and provide detailed instructions for the installation of semi-permanent or permanent single soil-gas ports (using direct-push technology or a hollow stem auger) and the collection of soil-gas samples for VOC analysis.

II. Personnel Qualifications

Field sampling personnel will have current health and safety training, including 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training. Site supervisor training, site-specific training, first-aid, and cardiopulmonary resuscitation (CPR), may be appropriate at some sites. Field sampling personnel will be well versed in the relevant standard operating procedures (SOPs) and possess the required skills and experience necessary to successfully complete the desired field work. Personnel responsible for leading soil-gas sample collection activities must have previous soil-gas sampling experience.

III. Health and Safety Considerations

All sampling personnel should review the appropriate health and safety plan (HASP) and job safety analysis (JSA) prior to beginning work to be aware of all potential hazards associated with the job site and the specific installation. Field sampling equipment must be carefully handled to minimize the potential for injury and the

spread of hazardous substances. For vapor port installation, drilling with a direct-push drilling rig or hollow stem auger rig should be done only by personnel with prior experience using such of equipment.

IV. Equipment List

The equipment required to install single soil vapor ports is presented below:

- Appropriate personal protective equipment (PPE; as required by the HASP and JSA);
- Appropriate drill rig to reach necessary sample depth (hollow stem auger, direct-push rig, etc)
 - Hollow stem auger rig with interconnecting augers. The inner diameter of typical augers ranges from 2.25-inches to 7.75-inches.
 - Direct-push rig (e.g., -Geoprobe) equipped with interconnecting 4-foot lengths of steel drive rods (2.25-inch-diameter, or 3.25-inch diameter).
- 1/4-inch outside diameter (OD) x 1/8-inch inside diameter (ID) tubing (Teflon, Teflon lined, or nylon). Note that Nylaflow tubing has a somewhat higher background level of BTEX and much poorer recovery of trichlorobenzene and naphthalene then Teflon, so it should not be used on site where these compounds are a concern (Hayes, 2006)
- Stainless steel sample screens with sacrificial point (one per sample depth to weight sample screen, available from Geoprobe). Typically 6" long for sized for 1/4-inch OD tubing.
- Stainless steel, or Teflon ball valve or needle valve (one per sample depth to match sample tubing) for sample line termination.
- Commercially available clean sand filter pack or glass beads having a grain size larger than 0.0057-inch (pore diameter of screen)
- Granular and powdered bentonite (Benseal[®], Volclay[®] Crumbles, or equivalent)
- Down hole measuring device

- Distilled or Deionized water for hydration of bentonite
- Plastic or aluminum tags for permanently labeling port with sample depth, and port identification number. It is not recommended to write on or affix adhesive tape to tubing as these methods fail over time.
- Well cover for permanent installation, This should be a traffic rated road box for exterior installations or an appropriate clean-out cover for interior installations.
- Photoionization Detector (PID) (with a lamp of 10.6 eV).

The equipment required for soil-gas sample collection from single ports is presented below:

- 1,3, or 6 liter stainless steel SUMMA® canisters (order at least one extra, if feasible) (batch certified canisters or individual certified canisters as required by the project)
- Flow controllers with in-line particulate filters and vacuum gauges; flow controllers are pre-calibrated to specified sample duration (e.g., 30 minutes, 8 hours, 24 hours) or flow rate (e.g., 200 milliliters per minute [mL/min]); confirm with the laboratory that the flow controller comes with an in-line particulate filter and pressure gauge (order at least one extra, if feasible). Flow rate should be selected based on expected soil type (see below)
- Decontaminated stainless steel1/4-inch Swagelok (or equivalent) fittings (e.g., nuts, ferrules and backers)
- Decontaminated stainless steel Swagelok or comparable "T" fitting and needle valve for isolation of purge pump.
- Stainless steel or brass "T" fitting (if collecting duplicate [i.e., split] samples).
 Swage-lok or comparable
- Portable vacuum pump capable of producing very low flow rates (e.g., 100 to 200 mL/min) with vacuum gauge. Purging flow rate should also be selected based on expected soil type (see below).

- Rotameter or an electric flow sensor if vacuum pump does not have an accurate flow gauge (Bios DryCal or equivalent).
- Tracer gas testing supplies if applicable (refer to tracer SOP)
- Photoionization Detector (PID) (with a lamp of 10.6 eV)
- Appropriate-sized open-end wrench (typically 9/16-inch, 1/2-inch, and 3/4-inch)
- Down hole measuring device (e.g., water level probe, tape measure)
- · Portable weather meter, if appropriate
- Chain-of-custody (COC) forms
- · Sample collection logs (attached)
- · Field Book

V. Cautions

The following cautions and field tips should be reviewed and considered prior to installing or collecting a single soil-gas sample.

- When drilling to install sampling ports, be mindful of utilities that may be in the area. Follow utility location procedure. If the driller is concerned about a particular location, consult the project manager about moving it to another location. Do not hesitate to use Stop Work Authority; if something doesn't seem right stop and remedy the situation.
- Sampling personnel should not handle hazardous substances (such as gasoline), permanent marking pens (sharpies), wear/apply fragrances, or smoke cigarettes/cigars before and/or during the sampling event.
- Ensure that the flow controller is pre-calibrated to the proper sample collection duration (confirm with laboratory). Sample integrity can be compromised if sample collection is extended to the point that the canister reaches atmospheric pressure. Sample integrity is maintained if sample collection is terminated prior to the target duration and a measurable vacuum (e.g., 3-7–

inches Hg) remains in the canister when sample collection is terminated. Do not let sample canister reach atmospheric pressure (e.g., 0-inches Hg).

- When introducing granular bentonite to the boring, the material should be introduced slowly and hydrated properly. Consult the bentonite manufacturer's instructions on the bag to determine the proper amount of to be used. When hydrated properly bentonite forms a thick clay mass that remains moist. The hydration step is crucial in the installation process and if not done properly the integrity of the bentonite seal can be compromised.
- Using prehydrated bentonite is best and should be discussed with drilling subcontractor.
- The purge flow rate of 100 ml/min should be suitable for a variety of silt and sand conditions but will not be achievable in some clays without excessive vacuum. Thus lower flow rates may be necessary in clay. A low vacuum (<10" of mercury) should be maintained. Record the measured flow rate and vacuum pressure during sample collection.

The cutoff value for vacuum differs in the literature from 10" of water column (ITRC 2007) to 136" of water column or 10" of mercury (http://www.dtsc.ca.gov/lawsregspolicies/policies/SiteCleanup/upload/SMBR _ADV_activesoilgasinvst.pdf). A detailed discussion of the achievable flow rates in various permeability materials can be found in Nicholson 2007. Related issues of contaminant partitioning are summarized in ASTM D5314-92. Passive sampling approaches can be considered as an alternative for clay soils although most passive methods for soil gas do not yield a quantitative concentration in soil gas.

- It is important to record the canister pressure, start and stop times and ID on a proper field sampling form. You should observe and record the time/pressure at a mid-point in the sample duration. It is a good practice to lightly tap the pressure gauge with your finger before reading it to make sure it isn't stuck.
- Ensure that there is still measureable vacuum in the SUMMA[®] after sampling.
 Sometimes the gauges sent from labs have offset errors, or they stick.
- When sampling carefully consider elevation. If your site is over 2,000' above sea level or the difference in elevation between your site and your lab is

more than 2,000' then pressure effects will be significant. If you take your samples at a high elevation they will contain less air for a given ending pressure reading. High elevation samples analyzed at low elevation will result in more dilution at the lab, which could affect reporting limits. Conversely low elevation samples when received at high elevation may appear to not have much vacuum left in them. http://www.uigi.com/Atmos_pressure.html.

- If possible, have equipment shipped two or three days before the sampling date so that all materials can be checked. Order replacements if needed.
- Requesting extra canisters from the laboratory should also be considered to ensure that you have enough equipment on site in case of an equipment failure.
- Soil-gas sampling should not proceed within 5 days following a significant rain event (1/2-inch of rainfall or more). Exceptions to this requirement may be appropriate depending on site climatic conditions, soil gas point depth and soil drainage characteristics. However since this requirement is frequently contained in regulatory documents, any exception to this requirement must be discussed with client and/or regulatory representatives. ITRC (2007) discussed the conditions when this requirement may not be necessary: "Infiltration from rainfall can potentially impact soil gas concentrations by displacing the soil gas, dissolving VOCs, and by creating a "cap" above the soil gas. In many settings, infiltration from large storms penetrates into only the uppermost vadose zone. In general, soil gas samples collected at depths greater than about 3–5 feet bgs or under foundations or areas with surface cover are unlikely to be significantly affected. Soil gas samples collected closer to the surface (<3 feet) with no surface cover may be affected. If the moisture has penetrated to the sampling zone, it typically can be recognized by difficulty in collecting soil gas samples."

VI. Procedure

Single Soil-Gas Monitoring Point Installation

The procedure used to install semi-permanent or permanent single soil-gas ports will vary based upon the method of boring installation. In some situations a temporary well casing may need to be installed to keep the down hole formation from collapsing

during port installation. The following steps will detail installing soil-gas ports through a temporary well casing. These following steps should be discussed with the drilling subcontractor and altered based on the methods chosen for a given project.

- 1. Advance boring to bottom of deepest sampling interval and install a temporary well casing, if necessary. Care should be taken to ensure that the terminal depth of the boring does not reach groundwater or the capillary fringe. Soil-gas probes should not be installed in groundwater or the capillary fringe. Moisture conditions and/or other observations (such as depth to water in nearby monitoring wells) should be recorded on the soil-gas collection log, as indicated.
- 2. Cut a length of 1/4-inch tubing slightly longer (e.g., 4 to 5 feet) than the collection depth. Attach a stainless steel sample screen and sacrificial point to the tubing and lower the screen and attached tubing through the boring.
- 3. Assure that the sample screen has reached the bottom of the boring and record this depth.
- 4. Begin simultaneously filling in the area around the sample screen with sand filter pack and retracting the temporary well casing. The casing should be lowered back down onto the sand every few inches to compact the sand around the screen. Sand should be introduced 3-inches below the screen, to cover the 6-inch sample screen and extend 3-inches inches above the screen for a total of 12 inches of sand. Closely monitor the amount of sand added to the borehole with a tape measure or water level probe.
- 5. With the proper sand pack in place begin slowly introducing 6-inches of dry granular bentonite into the boring. This dry Bentonite will prevent water from entering the sand filter pack during hydration.
- 6. A slurry of hydrated bentonite should be placed above the dry granular bentonite to the ground surface.
- 7. Properly label the sample tubing with a permanent label to designate the sample number and screen depth.
- 8. Affix a Swagelok fitting and valve to the end of the tubing.
- 9. With all semi-permanent or permanent single ports installed and labeled, a well cover may be installed.

- a. For permanent installations, the well cover should be rated for whatever type of traffic it may encounter in the future. For interior installations a brass clean-out cover available from a plumbing supply store may provide adequate protection. For exterior installations in high traffic areas a heavy duty groundwater well cover may be appropriate.
- b. For a semi-permanent installation, a well cover is generally not necessary as the tubing will be removed within several days.
- 10. All soil-gas points should be allowed to sit and equilibrate for a minimum of 24hours before proceeding to soil-gas sample collection.

Soil-Gas Sample Collection

The following steps should be used to collect a soil-gas sample from each of the single probes installed using the above procedure.

- 1. Record the following information on the sample log, if appropriate (contact the local airport or other suitable information source [e.g., site-specific measurements, weatherunderground.com] to obtain the information):
 - a. wind speed and direction;
 - b. ambient temperature;
 - c. barometric pressure; and
 - d. relative humidity.
- 2. Assemble the sample train by removing the cap from the SUMMA canister and connecting the Swagelok T-fitting to the can using a short length of 1/4-inch OD Teflon tubing. The flow controller with in-line particulate filter and vacuum gauge is then attached to the T-fitting. The Swagelok (or similar) two-way valve is connected to the free end of the T-fitting using a short length of ¼-inch OD Teflon tubing (precleaned stainless steel tubing could also be used).
- When collecting duplicate or other quality assurance/quality control (QA/QC) samples as required by applicable regulations and guidance, couple two SUMMA canisters using stainless steel Swagelok duplicate sample T-fitting

supplied by the laboratory. Attach flow controller with in-line particulate filter and vacuum gauge to duplicate sample T-fitting provided by the laboratory.

- 4. Attach Teflon sample tubing to the flow controller using Swagelok fittings.
- 5. Remove the flush Swagelok cap from the sample port and install a Swagelok nut, ferrules, and sample tubing into the sub-slab port.
- 6. Connect the two-way valve and the portable purge pump using a length of Teflon sample tubing.
- 7. Record on the sample log and COC form the flow controller number with the appropriate SUMMA® canister number.
 - a. Perform a leak-down-test by replacing the nut which secures sample tubing with the cap from the canister or closing the valve on the sample port. This will create a closed system. Open the canister valve and quickly close it; the vacuum should increase approaching 30" Hg. If there are no leaks in the system this vacuum should be held. If vacuum holds proceed with sample collection; if not attempt to rectify the situation by tightening fittings.
- 8. The seal around the soil-gas sampling port and the numerous connections comprising the sampling train will be evaluated for leaks using helium as a tracer gas. The helium tracer gas will be administered according to the methods established in the appropriate guidance documents and SOP: Administering Tracer Gas.
- 9. Open the two-way valve and purge the soil-gas sampling port and tubing with the portable sampling pump. Purge approximately three volumes of air from the soil-gas sampling port and sampling line using a flow rate of 200 mL/min. Purge volume is calculated by the following equation "purge volume = 3 x Pi x inner radius of tubing² x length of tubing." Purge air should be vented away from personnel and sampling equipment, a length of tubing or Tedlar bag can be used for this purpose. Measure organic vapor levels and tracer gas within the Tedlar bag, as appropriate.
- 10. Close the two-way valve to isolate the purge pump.

11. Open the SUMMA® canister valve to initiate sample collection. Record on the sample log (attached) the time sampling began and the canister pressure.

If the initial vacuum pressure registers less than -25 inches of Hg, then the SUMMA® canister is not appropriate for use and another canister should be used.

- 12. Take a photograph of the SUMMA® canister and surrounding area unless prohibited by the property owner.
- 13. Check the SUMMA canister pressure approximately half way through the sample duration and note progress on sample logs.

Termination of Sample Collection

- 1. Arrive at the SUMMA® canister location at least 1-2 hours prior to the end of the required sampling interval (e.g., 8, 24-hours).
- 2. Record the final vacuum pressure. Stop collecting the sample by closing the SUMMA® canister valves. The canister should have a minimum amount of vacuum (approximately 6 inches of Hg or slightly greater).
- 3. Record the date and time of valve closing on the sample log and COC form.
- 4. Close the valve on the soil-gas sample tubing or replace Swagelok cap.
- 5. Once the sample has been collected, be sure the well cover (if applicable) is properly re-installed and secured.
- 6. Remove the particulate filters and flow controllers from the SUMMA® canisters, re-install the brass plugs on the canister fittings, and tighten with the appropriate wrench.
- 7. Package the canisters and flow controllers in the shipping container supplied by the laboratory for return shipment to the laboratory. The SUMMA® canisters should <u>not</u> be preserved with ice or refrigeration during shipment.
- 8. Complete the appropriate forms and sample labels as directed by the laboratory (e.g., affix card with a string).

 Complete the COC form and place the requisite copies in a shipping container. Close the shipping container and affix a custody seal to the container closure. Ship the container to the laboratory via overnight carrier (e.g., Federal Express) for analysis.

VII. Soil-Gas Monitoring Point Abandonment

If the single soil-gas ports were installed in a semi-permanent manner, and the soilgas samples have been collected, the soil-gas monitoring points will be abandoned by pulling up the sample tubing. Since the boring is filled with bentonite and sand, no additional abandonment steps are necessary. Ensure that the boring location and surrounding area are returned to as close to their original appearance as possible.

VIII. Waste Management

The waste materials generated by these activities should be minimal. Personal protective equipment, such as gloves and other disposable equipment (i.e., tubing) should be collected by field personnel for proper disposal. Any soils brought up from the borehole should be disposed of in a manner consistent with the project workplan.

IX. Data Recording and Management

Measurements will be recorded on the sample log at the time of measurement with notations of the project name, sample date, sample start and finish time, sample location (e.g., GPS coordinates, distance from permanent structure), canister serial number, flow controller serial number, initial vacuum reading, and final pressure reading. Field sampling logs and COC records will be transmitted to the Project Manager.

X. Quality Assurance

Duplicate samples should be collected in the field as a quality assurance step. Generally, duplicates are taken of 10% of samples, but project specific requirements should take precedence.

Soil-gas sample analysis will generally be performed using USEPA TO-15 methodology or a project specific constituent list. Method TO-15 uses a quadrupole or ion-trap GC/MS with a capillary column to provide optimum detection limits (typically 0.5-ppbv for most VOCs). A trip blank sample will accompany each shipment of soilgas samples to the laboratory for analysis. Trip blanks assess potential sample contamination resulting from the transportation and storing of samples.

Duplicate soil gas samples should be collected via a split sample train, allowing the primary and duplicate sample to be collected from the soil-gas probe simultaneously.

XI. References

- ASTM "Standard Guide for Soil Gas Monitoring in the Vadose Zone", D5314-92.
- ITRC "Vapor Intrusion Pathway: A Practical Guide", January 2007, Appendix F: "regulators Checklist for Reviewing Soil Gas Data"
- New York State Department of Health (NYSDOH). 2005. DRAFT "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" February 23, 2005.
- Nicholson, P, D. Bertrand and T. McAlary. "Soil Gas Sampling in Low-Permeability Materials" Presented at AWMA Specialty Conference on Vapor Intrusion, Providence RI, Sept 200
- Hayes, H. C., D. J. Benton and N. Khan "Impact of Sampling Media on Soil Gas Measurements" Presented with short paper at AWMA Vapor Intrusion Conference, January2006, Philadelphia, PA.

Madison Kip	p Corporation		lab Soil Vapor Collection Log
		Sample ID:	
Client:		Boring Equipment:	
Project:		Sealant:	
Location:		Tubing Information:	
Project #:		Miscellaneous Equipment:	
Samplers:		Subcontractor:	
		Equipment:	
Sampling Depth:		Moisture Content of Sampling Zone:	
Time and Date of Installation:		Approximate Purge Volume:	

Instrument Readings:

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppm)

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1 L	6 L
Canister ID:		
Flow		
Controller ID:		
Notes:		

Tracer Test Information (if applicable):

Initial Helium		
Shroud:		
Final Helium		
Shroud:		
Tracer Test	Yes	No
Passed:	165	NO
Notes:		

General Observations/Notes:

Approximating One-Well Volume (for purging):

When using $1\frac{1}{2}$ -inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of $\frac{1}{2}$ -inch tubing will have a volume of approximately 10 mL.

Indoor Air or Ambient Air Sampling and Analysis Using USEPA Method TO-15

I. Scope and Application

This standard operating procedure (SOP) describes the procedures to collect indoor air or ambient air samples for the analysis of volatile organic compounds (VOCs) using United States Environmental Protection Agency (USEPA) Method TO-15 (TO-15). The TO-15 method uses a 6-liter SUMMA® passivated stainless steel canister. An evacuated SUMMA® canister (<28 inches of mercury [Hg]) will provide a recoverable whole-gas sample of approximately 5 liters when allowed to fill to a vacuum of 6 inches of Hg. The whole-air sample is then analyzed for VOCs using a quadrupole or ion-trap gas chromatograph/mass spectrometer (GS/MS) system to provide compound detection limits of 0.5 parts per billion volume (ppbv).

The following sections list the necessary equipment and provide detailed instructions for placing the sampling device and collecting indoor air samples for VOC analysis.

II. Personnel Qualifications

Field sampling personnel will have current health and safety training, including 40-hour HAZWOPER training, site supervisor training, site-specific training, first aid, and cardiopulmonary resuscitation (CPR), as needed. Field sampling personnel will be well versed in the relevant SOPs and possess the required skills and experience necessary to successfully complete the desired field work. Personnel responsible for leading indoor air sample collection activities must have previous indoor air sampling experience.

III. Health and Safety Considerations

All sampling personnel should review the appropriate health and safety plan (HASP) and job safety analysis (JSA) prior to beginning work to be aware of all potential hazards associated with the job site and the specific task. The following are examples of hazards that are often encountered in conducting indoor air sampling:

- In crawl spaces, hazards often include low head room, limited light, poisonous insects, venomous snakes, and sharp debris.
- In residential buildings and neighborhoods unfamiliar dogs can pose a hazard. Even though proper permission for sampling may have been secured, it is still possible to encounter persons suspicious of or hostile to the sampling team.
- In occupied industrial buildings be aware of the physical hazards of ongoing industrial processes. Examples include moving forklifts and equipment pits.

IV. Equipment List

The equipment required for indoor air sample collection is presented below:

- 6-liter, stainless steel SUMMA® canisters (order at least one extra, if feasible);
- Flow controllers with in-line particulate filters and vacuum gauges (flow controllers are pre-calibrated by the laboratory to a specified sample duration [e.g., 8-hour]). Confirm with lab that flow controller is equipped with an in-line particulate filter and pressure gauge (order an extra set for each extra SUMMA® canister, if feasible);
- Appropriate-sized open-end wrenches (typically 9/16-inch);
- Chain-of-custody (COC) form;
- Building survey and product inventory form;
- Portable photoionization detector (PID) (for use identifying potential background sources during building survey described below);
- Sample collection log (attached);
- Camera if photography is permitted at sampling locations;
- Portable weather meter, if appropriate;
- Box, chair, tripod, or similar to hold canister above the ground surface; and
- Teflon sample tubing may be used to sample abnormal situations (i.e., sumps, where canisters must be hidden, etc.). In these situations ¼-inch Swagelok fittings or other methods may be appropriate to affix tubing to canister. Staff should check this before heading out into field.

V. Cautions

Care must be taken to minimize the potential for introducing interferences during the sampling event. As such, keep ambient air canisters away from heavy pedestrian traffic areas (e.g., main entranceways, walkways) if possible. If the canisters are not to be overseen for the entire sample duration, precautions should be taken to maintain the security of the sample (e.g., do not place in areas regularly accessed by the public, fasten the sampling device to a secure object using lock and chain, label the canister

to indicate it is part of a scientific project, notify local authorities, place the canister in secure housing that does not disrupt the integrity/validity of the sampling event). Sampling personnel should not handle hazardous substances (such as gasoline), permanent marking pens (sharpies), wear/apply fragrances, or smoke cigarettes before and/or during the sampling event.

Ensure that the flow controller is pre-calibrated to the proper sample collection duration (confirm with laboratory). Sample integrity can be compromised if sample collection is extended to the point that the canister reaches atmospheric pressure. Sample integrity is maintained if sample collection is terminated prior to the target duration and a measurable vacuum (e.g., 5–inches Hg) remains in the canister when sample collection is terminated.

VI. Procedure

Initial Building Survey for Indoor Air Samples (if applicable to project)

- 1. Complete the appropriate building survey form and product inventory form (e.g., state-specific form, USEPA form), as necessary in advance of sample collection.
- 2. Survey the area for the apparent presence of items or materials that may potentially produce or emit constituents of concern and interfere with analytical laboratory analysis of the collected sample. Record relevant information on survey form and document with photographs.
- 3. Record date, time, location, and other relevant notes on the sampling form.
- 4. Items or materials that contain constituents of concern and/or exhibit elevated PID readings shall be considered probable sources of VOCs. Request approval of the owner or occupant to have these items removed to a structure not attached to the target structure at least 48 hours prior to sampling if possible.
- 5. Set a date and time with the owner or occupant to return for placement of SUMMA® canisters.

Preparation of SUMMA®-Type Canister and Collection of Sample

- 1. Record the following information on the sampling form (use a hand-held weather meter, contact the local airport or other suitable information source [e.g., weatherunderground.com] to obtain the following information):
 - ambient temperature;

- barometric pressure;
- wind speed; and
- relative humidity.
- 2. Choose the sample location(s) in accordance with the sampling plan. If a breathing zone sample is required, place the canister on a ladder, tripod, box, or other similar stand to locate the canister orifice 3 to 5 feet above ground or floor surface. If the canister will not be overseen for the entire sampling period, secure the canisters as appropriate (e.g., lock and chain). Canister may be affixed to wall/ceiling support with nylon rope or placed on a stable surface. In general, areas near windows, doors, air supply vents, and/or other potential sources of "drafts" shall be avoided.
- 3. Record SUMMA® canister serial number and flow controller number on the sampling log and chain of custody (COC) form. Assign sample identification on canister ID tag, and record on the sample collection log (Attachment A), and COC form.
- 4. Remove the brass dust cap from the SUMMA® canister. Attach the flow controller with in-line particulate filter and vacuum gauge to the SUMMA® canister with the appropriate-sized wrench. Tighten with fingers first, then gently with the wrench. Use caution not to over tighten fittings.
- 5. Open the SUMMA® canister valve to initiate sample collection. Record the date and local time (24-hour basis) of valve opening on the sample collection log, and COC form. Collection of duplicate samples will include collecting two samples side by side at the same time.
- Record the initial vacuum pressure in the SUMMA® canister on the sample log and COC form. If the initial vacuum pressure registers less than -25 inches of Hg, then the SUMMA® canister is not appropriate for use and another canister should be used.
- 7. Take a photograph of the SUMMA® canister and surrounding area, if possible.
- 8. Check the SUMMA canister approximately half way through the sample duration and note progress on sample logs.

Termination of Sample Collection

- 1. Arrive at the SUMMA® canister location at least 1-2 hours prior to the end of the sampling interval (e.g., 8-hour, 24-hour).
- Stop collecting the sample when the canister vacuum reaches approximately 7 inches of Hg (leaving some vacuum in the canister provides a way to verify if the canister leaks before it reaches the laboratory) or when the desired sample time has elapsed.
- 3. Record the final vacuum pressure. Stop collecting the sample by closing the SUMMA® canister valve. Record the date, local time (24-hour basis) of valve closing on the sample collection log, and COC form.
- 4. Remove the particulate filter and flow controller from the SUMMA® canister, reinstall brass cap on canister fitting, and tighten with wrench.
- Package the canister and flow controller in the shipping container supplied by the laboratory for return shipment to the laboratory. The SUMMA® canister does not require preservation with ice or refrigeration during shipment.
- 6. Complete the appropriate forms and sample labels as directed by the laboratory (e.g., affix card with string).
- 7. Complete COC form and place requisite copies in shipping container. Close shipping container and affix custody seal to container closure. Ship to laboratory via overnight carrier (e.g., Federal Express) for analysis.

VII. Waste Management

No specific waste management procedures are required.

VIII. Data Recording and Management

Notes taken during the initial building survey will be recorded on the sample log, with notations of project name, sample date, sample time, and sample location (e.g., description and GPS coordinates if available) sample start and finish times, canister serial number, flow controller number, initial vacuum reading, and final vacuum reading. Sample logs and COC records will be transmitted to the Task Manager or Project Manager. A building survey form and product inventory form may also be completed for each building within the facility being sampled during each sampling event as applicable.

IX. Quality Assurance

Indoor air or ambient air sample analysis will be performed using USEPA Method TO-15. This method uses a quadrupole or ion-trap GC/MS with a capillary column to provide optimum detection limits. The GC/MS system requires a 1-liter gas sample (which can easily be recovered from a 6-liter canister) to provide a 0.5 ppbv detection limit. The 6-liter canister also provides several additional 1-liter samples in case subsequent re-analyses or dilutions are required. This system also offers the advantage of the GC/MS detector, which confirms the identity of detected compounds by evaluating their mass spectra in either the SCAN or SIM mode.

Duplicate samples should be collected in the field as a quality assurance step. Generally, duplicates are taken of 10% of samples, but project specific requirements should take precedence.

Madison Kip	op Corporation		Air/Ambient Air Collection Log
		Sample ID:	
Client:		Outdoor/Indoor:	
Project:		Sample Intake Height:	
Location:		Tubing Information:	
Project #:		Miscellaneous Equipment:	
Samplers:		Time On/Off:	
Sample Point Location:		Subcontractor:	

Instrument Readings:

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppm)

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1L 6L
Canister ID:	
Flow Controller ID:	
Notes:	

General Observations/Notes:

Administering Helium Tracer Gas for Leak Checks of Soil Gas or Sub-slab Sampling Points

I. Scope and Application

When collecting subsurface vapor samples as part of a vapor intrusion evaluation, a tracer gas serves as a quality assurance/quality control method to verify the integrity of the vapor port seal and the numerous connections comprising the sample train. Without the use of a tracer, verification that a soil vapor sample has not been diluted by ambient or indoor air is difficult.

This standard operating procedure (SOP) focuses on using helium as a tracer gas. However, depending on the nature of the contaminants of concern, other compounds can be used as a tracer including sulfur hexafluoride (SF6), butane and propane (or other gases). In all cases, the protocol for using a tracer gas is consistent and includes the following basic steps: (1) enrich the atmosphere in the immediate vicinity of the sample port where ambient air could enter the sampling train during sampling with the tracer gas; and (2) measure a vapor sample from the sample tubing for the presence of elevated concentrations (> 10%) of the tracer. A plastic pail, bucket, garbage can or even a plastic bag can serve to keep the tracer gas in contact with the port during the testing.

There are two basic approaches to testing for the tracer gas:

- 1. Include the tracer gas in the list of target analytes reported by the laboratory; and/or
- 2. Use a portable monitoring device to analyze a sample of soil vapor for the tracer prior to sampling for the compounds of concern. (Note that tracer gas samples can be collected via syringe, Tedlar bag, etc. They need not be collected in SUMMA® canisters or minicans.)

This SOP focuses on monitoring helium using a portable sampling device, although helium can also be analyzed by the laboratory along with other volatile organic compounds (VOCs). Real-time tracer sampling is generally preferred as the results can be used to confirm the integrity of the port seals prior to formal sample collection.

During the initial stages of a subsurface vapor sampling program, tracer gas samples should be collected at each of the sampling points. If the results of the initial samples indicate that the port seals are adequate, the Project Manager can consider reducing the number of locations at which tracer gas samples are used in future monitoring rounds. At a minimum, at least 5% of the subsequent samples should be supported with tracer gas analyses. When using permanent soil vapor points as part of a long-term monitoring program, the port should be tested prior to the first sampling event. Tracer gas testing of subsequent sampling events may often be reduced or eliminated unless conditions have changed at the site. Soil gas port integrity should certainly be

rechecked with Tracer gas if land clearing/grading activities, freeze thaw cycles, or soil dessication may have occurred. Points should also be rechecked if more than 2 years have elapsed since the last check of that port.

II. Personnel Qualifications

ARCADIS field sampling personnel will have current health and safety training, including 40-hour HAZWOPER training, site supervisor training, site-specific training, first-aid, and cardiopulmonary resuscitation (CPR), as needed. ARCADIS field sampling personnel will be well versed in the relevant SOPs and possess the required skills and experience necessary to successfully complete the desired field work. ARCADIS personnel responsible for leading the tracer gas testing must have previous experience conducting similar tests.

III. Health and Safety Considerations

Field sampling equipment must be carefully handled to minimize the potential for injury and the spread of hazardous substances. All sampling personnel should review the appropriate health and safety plan (HASP) and job safety analysis (JSA) prior to beginning work to be aware of all potential hazards associated with the job site and the specific task. Field staff should review the attachment on safely handling compressed gas cylinders prior to commencing field work.

IV. Equipment List

The equipment required to conduct a helium tracer gas test is presented below:

- Appropriate PPE for site (as required by the Health and Safety Plan)
- Helium (laboratory grade)
- Regulator for helium tank
- Shroud (plastic bucket, garbage can, etc)
 - The size of the shroud should be sufficient to fit over the sample port. It is worth noting that using the smallest shroud possible will miminze the volume of helium needed; this may be important when projects require a large number of helium tracer tests.
 - The shroud will need to have three small holes in it. These holes will include one on the top (to accommodate the sample tubing), and two

on the side (one for the helium detector probe, and one for the helium line).

- The shroud should ideally enclose the sample port and as much as possible of the sampling train.
- Helium detector capable of measuring from 1 100% (Dielectric MGD-2002, Mark Model 9522, or equivalent)
- Tedlar bags
- Seal material for shroud (rubber gasket, modeling clay, bentonite, etc) to keep helium levels in shroud high in windy conditions. Although the sealing material is not in direct contact with the sample if leakage does not occur, sealing materials with high levels of VOC emissions should be avoided, since they could contaminate a sample if a leak occurs.
- Sample logs
- Field notebook

V. Cautions

Helium is an asphyxiant! Be cautious with its use indoors! Never release large volumes of helium within a closed room!

Compressed gas cylinders should be handled with caution; see attachment on the use and storage of compressed gasses before beginning field work.

Care should be taken not to pressurize the shroud while introducing helium. If the shroud is completely air tight and the helium is introduced quickly, the shroud can be over-pressurized and helium can be pushed into the ground. Provide a relief valve or small gap where the helium can escape.

Because minor leakage around the port seal should not materially affect the usability of the soil vapor sampling results, the mere presence of the tracer gas in the sample should not be a cause for alarm. Consequently, portable field monitoring devices with detection limits in the low ppm range are more than adequate for screening samples for the tracer. If high concentrations (> 10%) of tracer gas are observed in a sample, the port seal should be enhanced and fittings within the sampling train should be should be checked and/or tightened to reduce the infiltration of ambient air and the tracer test readministered. If the problem cannot be rectified, a new sample point should be installed or an alternate sampling train used.

VI. Procedure

The procedure used to conduct the helium tracer test should be specific to the shroud being used and the methods of vapor point installation. The helium tracer test can be conducted when using temporary or permanent sampling points and inside or outside a facility. When using the tracer gas within indoor areas you must provide adequate ventilation as helium is an asphyxiant.

- 1. Attach Teflon or nylon (Nylaflow) sample tubing to the sample point. This can be accomplished utilizing a number of different methods depending on the sample install (i.e., most typically Swage-Lok brand compression fittings, but some quick release fittings could also be used etc.).
- 2. Place the shroud over the sample point and tubing.
- 3. Pull the tubing through hole in top of shroud. Seal opening at top of shroud with modeling clay.
- 4. Place weight on top of shroud to help maintain a good seal with the ground.
- 5. Insert helium tubing and helium detector probe into side of shroud. Seal both with modeling clay to prevent leaks.
- 6. Fill shroud with helium. Fill shroud slowly, allowing atmospheric air to escape either by leaving a gap where the shroud meets the ground surface or by providing a release value on the side of the shroud.
- 7. Use the helium detector to monitor helium concentration within the shroud from the lowest hole drilled in the shroud (bottom of the shroud nearest where the sample tubing intersects the ground). Helium should be added until the environment inside the shroud has > 60% helium.
- 8. Purge the sample point through the sample tubing into a Tedlar bag using a hand held sampling pump. The purge rate should at least match the sample collection rate but not exceed 100 ml/min. Test the air in the Tedlar bag for helium using portable helium detector. If the point is free of leaks there should be very low helium in the purge air from the soil. The natural concentration of helium in the atmosphere is 0.00052% by volume and there are few if any natural sources of helium to soil gas.
- 9. If > 10% helium is noted in purge air, add more clay or other material to the seal the sample port and repeat the testing procedure. If the seal cannot be fixed, re-install sample point.

- 10. Monitor and record helium level in shroud before, during and after tracer test.
- 11. Monitor and record helium level in purge exhaust.
- 12. At successful completion of tracer test and sample point purging, the soil vapor sample can be collected (if the helium shroud must be removed prior to sample collection be mindful not disturb the sample tubing and any established seals).

VII. Data Recording and Management

Measurements will be recorded on the sample logs at the time of measurement with notations of the project name, sample date, sample start and finish time, sample location, and the helium concentrations in both the shroud and the purge air before, during, and after tracer testing. Any problems encountered should also be recorded in the field notes.

OPERATING PROCEDURE SUB-SLAB SOIL VAPOR SAMPLING

PROBE CONSTRUCTION

Initially, a 3/8-inch hole is drilled through the slab. A 1-inch hole is then advanced to the approximate depth to allow the compression fitting to fit flush with the floor surface.

Components of the soil vapor sampling probes will be made of either brass or stainless steel. Figure 1 shows the construction of the probe. A 1/4-inch tube is placed in a compression fitting, and a cap is placed on the top of the fitting. The fitting is then placed in the drilled hole, and anchored with fast-drying concrete patch.

SAMPLING

A plastic shroud is placed over the sample probe. Weather stripping is taped to the rim at the base of the shroud to provide a tight seal between the shroud and the floor. Additional equipment includes a helium canister, a low-flow air pump and a helium detector (Radiodetection Dielectric Technologies model HDP 9900 is used). New flexible tubing (Teflon) is used for the collection of each sample. Tubing and the valve which penetrate the shroud are securely sealed, to prevent any leakage.

Tubing is attached to the sample probe, using a compression fitting. To provide additional sealant around the probe, modeling clay is packed around the probe, after the tubing has been attached to it. An in-line valve is fitted near the probe, and a three-way valve is attached immediately before the summa canister for "shut in" testing (see below).

Initially, one port on the three-way valve is fitted with a pump and vacuum gage. The valve is closed at the probe and a vacuum pressure of 50 to 100 inches of water is applied to the tubing. The valve at the pump is then closed, and the vacuum pressure is monitored for 1 minute. If the pressure remains stable, the connections in the line are assumed to be tight. If there is a drop in pressure, the fittings are examined and adjusted as necessary, and the test is repeated.

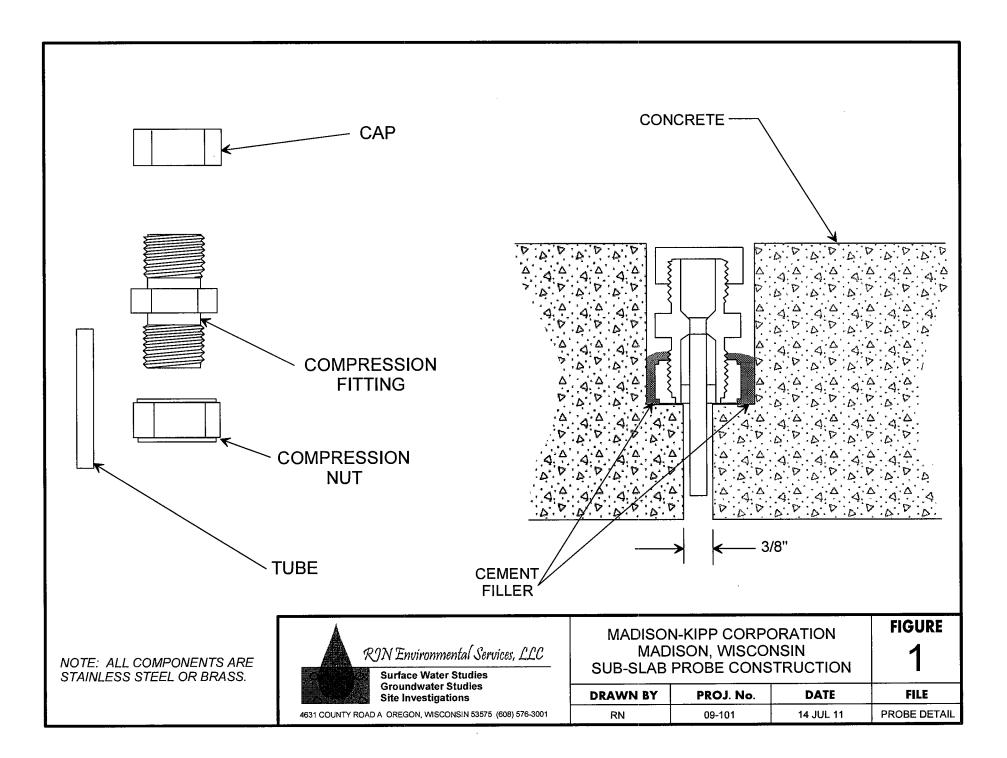
After the shut in test is completed, the probe itself is tested for leaks, using the shroud and helium. One port on the three-way valve is attached to the summa canister, along with a pressure gage and laboratory-supplied flow controller. At this point, the three-way valve is closed to the summa canister.

The pump is then attached to the second port on the three-way valve, and several liters of air are purged. Because the helium detector also detects methane and hydrogen, false readings can occur. Additionally, because it is only calibrated for helium, false background readings can be quite high. Consequently, prior to introducing hydrogen into the shroud, a reading is taken from the probe to approximate the background concentration.

After reading the background concentration, the shroud is flooded with helium. During this process, the valve at the top of the shroud is open, to allow air to escape. After filling the shroud, the valve is closed. Another reading with the helium detector is then taken from the probe. If there is no appreciable increase in helium levels, the sample is collected.

The valve on the canister is open enough to allow a low flow from the probe of 150 to 200 mL/min. An initial vacuum reading is taken at the summa canister. The canister remains attached until air is no longer flowing, and another vacuum reading is taken. The valve on the canister is then closed, and it is disconnected from the sample probe.

After sampling, the tubing is removed from the probe, and the cap is re-attached. Samples will be delivered directly to an approved laboratory. All samples will be delivered on the same day of collection, and will be tracked with chain-of-custody forms.





Madison-Kipp Corporation Post Office Box 8043 Madison, WI 53708-8043 201 Waubesa Street Madison, WI 53704-5728 **Telephone** 608-244-3511 Website www.Madison-Kipp.com

April 20, 2012

Ms. Leslie Bellais 102 S. Marquette Street Madison, WI 53704

RE: Results of Air Testing 102 S. Marquette Street, Madison, WI 53704

Dear Ms. Bellais:

On April 13, 2012, ARCADIS personnel, on behalf of Madison-Kipp, completed sub-slab vapor sampling activities to measure levels of select volatile organic compounds (VOCs) below your home, located at 102 S. Marquette Street in Madison, Wisconsin. This work was completed in cooperation with and with the prior approval of the Wisconsin Department of Natural Resources (WDNR).

As previously presented in a letter to you dated April 3, 2012, the sub-slab samples collected on March 17 were submitted to the laboratory for analysis. However, the laboratory inadvertently cleaned the sample canister prior to analyzing the sample. ARCADIS personnel performed re-sampling of sub-slab vapor at your residence on April 13, 2012. This letter provides a summary of the sub-slab vapor laboratory results from the samples collected on April 13.

Specifically, the sampling was completed to test for the presence of tetrachloroethene (PCE), trichloroethene (TCE), cis- and trans-1,2-dichloroethene, and vinyl chloride. The homes that were sampled in your neighborhood were given a unique sample identification number when submitting the samples to the laboratory to ensure confidentiality. The following samples were collected from your home:

SSV1-1 and SSV2-1 - Sub-slab samples collected on April 13, 2012. The sub-slab samples
were collected from the sample points that were installed in the basement floor of your
home.

Based on the laboratory results (below), only PCE was detected in the sub-slab samples. PCE was not detected in the previously reported indoor air samples. The levels of PCE in the collected samples were below the sub-slab soil gas Residential Action Levels provided by the WDNR. The WDNR Residential Action Level is based on the U.S. Environmental Protection Agency's Residential Air Screening Levels that represent health-protective concentrations an individual can be exposed to for 30 years for 24 hours a day.

Sample ID	Results (part per billion	Residential Action Level
	(ppbv))	(ppbv)
SSV-1-1	0.96	60
SSV-2-1	0.18	60

Copies of the laboratory data and field notes are enclosed for your reference.

Sincerely, • Uu lu CO

Mark Meunier Madison-Kipp Corporation

cc: Michael Schmoller – WDNR Dr. Henry Nehls-Lowe – WDHS Norman Berger, Esq. David A. Crass, Esq.

Attachments: Laboratory Analytical Report Field Notes

INDOOR AIR QUALITY BUILDING SURV	EY
Date: 03/10/12 Project #: VI001239	
Address: 102 Manquett Street	
Madison, WI	
Property Contact: Leslie Bellais	
• /	
Phone: Home: $(i_{03}) \underline{249-756}$ Work: () Cell: ()_	
Building Occupants: Children <13 Children age 13-18 A	dults
Duilding Construction Chorestonistics (Circle annualists description)	
Building Construction Characteristics: (Circle appropriate description)	
Single Family Multiple Family School	Commercial
Ranch 2-FamilyRaised Ranch DuplexColonial # of upSplit Level CondominiumMobile HomeOther (specify)	mus
General Description of Building Construction Materials, especially new ma	
	<u> </u>
LUGOD CONSTRUCTION, UNIC SIDING ON	VER ASPHALT
How many occupied stories does the building have? 1.5	
Has the building been weatherized with any of the following? (Circle all the Insulation Storm Windows) Energy-Efficient Windows	at apply)
Other (specify)	
What type of basement does the building have? (Circle all that apply)	
Full basemen Crawlspace Slab-on-Grade Other (specify)	
Basement Size (ft ²)	
Surveyor's Initials:	Page 1 of 5

A-2

INDOOR AIR QUALITY BUILDING SURVEY

Describe Basement Floor and Walls:
CONCRETE, CEMENT BLOCK
Moisure: Always Dry Always Wet Frequently Wet Sometimes Wet
Is a basement sump present? (YA) Is a sump pump present? (YA) (circle one)
Does the basement have any preferential pathways that might permit soil vapor entry? (Circle all that apply).Visible CracksUnsealed Pipes/Utility ConduitsSump pumps
What type of ground cover surrounds the outside of building? (Circle all that apply) Grass Concrete Asphal Other (specify) Sourtie
Heating and Ventilation System(s) Present:What type of heating system(s) is (are) used in this building? (Circle all that apply)Hot Air CirculationHeat PumpSteam RadiationWood StoveHot Air RadiationUnvented Kerosene heaterElectric BaseboardOther (specify):
What type (s) of fuel(s) are used in this building? (Circle all that apply) Natural Gas Electric Coal Other (specify): Fuel Oil Wood Solar
What type of mechanical ventilation systems are present and/or currently operating in the building? (Circle all that apply) Image: Circle all that apply) Central Air Conditioning Bathroom Fan Kitchen fan Individual Air Conditioning Units Air-to-Air Heat Exchanger Other (specify):
Septic system? Yes / Yes (but not used) No Irrigation/private well? Yes / Yes (but not used) / No
Existing subsurface depressurization (radon) system in place? Yes / No If yes, is it running? Yes / No

Surveyor's Initials:

Page 2 of 5

INDOOR AIR QUALITY BUILDING SURVEY

Sources of Chemical Contaminants:

Which of these items are present in the building? **Check if Present Removed Prior to** Potential Sources Sampling? (Yes / No / NA) Location(s) Paints or paint thinners ι. Gas-powered equipment Gasoline storage cans Cleaning solvents Air fresheners Oven cleaners Carpet/upholstery cleaners Hairspray Nail polish/polish remover Bathroom cleaner Appliance cleaner Furniture/floor polish Moth balls Fuel tank Wood stove Fireplace Perfume/colognes Hobby supplies (e.g., SUPPRECUE solvents, paints, lacquers, glues, photographic darkroom chemicals) Scented trees, potpourri, etc. Other: Other: Other:

Do one or more smokers occupy this building on a regular basis (Y(1)? How often?

Has anybody smoked in the building in the last 48 hours (YAN)

Does the building have an attached garage (Y_N) ? If so, is a car usually parked in the garage (Y/N)?

Do the occupants of the building frequently have their clothes dry-cleaned (Y(N)?

Was there any recent remodeling or painting done in the building (YM)?

Surveyor's Initials:

Page 3 of 5

A-4

INDOOR AIR QUALITY BUILDING SURVEY

Are there any pressed wood products in the building (e.g., hardwood plywood wall paneling, particleboard, fiberboard) (YN)?

Are there any new upholstery, drapes or other textiles in the building (Y(N)?

Have the occupants ever noticed any unusual odors in the building? (Y(1)) If yes, describe odors, location(s), and conditions that seem to affect odors (especially rain, temperature, wind):

Any known spills of a chemical immediately outside or inside the building? (YN)? If yes, describe (location, age, type of chemical, any actions to clean up):

Has the building been treated (inside or outside) with any insecticides/pesticide (V/N)? If so, what chemicals are used and how often are they applied:

LAWN APPLICATIONS (6/4EAR)

Outdoor Sources of Contamination:

Nearby Gasoline Stations (distance and direction):

Surveyor's Initials:

Page 4 of 5

INDOOR AIR QUALITY BUILDING SURVEY

Industrial Stack Emissions (distance and direction):

Automotive emission sources (e.g., highway; bus stop; high-traffic area):

W	eather	Conditions	During	Sampling:
---	--------	------------	--------	-----------

Outside Temperature (°F):____

Prevailing wind speed and direction:

Describe the general weather conditions (e.g., sunny, cloudy, rain):

Precipitation >0.1 inches within 12 hours preceding the sampling event (Y/N)? ______ General Comments: ______

Is there any other information about the structural features of this building, the habits of its occupants or potential sources of chemical contaminants to the indoor air that may be of importance in facilitating the evaluation of the indoor air quality of the building?

The responses documented on this survey are true, accurate and complete to the best of my knowledge and ability.

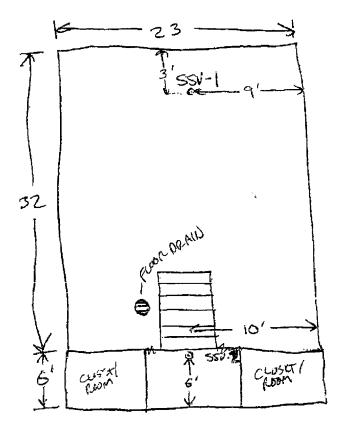
TIM ALESS
Name of Surveyor
- K_
Signature
3/10/12

Date

Surveyor's Initials:

Page 5 of 5

A-6



CLIPDEN ULTRA HIGE WHITE LIGHTTICING LINDOWN/POOR CALL FLOOR AND WALL PRIMER RD ZINNSER BRISH & BRISTLE WASH KILZ ORIGINAL PRIMER WO-40 PAINT THINNER MITCH BOY CELLING PAINT ED DWIGAN'S OUL PAINT (EXTREMO RAID ANT KILLER

SANI-DRY XP BASEMENT AIR SYSTEM DEHUMIDIFIER

Madison Kipp Corporation		Soil Vapor Sample Collection Log		
		Sample ID:	IAG-1	
Çlient	MADISON KUPP	Boring Equipment:		
Project	MADISON KUP?	Sealant:		
Location	MADISON WE	Tubing information:		
Project #:	WJ-001283.119	Miscellaneous Equipment:		
Sampters:	TALAW	Subcontractor:		
Sample Point Location	EAST SIDE OF BASEMENT	Equipment:		
Sampling Depth:		Molsture Content:		
Time and Date of installation;		Approximate Purge Volume:		

Datte	Tine	Canister Vecuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/16/12	833	-79.5					
317172	810	-5			ļ		

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1L 2.7L (6L)
Canister ID:	4369
Flow Controller ID:	40573
Notes:	

Tracer Test Information (if applicable):

۰.

٠.

Initial Helium Shroud:		
Final Helium Shroud:		
Tracer Test Passed:	Yes	No
Notes:		

General Observations/Notes:

COLLISCE OUP - 3	1NITALUACE = 29.3	
- anne part	FURAL VACE -5	
	CANGTER # 4361	
	PLONCONMOLE 40544	

Approximating One-Well Volume (for purging):

When using 1¼-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

Madiso	Madison Kipp Corporation		Soil Vapor Sample Collection Log		
			TAF-1		
Çilent	MADISON KIPP	Boring Equipment			
Project	MADISON RIPP	Sealant:			
Lecation:	MADISON WIT	Tubing Information:			
Project #:	WI00283.1,9	Miscelläneous Equipment:			
Samplers:	TRAW	Subcontractor:			
Sample Point Location:		Equipment:			
Sampling Depth;		Moisture Content:			
Time and Date of Installation:		Approximate Purge Volume:			

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Huspidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PfD (ppb)
3/6/12	835	-30					
3/17/12	10000	-5			L		
						L	L

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1L 2.7L (BL)
Canister ID:	5562
Flow Controller	40414
Notes:	

Tracer Test Information (if applicable):

Initial Helium Shroud:		
Final Hellum Shroud:		
Tracer Test Passed:	Yes	No
Notes:		

General Observations/Notes:

Approximating One-Well Volume (for purging):

When using 1%-lnch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.

Madison Kipp Corporation		1	Vapor Sample
		Sample ID:	55V-1-1
Client:	MADISON KIPD	Boring Equipment:	
Project:	MADISON KLOP	Sealaní:	
Location:	MADISON CIT-	Tubing Information:	
Project #:	ME001283.1.9	Miscellaneous Equipment:	
Samplers:	TA	Subcontractor;	
Sample Point Location:	JUB-SLAS	Equipment:	······································
Sampling Depth:	SUB-SUNS	Moisture Content:	
Time and Date of Installation:	·	Approximate Purge Volume:	

7

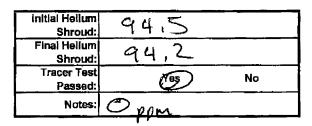
Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
41312	1547	7-30		·			
415/12	1645	-4.5					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one): 1L 2.7L (BL) Canister ID: 33993 Flow Controller ID: 400 Notes:

Tracer Test Information (if applicable):



General Observations/Notes:

Approximating One-Well Volume (for purging):

When using 1%-Inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.

Madiso	Madison Kipp Corporation		Vapor Sample ollection Log
		Sample ID:	551-2-1
Cilent:	MAPISON KIPP	Boring Equipment:	
Project:	MADISON KIPP	Sealant:	
Location:	MNOLSON WI	Tubing Information:	
Project #:	WI001283.1.9	Miscellaneous Equipment:	
Samplers:	TA	Subcontractor:	
Sample Point Location:	SUB-SLAB	Equipment:	·····
Sampling Depth:	SUB-SLAB SUB-SLAD	Moisture Content:	
Time and Date of Installation:		Approximate Purge Volume:	

.

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Spead (mph)	Barometric Pressure (Inches of Hg)	PID (ppb)
4/13/12	1530	- 29,5					
4/13/12	1622	-3,5					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1L 2.7L
Canister ID:	22107
Flow Controller ID:	245
Notes:	

Tracer Test Information (if applicable):

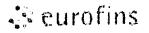
Initial Helium Shroud:	94.7	
Final Helium Shroud:	93.8	
Tracer Test Passed:	Yes	No
Notes:	135000m	

General Observations/Notes:

NUP 5 CONTIN	CANISTRE IDHE	37118
	FOW CONTOU #	6713
	INITIAL Ha=	7-30
	FINAL "ILE=	-7_
······································		

Approximating One-Well Volume (for purging):

When using 1%-inch "Dummy Point" and a 6-inch sampling Interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.



An Toxics

4/1/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203430A

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/20/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

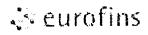
Scielt

Ausha Scott Project Manager

Energies Weiterseiten Be-

125 (m. 436 and 5200 (base) b. Edispon (16 seconda) La organistator griscies Leon and Production

Page 1 of 11



Ar Raise

WORK ORDER #: 1203430A

Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	P.O. #	W1001283.0001.00009
FAX:	317-231-6514	PROJECT #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED: DATE COMPLETED:	03/20/2012 04/01/2012	CONTACT:	Ausha Scott

FRACTION #	NAME	TEST	RECEIPT <u>VAC./PRES.</u>	FINAL <u>PRESSURE</u>
01A	IAB-1	Modified TO-15 SIM	5.5 "Hg	5 psi
02A	IAF-1	Modified TO-15 SIM	5.5 "Hg	5 psi
03A	Lab Blank	Modified TO-15 SIM	NA	NA
04A	CCV	Modified TO-15 SIM	NA	NA
05A	LCS	Modified TO-15 SIM	NA	NA
05AA	LCSD	Modified TO-15 SIM	NA	NA

CERTIFIED BY:

and the start of the source and and

DATE: 04/01/12

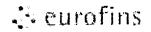
Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

Page 2 of 11



जेवा नेवस्तर भ

LABORATORY NARRATIVE Modified TO-15 SIM Arcadis U.S., Inc. Workorder# 1203430A

Two 6 Liter Summa Canister (SIM Certified) samples were received on March 20, 2012. 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<br compounds allowed out to < 40% RSD	Project specific; default criteria is =30% RSD with 10% of compounds allowed out to < 40% RSD</td
Daily Calibration	+- 30% Difference	Project specific; default criteria is $ Differencewith 10% of compounds allowed out up to .; flagand 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

There were no receiving discrepancies.

Analytical Notes

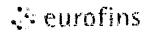
There were no analytical discrepancies.

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 and/or LCS.
- N The identification is based on presumptive evidence.



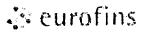
An Appres

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

rl-File was requantified for the purpose of reissue



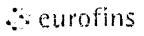
AN TOXICS.

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

Client Sample ID: IAB-1

Lab ID#: 1203430A-01A No Detections Were Found.

Client Sample ID: IAF-1 Lab ID#: 1203430A-02A No Detections Were Found.



A SAMES

Client Sample ID: IAB-1 Lab ID#: 1203430A-01A MODIFIED EPA METHOD TO-15 GC/MS SIM

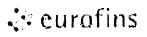
٦

File Name: Dil. Factor:	e032213sim 1.64	Date of Collection: 3/16/12 8:33:00 AM Date of Analysis: <u>3/22/12</u> 06:33 PM			
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Llmit (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	Not Detected	0.18	Not Detected	
Tetrachloroethene	0.033	Not Detected	0.22	Not Detected	
trans-1,2-Dichloroethene	0.16	Not Detected	0.65	Not Detected	

Container Type: 6 Liter Summa Canister (SIM CertIfied)

	(2	Method
Surrogates	%Recovery	Limits
1.2-Dichloroethane-d4	96	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	106	70-130

.



Surfoxues.

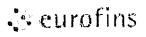
Client Sample ID: IAF-1 Lab ID#: 1203430A-02A <u>MODIFIED EPA METHOD TO-15 GC/MS SIM</u>

٦

File Name: Dil. Factor:	e032214sim 1.64	Date of Collection: 3/16/12 8:35:00 AM Date of Analysis: 3/22/12 07:16 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	Not Detected	0.18	Not Detected	
Tetrachloroethene	0.033	Not Detected	0.22	Not Detected	
trans-1,2-Dichloroethene	0.16	Not Detected	0.65	Not Detected	

Container Type: 6 Liter Summa Canister (SIM Certified)

	(,	Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	. 96	70-130
4-Bromofluorobenzene	105	70-130



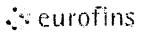
Ли Томсь

Client Sample ID: Lab Blank Lab ID#: 1203430A-03A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: Dil. Factor:	e032206sim 1.00	Date of Collection: NA Date of Analysis: 3/22/12 12:55 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

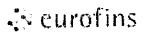
Container Type: NA Met Applicable		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	105	70-130



13.7 No.435

Client Sample ID: CCV Lab ID#: 1203430A-04A MODIFIED EPA METHOD TO-15 GC/MS SIM

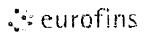
File Name: Dil. Factor:	e032202slm 1.00		Date of Collection: NA Date of Analysis: 3/22/12 10:00 AM	
Compound			%Recovery	
 Vinyl Chloride			86	
cis-1,2-Dichloroethene			102	
Trichloroethene			95	
Tetrachloroethene			88	
trans-1,2-Dichloroethene			96	
Container Type: NA - Not A	pplicable			
-			Method	
Surrogates		%Recovery	Limits	
1,2-Dichloroethane-d4		111	70-130	
Toluene-d8		103	70-130	
4-Bromofluorobenzene		107	70-130	



ANT TOPHES

Client Sample ID: LCS Lab ID#: 1203430A-05A MODIFTED EPA METHOD TO-15 GC/MS SIM

File Name: Dil. Factor:	e032203sim 1.00	Date of Collec Date of Analy	ction: NA sis: 3/22/12 10:43 AM
Compound			%Recovery
Vinyl Chloride			94
cis-1,2-Dichloroethene			102
Trichloroethene			90
Tetrachloroethene			87
trans-1,2-Dichloroethene			109
Container Type: NA - Not Ap	plicable		
			Method
Surrogates		%Recovery	Limits
1.2-Dichloroethane-d4		114	70-130
Toluene-d8		104	7 0-1 30
4-Bromofluorobenzene		107	70-130



101101013

Client Sample ID: LCSD Lab ID#: 1203430A-05AA MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

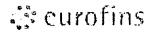
File Name: Dil. Factor:			Date of Collection: NA Date of Analysis: 3/22/12 11:22 AM	
Compound	_		%Recovery	
Vinyl Chloride			90	
cis-1,2-Dichloroethene			102	
Trichloroethene			88	
Tetrachloroethene			86	
trans-1,2-Dichloroethene			108	
Container Type: NA - Not A	oplicable			
			Method	
Surrogates		%Recoverv	Limits	

Surrogates	%Recovery	Linits
1.2-Dichloroethane-d4	112	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	104	70-130



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 Page _____ of _____

	Dject Manager JENNINE TRASK			Project Info:			Turn Around Time:		Lab Use Only Pressurized by		ĺ
				P.O. #_	· · · · · · · · · ·		🖬 No	rmal	Date		
	pany ARCADIS Email THUM DE PLAN CHICADIS SICA			Project # 0001225.0001.00009			🖵 Rush		Pressurization Gas.		Gas.
	61, JEFFESUNST. STERD City Minuture Stat			l Proiect	Name MHO	SON KIPP		xecify		N ₂ H	
Phone	414-276-7742 Fax 414-2			ate	Time		<u>'</u>		ter Pres	sure/Vac	uum
Lab I.D.	Field Sample I.D. (Location)	Can #	n –	llection		Analyses Reques	sted	Initial	Final	Receipt	Final (psi)
0/4	IAB-1	4369	3/1	6/12	833	TO-15			-5.0	ب و بر میکند.	
JLA	I AF-1	5562	31	6/12	835	TO-15		-300	-2.0		
<u>,n</u>	SSV-1-1	440	3h	7/12	925	TO-15		-29.5	-35		
	581-2-1	25249	3	17/12	830	TO-13		-30.0	-4.0		
		_								. <u> </u>	
<u></u>											
 []]											
i					1						
							<u></u>	[·	
	31A/12 1637 -	eived by: (signa eived by: (signa	4i		01209		PCE TCE	27, С СШи	MOĽ		
Relinqui	shed by: (signature) Date/Time Rec	eived by: (signa	iture)	Date/Tir	ne	<u>ى مەربىيە بىر بىر بىر بىر بىر بىر بىر بىر بىر بىر</u>	CIS-	1.2-0	CE		
Lab	Shipper Name Air Bill #		remp (°C)	Condition					Order #	
Use Only	Tes to		p/}		(grand	>> Yes N	o No	one	: 	31)
								<u></u>			n 1293 rev.1



AP LUSIES

4/20/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1204335

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 4/17/2012 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.

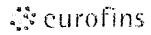
Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

75cott-

Ausha Scott Project Manager

En l'Anna an eile suis in Schemelie anna



AR KARL

WORK ORDER #: 1204335

Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	P.O. #	WI001283.0001.00012
FAX:	317-231-6514	PROJECT #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED:	04/17/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	04/20/2012		

FRACTION #	NAME	TEST	RECEIPT <u>VAC./PRES.</u>	FINAL <u>PRESSURE</u>
01A	<u>SSV-1-1</u>	Modified TO-15	3.5 "Hg	5 psi
02A	SSV-2-1	Modified TO-15	2.5 "Hg	5 psi
03A	Lab Blank	Modified TO-15	NA	NA
04A	CCV	Modified TO-15	NA	NA
05A	LCS	Modified TO-15	NA	NA
05AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:

And allow of According to a

DATE: 04/20/12

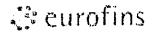
Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

Page 2 of 11



As Indus

LABORATORY NARRATIVE Modified TO-15 Arcadis U.S., Inc. Workorder# 1204335

Two 6 Liter Summa Canister samples were received on April 17, 2012. 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
ICAL %RSD acceptance criteria	+- 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	= 30% Difference with four allowed out up to</p =40%.; flag and narrate outliers</p
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
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

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

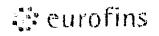
There were no analytical discrepancies.

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.



AIT DAIGS

UJ- Non-detected compound associated with low bias in the CCV and/or LCS.

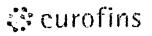
N - The identification is based on presumptive evidence.

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



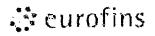
Air Toxics

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

Client Sample ID: SSV-1-1

Lab ID#: 1204335-01A

Сотроила	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.15	0.96	1.0	6.5
Client Sample ID: SSV-2-1				
Lab ID#: 1204335-02A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.15	0.18	0.99	1.2



AJ TEXES

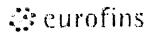
Client Sample ID: SSV-1-1 Lab ID#: 1204335-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	v041806 1.52	Date of Collection: 4/13/12 4:45:00 PM Date of Analysis: 4/18/12 05:11 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.15	Not Detected	0.39	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	0.60	Not Detected
cis-1.2-Dichloroethene	0.15	Not Detected	0.60	Not Detected
Trichloroethene	0.15	Not Detected	0.82	Not Detected
Tetrachloroethene	0.15	0.96	1.0	6.5

Container Type: 6 Liter Summa Canister

		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	105	70-130	
Toluene-d8	99	70-130	
4-Bromofluorobenzene	90	70-130	



Air Torres

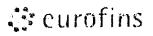
Client Sample ID: SSV-2-1 Lab ID#: 1204335-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: DII. Factor:	v041807 1.46	Date of Collection: 4/13/12 4:22:00 PM Date of Analysis: 4/18/12 05:56 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.15	Not Detected	0.37	Not Detected
trans-1.2-Dichloroethene	0.15	Not Detected	0.58	Not Detected
cis-1,2-Dichloroethene	0.15	Not Detected	0.58	Not Detected
Trichloroethene	0.15	Not Detected	0.78	Not Detected
Tetrachloroethene	0.15	0.18	0.99	1.2

Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	102	70-130



Air Toxics

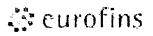
Client Sample ID: Lab Blank Lab ID#: 1204335-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dll. Factor:	v041805 1.00	Date of Collection: NA Date of Analysis: 4/18/12 04:14 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Trichloroethene	0.10	Not Detected	0.54	Not Detected
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected

Container Type: NA - Not Applicable

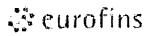
		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	101	70-130	
Toluene-d8	99	70-130	
4-Bromofluorobenzene	106	70-130	



Client Sample ID: CCV Lab ID#: 1204335-04A

File Name: DII. Factor:	v041802 1.00	Date of Collection: NA Date of Analysis: 4/18/12 01:21 PM
Compound		%Recovery
Vinyl Chloride		100
trans-1,2-Dichloroethene		93
cis-1,2-Dichloroethene		94
Trichloroethene		98
Tetrachloroethene		96

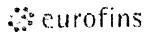
SurrogatesMethodSurrogates%RecoveryLimits1,2-Dichloroethane-d49770-130Toluene-d810170-1304-Bromofluorobenzene10670-130



Client Sample ID: LCS Lab ID#: 1204335-05A

File Name: v041803 Dil. Factor: 1.00		Date of Collection: NA Date of Analysis: 4/18/12 02:15 PM		
Vinyl Chloride		117		
trans-1,2-Dichloroethene		121		
cis-1,2-Dichloroethene		109		
Trichloroethene		107		
Tetrachloroethene		108		

SurrogatesMethod1,2-Dichloroethane-d49970-130Toluene-d89970-1304-Bromofluorobenzene10570-130



Client Sample ID: LCSD Lab ID#: 1204335-05AA MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	v041804 1.00	Date of Collection: NA Date of Analysis: 4/18/12 03:05 PM
Compound		%Recovery
Vinyl Chloride		111
trans-1,2-Dichloroethene		117
cis-1,2-Dichloroethene		105
Trichloroethene		106
Tetrachloroethene		102

Surrogates	%Recovery	Limits
1.2-Dichloroethane-d4	98	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	104	70-130



5.5

Ĺ

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 indicates the Toxics Limited assumes no liability with respect to the collection and indicates agreement to hold harmless, defend, and indicates the Toxics Limited assumes and indicates agreement to hold harmless. 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) 457-4922

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

Page _ 1 of _1

Project Manag	er JENNINE TRACK			Projec	ct Info:	ار ان بن میں بیش میں ایک میں میں ایک اور ایک میں ایک ایک میں ایک ایک میں ایک ایک میں ایک ایک ایک ایک ایک ایک ای		Around me:	<i>Leb Use</i> Pressi	Only urized by:	
collected by: (F	Print and Sign) TIM ALESS			P.O. #_			X No	rmal	Date [,]		
-	Email: Emai			ļ.		<u>63,0001,00009</u>	🖵 Ru	ish		urization (
	1-276-7742 Fax 414-			Project	t Name MROS	SON KIPP	sr	recity	ALC: NOT THE OWNER.	N ₂ He	·
Lab I.D.	Field Sample I.D. (Location)	Can #)ate ollection	Time of Collection	Analyses Reque	sted	Canis Initial	ter Pres Final	Receipt	
<u> </u>	SSV-1-1	33993	41	3/12	1645	TO-15		>-30	-4.5		
01A 02A		22107	······	13/12	1622	TO-15		-79.5	-3.5		
044										-	
								· 	ļ		
				-							
								<u> </u>	<u> </u>		
							·				
			<u> </u>		· · ·						<u> </u>
			<u> </u>								
			-	Deto/Ti		Notes:			 _!		
1. I	by: (signature) Date/Time	Received by (signa B. Wutter				ONLY	REPOR	ц.,,			
Relinquished	by: (signature) Date/Time	Received by: (sign	ature)	Date/Ti	ime		PLE TLE UU		LOUDE.		
Relinquisnea	i by: (signature) Date/Time	necence by: (oig:					TAAL	5-1,2-	OCE.		
Lab	Shipper Name Air Bill	#	Temp	(°C)	Conditio				Work	Order #	<u></u>
	eder !!	1	JA	6	ord	Yes	No (N	lone	1	204	<u> 335</u>
		ار در بازین د روی و بسیانی در این بازین بازی ا	an kanalijika a	والمراجع المراجع				Time and the second	ayeren Teleforagi	Fr	orm 1293 rev



Madison-Kipp Corporation

Post Office Box 8043 Madison, WI 53708-8043 Madison, WI 53704-5728

201 Waubesa Street

Telephone 608-244-3511 Website www.Madison-Kipp.com

April 3, 2012

Ms. Leslie Bellais 102 S. Marquette Street Madison, Wisconsin 53704

RE: Results of Air Testing 102 S. Marguette Street, Madison, WI 53704

Dear Ms. Bellais:

On March 16 and 17, 2012, ARCADIS personnel, on behalf of Madison-Kipp, completed indoor air and sub-slab vapor sampling activities to measure levels of select volatile organic compounds (VOCs), below and/or within your home, located at 102 S. Marquette Street in Madison, Wisconsin. This work was completed in cooperation with and with the prior approval of the Wisconsin Department of Natural Resources (WDNR).

Specifically, the sampling was completed to test for the presence of tetrachloroethene (PCE), trichloroethene (TCE), cis- and trans-1,2-dichloroethene, and vinyl chloride. The homes that were sampled in your neighborhood were given a unique sample identification number when submitting the samples to the laboratory to ensure confidentiality. The following samples were collected from your home:

- SSV1-1 and SSV2-1 Sub-slab samples collected on March 17, 2012. The sub-slab samples were collected from the sample points that were installed in the basement floor of your home.
- IAB-1 Indoor air basement sample collected on March 16-17, 2012.
- IAF-1 Indoor air first floor sample collected on March 16-17, 2012.

Based on the laboratory results (below), PCE was not detected in the indoor air samples. The WDNR Residential Action Level is based on the U.S. Environmental Protection Agency's Residential Air Screening Levels that represent health-protective concentrations an individual can be exposed to for 30 years for 24 hours a day.

Sample ID	Results (part per billion	Residential Action Level
	(ppbv))	(ppbv)
IAB-3	Not detected	6
IAF-3	Not detected	6

The sub-slab samples were submitted to the laboratory for analysis. However, the laboratory inadvertently cleaned the sample canister prior to analyzing the sample. ARCADIS will contact you to re-schedule the sub-slab sampling at your earliest convenience.

Copies of the laboratory data and field notes are enclosed for your reference.

Sincerely, ٠ Unda Blen

Mark Meunier Madison-Kipp Corporation

cc: Michael Schmoller – WDNR Dr. Henry Nehls-Lowe – WDHS Norman Berger, Esq. David A. Crass, Esq.

Attachments: Laboratory Analytical Report Field Notes Inde

Indoor Air Quality Building Survey
INDOOR AIR QUALITY BUILDING SURVEY
Date: 03/10/12 Project #: VT0012\$8
Address: 102 Manquett Street
Madison, WI
Property Contact: Les lie Bellais
Phone: Home: (108) <u>149-736</u> Work: () Cell: ()
Building Occupants: Children <13 Children age 13-18 Adults
Building Construction Characteristics: (Circle appropriate description)
Single FamilyMultiple FamilySchoolCommercialRanch 2-FamilyRaised Ranch DuplexColonial # of unitsSplit Level CondominiumMobile HomeOther (specify)
General Description of Building Construction Materials, especially new materials:
WOOD CONSTRUCTION, UNKL SIDING OVER ASPHAC
How many occupied stories does the building have? 1,5
Has the building been weatherized with any of the following? (Circle all that apply) Insulation Storm Windows Energy-Efficient Windows Other (specify)
What type of basement does the building have? (Circle all that apply) Full basement Crawlspace Slab-on-Grade Other (specify)
Basement Size (ft ²)
Surveyor's Initials: Page 1 of 5

Т

Indoor Air Quality Building Survey

INDOOR AIR QUALITY BUILDING SURVEY

Describe Basement Floor and Walls:
CONCRETE, CEMENT BLOCK
Moisure: Always Dry Always Wet Frequently Wet Sometimes Wet
Is a basement sump present? (YO) Is a sump pump present? (YO) (circle one)
Does the basement have any preferential pathways that might permit soil vapor entry? (Circle all that apply) Visible Cracks Unsealed Pipes/Utility Conduits Sump pumps
What type of ground cover surrounds the outside of building? (Circle all that apply) Grass Concrete Asphal Other (specify) SourtH
Heating and Ventilation System(s) Present:What type of heating system(s) is (are) used in this building? (Circle all that apply)Hot Air CirculationHeat PumpHot Air RadiationWood StoveHot Air RadiationUnvented Kerosene heaterElectric BaseboardOther (specify):
What type (s) of fuel(s) are used in this building? (Circle all that apply)Natural GasElectricCoalOther (specify):Fuel OilWoodSolar
What type of mechanical ventilation systems are present and/or currently operating in the building? (Circle all that apply) Central Air Conditioning) Individual Air Conditioning Units Open windows Sentia system? Yes (Yes (but not used) (No)
Septic system? Yes / Yes (but not used) (No) Irrigation/private well? Yes / Yes (but not used) / No Existing subsurface depressurization (radon) system in place? Yes / No If yes, is it running? Yes / No

Surveyor's Initials: 529

Page 2 of 5

INDOOR AIR QUALITY BUILDING SURVEY

Sources of Chemical Contaminants:

Which of these	items are	present in	the building?

Potential Sources	Check if Present	Removed Prior to
Location(s)		Sampling? (Yes / No / NA)
Paints or paint thinners	\checkmark	
Gas-powered equipment		
Gasoline storage cans		
Cleaning solvents		
Air fresheners		
Oven cleaners		
Carpet/upholstery cleaners		
Hairspray		
Nail polish/polish remover		
Bathroom cleaner		
Appliance cleaner		
Furniture/floor polish		
Moth balls		
Fuel tank		
Wood stove		
Fireplace		
Perfume/colognes		
Hobby supplies (e.g.,	SUPPLEWE	
solvents, paints, lacquers,		
glues, photographic		
darkroom chemicals)		
Scented trees, potpourri, etc.		·····
Other:	<u></u>	
Other:		
Other:		

Do one or more smokers occupy this building on a regular basis (YN)? How often?

Has anybody smoked in the building in the last 48 hours (Yay)?

Does the building have an attached garage (YN)?	If so, is a car usually parked in the garage
(Y/N)?	

Do the occupants of the building frequently have their clothes dry-cleaned (YN)?

Was there any recent remodeling or painting done in the building (Y/M)?

Surveyor's Initials:

Page 3 of 5

A-4

Indoor Air Quality Building Survey

INDOOR AIR QUALITY BUILDING SURVEY

Are there any pressed wood products in the building (e.g., hardwood plywood wall paneling, particleboard, fiberboard) (Y(N)?

Are there any new upholstery, drapes or other textiles in the building (Y/N)?

Have the occupants ever noticed any unusual odors in the building? (Y(N)) If yes, describe odors, location(s), and conditions that seem to affect odors (especially rain, temperature, wind):

Any known spills of a chemical immediately outside or inside the building? (Y(N)? If yes, describe (location, age, type of chemical, any actions to clean up):

Has the building been treated (inside or outside) with any insecticides/pesticide (V/N)? If so, what chemicals are used and how often are they applied:

LAWN APPLICATIONS (6/4ENR)

Outdoor Sources of Contamination:

Nearby Gasoline Stations (distance and direction):

Surveyor's Initials:

Page 4 of 5

Indoor Air Quality Building Survey

•

INDOOR AIR QUALITY BUILDING SURVEY

Industrial Stack Emissions (distance and direction):

Automotive emission sources (e.g., highway; bus stop; high-traffic area):

Weather	Conditions	During	Sampling:

Outside Temperature (°F):_____

Prevailing wind speed and direction:

Describe the general weather conditions (e.g., sunny, cloudy, rain):________ Precipitation >0.1 inches within 12 hours preceding the sampling event (Y/N)?______ General Comments:______

Is there any other information about the structural features of this building, the habits of its occupants or potential sources of chemical contaminants to the indoor air that may be of importance in facilitating the evaluation of the indoor air quality of the building?

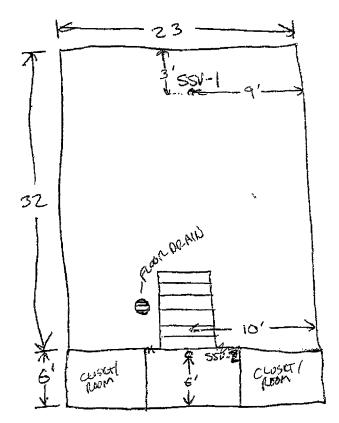
The responses documented on this survey are true, accurate and complete to the best of my knowledge and ability.

TIM ALESSI Name of Surveyor Signature 3/10/12

Date

Surveyor's Initials:

Page 5 of 5



CLIDDEN ULTRA HIGE WHITE LIGHTTIVING LINDOWS/DOOR CALM FLOOR AND WALL PILIPMER RUS ZINNSER BRISH & BRISTLE WASH KILZ ORIGINAL PRIMER WO-40 PAINT THINNER MITWAY WOOD HARDFINE PUTCH BOY CEILING PAINT (EXTREMA ED BWIGAN'S OUL PAINT (EXTREMA RAID ANT KILLER

SANI-DRY XP BASEMENT AIR SYSTEM DEHUMIDIFIER

Madiso	Madison Kipp Corporation		Soil Vapor Sample Collection Log		
		Sample ID:	IAG-1		
Cilent:	MADISON KUPP	Boring Equipment:			
Project.	MADISON KUPP	Sealant:			
Location:	MADISON WE	Tubing Information:			
Project #:	WI-001283.119	Miscellaneous Equipment:			
Samplers:	TALAW	Subcontractor:			
Sample Point Location:	EAST SIDE OF BASEMENT	Equipment:			
Sampling Depth:		Molsture Content:			
Time and Date of Installation:		Approximate Purge Volume:			

Date	Time	Canister Vacuum (a) (Inches of Hg)	Temperaturə (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/16/12	833	-71.5					
317/12	816	-5					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1L 2.7L (6L)
Canister ID:	4369
Flow Controller ID:	40573
Notes:	

Tracer Test Information (if applicable):

Initial Helium Shroud:		
Final Helium		
Shroud:		
Tracer Test	Yes	No
Passed:	165	110
Notes:		

General Observations/Notes:

COLLECT DUP-3	IDITIAL WACE = 29.3
	CANISTER # 4361
	PLOWCONMOLIT 40544

Approximating One-Well Volume (for purging):

When using 1½-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.

Madisor	Madison Kipp Corporation		Soil Vapor Sample Collection Log		
		Sample ID:	CAF-1		
Cilent:	MADISON KIPP	Boring Equipment:			
Project:	MADISON RIPP	Sealant:			
Location:	MADISON WIT	Tubing Information:			
Project #:	WI00,283.1,9	Mișcellaneous Equipment			
Samplers:	Th (AW	Subcontractor;			
Sample Point Location:	KITCHEN CONTRR	Equipment:			
Sampling Depth;		Molsture Content:			
Time and Date of Installation:		Approximate Purge Volume:			

and a second s

Date	Time	Canister Vacuum (a) (Inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/16/12	835	-30					
3/17/12	1000	÷5					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1L 2.7L 6L
Canister ID:	5562
Flow Controller ID:	40414
Notes:	

Tracer Test Information (if applicable):

Initial Helium		
Shroud:		•
Final Helium		
Shroud:		
Tracer Test	Yes	No
Passed:	163	10
Notes:		

General Observations/Notes:

Approximating One-Well Volume (for purging):

When using 1%-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.

Madisor	a Kipp Corporation	Soil Vapor Sample Collection Log		
		Sample ID:	350-1-1	
Cilent:	MADISON KIPP	Boring Equipment:		
Project:	MADISON MIP	Sealants		
Location:	MADISON WI	Tubing Information:		
Project #:	WI001283.1.9	Miscellaneous Equipment:		
Samplers:	TALAW	Subcontractor:		
Sample Point Location:	FEAST SIDE OABEMENT	Equipment:		
Sampling Depth;	SUB SLAD	Moisture Content:		
Time and Date of Installation:		Approximate Purge Volume:		

Date	Tine	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
31712	925	-29.5					
3/17/12	1004	-3.5					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1L 2.7L 6L
Canister ID:	440
Flow Controller ID:	<i>୳୦</i> ୫୯୦
Notes:	

Tracer Test Information (if applicable):

Initial Hellum Shroud:	85.4	
Finai Helium Shroud:	20.1	
Tracer Test Passed:	Yes	No
Notes:	8950 Mm	

General Observations/Notes:

Approximating One-Well Volume (for purging):

When using 1½-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.

Madison Kipp Corporation		Soil Vapor Sample Collection Log		
		Sample ID:	SSV-2-1	
Client:	MADISON KIPP	Boring Equipment:		
Project:	MADISON KIPP	Sealant:		
Location:	MADISON WI	Tubing Information:		
Project#:	WI001283.1.9	Miscellaneous Equipment:		
Samplers:	TALAW	Subcontractor:		
Sample Point Location:	WRST SIDE BASEMENT	Equipment:		
Sampling Depth:		Molsture Content:		
Time and Date of Installation:		Approximate Purge Volume:		

Date	Tine	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
317112	930	-30					
3/17/12	1000	-4					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1L 2.7L 6L
Canister ID:	25249
Flow Controller ID:	FC00527
Notes:	

Tracer Test Information (if applicable):

Initial Helium Shroud:	95,1	
Final Helium Shroud:	83.2	
Tracer Test Passed:	Yes	No
Notes:	25 0pm	

General Observations/Notes:

Carret DIP-4.	INITIAL VAC = -30
	FWAL UNC= -4.5
	CANSTER # 12077
	Plowcanthal # 6906

Approximating One-Well Volume (for purging):

When using 1¼-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.



4/1/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203430A

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/20/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

cott-

Ausha Scott Project Manager

医骨肉 网络马克拉马克拉马克拉马克马克马克马克马克马克

140 Mas Banne Abau 2008 B Februar CAMPAC

🔆 eurofins

WORK ORDER #: 1203430A

Work Order Summary

CLIENT;	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	P.O. #	W1001283.0001.00009
FAX:	317-231-6514	PROJECT #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED:	03/20/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	04/01/2012		

			ILDOLLII I	
FRACTION #	NAME	TEST	VAC./PRES.	PRESSURE
01A	IAB-1	Modified TO-15 SIM	5.5 "Hg	5 psi
02A	IAF-1	Modified TO-15 SIM	5.5 "Hg	5 psi
03A	Lab Blank	Modified TO-15 SIM	NA	NA
04A	CCV	Modified TO-15 SIM	NA	NA
05A	LCS	Modified TO-15 SIM	NA	NA
05AA	LCSD	Modified TO-15 SIM	NA	NA

CERTIFIED BY:

Variation Anton and and

DATE: 04/01/12

RECEIPT

FINAL.

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP - CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

Page 2 of 11



LABORATORY NARRATIVE Modified TO-15 SIM Arcadis U.S., Inc. Workorder# 1203430A

Two 6 Liter Summa Canister (SIM Certified) samples were received on March 20, 2012. 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	<pre><!--=30% RSD with 2 compounds allowed out to < 40% RSD</pre--></pre>	Project specific; default criteria is $ RSD with 10% of compounds allowed out to < 40\% RSD$
Daily Calibration	+- 30% Difference	Project specific; default criteria is $ Differencewith 10% of compounds allowed out up to ; flagand 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

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

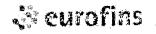
Definition of Data Qualifying Flags

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.

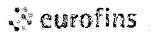
- E Exceeds instrument calibration range.
- S Saturated peak.
- Q Exceeds quality control limits.
- U Compound analyzed for but not detected above the reporting limit.
- UJ- Non-detected compound associated with low bias in the CCV and/or LCS.
- N The identification is based on presumptive evidence.



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



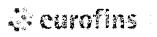
Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS SIM

Client Sample ID: IAB-1

Lab ID#: 1203430A-01A No Detections Were Found.

Client Sample ID: IAF-1

Lab ID#: 1203430A-02A No Detections Were Found.



Client Sample ID: IAB-1 Lab ID#: 1203430A-01A MODIFIED EPA METHOD TO-15 GC/MS SIM

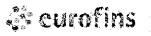
٦

File Name: Dil. Factor:	e032213sim 1.64	Date of Collection: 3/16/12 8:33:00 AM Date of Analysis: 3/22/12 06:33 P <u>M</u>		
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	Not Detected	0.18	Not Detected
Tetrachloroethene	0.033	Not Detected	0.22	Not Detected
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	96	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	106	70-130

.



Client Sample ID: IAF-1 Lab ID#: 1203430A-02A MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: Dil. Factor:	e032214sim 1.64	Date of Collection: 3/16/12 8:35:00 AM Date of Analysis: 3/22/12 07:16 PM		
Compound	Rpt. Llmit (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	Not Detected	0.18	Not Detected
Tetrachloroethene	0.033	Not Detected	0.22	Not Detected
trans-1.2-Dichloroethene	0.16	Not Detected	0.65	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Container Type: o Ener Summa Sumster	· · ·	Method		
Surrogates	%Recovery	Limits		
1,2-Dichloroethane-d4	98	70-130		
Toluene d8	96	70-130		
4-Bromofluorobenzene	105	70-130		

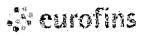


Client Sample ID: Lab Blank Lab ID#: 1203430A-03A <u>MODIFIED EPA METHOD TO-15 GC/MS SIM</u>

٦

File Name: Dil. Factor:	e032206sim 1.00	Date of Collection: NA Date of Analysis: 3/22/12 12:55 PM			
Compound	Rpt. Łimit (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 Typer na nor Approable		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	105	70-130

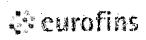


Client Sample ID: CCV Lab ID#: 1203430A-04A MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: e032202sim Dil. Factor: 1.00		Date of Collection: NA Date of Analysis: 3/22/12 10:00 AM
Compound		%Recover
Vinyl Chloride		86
cis-1.2-Dichloroethene		102
Trichloroethene		95
Tetrachloroethene		88
trans-1,2-Dichloroethene		96

		Method		
Surrogates	%Recovery	Limits		
1,2-Dichloroethane-d4	111	70-130		
Toluene-d8	103	70-130		
4-Bromofluorobenzene	107	70-130		

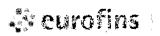


Client Sample ID: LCS Lab ID#: 1203430A-05A <u>MODIFIED EPA METHOD TO-15 GC/MS SIM</u>

٦

File Name: Dil. Factor:	e032203sim 1.00	Date of Collection: NA Date of Analysis: 3/22/12 10:43 AM
Compound		%Recovery
Vinyl Chloride		94
cis-1,2-Dichloroethene		102
Trichloroethene		90
Tetrachloroethene		87
trans-1.2-Dichloroethene		109

Surrogates	%Recovery	Method Limits		
1,2-Dichloroethane-d4	114	70-130		
Toluene-d8	104	70-130		
4-Bromofluorobenzene	107	70-130		



Client Sample ID: LCSD Lab ID#: 1203430A-05AA <u>MODIFIED EPA METHOD TO-15 GC/MS SIM</u>

٦

.

File Name: Dil. Factor:	e032204sim 1.00	Date of Collection: NA Date of Analysis: 3/22/12 11:22 AM			
Compound		%Recovery			
Vinyl Chloride	••••••••••••••••••••••••••••••••••••••	90			
cis-1,2-Dichloroethene		102			
Trichloroethene		88			
Tetrachloroethene		86			
trans-1,2-Dichloroethene		108			

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

XICS 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

Page _ of _

Project Manager	κ			Proje	ct Info:				Around me:		on/y irized by:	
Collected by: (Print and Sign) ALESS	A	<u>(</u>		P.O. #_				M No		Date	iniz service y	
	mail <u>Junios, 72</u>			Project	1# WI001283	5.0001	00009				urization (<u>.</u>
Address MSA, JEFFFEAUST, STEAD City Mill			202							1. Sec. 1.		
Phone 414-276-7742 Fax_	414 - 27	6-7603	į	Project	Name MHOL	ZON K		s;	<i>ecify</i>		N ₂ H	
				ate	Time	•	D				sure/Vac	122000000
Lab I.D. Field Sample I.D. (Locat	tion)	Can #	of Co	llection	of Collection	Ana	lyses Reques	stea	Initial		Receipt	Final (ps)
VA JAB-1		4369	3/1	6/12	833	70	-15		-29.5	-5.0		
ILA I AF-1		5562	311	6/12	835	10	5-15		-320	-5.0		
SSV - 1 - 1		440	Зh	7/12	925	TO	0-15		-29.5	-35		
SSU-Z-1		25249	31	7/12	830	77	0-15		-30.0	-4.0		
									•			
									~~			
Sectors and the sector of the	•••										ingeneration Children Linder Receiver an Vacad	
								·····				
Relinquished by: (signature) Date/Time	Rece	i ved by: (signa;	ture)	Date/Tim	le]		Notes;		ł			1.55.2.200
	\$37	7	U		01209	20	ONLY	REPOR	Ξ			
Relinquished by: (signature) Date/Time	Rece	ived by: (signa	ture)	Date/Tim	<u>`````````````````````````````````</u>			PCE				
								VINY	L CHLOR			
Relinquished by: (signature) Date/Time	Rece	ived by: (signa	ture)	Date/Tim	1 0				1.2-DC 1.2-DC			ĺ
Shippet Name			emp ('	C ^λ	Condition					Work (Jider #	
and the second	Air Bill #		A.	<u>, (v)</u>		<u></u>		n Nc	and distant with the		2436	<u>1.2.16.13</u>
Use Tels 22		/			6~~5	2				1. 16		L
							\sim					

Form 1293 /ev.11



Madison-Kipp Corporation

Post Office Box 8043 Madison, WI 53708-8043 201 Waubesa Street Madison, WI 53704-5728 *Telephone* 608-244-3511 Website www.Madison-Kipp.com

April 2, 2012

Mr. Eric Bott 110 S. Marquette Street Madison, WI 53704

RE: Results of Air Testing 110 S. Marquette Street, Madison, WI 53704

Dear Mr. Bott:

On March 15 through 17, 2012, ARCADIS personnel, on behalf of Madison-Kipp, completed indoor air and sub-slab vapor sampling activities to measure levels of select volatile organic compounds (VOCs), below and/or within your home, located at 110 S. Marquette Street in Madison, Wisconsin. This work was completed in cooperation with and with the prior approval of the Wisconsin Department of Natural Resources (WDNR).

Specifically, the sampling was completed to test for the presence of tetrachloroethene (PCE), trichloroethene (TCE), cis- and trans-1,2-dichloroethene, and vinyl chloride. The homes that were sampled in your neighborhood were given a unique sample identification number when submitting the samples to the laboratory to ensure confidentiality. The following samples were collected from your home:

- SSV1-3 and SSV2-3 Sub-slab samples collected on March 16-17, 2012. The subslab samples were collected from the sample points that were installed in the basement floor of your home.
- IAB-3 Indoor air basement sample collected on March 15-16, 2012.
- IAF-3 Indoor air first floor sample collected on March 15-16, 2012.

Based on the laboratory results (below), only PCE was detected in these samples. The levels of PCE in the collected samples were below the sub-slab soil gas and indoor air Residential Action Levels provided by the WDNR. The WDNR Residential Action Level is based on the U.S. Environmental Protection Agency's Residential Air Screening Levels that represent health-protective concentrations an individual can be exposed to for 30 years for 24 hours a day.

Sample ID	Results (part per billion (ppbv))	Residential Action Level (ppbv)
SSV1-3	1.5	60
SSV2-3	0.28	60
IAB-3	0.060	6
IAF-3	0.060	6

Copies of the laboratory data and field notes are enclosed for your reference.

Sincerely • lettel Kein

Mark Meunier Madison-Kipp Corporation

cc: Michael Schmoller – WDNR Dr. Henry Nehls-Lowe – WDHS Norman Berger, Esq. David A. Crass, Esq.

Attachments: Laboratory Analytical Report Field Notes Indoor Air Quality Building Survey

INDOOR AIR QUALITY BUILDING SURVE	EY
Date: 3/8/12 Project #: WI001283.1.4	
Address: 110 MARQUETTEST	
MADISON WI	<u> </u>
	·····
Property Contact: EAC BOTT	
Phone: Home: (92) 579-0829 Work: () Cell: ()_	
Building Occupants: Children <13 Children age 13-18 Ad	dults_2
Building Construction Characteristics: (Circle appropriate description)	
Single FamilyMultiple FamilySchoolORanch 2-FamilyRaised Ranch DuplexColonial # of unSplit Level CondominiumMobile HomeOther (specify)	nits
General Description of Building Construction Materials, especially new mat	terials:
WOOD CONSTRUCTION (WOOD SIDING	د
How many occupied stories does the building have?	
Has the building been weatherized with any of the following? (Circle all that Insulation Storm Windows Energy-Efficient Windows) Other (specify)	t apply)
What type of basement does the building have? (Circle all that apply) Full basement Crawlspace Slab-on-Grade Other (specify)	
Basement Size $_{75}(ft^{2})$	
Surveyor's Initials:	Page 1 of 5

Indoor Air Quality Building Survey

INDOOR AIR QUALITY BUILDING SURVEY

Describe Basement Floor and Walls: CONCRETE FLOOR AND WALLS Sometimes Wet Moisure: Always Dry Always Wet Frequently Wet Is a basement sump present? (YAN) Is a sump pump present? (YAN) (circle one) Does the basement have any preferential pathways that might permit soil vapor entry? (Circle all that apply) Visible Cracks Unsealed Pipes/Utility Conduits Sump pumps What type of ground cover surrounds the outside of building? (Circle all that apply) Grass (Concrete) Asphalt Other (specify) Heating and Ventilation System(s) Present: What type of heating system(s) is (are) used in this building? (Circle all that apply) Hot Air Circulation Heat Pump Steam Radiation Wood Stove Unvented Kerosene heater Electric Baseboard Hot Air Radiation Other (specify): _ What type (s) of fuel(s) are used in this building? (Circle all that apply) Other (specify): _____ Natural Gas Electric Coal Fuel Oil Wood Solar What type of mechanical ventilation systems are present and/or currently operating in the building? (Circle all that apply) (Bathroom Fan) Central Air Conditioning) Kitchen fan Individual Air Conditioning Units Air-to-Air Heat Exchanger Open windows Other (specify): _____ Septic system? Yes / Yes (but not used) Irrigation/private well? Yes / Yes (but not used) (No Existing subsurface depressurization (radon) system in place? Yes (No If yes, is it running? Yes / No

Page 2 of 5

INDOOR AIR QUALITY BUILDING SURVEY

Sources of Chemical Contaminants:

Which of these items are present in the building?

Potential Sources	Check if Present	Removed Prior to
Location(s)		Sampling? (Yes / No / NA)
Paints or paint thinners	\checkmark	
Gas-powered equipment		
Gasoline storage cans	A	
Cleaning solvents		
Air fresheners		
Oven cleaners		
Carpet/upholstery cleaners		
Hairspray		
Nail polish/polish remover		
Bathroom cleaner	\checkmark	
Appliance cleaner		
Furniture/floor polish		
Moth balls		
Fuel tank		
Wood stove		
Fireplace		
Perfume/colognes		
Hobby supplies (e.g.,		
solvents, paints, lacquers,		
glues, photographic		
darkroom chemicals)	·····	
Scented trees, potpourri, etc.		
Other:		
Other:		
Other:		

Do one or more smokers occupy this building on a regular basis (YD? How often? _____

Has anybody smoked in the building in the last 48 hours (VN)

Does the building have an attached garage (Y/N)? If so, is a car usually parked in the garage (Y/N)?

Do the occupants of the building frequently have their clothes dry-cleaned (Y)?

Was there any recent remodeling or painting done in the building (YN)

Surveyor's Initials:

Page 3 of 5

A-4

Indoor Air Quality Building Survey

INDOOR AIR QUALITY BUILDING SURVEY

Are there any pressed wood products in the building (e.g., hardwood plywood wall paneling, particleboard, fiberboard) (Y(N)?

Are there any new upholstery, drapes or other textiles in the building (YM)?

Have the occupants ever noticed any unusual odors in the building? ((YN)? If yes, describe odors, location(s), and conditions that seem to affect odors (especially rain, temperature, wind):

SMELL OF BURNING RUBBER NEAR STAIRS TO

BASEMENT

Any known spills of a chemical immediately outside or inside the building? (YN) If yes, describe (location, age, type of chemical, any actions to clean up):

Has the building been treated (inside or outside) with any insecticides/pesticides(YN)? If so, what chemicals are used and how often are they applied:

Outdoor Sources of Contamination:

Nearby Gasoline Stations (distance and direction):

Surveyor's Initials:

Page 4 of 5

Indoor Air Quality Building Survey

INDOOR AIR QUALITY BUILDING SURVEY

The second second

Industrial Stack Emissions (distance and direction):

Automotive emission sources (e.g., highway; bus stop; high-traffic area):

Outside Temperature (°F):____

Prevailing wind speed and direction:

Describe the general weather conditions (e.g., sunny, cloudy, rain):_____

Precipitation >0.1 inches within 12 hours preceding the sampling event (Y/N)? ______ General Comments: ______

Is there any other information about the structural features of this building, the habits of its occupants or potential sources of chemical contaminants to the indoor air that may be of importance in facilitating the evaluation of the indoor air quality of the building?

The responses documented on this survey are true, accurate and complete to the best of my knowledge and ability.

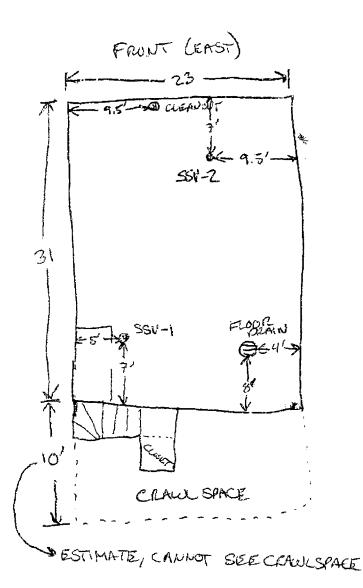
TIM ALESS		
Name of Surveyor		
and the the		
Signature		
3/8/12		

Date

Surveyor's Initials:

Page 5 of 5

А-б



WD-40 PETROLEUM DISTILLATES PUTCH BOX LATEX (ZELO UOC) KEYLLC PARMER VERATHANE WOOD FILLER (WATERSING) PUT CH BOY DIMENSIONS LATER UINCL PARMER NCRYLL PAYMER Z- (Z-BUTOXYETHOYY) - ETHANOL ETHYLENE GUYCOL SUNNYSIDE PAINT THINNER MAX VOC 772 glL SHERWIN WILLIAMS ENAMEL ACEYLIC POINMER SHRETFROM JOINT COMPANNO ETHYLENE UNVIL ACETATE FOLK BLEACH

Madiso	Madison Kipp Corporation		Soil Vapor Sample Collection Log		
		Sample ID:	IAB-3		
Client:	MADUON KIPP	Boring Equipment:			
Project:	MADISON KIN	Sealant:			
Location:	MNOISON WI	Tubing Information:			
Project #:	WI 601283.0001.00009	Miscellaneous Equipment:			
Samplers:	TA/AW	Subcontractor:			
Sample Point Location:		Equipment:			
Sampling Depth:		Moisture Content:			
Time and Date of Installation:		Approximate Purge Volume:			

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
315/12	1001	-30					
HUIT	203	-6.5					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1L 2.7L 📵
Canister ID:	431
Flow Controller ID:	40515
Notes:	

Tracer Test Information (if applicable):

١.

Initial Helium		
Shroud:		
Final Hellum		
Shroud:		
Tracer Test	Yes	No
Passed:	103	
Notes:		

General Observations/Notes:

10 MARQUETTR

Approximating One-Well Volume (for purging):

When using 1%-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.

Madison Kipp Corporation		Soil Vapor Sample Collection Log		
		Sample ID:	IAF-3	
Client:	MADISON KIPP	Boring Equipment:		
Project:	MADISON KIPP	Sealant:		
Location:	MADISON WI	Tubing Information:		
Project #	WS 061287,0001.00001	Miscellaneous Equipment:		
Samplers:	TA/AW	Subcontractor:		
Sample Point Location:		Equipment:		
Sampling Depth:		Moisture Content:		
Time and Date of installation:		Approximate Purgé Volume:		

M.

ì

Date 71m	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PiD (ppb)
3/15/12 100)년 -27					
3/16/12 48	0 -5					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1L 2.7L (6L)
Canister ID:	R-18
Flow Controller ID:	40105
Notes:	

Approximating One-Well Volume (for purging):

Tracer Test Information (if applicable):

Initial Helium Shroud:		
Final Helium		
Shroud:		
Tracer Test	Yes	No
Passed:	108	110
Notes:		

General Observations/Notes:

110 MARQUETTE

When using 1¼-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

Madison Kipp Corporation		Soil Vapor Sample Collection Log		
		Sample ID:	SSU-1-3	
Client:	MADISON KIPP	Boring Equipment:		
Project:	MADISON MPP	Sealant:		
Location:	MADISON WI	Tubing Information:		
Project #:	UIF001283.1.9	Miscellaneous Equipment:		
Samplers:	TALAW	Subcontractor:		
Sample Point Location:	WEST SIDE OF DISEMENT	Equipment:		
Sampling Depth:	SUR SLAB	Molsture Content:		
Time and Date of Installation:		Approximate Purge Volume:		

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humicity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
31712	1320	-29					
3(17/12	1357	-4					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1L 2.7L
Canister ID:	31146
Flow Controller ID:	20996
Notes:	

Tracer Test information (if applicable):

Initial Helium Shroud:	90.8	
Final Helium	83.7	
Shroud: Tracer Test		No
Passed:	(res)	
Notes:	Oppm	

General Observations/Notes:

Approximating One-Well Volume (for purging):

When using 1%-Inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.

Madiso	Madison Kipp Corporation		Soil Vapor Sample Collection Log		
		Sample ID:	SSV-2-3		
Client:	MAPISON KIPP	Boring Equipment;			
Project:	MADISON KIPP	Sealant			
Location:	MADISON WI	Tubing Information:			
Prøject #:	WI001283,0001.00009	Miscellaneous Equipment:			
Samplers:	TRAAW	Subcontractor:			
Sample Point Location:	WEST	Equipment			
Sampling Depth:	SUB SLAB	Moisture Content:			
Time and Date of Installation:		Approximate Purge Volume:	· ·		

and and a second second

į

Date	Time	Canister Vacuum (a) (Inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/16/12	1116	-29.5					
3/16/12	1711	+3					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Tracer Test Information (if applicable):

Size (circle one):	1L 2.7L 6L
Canister ID:	33184
Flow Controller ID:	FC 00 838
Notes:	

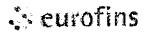
Initial Helium Shroud:	95.1	
Final Helium	0-7 3	
Shroud:	0211	
Tracer Test	(les)	No
Passed:		
Notes:	250000m	

General Observations/Notes:

WOH PIP = 3400 ppb

Approximating One-Well Volume (for purging):

When using 1%-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.



ALL HEALS

4/1/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203428B

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/20/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

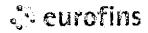
Regards,

cott-

Ausha Scott Project Manager

· · · · · ·

Eller (1982) (Caliba Pre-

180 ball Banna Word Mids B. Cahari juk Sours 

AR Toxees

WORK ORDER #: 1203428B

Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	P.O. #	W1001283.0001.00009
FAX:	317-231-6514	PROJECT #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED: DATE COMPLETED:	03/20/2012 04/01/2012	CONTACT:	Ausha Scott

			RECEIPT	FINAL
FRACTION #	<u>NAME</u>	<u>TEST</u>	VAC./PRES.	<u>PRESSURE</u>
03A	SSV-1-3	Modified TO-15	5.0 "Hg	5 psi
04A	SSV-2-3	Modified TO-15	5.5 "Hg	5 psi
05A	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:

in dal de trumane

DATE: 04/01/12

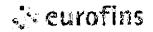
Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

Page 2 of 11



As Iones

LABORATORY NARRATIVE Modified TO-15 Arcadis U.S., Inc. Workorder# 1203428B

Two 6 Liter Summa Canister samples were received on March 20, 2012. 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
ICAL %RSD acceptance criteria	+- 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	= 30% Difference with four allowed out up to </=40%.; flag and narrate outliers</td
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
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

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

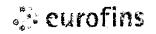
Definition of Data Qualifying Flags

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 and/or LCS.



A.: Toxics

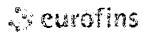
N - The identification is based on presumptive evidence.

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



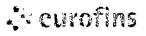
An Toxics

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

Client Sample ID: SSV-1-3

Lab ID#: 1203428B-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.16	1.5	1.1	10
Client Sample ID: SSV-2-3				
Lab ID#: 1203428B-04A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.16	0.28	1.1	1.9



An fames

Client Sample ID: SSV-I-3 Lab ID#: 1203428B-03A <u>MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN</u>

...

٦

File Name: Dil. Factor:	e032217 1.61	Date of Collection: 3/17/12 1:20:00 PM Date of Analysis: 3/22/12 10:08 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.16	Not Detected	0.41	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
Trichloroethene	0.16	Not Detected	0.86	Not Detected
Tetrachloroethene	0.16	1.5	1.1	10

Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	93	70-130
4-Bromofluorobenzene	104	70-130



An Locars

Client Sample ID: SSV-2-3 Lab ID#: 1203428B-04A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

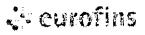
1

٦

File Name: Dil. Factor:	e032218 1.64	Date of Collection: 3/16/12 11:16:00 AM Date of Analysis: 3/22/12 10:53 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.16	Not Detected	0.42	Not Detected
trans-1.2-Dichloroethene	0.16	Not Detected	0.65	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.65	Not Detected
Trichloroethene	0.16	Not Detected	0.88	Not Detected
Tetrachloroethene	0.16	0.28	1.1	1.9

Container Type: 6 Liter Summa Canister

Container Type, o Ener Gumma Gumotor		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	117	70-130
Toluene-d8	92	70-130
4-Bromofluorobenzene	111	70-130



Asc Toxics

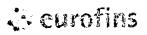
Client Sample ID: Lab Blank Lab ID#: 1203428B-05A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name; Dii. Factor:	e032206 1.00	Date of Collection: NA Date of Analysis: 3/22/12 12:55 PM			
Compound	Rpt, Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected	
trans-1.2-Dichloroethene	0.10	Not Detected	0.40	Not Detected	
cis-1,2-Dichloroethene	0,10	Not Detected	0.40	Not Detected	
Trichloroethene	0.10	Not Detected	0.54	Not Detected	
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected	

Container Type: NA - Not Applicable

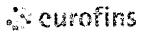
Container Type: The Horrippilouble		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	104	70-130



An Tosus

Client Sample ID: CCV Lab ID#: 1203428B-06A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e032202		Date of Collection: NA		
Dil. Factor:	1.00	Date of Analy	sis: 3/22/12 10:00 AM		
Compound		· · · · ·	%Recovery		
Vinyl Chloride			98		
trans-1,2-Dichloroethene			104		
cis-1,2-Dichloroethene			108		
Trichloroethene			105		
Tetrachloroethene			112		
Container Type: NA - Not Applicab	le				
			Method		
Surrogates		%Recovery	Limits		
1.2-Dichloroethane-d4		111	70-130		
Toluene-d8		101	70-130		
4-Bromofluorobenzene		112	70-130		



si Toxics

Client Sample ID: LCS Lab ID#: 1203428B-07A <u>MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN</u>

File Name:	e032203	Date of Collect	•••
Dil. Factor:	1.00	Date of Analy	sis: 3/22/12 10:43 AM
Compound			%Recovery
Vinyl Chloride			109
trans-1,2-Dichloroethene			118
cis-1,2-Dichloroethene			112
Trichloroethene			98
Tetrachloroethene			109
Container Type: NA - Not Appl	icable		
			Method
Surrogates		%Recovery	Limits
1.2-Dichloroethane-d4		115	70-130
Toluene-d8		101	70-130
4-Bromofluorobenzene		111	70-130



AR DECE

Client Sample ID: LCSD Lab ID#: 1203428B-07AA <u>MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN</u>

File Name: e032204 Dil. Factor: 1.00		Date of Collec Date of Analy	ction: NA sis: 3/22/12 11:22 AM
Compound			%Recovery
Vinyl Chloride			103
trans-1,2-Dichloroethene			118
cis-1,2-Dichloroethene			113
Trichloroethene			96
Tetrachloroethene			107
Container Type: NA - Not Ap	plicable		
Surrogates		%Recovery	Method Limits
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		102	70-130
4-Bromofluorobenzene		105	70-130



1. **1**. 11

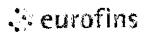
i i

Sample Transportation Notice

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 narmless, 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. Hotine (800) 467-4922

	ng, or saipping c	aampi		ct Info;		Turn	Around	Lap Use	Only -	
Project Manager <u>JCUNIUE TRASK</u>	, Č					Time:		Pressurized by		
Collected by: (Print and Sign) TIM ALESSI			P.O. #_		······································	🖾 No	ormal	Date		
Company ALCAUIS Email JOURNE, TH			Project	#1.172228	13.0001,00009	🗖 🗖 Ri	lsh	Presa	inzation I	Gas
Address 12-20, JEFRESSUST, JEHR City MULLALES State	(JT_Zp 53	202							Ni ₂ H	
Phone 414-276-7742 Fax 414-27	6-7603		Project	I Name_ <u>MP\D</u>	SON K-IFF	SĮ.	vecity		C12.	س خدان اخذ
			ate	Time		- 1	L		sure/Vac	10 20
Lab LD. Field Sample I.D. (Location)	Can #	of Co	llection	of Collection	Analyses Reques		Initial	Final	Receipt	Final (psi)
IAB-3	431	31	5/12	1006	TO-15		-300	-65		
IAF-3	12-18	3	5/12	1004	TO-15		-27.0	-5.0		
03A SEN-1-3	3146		7/12	1376	TO-15		-29,0	-4.0		
55W-2-3	33984		16/12	1116	10-15	•	-7:4.5	-5.0		
										-
		. <u></u>								
	_	-							an a	 ,
		1					 		2.29	
	ived by: (signa	•	Date/Tir		Notes:					
the second se	<u>_ 11711</u>			0920						
RelInquished by: (signature) Date/Time Rece	ived by: (signa	dure)	Date/Tir	ne						
Relinquished by: (signature) Date/Time Rece	fived by: (signa	iture)	Date/Tir	ne						
California Norma		lemp (<u>ەر،</u>	Condition	Custody S	eals Int	act?	Work	Order #	**************************************
Lab Shipper Maine All Call #	<u> </u>	N/X					وهارد بالدو التحرير ال	and a stand	430	
Use Only		NA	<u></u>	<u>(D 2008</u>		· · · · · ·		NUU	<u>*42</u>	
							والمراجع والمراجع والمراجع والمراجع	-		

Form 1293 rev.11



An Trans

4/1/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203428A

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/20/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

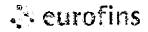
Regards,

coll-

Ausha Scott Project Manager

8 (1997) - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 19

1811 de lementes de 20 Pour Angel T COSPATISONS PESSIONAL COS SPANIA CONTRACTOR



All Heins

WORK ORDER #: 1203428A

Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	P.O. #	WI001283.0001.00009
FAX:	317-231-6514	PROJECT #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED:	03/20/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	04/01/2012		

			RECEIPT	FINAL
FRACTION #	<u>NAME</u>	<u>TEST</u>	<u>VAC./PRES.</u>	<u>PRESSURE</u>
01A	IAB-3	Modified TO-15 SIM	5.0 "Hg	5 psi
02A	IAF-3	Modified TO-15 SIM	5.5 "Hg	5 psi
03A	Lab Blank	Modified TO-15 SIM	NA	NA
04A	CCV	Modified TO-15 SIM	NA	NA
05A	LCS	Modified TO-15 SIM	NA	NA
05AA	LCSD	Modified TO-15 SIM	NA	NA

CERTIFIED BY:

Variated Antonia and

DATE; 04/01/12

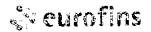
Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

Page 2 of 11



Alt Taxes

LABORATORY NARRATIVE Modified TO-15 SIM Arcadis U.S., Inc. Workorder# 1203428A

Two 6 Liter Summa Canister (SIM Certified) samples were received on March 20, 2012. 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<br compounds allowed out to < 40% RSD	Project specific; default criteria is =30% RSD with 10% of compounds allowed out to < 40% RSD</td
Daily Calibration	+- 30% Difference	Project specific; default criteria is $ Differencewith 10% of compounds allowed out up to .; flagand 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

There were no receiving discrepancies.

Analytical Notes

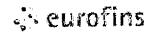
There were no analytical discrepancies.

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 and/or LCS.
- N The identification is based on presumptive evidence.



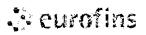
An Frank

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



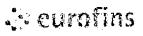
ALC TARKS

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

Client Sample ID: IAB-3

Lab ID#: 1203428A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.032	0.060	0.22	0.41
Client Sample ID: IAF-3				
Lab ID#: 1203428A-02A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.033	0.060	0.22	0.41



An fusics

Client Sample ID: IAB-3 Lab ID#: 1203428A-01A MODIFIED EPA METHOD TO-15 GC/MS SIM

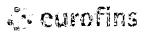
•

٦

File Name: Dil. Factor:	a032219sim 1.61	Date of Collection: 3/15/12 10:06:00 AM Date of Analysis: 3/22/12 08:39 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	Not Detected	0.17	Not Detected	
Tetrachloroetherie	0.032	0.060	0.22	0.41	
trans-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected	

Container Type: 6 Liter Summa Canister (SIM Certified)

Container Type, o Ener Summa Samola		Method
Surrogates	%Recovery	Limits
1.2-Dichloroethane-d4	115	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	101	70-130



ALL HEXTEN

Client Sample ID: IAF-3 Lab ID#: 1203428A-02A MODIFIED EPA METHOD TO-15 GC/MS SIM

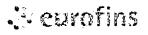
:

٦

File Name: Dil. Factor:	a032220sim 1.64	Date of Collection: 3/15/12 10:04:00 AM Date of Analysis: 3/22/12 09:20 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	Not Detected	0.18	Not Detected	
Tetrachloroethene	0.033	0.060	0.22	0.41	
trans-1,2-Dichloroethene	0.16	Not Detected	0.65	Not Detected	

Container Type: 6 Liter Summa Canister (SIM Certified)

		Method Limits		
Surrogates	%Recovery			
1.2-Dichloroethane-d4	116	70-130		
Toluene-d8	100	70-130		
4-Bromofluorobenzene	102	70-130		

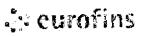


Arr Barles

Client Sample ID: Lab Blank Lab ID#: 1203428A-03A MODIFIED EPA METHOD TO-15 GC/MS SIM.

File Name: Dil. Factor:	a032207sim 1.00	Date of Collection: NA Date of Analysis: 3/22/12 11:47 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	

Surrogates%RecoveryMethod1,2-Dichloroethane-d410870-130Toluene-d89970-1304-Bromofluorobenzene10370-130

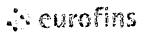


Ah Podes

Client Sample ID: CCV Lab ID#: 1203428A-04A <u>MODIFIED EPA METHOD TO-15 GC/MS SIM</u>

٦

File Name: Dil. Factor:	a032202sim 1.00	Date of Collec Date of Analy	ction: NA sls: 3/22/12 08:39 AM
Compound			%Recovery
Vinyl Chloride			80
cis-1,2-Dichloroethene			81
Trichloroethene			83
Tetrachioroethene			85
trans-1,2-Dichloroethene			83
Container Type: NA - Not Ap	plicable		Method
Surrogates		%Recovery	Limits_
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		100	70-130
4-Bromofluorobenzene		103	7 0 -130

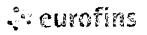


Str. Reality

Client Sample ID: LCS Lab ID#: 1203428A-05A MODIFIED EPA METHOD TO-15 GC/MS SIM

÷

File Name: Di]. Factor:	a032203sim 1.00	Date of Collec Date of Analy	:tion: NA sis: 3/22/12 09:20 AM
Compound			%Recovery
Vinyl Chloride			80
cis-1,2-Dichloroethene			80
Trichloroethene			80
Tetrachloroethene			82
trans-1,2-Dichloroethene			90
Container Type: NA - Not Ap	plicable		Method
Surrogates		%Recovery	Limits
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		101	70-130
4-Bromofluorobenzene		102	70-130



An index

Client Sample ID: LCSD Lab ID#: 1203428A-05AA MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	a032204sim	Date of Collect	
Dil. Factor: 1.00		Date of Analy	sis: 3/22/12 09:57 AM
Compound			%Recovery
Vinyl Chloride			81
cis-1,2-Dichloroethene			80
Trichloroethene			81
Tetrachloroethene			82
trans-1,2-Dichloroethene			91
Container Type: NA - Not A	pplicable		
			Method
Surrogates		%Recovery	Limits
1.2-Dichloroethane-d4		107	70-130
Toluene-d8		100	70-130
4-Bromofluorobenzene		102	70-130



94 . T

and the second se

S)

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

		nager <u>TENNINE TRASK</u>				Projec	et Info:		Turn A Tin	round ne:	Lab Use Pressi	<i>Ony</i> urized by	
		Y: (Prim and Sign) TIM ALESSI =				P.O. #_			🔄 Noi	rmal	Date.		
				HOLE MCHOS-		Project	# WIEX18	3.0001,00009	Ru	sh	Press	urization	Gas;
	Address	N. STATEASOUST, SELLO City MUNALLEE	State	(UT_ZIP <u>53</u>)	102							N ₂ H	
1	Phone	414-276-7742 Fax 414-	-1-16	<u>s 7605</u>					sp:	ecily Conjet		sure/Vac	
	Lab I.D.	Field Sample I.D. (Location)		Can #		ate llection	Time of Collection	Analyses Reque	sted	Initial		Receipt	
	01A	IAB-3		431	3/1	5h2	1006	TO-15		-300	-65		
	74	IAF-3		R-18	31	15/12	1004	-to-15		-77,0	-5.0		
ju juk		SSV-1-3		3146	31	17/12	1320	TO-15		-29,0	-4.0		3 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Jaco		551-2-3		33984	31	16/12	1116	70-15	,	-24,5	-5.0		
											}		
		· · · · · · · · · · · · · · · · · · ·											7
					:								
	1	ned by: (signature) Date/Time	30	ived by: (signa LAU	7,	Date/Tin 29.12	0920	Notes:					
	Relinquist	ned by: (signature) Date/Time	Rece	ived by: (signa	ture)	Date/Tir	ne						
	Relinquist	ned by: (signature) Date/Time	Rece	ived by: (signa	ture)	Date/Tlr	πθ		*			·····	
	Lab	Shipper Name Air Bill #	<u>* .</u>	٦	Temp	(°Ć)	Condition				1992 - A. C.	Qrder #	· · · · · · · · · · · · · · · ·
	Use	Ladra			NK]	(com	Yes N	lo Na	ne	803	3431	<u>]</u>
	Only											الأولية والمحادثة	
	Line and the second	المتحافظ والمتحافظ المتحد المتحد المتحد فالمتحد والمحمد المتحد المتحد والمحد والمحدوق والمحدوق والمح		الانتقاف العادي فيتقبو		والمراجعة الم						Fri	rm 1293 rev.



Madison-Kipp Corporation

Post Office Box 8043 Madison, WI 53708-8043 201 Waubesa Street Madison, WI 53704-5728 **Telephone** 608-244-3511 Website www.Madison-Kipp.com

April 17, 2012

Mr. Stephen Josheff 114 S. Marquette Street Madison, WI 53704

RE: Results of Air Testing 114 S. Marquette Street, Madison, WI 53704

Dear Mr. Josheff:

On March 28 and 29, 2012, ARCADIS personnel, on behalf of Madison-Kipp, completed indoor air and sub-slab vapor sampling activities to measure levels of select volatile organic compounds (VOCs), below and/or within your home, located at 114 S. Marquette Street in Madison, Wisconsin. This work was completed in cooperation with and with the prior approval of the Wisconsin Department of Natural Resources (WDNR).

Specifically, the sampling was completed to test for the presence of tetrachloroethene (PCE), trichloroethene (TCE), cis- and trans-1,2-dichloroethene, and vinyl chloride. The homes that were sampled in your neighborhood were given a unique sample identification number when submitting the samples to the laboratory to ensure confidentiality. The following samples were collected from your home:

- SSV1-4 and SSV2-4 Sub-slab samples collected on March 29, 2012. The sub-slab samples were collected from the sample points that were installed in the basement floor of your home.
- IAB-4 Indoor air basement sample collected on March 28-29, 2012.
- IAF-4 Indoor air first floor sample collected on March 28-29, 2012.

Based on the laboratory results (below), PCE was detected in the sub-slab and indoor air samples. The levels of PCE in the collected samples were below the sub-slab soil gas and indoor air Residential Action Levels provided by the WDNR. The WDNR Residential Action Level is based on the U.S. Environmental Protection Agency's Residential Air Screening Levels that represent health-protective concentrations an individual can be exposed to for 30 years for 24 hours a day.

Sample ID	Results (part per billion (ppbv))	Residential Action Level (ppbv)
SSV1-4	1.7	60
SSV2-4	0.50	60
IAB-4	0.084	6
IAF-4	0.092	6

The compound TCE was also detected in the sub-slab sample SSV-2-4 at a level of 0.27 ppbv. The detected concentration is below the WDNR Residential Action Level of 3.8 ppbv. TCE was not detected in the other samples.

Copies of the laboratory data and field notes are enclosed for your reference.

Singerely, ٣ lietus UL

Mark Meunier Madison-Kipp Corporation

cc: Michael Schmoller – WDNR Dr. Henry Nehls-Lowe – WDHS Norman Berger, Esq. David A. Crass, Esq.

Attachments: Laboratory Analytical Report Field Notes

INDOOR AIR QUALITY BUILDING SU	RVEY
Date: 3/20/12 Project #: 01001283.1.9	
Address: 114 S. MARQUETTE ST.	
MADISON LI	
	<u></u>
Property Contact: STEPHEN JOSHEFF	
Phone: Home: () Work: () Cell: ()
Building Occupants: Children <13 Children age 13-18	Adults
Building Construction Characteristics: (Circle appropriate description Single Family Multiple Family School	
Single FamilyMultiple FamilySchoolRanch-Z-FamilyRaised Ranch DuplexColonial #Split Level CondominiumMobile HomeOther (specify)	of units
General Description of Building Construction Materials, especially new	w materials:
WOOD CONSTRUCTION	
How many occupied stories does the building have?	
Has the building been weatherized with any of the following? (Circle a Insulation Storm Windows Energy-Efficient Window Other (specify)	ll that apply) s
	cify)
Basement Size <u>~ 700</u> (ft ²)	
Surveyor's Initials:	Page 1 of 5

INDOOR AIR QUALITY BUILDING SURVEY ,

Describe Basement Floor and Walls:
CONCRETE WALLS 3 FLOOR
Moisure: Always Dry Always Wet Frequently Wet Sometimes Wet)
Is a basement sump present? (VN) Is a sump pump present? (VN) (circle one)
Does the basement have any preferential pathways that might permit soil vapor entry? (Circle all that apply)
Visible Cracks Unsealed Pipes/Utility Conduits Sump pumps
What type of ground cover surrounds the outside of building? (Circle all that apply)GrassConcreteAsphaltOther (specify)
Hasting and Vantilation System(a) Presents
Heating and Ventilation System(s) Present: What type of heating system(s) is (are) used in this building? (Circle all that apply)
Hot Air Circulation Heat Pump Steam Radiation Wood Stove
Hot Air Circulation Heat Pump Steam Radiation Wood Stove Hot Air Radiation Unvented Kerosene heater Electric Baseboard
Other (specify):
What type (s) of fuel(s) arc used in this building? (Circle all that apply)
Natural Gas Electric Coal Other (specify):
Fuel Oil Wood Solar
What type of mechanical ventilation systems are present and/or currently operating in the building? (Circle all that apply)
Central Air Conditioning Bathroom Fan Kitchen fan
Individual Air Conditioning Units Air-to-Air Heat Exchanger
Open windows Other (specify):
Septic system? Yes / Yes (but not used) No Irrigation/private well? Yes / Yes (but not used) Ng
Existing subsurface depressurization (radon) system in place? Yes No If yes, is it running? Yes / No

Surveyor's Initials:

.

Page 2 of 5

INDOOR AIR QUALITY BUILDING SURVEY

Sources of Chemical Contaminants:

Which of these items are present in the building?

Potential Sources	Check if Present	Removed Prior to
Location(s)		Sampling? (Yes / No / NA)
Paints or paint thinners	\checkmark	
Gas-powered equipment		
Gasoline storage cans		
Cleaning solvents		
Air fresheners		
Oven cleaners		
Carpet/upholstery cleaners		
Hairspray		
Nail polish/polish remover		
Bathroom cleaner		
Appliance cleaner		
Furniture/floor polish		
Moth balls		
Fuel tank		
Wood stove		
Fireplace		· · · · · · · · · · · · · · · · · · ·
Perfume/colognes		
Hobby supplies (e.g.,		
solvents, paints, lacquers,		
glues, photographic		
darkroom chemicals)		······
Scented trees, potpourri, etc.		
Other:		
Other:		
Other:		

Do one or more smokers occupy this building on a regular basis (Y/N)? How often?

Has anybody smoked in the building in the last 48 hours (VAN)?

Does the building have an attached garage (YN)?	If so, is a car usually parked in the garage
(Y/N)?	

Do the occupants of the building frequently have their clothes dry-cleaned (Y(N))?

Was there any recent remodeling or painting done in the building (YM)?

Surveyor's Initials:

Page 3 of 5

A-4

INDOOR AIR QUALITY BUILDING SURVEY

Are there any pressed wood products in the building (e.g., hardwood plywood wall paneling, particleboard, fiberboard) (Y/N)

Are there any new upholstery, drapes or other textiles in the building (YND)

Have the occupants ever noticed any unusual odors in the building? (Y()) If yes, describe odors, location(s), and conditions that seem to affect odors (especially rain, temperature, wind):

Any known spills of a chemical immediately outside or inside the building? (YN) If yes, describe (location, age, type of chemical, any actions to clean up):

Has the building been treated (inside or outside) with any insecticides/pesticides(YN). If so, what chemicals are used and how often are they applied:

Outdoor Sources of Contamination:

Nearby Gasoline Stations (distance and direction):

Surveyor's Initials:

Page 4 of 5

INDOOR AIR QUALITY BUILDING SURVEY

Industrial Stack Emissions (distance and direction):

Automotive emission sources (e.g., highway; bus stop; high-traffic area):

Weather Conditions During Sampling:

Outside Temperature (°F):____

Prevailing wind speed and direction:

Describe the general weather conditions (e.g., sunny, cloudy, rain):____

Precipitation >0.1 inches within 12 hours preceding the sampling event (Y/N)? ______ General Comments:______

Is there any other information about the structural features of this building, the habits of its occupants or potential sources of chemical contaminants to the indoor air that may be of importance in facilitating the evaluation of the indoor air quality of the building?

The responses documented on this survey are true, accurate and complete to the best of my knowledge and ability.

.

Name of Surveyor

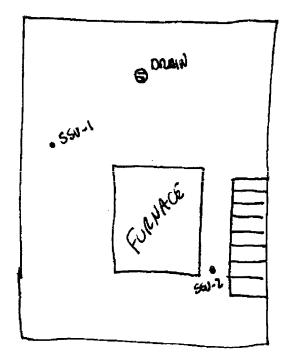
Signature

Date

Surveyor's Initials:

Page 5 of 5

A-6



Madiso	Madison Kipp Corporation		I Vapor Sample ollection Log
		Sample (D:	TAB-4
Client:	Madison Kipp	Boring Equipment:	NA
Project		Sealant:	AUN
Location:		Tubing Information:	NA
Project #:	•	Miscellaneeus Equipment:	NA
Samplers:	Bray	Subcontractor:	NA
Sample Point Location		Equipment	
Sampling Depth:		Moisture Content:	•
Time and Date of Installation:		Approximate Purge Volume:	

Date	Time	Canister Vecuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	P ID (ppb)
328/12	0810	- 29					
3/29/12	0945	Ø					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Tracer Test Information (if applicable):

Size (circle one):	1L 2.7L (BL)
Canister ID:	
Flow Controller ID:	
Notes:	

Initial Hellum Shroud:		
Final Heilum Shroud:		
Tracer Test Passed:	Yes	No
Notes:		

General Observations/Notes:

Mr. Josefs	did not	answer -	the door	at the	8 am ap	pointmen	ut
time.						1	
			······				
					<u></u>		

Approximating One-Well Volume (for purging):

When using 1¼-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL

Madiso	Madison Kipp Corporation		Vapor Sample
		Sample ID:	IAF-4
Client:	Madison Kipp	Boring Equipment:	NA
Project	Madison Kipp Residential Sampling	Sealant:	
Location:	Madison, 1145. Marguetk	Tubing Informations	
Project #:	· •	Miscellaneous Equipment	
Samplers:	•	Subcontractor:	
Sample Point Location		Equipment:	
Sampling Depth:		Molsture Content:	
Time and Date of installation:		Approximate Purge Volume:	4

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3 28/12	0500	-29					
32910	1050	- 2					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Tracer Test Information (If applicable):

ŝ

Size (circie one):	1L	2.7L	(GL
Canister ID:			
Flow Controller ID:			
Notes:			

Initial Helium Shroud:	NA	
Final Hellum Shroud:		
Tracer Test Passed:	Yes	No
Notes:		

General Observations/Notes:

Approximating One-Well Volume (for purging):

When using 1%-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.

			I Vapor Sample
Madise	on Kipp Corporation	C	ollection Log
		Sample ID:	SSV-1-4
Client	Madison Kipp	Boring Equipment:	
Project	Residential Sub-Slab	Sealant:	
Location	Modison Kipp Residential Sub-Slab Modison, 114 S. Marguetk	Tubing Information:	
Project#		Miscellaneous Equipment:	
Samplers		Subcontractor:	
		and the second se	

Ďate	Time	Canister Vacuum (a) (Inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PłD (ppb)
3/29	1020	14-3 0					
	1040	-5	_				
]		l		

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister information:

Tracer Test Information (if applicable):

÷,

Size (circle one):	1L	2.7L	۶L
Canister ID:			
Flow Controller			
Notes:			

Initial Helium Shroud:	96%	
Final Helium Shroud:	96%	
Tracer Test Passed:	Yes	No
Notes:	Open in Sam	de prain

General Observations/Notes:

Approximating One-Well Volume (for purging):

When using 1¼-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

Madison Kipp Corporation		Soil Vapor Sample Collection Log	
		Sample ID:	SSV-2-4
Ctient:	Madison Kipp	Boring Equipment:	
• •	Residential Sub-Slab	Sealant:	Na
	Madison, 1145. Marguetk	Tubing Informationa	
Project #:		Miscellaneous Equipment:	
Samplers:		Subcontractor:	NA
Sample Point Location:	near stairs	Equipment:	NA
Sampling		Molsture Content:	
Time and Date of Installation:		Approximate Purge Volume:	

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humicity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID. (ppb)
3/29	1020	-30					
	1045	- 5					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one): 1L 2.7L (6L) Canister ID: Flow Controller ID: Notes:

Initial Helium Shroud:	98%	
Final Helium Shroud:	98%	
Tracer Test Passed:	Yes	No
Notes:	Doom in same	le train
		•

Tracer Test information (if applicable):

General Observations/Notes:

Approximating One-Well Volume (for purging):

When using 1%-inch "Dummy Point" and a 6-inch sampling Interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.



Ar foxics

4/13/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: Project #: Workorder #: 1204018A

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 4/2/2012 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.

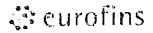
Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

ATScott-

Ausha Scott Project Manager

A Balevier Constantes d'All Autorité d'au Centres so La constant de la const La constant de la cons en salasta de tetro Carlos



Ger Textos

WORK ORDER #: 1204018A

Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	P.O. #	WI001283.0001.00009
FAX:	317-231-6514	PROJECT #	
DATE RECEIVED:	04/02/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	04/13/2012		

			RECEIPT	FINAL
FRACTION #	NAME	<u>TĒST</u>	VAC./PRES.	PRESSURE
01A	IAB-4	Modified TO-15 SIM	0.5 "Hg	5 psi
02A	IAF-4	Modified TO-15 SIM	3.0 "Hg	5 psi
03A	Lab Blank	Modified TO-15 SIM	NA	NA
04A	CCV	Modified TO-15 SIM	NA	NA
05A	LCS	Modified TO-15 SIM	NA	NA
05AA	LCSD	Modified TO-15 SIM	NA	NA

CERTIFIED BY:

and the fact of the second and a second

DATE: 04/13/12

DECEIDT

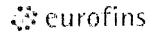
ETNIAT

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

> > Page 2 of 11



Arr Toxics

LABORATORY NARRATIVE Modified TO-15 SIM Arcadis U.S., Inc. Workorder# 1204018A

Two 6 Liter Summa Canister (SIM Certified) samples were received on April 02, 2012. 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<br compounds allowed out to < 40% RSD	Project specific; default criteria is $ RSD with 10% of compounds allowed out to < 40\% RSD$
Daily Calibration	+- 30% Difference	Project specific; default criteria is $ Differencewith 10% of compounds allowed out up to .; flagand 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

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

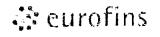
Definition of Data Qualifying Flags

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 and/or LCS.
- N The identification is based on presumptive evidence.

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

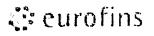


Air Toxics

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

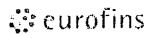
Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS SIM

2

Client Sample ID: IAB-4

Lab ID#: 1204018A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit _(ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.027	0.084	0.18	0.57
Client Sample ID: IAF-4				
Lab ID#: 1204018A-02A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.030	0.092	0.20	0.63



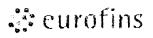
Air foxics

Client Sample ID: IAB-4 Lab ID#: 1204018A-01A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: Dil. Factor:	40-100 I I I I I I I I I I I I I I I I I I			9/12 9:45:00 AM 2 05:00 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.014	Not Detected	0.035	Not Detected
cis-1,2-Dichloroethene	0.027	Not Detected	0.11	Not Detected
Trichloroethene	0.027	Not Detected	0.15	Not Detected
Tetrachloroethene	0.027	0.084	0.18	0.57
trans-1,2-Dichloroethene	0.14	Not Detected	0.54	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	115	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	101	70-130



Air Toxics

Client Sample ID: IAF-4 Lab ID#: 1204018A-02A MODIFIED EPA METHOD TO-15 GC/MS SIM

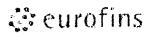
.

٦

File Name: Dil. Factor:	a040312sim 1.49	Date of Collection: 3/29/12 10:50:00 AM Date of Analysis: 4/3/12 05:47 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinvl Chloride	0.015	Not Detected	0.038	Not Detected
cls-1,2-Dichloroethene	0.030	Not Detected	0.12	Not Detected
Trichloroethene	0.030	Not Detected	0.16	Not Detected
Tetrachloroethene	0.030	0.092	0.20	0.63
trans-1,2-Dichloroethene	0.15	Not Detected	0.59	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	114	70-130
	99	70-130
4-Bromofluorobenzene	100	70-130

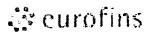


Air Iorics

Client Sample ID: Lab Blank Lab ID#: 1204018A-03A <u>MODIFIED EPA METHOD TO-15 GC/MS SIM</u> File Name: a040307sim Date of Collection: NA

Dil. Factor:	1.00	Date	Date of Analysis: 4/3/12 01:23 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: MA - Not Application		Method		
Surrogates	%Recovery	Limits		
1,2-Dichloroethane-d4	110	70-130		
Toluene-d8	98	70-130		
4-Bromofluorobenzene	97	70-130		

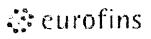


Air francs

Client Sample ID: CCV Lab ID#: 1204018A-04A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	a040303sim	Date of Collection: NA
Dil, Factor:	1.00	Date of Analysis: 4/3/12 10:12 AM
Compound		%Recovery
Vinyl Chloride		86
cis-1,2-Dichloroethene		85
Trichloroethene		86
Tetrachloroethene		88
trans-1,2-Dichloroethene		87

Condition Typer and Theoryphices		Method		
Surrogates	%Recovery	Limits		
1,2-Dichloroethane-d4	109	70-130		
Toluene-d8	100	70-130		
4-Bromofluorobenzene	101	70-130		



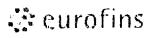
Art Toxics

Client Sample ID: LCS Lab ID#: 1204018A-05A

MODIFIED EPA METHOD TO-15 GC/MS SIM File Name: a040304sim Date of Collection: NA Dill. Factor: 1.00 Date of Analysis: 4/3/12 11:02 AM Compound %Recovery Vinyl Chloride 86 83

cis-1,2-Dichloroethene	83
Trichloroethene	84
Tetrachloroethene	84
trans-1,2-Dichloroethene	95

		Method		
Surrogates	%Recovery	Limits		
1.2-Dichloroethane-d4	109	70-130		
Toluene-d8	100	70-130		
4-Bromofluorobenzene	101	70-130		



Air Toxics

Client Sample ID: LCSD Lab ID#: 1204018A-05AA MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: Dil. Factor:	a040305sim 1.00	Date of Collection: NA Date of Analysis: 4/3/12 11:53 AM
Compound		%Recovery
Vinyl Chloride		84
cis-1,2-Dichloroethene		82
Trichloroethene		82
Tetrachloroethene		83
trans-1,2-Dichloroethene		93

Container Type, and a not Applicable		Method		
Surrogates	%Recovery	Limits		
1,2-Dichloroethane-d4	109	70-130		
Toluene-d8	100	70-130		
4-Bromofluorobenzene	102	70-130		

Sample Transportation Notice

ALALLY MARKANING CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR

Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federai, 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. Hotime (800) 467-4922

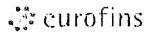
180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020

Page ____ of ____

Form 1293 rev.11

Project Mar	nager Jennine Trask			Proje	ct Info:			Around	Lab Use Press	Only urized by	
Collected by: (Print and Sign) Cari Bray Cari Bray				P.O. #		Normal		Date.			
		Trast Carcodis-		Destant	# WE001283	nool, on Q	Ru				
Address 176	N. Jefferson St \$ 40 City Milwaukee s	tate WF Zip 5	202					311	Press	urization (595
Phone 414	-276-1742 Fax 414-276-	1603		Projec	Name Madis	on Kipp	sp	ecity		N ₂ He	9
				ate	Time		_		·	sure/Vac	ri
Lab I.D.	Field Sample I.D. (Location)	Can #	of Co	lection	of Collection	Analyses Reques	sted	Initial	Final	Receipt	Final (psi)
UA	IAB-4		3/29	1/12	0945	TD-15		-29	0		-
044	FAF-4	99109	3/29	1/12	1050	TO-15		-27	-3		
02A	SSV-1-4		3/2	112	1045	70-15		-29	-5		
174A	SSV-2-4		3/2	1	1040	TO-15		-29	-5		
ha											
-12/12									1		1
			-								
						······································				<u></u> , , ,	
	A				· · · · · ·					+	†
/1	ed by: (signature) Date/Time F Bray 3/30/12 1900	Received by: (sign 6.1.74.46.4		Date/Tir 4/2/	1	Notes: Only Re	port;	<u> </u>		nipped : 2 boxes	
Rəlinquish	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Received by: (sign		Date/Tir		PCE TCE Viay	Chlor.	id.			
Relinquish	ed by: (signature) Date/Time F	Received by: (sigr	ature)	Date/Ti	ne	CiS-i	2-DC	E			
Lab	Shipper Name Air Bill #		Temp (°C)	Condition	Custody S	eals int	act	Work	Ordei #	
Use Only	Freder		NIA	- (Groot	(Yes) N	io Ne	ene	<u>1 ()</u>]40	28

. .



AIT IDAICS

4/13/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: Project #: Workorder #: 1204018B

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 4/2/2012 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.

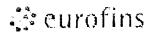
Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

17Scott-

Ausha Scott Project Manager

۰.



Arr loxies

WORK ORDER #: 1204018B

Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	P.O. #	WI001283.0001.00009
FAX:	317-231-6514	PROJECT #	
DATE RECEIVED:	04/02/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	04/13/2012		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
		Modified TO-15	5.0 "Hg	5 psi
03A	SSV-1-4		0	
04A	SSV-2-4	Modified TO-15	5.0 "Hg	5 psi
05A	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:

a harates a fire march

DATE: 04/13/12

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP - CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins | Alr Toxics, Inc.

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



Air fostes

LABORATORY NARRATIVE Modified TO-15 Arcadis U.S., Inc. Workorder# 1204018B

Two 6 Liter Summa Canister samples were received on April 02, 2012. 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
ICAL %RSD acceptance criteria	+- 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	= 30% Difference with four allowed out up to</p =40%.; flag and narrate outliers</p
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
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

Receiving Notes

There were no receiving discrepancies.

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 and/or LCS.

🔅 eurofins

An Toxics

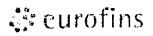
N - The identification is based on presumptive evidence.

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



AL TOMOS

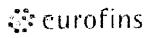
Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SSV-1-4

Lab ID#: 1204018B-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.16	1.7	1.1	12
Client Sample ID: SSV-2-4				
Lab ID#: 1204018B-04A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.16	0.27	0.86	1.5
Tetrachloroethene	0.16	0.50	1.1	3.4

-



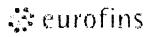
Arr Toxics

Lab ID#: 1204018B-03A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN				
File Name: Dil. Factor:	a040317 1.61	Date	of Collection: 3/2 of Analysis: 4/3/1	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.16	Not Detected	0.41	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0. 64	Not Detected
Trichloroethene	0.16	Not Detected	0.86	Not Detected
Tetrachioroethene	0.16	1.7	1.1	12

Client Sample ID: SSV-1-4

Container Type: 6 Liter Summa Canister

Container Type: o Endi Gamma Gameter		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	114	78-134	
Toluene-d8	100	91-106	
4-Bromofluorobenzene	98	87-118	



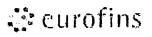
An Toxics

Client Sample ID: SSV-2-4 Lab ID#: 1204018B-04A <u>MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN</u>

File Name: Dil. Factor:	a040318 1.61	Date of Collection: 3/29/12 10:40:00 A Date of Analysis: 4/3/12 10:36 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinvi Chloride	0.16	Not Detected	0.41	Not Detected
trans-1.2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
Trichloroethene	0.16	0.27	0.86	1.5
Tetrachloroethene	0.16	0.50	1.1	3.4

Container Type: 6 Liter Summa Canister

		Method	
Surrogates	%Recovery	Limits	
1.2-Dichloroethane-d4	114	78-134	
Toluene-d8	100	91-106	
4-Bromofluorobenzene	101	87-118	



Tetrachloroethene

Air Toxica

Lab ID#: 1204018B-05A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN				
File Name: DII, Factor:	a040307 1.00		of Collection: NA of Analysis: 4/3/1	2 01:23 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
trans-1.2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Trichloroethene	0.10	Not Detected	0.54	Not Detected

Client Sample ID: Lab Blank

Container Type: NA - Not Applicable

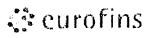
		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	108	70-130	
Toluene-d8	97	70-130	
4-Bromofluorobenzene	92	70-130	

Not Detected

0.10

Not Detected

0.68



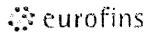
Air loxics

Client Sample ID: CCV Lab ID#: 1204018B-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	a040303 1.00	Date of Collection: NA Date of Analysis: 4/3/12 10:12 AM
Compound		%Recovery
Vinyl Chloride		97
trans-1,2-Dichloroethene		91
cis-1,2-Dichloroethene		91
Trichloroethene		94
Tetrachloroethene		93

Somanici Typer text net oppressio		Method	
Surrogates	%Recovery	Limits	
1.2-Dichloroethane-d4	111	70-130	
Toluene-d8	100	70-130	
4-Bromofluorobenzene	100	70-130	



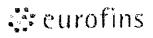
Air Toxics

Client Sample ID: LCS Lab ID#: 1204018B-07A

a040304 Date of Collection: NA

ile Name: a040304)il. Factor: 1.00		Date of Collection: NA Date of Analysis: 4/3/12 11:02 AM
Compound		%Recovery
Vinyl Chloride		96
trans-1,2-Dichloroethene		98
cis-1.2-Dichloroethene		91
Trichloroethene		88
Tetrachloroethene		88

		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	112	70-130	
Toluene-d8	99	70-130	
4-Bromofluorobenzene	100	70-130	



Air Torics

Client Sample ID: LCSD Lab ID#: 1204018B-07AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: a040305 Dil. Factor: 1.00		Date of Collection: NA Date of Analysis: 4/3/12 11:53 AM
Compound		%Recovery
Vinyl Chloride		92
trans-1,2-Dichloroethene		94
cis-1,2-Dichloroethene		85
Trichloroethene		70
Tetrachioroethene		88

Container Type. NA - Not Applicable		Method		
Surrogates	%Recovery	Limits		
1,2-Dichloroethane-d4	107	70-130		
Toluene-d8	79	70-130		
4-Bromofluorobenzene	101	70-130		

Air Toxics ltd.	,
CHAIN-OF-CUSTODY RECORD	

. . . .

с**і** і.

.∉ §

 \sim

Sample Transportation Notice

Relinquishing signature on this document indicates that sample is being shipped in compliance with 180 BLUE RAVINE ROAD, SUITE B 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. Relinguishing 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

FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020

Page ____ of ____

		nager Jenine Trask y: (Print and Sign) Cari Bray Couri Bray	~		Projec	et info:		Turn Ar Time	e;	Lab Use Press	<i>Only</i> uri ze d by:	
	Company <u>A</u>	PCADISEmail Email Email	Fast Carcodis-	-	-	# WE001283		Norn		Date:		0
		6N.JeffersonSt #40 City <u>Milwauker</u> St 1-276-7742 Fax 414-276-		202		Name Madis		spea			urization (N_2 He	
	Lab I.D.	Field Sample I.D. (Location)	Сал #		ate liection	Time of Collection	Analyses Reques	Ĺ	Canis Initial	ter Pres Final	sure/Vac	
Ru 1/2/12		TAB-4		3/29		0945	TD-15	h	-29	0	, loop,pe	(pai)
4/2/12	624	TAF-4	99109	3/29	7	1050	TO-15	-	-29	-3		
	03A	SSV-1-4		3/29	1	1045	70-15		-29	-5		
	OHA	SSV-2-4		3/2	1	1040	TO-15	-	-29	-5		
					- <u></u>							
				1								
	Can	Brang 3/30/12 1900	eceived by: (signa <u>B. L. Ruff . (</u> eceived by: (signa	er 470	- 4/2/	12 0850	Notes: Only Re PCE TCE	port:			nipped :	
			eceived by: (sign				Vinyl	Chlorid 12-DCE -1,2-D	5. 5. CE			
	Lab	Shipper Name Air Bill #		Temp (°C)	Condition				Work	Order #	
	Use Only	Freder		NA	- (Frond	(Yes) N	o Non	ie	12	049	18



Madison-Kipp Corporation

Post Office Box 8043 Madison, WI 53708-8043 Madison, WI 53704-5728

201 Waubesa Street

Telephone 608-244-3511 Website www.Madison-Kipp.com

March 30, 2012

Ms. Judith James 118 S. Marquette Street Madison, WI 53704

RE: Results of Air Testing 118 S. Marguette Street, Madison, WI 53704

Dear Ms. James:

On March 12 and 13, 2012, ARCADIS personnel, on behalf of Madison-Kipp, completed indoor air and sub-slab vapor sampling activities to measure levels of select volatile organic compounds (VOCs), below and/or within your home, located at 118 S. Marguette Street in Madison, Wisconsin. This work was completed in cooperation with and with the prior approval of the Wisconsin Department of Natural Resources (WDNR).

Specifically, the sampling was completed to test for the presence of tetrachloroethene (PCE), trichloroethene (TCE), cis- and trans-1,2-dichloroethene, and vinyl chloride. The homes that were sampled in your neighborhood were given a unique sample identification number when submitting the samples to the laboratory to ensure confidentiality. The following samples were collected from your home:

- SSV1-5 and SSV2-5 Sub-slab samples collected on March 13, 2012. The sub-slab samples were collected from the sample points that were installed in the basement floor of your home.
- IAB-5 Indoor air basement sample collected on March 12-13, 2012.
- IAF-5 Indoor air first floor sample collected on March 12-13, 2012.

Based on the laboratory results (below), only PCE was detected in these samples. The levels of PCE in the collected samples were below the sub-slab soil gas and indoor air Residential Action Levels provided by the WDNR. The WDNR Residential Action Level is based on the U.S. Environmental Protection Agency's Residential Air Screening Levels that represent health-protective concentrations an individual can be exposed to for 30 years for 24 hours a day.

Sample ID	Results (part per billion (ppbv))	Residential Action Level (ppbv)
SSV1-5	1.4	60
SSV2-5	0.32	60
IAB-5	0.14	6
IAF-5	0.061	6

Copies of the laboratory data and field notes are enclosed for your reference.

Sincerely lela

Mark Meunier Madison-Kipp Corporation

cc: Michael Schmoller – WDNR Dr. Henry Nehls-Lowe – WDHS Norman Berger, Esq. David A. Crass, Esq.

Attachments: Laboratory Analytical Report Field Notes

INDOOR AIR QUALITY BUILDING SURVEY	7
Date: $03/06/2012$ Project #: $WIOO 1283.0001.0001.0001.0001.0001.0001.0001.00$	
Address: 118 Manquette Street, Madison, WI	
Address:	
Property Contact: Judith James	
Phone: Home: (602) $622 - 3106$ Work: () Cell: (202)	52-9696
Building Occupants: Children <13 Children age 13-18 Adu	lts_2
Building Construction Characteristics: (Circle appropriate description) Single Family Multiple Family School Con Ranch 2-Family Raised Ranch Duplex Colonial # of units Split Level Condominium Mobile Home Other (specify) General Description of Building Construction Materials, especially new mater	
WOOD HOME, WOOD SIDING-(ORIGINAL)	
How many occupied stories does the building have?	
Has the building been weatherized with any of the following? (Circle all that a Insulation Storm Windows Energy-Efficient Windows Other (specify)	pply)
What type of basement does the building have? (Circle all that apply) Full basement Crawlspace (Slab-on-Grade) Other (specify)	

A-2

INDOOR AIR QUALITY BUILDING SURVEY ,

Describe Basement Floor and Walls: CONCRETE FLOOR, CRMRNT

BLOCK WALLS

Moisure: Always Dry Always Wet Frequently Wet Sometimes Wet
Is a basement sump present? (YA) Is a sump pump present? (YA) (circle one)
Does the basement have any preferential pathways that might permit soil vapor entry? (Circle all that apply) Visible Cracks Unsealed Pipes/Utility Conduits Sump pumps What type of ground cover surrounds the outside of building? (Circle all that apply) Grass Concrete Asphalt Other (specify)
Heating and Ventilation System(s) Present: What type of heating system(s) is (are) used in this building? (Circle all that apply) Hot Air Circulation Heat Pump Steam Radiation Wood Stove Hot Air Radiation Unvented Kerosene heater Electric Baseboard Other (specify):
What type (s) of fuel(s) are used in this building? (Circle all that apply) Natural Gas Electric Coal Other (specify): Fuel Oil Wood Solar
What type of mechanical ventilation systems are present and/or currently operating in the building? (Circle all that apply) Central Air Conditioning Individual Air Conditioning Units Open windows Other (specify):
Septic system? Yes / Yes (but not used) / M Irrigation/private well? Yes / Yes (but not used) / M
Existing subsurface depressurization (radon) system in place? Yes No

Surveyor's Initials:

A-3

Page 2 of 5

INDOOR AIR QUALITY BUILDING SURVEY

Sources of Chemical Contaminants:

Which of these items are present in the building?

Potential Sources	Check if Present	Removed Prior to
Location(s)	_	Sampling? (Yes / No / NA)
Paints or paint thinners		
Gas-powered equipment		
Gasoline storage cans		
Cleaning solvents	(Glasselt)	
Air fresheners		
Oven cleaners	V (KITCHEN)	
Carpet/upholstery cleaners		
Hairspray		· · · · · · · · · · · · · · · · · · ·
Nail polish/polish remover		
Bathroom cleaner	V	
Appliance cleaner		
Furniture/floor polish		
Moth balls		
Fuel tank		
Wood stove		
Fireplace		
Perfume/colognes	/ (UPSTAIRS ON	04)
Hobby supplies (e.g.,	V (wood chu	ě)
solvents, paints, lacquers,		
glues, photographic		
darkroom chemicals)		
Scented trees, potpourri, etc.		·
Other: S EASONAL WANDER ONER	· (NOVEMBE	4)
Other:		•
Other:		

Do one or more smokers occupy this building on a regular basis (Y)? How often?

Has anybody smoked in the building in the last 48 hours (Y/N)?

Does the building have an attached garage (Y_N) ? If so, is a car usually parked in the garage (Y/N)?

Do the occupants of the building frequently have their clothes dry-cleaned (Y(N)?

Was there any recent remodeling or painting done in the building ((1)?

SAMPLE TEST IN DINING ROOM 2 MONTHS AGO

Surveyor's Initials:

Page 3 of 5

118

A-4

INDOOR AIR QUALITY BUILDING SURVEY

Are there any pressed wood products in the building (e.g., hardwood plywood wall paneling, particleboard, fiberboard) (YN)? SCRAP PCWOOD

Are there any new upholstery, drapes or other textiles in the building (YAN)?

Have the occupants ever noticed any unusual odors in the building? (YN)? If yes, describe odors, location(s), and conditions that seem to affect odors (especially rain, temperature, wind):

Any known spills of a chemical immediately outside or inside the building? (YN)? If yes, describe (location, age, type of chemical, any actions to clean up):

Has the building been treated (inside or outside) with any insecticides/pesticides(Y/N)? If so, what chemicals are used and how often are they applied:

Outdoor Sources of Contamination:

Nearby Gasoline Stations (distance and direction):

Surveyor's Initials:

Page 4 of 5

INDOOR AIR QUALITY BUILDING SURVEY

Industrial Stack Emissions (distance and direction):

Automotive emission sources (e.g., highway; bus stop; high-traffic area):

······································	· · · · · · · · · · · · · · · · · · ·
<u></u>	······································
<u> </u>	<u></u>
Weather Conditions During Samp	
Dutside Temperature (°F):	
revailing wind speed and direction:	: / / / / / / / / / / / / / / / /
Precipitation >0.1 inches within 12.1	hours preceding the sampling event (Y/N)?
Seneral Comments:	*
Jeneral Commonis.	<u></u>
	emical contaminants to the indoor air that may be of tion of the indoor air quality of the building?
	·
The responses documented on this so nowledge and ability.	urvey are true, accurate and complete to the best of my $\overline{11}M$ ALESS/
	<u>TM ALESS</u> / Name of Surveyor
	Signature
	3/6/12

Date

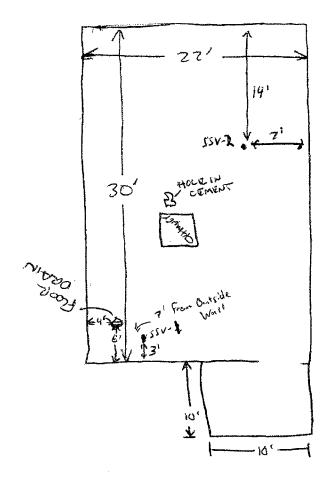
Surveyor's Initials

Page 5 of 5

118

1

А-б



SHERWIN WILLIAMS -CASHMERE - DURATION MAPEL MAPER PRIME LUNDERLAMMENT PRIMER) RED DEVIL ZIP-A-WAY CANK PAINTERS PREFERED ACRALL CANK FIF MUTIPURPOSE ENAMEL OIL LATEX PAINTS MOTOROIL PAINT THINNER STARTING FLUID

Î N 118

and a second sec	/			
	Madiso	n Kipp Corporation		I Vapor Sample ollection Log
			Sample ID:	55+1-118 SSU1-5-
	Client:	Madison Kipp	Boring Equipment:	NONL
	Project:	Madisin Kip	Sealant:	claux
	Location:	SSUI-buseauent-118	Tubing Information:	"hi" telfter 1 nuseulles
· .	Project #:		Miscellaneous Equipment:	None
	Samplers:	TALAW	Subcontractor:	Hone
:	Sample Point Location:	SSUI	Equipment:	IK detector, Snowd, pup
	Sampling Depth:	dure they betwo substab	Molsture Content:	dry
	Time and Date of Installation:		Approximate Purge Volume:	3

Date Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
2/13/12 1552	-29				29.72	
3/13/12 1004	-5				29.72	

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1L 2.7L 6L
Canister ID:	34023
Flow Controller ID:	FC258
Notes:	

Tracer Test Information (if applicable):

Initial Helium Shroud:	95.6010	
Final Hellum Shroud:	86-4016	
Tracer Test Passed:	Yes	No
Notes:		

i

¢

General Observations/Notes:

DUSSED Shuft- M LEST.

Approximating One-Well Volume (for purging):

When using 1¼-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

A	/			·
	Madisoi	a Kipp Corporation		Vapor Sample ollection Log
			Sample ID:	5542-118 SSV 2-5
	Client:	Madisin kipp	Boring Equipment:	Nons
	Project:	Madisu Kop	Sealant:	Clary
	Location:	SSV2-barrent-118	Tubing Information:	+14" tellon + Masterflop
-	Project #:		Miscellaneous Equipment:	NUP
	Samplers:	THIAN	Subcontractor:	NON
	Sample Point Location:	SSUZ	Equipment:	
i	Sampling Depth:	dretly below slab	Moisture Content:	pup the detector, the dry
	Time and Date of Installation:		Approximate Purge Volume:	

797	PID (ppb)	Barometric Pressure (inches of Hg)	Air Speed (mph)	Relative Humidity (%)	Temperature (°F)	Canister Vacuum (a) (inches of Hg)	Time	Date
2151 + 11010 -44		29.72				-29	1018	313112
3/13/12 11050 -5 29.72		29.72					11050	3/13/12

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one): Canister ID: (703 Flow Controller ID: FC 9U Notes:

Tracer Test Information (if applicable):

Initial Helium Shroud:	94,2%	
Final Helium Shroud:	82.4%	
Tracer Test Passed:	Yes	No
Notes:		

General Observations/Notes:

Neud Chot in Vet.	
WELD Shet M LET.	

Approximating One-Well Volume (for purging):

When using 1¼-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

Madiso	n Kipp Corporation	1	por Sample
		Sample ID: / A	F-5
Client:	MADISON RAPP	Boring Equipment:	
Project:		Sealant:	
Location:		Tubing Information:	
 Project #:		Miscellaneous Equipment:	
Samplers:	<u></u>	Subcontractor:	
Sample Point Location:	on buffort trude -furt	Equipment:	
Sampling Depth:	NOM	Moisture Content:	
Time and Date of Installation:		Approximate Purge Volume:	

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/12/12	1445	7-30					
3/13/17-	1508	-10.0					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one): 1L 2.7L 6L Canister ID: 3574 Flow Controller ID: 5777 Notes:

Initial Helium Shroud: Final Helium Shroud: Tracer Test Passed: Yes No

Notes:

Tracer Test Information (if applicable):

General Observations/Notes:

PASSED STUT-INTEST.	
HS S. LIAPQUETTE ST.	

Approximating One-Well Volume (for purging):

When using 1%-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.

	1			•
	Madiso	n Kipp Corporation		Vapor Sample ollection Log
,			Sample ID:	1AB-5
	Client:	MADISON KIPP	Boring Equipment:	
	Project:		Sealant:	
	Location:		Tubing Information:	
	Project #:	,	Miscellaneous Equipment:	
	Samplers:		Subcontractor:	, ````
	Sample Point Location:		Equipment:	
	Sampling Depth:		Moisture Content:	
	Time and Date of Installation:		Approximate Purge Volume:	

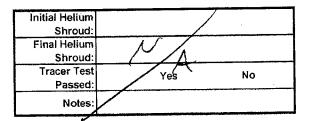
Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/12/2	1696	-24.5					
313/12	1510	-6.5					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Tracer Test Information (if applicable):

Size (circle one):	1L 2.7L 6L
Canister ID:	1593
Flow Controller ID:	40015
Notes:	



General Observations/Notes:

PASSED SHUT-INTEST.
NE MADRIETTE ST

Approximating One-Well Volume (for purging):

When using 1%-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.

eurofins 🕄

3/28/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203369A

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/16/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

,ceA

Ausha Scott Project Manager

A Eurofine Lancaster Laboratorits Company

Eurofine Alt Toxics, Inc.

180 Blue Ravine Road, Suite B Folsoni, CA 95630 T | 916-985-1000 F | 916-985-1020

Page 1 of 11



WORK ORDER #: 1203369A

Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	P.O. #	WI001283.0001.00009
FAX:	317-231-6514	PROJECT #	W1001283.0001.00009 MADISON KIPP
DATE RECEIVED: DATE COMPLETED:	03/16/2012 03/28/2012	CONTACT:	Ausha Scott

			RECEIPT	FINAL
FRACTION #	<u>NAME</u>	TEST	VAC./PRES.	PRESSURE
01A	IAB-5	Modified TO-15 SIM	6.2 "Hg	5 psi
02A	IAF-5	Modified TO-15 SIM	9.8 "Hg	5 psi
03A	Lab Blank	Modified TO-15 SIM	NA	NA
04A	CCV	Modified TO-15 SIM	NA	NA
05A	LCS	Modified TO-15 SIM	NA	NA
05AA	LCSD	Modified TO-15 SIM	NA	NA

CERTIFIED BY:

mala) of Frummer 6-3

DATE: 03/28/12

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

Page 2 of 11

🔅 eurofins

Air Toxics

LABORATORY NARRATIVE Modified TO-15 SIM Arcadis U.S., Inc. Workorder# 1203369A

Two 6 Liter Summa Canister (SIM Certified) samples were received on March 16, 2012. 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<br compounds allowed out to < 40% RSD	Project specific; default criteria is =30% RSD with 10% of compounds allowed out to < 40% RSD</td
Daily Calibration	+- 30% Difference	Project specific; default criteria is $ Differencewith 10% of compounds allowed out up to ; flagand 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

There were no receiving discrepancies.

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 and/or LCS.
- N The identification is based on presumptive evidence.

🔅 eurofins

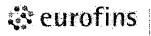
Air Toxics

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

rl-File was requantified for the purpose of reissue

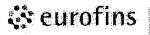


Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS SIM

Client Sample ID: IAB-5

Lab ID#: 1203369A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.034	0.14	0.23	0.92
Client Sample ID: IAF-5				
Lab ID#: 1203369A-02A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.040	0.061	0.27	0.41

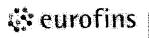


Client Sample ID: IAB-5 Lab ID#: 1203369A-01A MODIFIED EPA METHOD TO-15 GC/MS SIM.

File Name: Dil, Factor:	v031919sim 1.69	Date of Collection: 3/13/12 Date of Analysis: 3/19/12 05		
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	0.14	0.23	0.92
trans-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

		Method
Surrogates	%Recovery	Limits
1.2-Dichloroethane-d4	105	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	103	70-130



Client Sample ID: IAF-5 Lab ID#: 1203369A-02A MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: Dil. Factor:	v031920sim 1.99	Date of Collection: 3/13/12 3:0 Date of Analysis: 3/19/12 10:18			
Compound	Rpt. Limit (ppbv)	Amount Rpt. Limit (ppbv) (ug/m3)		Amount (ug/m3)	
Vinyl Chloride	0.020	Not Detected	0.051	Not Detected	
cis-1.2-Dichloroethene	0.040	Not Detected	0.16	Not Detected	
Trichloroethene	0.040	Not Detected	0.21	Not Detected	
Tetrachloroethene	0.040	0.061	0.27	0.41	
trans-1.2-Dichloroethene	0.20	Not Detected	0.79	Not Detected	

Container Type: 6 Liter Summa Canister (SIM Certified)

		Method
Surrogates	%Recovery	Limits
1.2-Dichloroethane-d4	104	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	101	70-130

🔅 eurofins

Air Toxics

Client Sample ID: Lab Blank Lab ID#: 1203369A-03A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: Dil. Factor:	v031906sim 1.00	Date of Collection: NA Date of Analysis: 3/19/12 12:30 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit Amoun (ug/m3) (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

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

🔅 eurofins

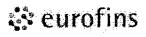
Air Toxics

Client Sample ID: CCV

Lab ID#: 1203369A-04A

File Name:	v031902sim	Date of Collection: NA		
Dil. Factor:	1.00	Date of Analysis: 3/19/12 09:36 AM		
Compound		%Recover		
Vinyl Chloride		85		
cis-1,2-Dichloroethene		91		
Trichloroethene		90		
Tetrachloroethene		89		
trans-1.2-Dichloroethene		. 91		

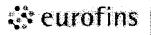
		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	102	70-130	
Toluene-d8	99	70-130	
4-Bromofluorobenzene	108	70-130	



Client Sample ID: LCS Lab ID#: 1203369A-05A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	v031903sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/19/12 10:26 AM
Compound		%Recovery
Vinyl Chloride		101
cis-1.2-Dichloroethene		108
Trichloroethene		97
Tetrachloroethene		105
trans-1.2-Dichloroethene		120

		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	101	70-130	
Toluene-d8	98	70-130	
4-Bromofluorobenzene	103	70-130	



Client Sample ID: LCSD Lab ID#: 1203369A-05AA MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	v031904sim	Date of Collection: NA			
Dil. Factor:	1.00	Date of Analysis: 3/19/12 11:17 AM			
Compound		%Recovery			
Vinyl Chloride		101			
cis-1,2-Dichloroethene		106			
Trichloroethene		95			
Tetrachloroethene		102			
trans-1,2-Dichloroethene		118			

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	108	70-130



177

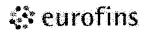
Sample Transportation Notice

Relinquishing signature on this document indicates that sample is being shipped in compliance with 180 BLUE RAVINE ROAD, SUITE B 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. Reilnquishing 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

FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020

Page ____ of ____

Project ManagerENNINE_TRASK			Projec	ct Info:			Around me:	Lab Use Pressi	<i>Only</i> Irized by:	
Collected by: (Print and Sign) TIM AUESS			P.O. #_			8 No	ormal	Date.		
Company ARCAOIS Email Brail			Project	# LOI COV	93,0001.00004		ush	Pressi	urization (Gas
Address 126 N. JEFFLAGN ST. STERCity MULLIONEE State	<u>wr</u> zip <u>53</u>	202							N ₂ H	
Phone 414-276-7742 Fax 414-276	5-4603	J	Project	I Name_CCAD	SON KIPP	S	pecify		sure/Vac	
Lab I.D. Field Sample I.D. (Location)	Can #		ate llection	Time of Collection	Analyses Reque	sted	Initial	Final	Receipt	1997-1997 (ASI)
ela IAB-5	4209	3/1	3hz	1510	TO-15		-79.5	-65		
OLA IAF-5	3574	-	3/12	1508	TO-15		7-30,0	-10,0		
SSV-1-5	34023	3/1	3/12	1624	TO-15 _		-29.0	-5.0	y Talahi Talahi	
SSV-2-5	1703	3/1	3/12	1650	TO-15		-Z4.0	-5.0		
		1								
	1	~								
		1								
	-	1								
	eived by: (stgna dived by: (signa	Ph	Date/Tin 2 Date/Tin	16/12 090	Notes: 0		REPORT PCE TCE UNXL CIS-1,2	ance		
Relinquished by: (signature) Date/Time Rec	eived by: (signa	iture)	Date/Tir	ne			TRANS-		Ē	
Lab Shipper Name Air Bill #		lemp (°C)	Condition	Custody	Seals In	tact?	Work	Order #	
Use PBO PX		NA		QUP	Yes	No N	one 1	203	36 0	
Only				· · · · · · · · · · · · · · · · · · ·						
									For	mr 1293 rev∫1



3/28/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203369B

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/16/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

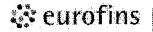
Ausha Scott Project Manager

A Eurotins Lancaster Laboratories Company

Eurofins All Toxics, Inc.

180 Blue Ravine Road, Suite & Folson, CA 95530

T (916-985-1000 F) 916-985-1020 www.alrtoxics.com



WORK ORDER #: 1203369B

Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	P.O. #	WI001283.0001.00009
FAX:	317-231-6514	PROJECT #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED: DATE COMPLETED:	03/16/2012 03/28/2012	CONTACT:	Ausha Scott

FRACTION #	NAME	TEST	RECEIPT <u>VAC./PRES.</u>	FINAL <u>PRESSURE</u>
03A	SSV-1-5	Modified TO-15	5.0 "Hg	5 psi
04A	SSV-2-5	Modified TO-15	5.6 "Hg	5 psi
05A	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:

Condo d. Friman

DATE: 03/28/12

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

Page 2 of 11

🔅 eurofins

Air Toxics

LABORATORY NARRATIVE Modified TO-15 Arcadis U.S., Inc. Workorder# 1203369B

Two 6 Liter Summa Canister samples were received on March 16, 2012. 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
ICAL %RSD acceptance criteria	+- 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	= 30% Difference with four allowed out up to </=40%.; flag and narrate outliers</td
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
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

Receiving Notes

There were no receiving discrepancies.

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 and/or LCS.

🔅 eurofins |

Air Toxics

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

rl-File was requantified for the purpose of reissue



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

Client Sample ID: SSV-1-5

Lab ID#: 1203369B-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.16	1.4	1.1	9.3
Client Sample ID: SSV-2-5				
Lab ID#: 1203369B-04A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.16	0.32	1.1	2.2

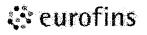
🛟 eurofins 🛛

Air Toxics

Client Sample ID: SSV-1-5 Lab ID#: 1203369B-03A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN					
File Name: Dil. Factor:	v032013 1.61		of Collection: 3/1 of Analysis: 3/20		
Compound	Rpt. Limit (ppbv)				
Vinyl Chloride	0.16	Not Detected	0.41	Not Detected	
trans-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected	
cis-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected	
Trichloroethene	0.16	Not Detected	0.86	Not Detected	
Tetrachloroethene	0.16	1.4	1.1	9.3	

Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	100	70-130



Client Sample ID: SSV-2-5 Lab ID#: 1203369B-04A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: v032015 Date of Collection: 3/13/12 4:50:00 PM Dil. Factor: Date of Analysis: 3/20/12 08:07 PM 1.65 Rpt. Limit Rpt. Limit Amount Amount Compound (ppbv) (ppbv) (ug/m3) (ug/m3) Vinyl Chloride 0.16 Not Detected 0.42 Not Detected 0.65 trans-1,2-Dichloroethene 0.16 Not Detected Not Detected 0.65 cis-1,2-Dichloroethene 0.16 Not Detected Not Detected 0.16 Not Detected 0.89 Not Detected Trichloroethene Tetrachloroethene 0.16 0.32 1.1 2.2

Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	97	70-130

🔅 eurofins

Air Toxics

Client Sample ID: Lab Blank Lab ID#: 1203369B-05A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	v032006 1.00	Date of Collection: NA Date of Analysis: 3/20/12 12:43 PM			
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected	
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected	
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected	
Trichloroethene	0.10	Not Detected	0.54	Not Detected	
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected	

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	93	70-130

eurofins

Air Toxics

Client Sample ID: CCV Lab ID#: 1203369B-06A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	∨032002 1.00	Date of Collection: NA Date of Analysis: 3/20/12 10:02 AM
	1.00	Date of Analysis. 5/20/12 10.02 AM
Compound		%Recovery
Vinyl Chloride		93
trans-1,2-Dichloroethene		91
cis-1,2-Dichloroethene		94
Trichloroethene		106
Tetrachloroethene		99

		Method		
Surrogates	%Recovery	Limits		
1,2-Dichloroethane-d4	103	70-130		
Toluene-d8	100	70-130		
4-Bromofluorobenzene	105	70-130		



Client Sample ID: LCS Lab ID#: 1203369B-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN					
File Name: Dil. Factor:	v032003 1.00	Date of Colle Date of Analy	ction: NA /sis: 3/20/12 10:46 AM		
Compound			%Recovery		
Vinyl Chloride			111		
trans-1,2-Dichloroethene			120		
cis-1,2-Dichloroethene			111		
Trichloroethene			108		
Tetrachloroethene			112		
Container Type: NA - Not Appl	icable				
			Method		
Surrogates		%Recovery	Limits		
1,2-Dichloroethane-d4		104	70-130		
Toluene-d8		99	70-130		
4-Bromofluorobenzene		103	70-130		



Client Sample ID: LCSD Lab ID#: 1203369B-07AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN					
File Name:	v032004	Date of Colle	ction: NA		
Dil. Factor:	1.00	Date of Analy	Analysis: 3/20/12 11:28 AM		
Compound			%Recovery		
Vinyl Chloride			108		
trans-1,2-Dichloroethene			116		
cis-1,2-Dichloroethene			109		
Trichloroethene			111		
Tetrachloroethene			114		
Container Type: NA - Not Ap	plicable	L.			
			Method		
Surrogates		%Recovery	Limits		
1,2-Dichloroethane-d4		103	70-130		

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

ICS LTD. CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice Relinquishing signature on this document indicates that sample is being shipped in compliance with 180 BLUE RAVINE ROAD, SUITE B 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

FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020

Page ____ of ___

Project ManagerFNMINE		Project Info:			ound	1	<i>Only</i> Jrized by		
Collected by: (Print and Sign)	—— P.C	P.O. #			nal (Date:	IIIZEU-DY		
Company <u>ARCADIS</u> Email <u>Ma</u>		K.Con	Project # (Rush			urization	Gas
Address 126 D. JELLERANST, STEPP. City MILLING, X. CE		α	pject Name_MAD					N ₂ H	
Phone 414-276-7742 Fax 414-	276-7605				specii			isure/Va	1.000 (1.000 (200 e
Lab I.D. Field Sample I.D. (Location)	Can #	Date of Collect	Time ion of Collection	Analyses Reque		nitial	Final	Receipt	
IAB-5	4209	3/13/17	2 1510	TO-15	-7	9.5	-65		
IAF-5	3574	3/13/12	1508	TO-15	7-	30,0	-10,0		
03A 55V-1-5	34023	3/13/17	2 1624	10-15	-	29.0	-5.0		
84A SSV-2-5	17.03	3/13/1	z 1650	TO - 15	-7.	1.0	- 5.0		
	£.								
	4		· ·						an an an Arthread Anna an Anna Anna Anna Anna Anna Anna
							1		
							í t		
Relinquished by: (signature) Date/Time	Received by: (signate		/Time	Notes:	ULY RE	POTT			-]
5	112		2/16/12 090		PC				
Relinquished by: (signature) Date/Time	Received by: (signati	ure) Date	2/Time		TC	л <u>я</u> NYL C	ينتزوناته	0C	- Jun - 1999
Relinquished by: (signature) Date/Time	Received by: (signate	ure) Date	e/Time		C	5-1,2	;		
Shipper Name Air Bill	#. To	mp (°C)	Condition	Custody S	eals Intacl	2	Mork	Order #	<u></u>
						Serge States		336	0
Only F30 Ex		UA I	GRD-		11,741	\$7	<u> 4 V</u>	000	U
						<u>لەردە مەردە</u>		For	rm 1293 rev,



Madison-Kipp Corporation Post Office Box 8043 Madison, WI 53708-8043 201 Waubesa Street Madison, WI 53704-5728 **Telephone** 608-244-3511 Website www.Madison-Kipp.com

April 2, 2012

Ms. Elizabeth Reynolds 126 S. Marquette Street Madison, WI 53704

RE: Results of Air Testing 126 S. Marquette Street, Madison, WI 53704

Dear Ms. Reynolds:

On March 15 and 16, 2012, ARCADIS personnel, on behalf of Madison-Kipp, completed indoor air and sub-slab vapor sampling activities to measure levels of select volatile organic compounds (VOCs), below and/or within your home, located at 126 S. Marquette Street in Madison, Wisconsin. This work was completed in cooperation with and with the prior approval of the Wisconsin Department of Natural Resources (WDNR).

Specifically, the sampling was completed to test for the presence of tetrachloroethene (PCE), trichloroethene (TCE), cis- and trans-1,2-dichloroethene, and vinyl chloride. The homes that were sampled in your neighborhood were given a unique sample identification number when submitting the samples to the laboratory to ensure confidentiality. The following samples were collected from your home:

- SSV1-6 and SSV2-6 Sub-slab samples collected on March 16, 2012. The sub-slab samples were collected from the sample points that were installed in the basement floor of your home.
- IAB-6 Indoor air basement sample collected on March 15-16, 2012.
- IAF-6 Indoor air first floor sample collected on March 15-16, 2012.

Based on the laboratory results (below), only PCE was detected in these samples. The levels of PCE in the collected samples were below the sub-slab soil gas and indoor air Residential Action Levels provided by the WDNR. The WDNR Residential Action Level is based on the U.S. Environmental Protection Agency's Residential Air Screening Levels that represent health-protective concentrations an individual can be exposed to for 30 years for 24 hours a day.

Sample ID	Results (part per billion (ppbv))	Residential Action Level (ppbv)
SSV1-6	5.8	60
SSV2-6	0.79	60
IAB-6	0.046	6
IAF-6	0.045	6

Copies of the laboratory data and field notes are enclosed for your reference.

Sincerely ٠ Unte le

Mark Meunier Madison-Kipp Corporation

cc: Michael Schmoller – WDNR Dr. Henry Nehls-Lowe – WDHS Norman Berger, Esq. David A. Crass, Esq.

Attachments: Laboratory Analytical Report Field Notes

×.

INDOOR AIR QUALITY BUILDING SURVEY

Date: 3/7/12 Project #: WI001283
Address: 126 MARQUETTE ST
MADISON, WII
Property Contact: ELIZA BETH REYNOLDS
Phone: Home: (6%) <u>394-6565</u> Work: () Cell: ()
Building Occupants: Children <13 Children age 13-18 Adults 2
Building Construction Characteristics: (Circle appropriate description)
Single FamilyMultiple FamilySchoolCommercialRanch 2-FamilyRaised Ranch DuplexColonial # of unitsSplit Level CondominiumMobile HomeOther (specify)
General Description of Building Construction Materials, especially new materials:
WOOD CONSTRUCTION, UNYLSIDING
How many occupied stories does the building have?
Has the building been weatherized with any of the following? (Circle all that apply) Insulation Storm Windows Energy-Efficient Windows Other (specify)
What type of basement does the building have? (Circle all that apply) Full basement Crawlspace Slab-on-Grade Other (specify)
Basement Size $g64$ (ft ²)

Surveyor's Initials:

÷

Page 1 of 5

INDOOR AIR QUALITY BUILDING SURVEY

Describe Basement Floor and Walls:
CONCRETE FLOOR, CONCRETE BLOCKWALL
Moisure: Always Dry Always Wet Frequently Wet Sometimes Wet
Is a basement sump present? (Y() Is a sump pump present? (Y() (circle one)
Does the basement have any preferential pathways that might permit soil vapor entry? (Circle all that apply) Visible Cracks Unsealed Pipes/Utility Conduits Sump pumps
What type of ground cover surrounds the outside of building? (Circle all that apply) Grass Concrete Asphalt Other (specify)
Heating and Ventilation System(s) Present:What type of heating system(s) is (are) used in this building? (Circle all that apply)Hot Air CirculationHeat PumpHot Air RadiationWood StoveHot Air RadiationUnvented Kerosene heaterElectric BaseboardOther (specify):
What type (s) of fuel(s) are used in this building? (Circle all that apply) Natural Gas Electric Coal Other (specify): Fuel Oil Wood Solar
What type of mechanical ventilation systems are present and/or currently operating in the building? (Circle all that apply) Central Air Conditioning Individual Air Conditioning Units Open windows Bathroom Fan Kitchen fan Air-to-Air Heat Exchanger Other (specify):
Septic system? Yes / Yes (but not used) (No Irrigation/private well? Yes / Yes (but not used) (No
Existing subsurface depressurization (radon) system in place? Yes 100 If yes, is it running? Yes / No

Surveyor's Initials:

Page 2 of 5

INDOOR AIR QUALITY BUILDING SURVEY

Sources of Chemical Contaminants:

Which of these items are present in the building? **Check if Present Potential Sources Removed Prior to** Sampling? (Yes / No / NA) Location(s) Paints or paint thinners Gas-powered equipment Gasoline storage cans Cleaning solvents Air fresheners Oven cleaners Carpet/upholstery cleaners Hairspray Nail polish/polish remover Bathroom cleaner Appliance cleaner Furniture/floor polish Moth balls Fuel tank Wood stove Fireplace Perfume/colognes Hobby supplies (e.g., solvents, paints, lacquers, glues, photographic darkroom chemicals) Scented trees, potpourri, etc. Other: Other: Other:

Do one or more smokers occupy this building on a regular basis (Y(N)? How often?

Has anybody smoked in the building in the last 48 hours (YAN)?

Does the building have an attached garage (Y/N)? If so, is a car usually parked in the garage (Y/N)?

Do the occupants of the building frequently have their clothes dry-cleaned (YN)

Was there any recent remodeling or painting done in the building (YN)?

Surveyor's Initials:

Page 3 of 5

A-4

INDOOR AIR QUALITY BUILDING SURVEY

Are there any pressed wood products in the building (e.g., hardwood plywood wall paneling, particleboard, fiberboard) (Y(N)?

Are there any new upholstery, drapes or other textiles in the building (Y(N))

Have the occupants ever noticed any unusual odors in the building? (XD)? If yes, describe odors, location(s), and conditions that seem to affect odors (especially rain, temperature, wind):

Any known spills of a chemical immediately outside or inside the building? (YA)? If yes, describe (location, age, type of chemical, any actions to clean up):

Has the building been treated (inside or outside) with any insecticides/pesticides(YN)? If so, what chemicals are used and how often are they applied:

Outdoor Sources of Contamination:

Nearby Gasoline Stations (distance and direction):

Surveyor's Initials: _____

Page 4 of 5

INDOOR AIR QUALITY BUILDING SURVEY

9

Industrial Stack Emissions (distance and direction):

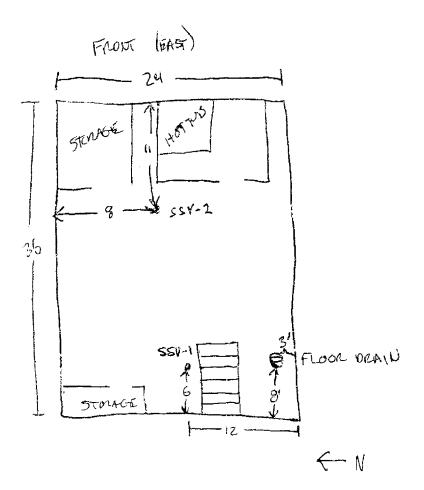
.

Automotive emission sources (e.g., h	lighway; bus stop; high-traffic area):
<u></u>	······································
······	
Weather Conditions During Sampl	
Outside Temperature (°F):	
Prevailing wind speed and direction:	
Describe the general weather condition	ons (e.g., sunny, cloudy, rain): ours preceding the sampling event (Y/N)?
General Comments:	ours preceding the sampling event (1/N)?
The responses documented on this su knowledge and ability.	arvey are true, accurate and complete to the best of my
	TIM ALESSI
	Name of Surveyor
	Signature
	- 1
	3/7/12
	Date

Surveyor's Initials:

A-6

Page 5 of 5



GLADE AEROSOL AIR FRESHUEL IELMER'S CUOOD GLUE

SHERWIN WILLIAMS LATEX RUST-OUEUM OIL BASED ENAMEL PETROLEUM DISTILLATES LUCITE LATEX MAUTZ LATEX TITANUM DIOXIDE UNVEL POLYMER ETHYLERE GLYCOL ZINSSER PRIMER HCKYLIC COPOLYMER ACAYLIC PUTHICK ETHYLENE GLYLOL WEATHER SOLE D ACRILLC PUTCH BOY LATTEX GUDDEN LATEX BIX PAINT DECLOSSER MAX VOC 748 g/L DEFT GLOSS WOOD FINISH ESTERS ETHER ALCOHOL KETWE HYDROCARSONS CHAMPION STANLESS STEEL CLEANER DEEL WOODS OFF pravo RAID HOUSE 3 GANDEN d-CIS ALLETHRIN 3- PHENOXYBENZYL D-05 AND TRANS, Z-2 DIMETHIC-3-EXCLOPENDANE CORSUMMERT ORANGE GLOW HARDWOOD FLOORCIENNE OUD ENGUSIT SLAATCH REMOVER PETROLEUM DISTILIANES THE WORKS RUST/LIME/CALCIUM REMOVE OXALLC 3 CHEALLAUN HOWARD RESTOR-A-FINISH MAX VOL 385 all SPEEDWAY DEGREASER OXY-CLEAN CAUNDRY PURD NAVEL JELLY KUST ASSCUR

Madisor	a Kipp Corporation	Soil Vapor Sample Collection Log	
	Sample ID:		TAB-6
Client:	MADISON KIPP	Boring Equipment:	
Project:	MINDISON KIPP	Sealant:	
Location:	MADISON WE	Tubing Information:	
Project #:	V-Ico (283,0001,000)	Miscellaneous Equipment:	
Samplers:	TH/AW	Subcontractor:	
Sample Point Location:	BASEMENT	Equipment:	
Sampling Depth:		Moisture Content:	
Time and Date of Installation:		Approximate Purge Volume:	

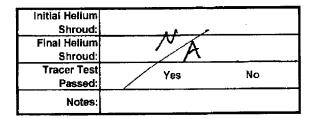
Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	P(D (ppb)
3/15/12	814	-27					
NIKOLA	911	-0	· · · · · · · · · · · · · · · · · · ·				

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1L 2.7L 6L
Canister ID:	1576
Flow Controller ID:	40211
Notes:	

Tracer Test Information (if applicable):



General Observations/Notes:

INITIAL VAC TEO 058-2 t1 42.90 a fonceure CANBITE ¢ 41 FLOW CONTRY 126 MACOLOTE

Approximating One-Well Volume (for purging):

When using 1%-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.

Madisor	Madison Kipp Corporation		Soil Vapor Sample Collection Log			
		Sample ID:	TAF-6			
Client:	MADISON KIPP	Boring Equipment				
Project:	MADISON KIPP	Sealant:				
Location:	MADISON WIT	Tubing Information:				
Project #	WI001283.0001.00009	Miscellaneous Equipment:				
Samplers:	TA/AW	Subcontractor:				
Sample Point Location:	DINING ROOM SOUTH WALL	Equipment:				
Sampling Depth:		Moisture Content:				
Time and Date of Installation:		Approximate Purge Volume:				

Ţ

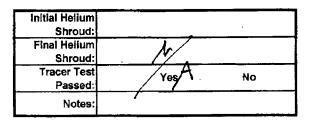
ampling	ampling

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister information:

Size (circle 1L 2.7L GL one): 30839 Canister ID: Flow Controller 40624 ID: Notes:

Tracer Test Information (if applicable):



General Observations/Notes:

DASSED SAUTINTEST 126 MACQUETTE

Approximating One-Well Volume (for purging):

When using 1%-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.

Madisor	Madison Kipp Corporation		Soil Vapor Sample Collection Log		
		Sample (D:	ssu-1-6		
Client:	MADISON KIPP	Boring Equipment:			
Project:	MADISON KIPP	Sealant:			
Location:	MADISON WI	Tubing Information:			
Project #:	WT001283,0001.00009	Miscelianeous Equipment:			
Samplers:	TALAW	Subcontractor:			
Sample Point Location:	WEST SIDE BASEMENT	Equipment:			
Sampling Depth:	SUB-SLAB	Moisture Content:			
Time and Date of Installation:		Approximate Purge Volume:			

4

Date Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/16/12 7:43	- <u>28</u>					
3/16/17 8.49	<u> - S</u>					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1L 2.7L 6L
Canister ID;	34754
Flow Controller ID:	FC 634
Notes:	

Tracer Test Information (if applicable):

Initial Helium Shroud:	95.4	
Final Helium Shroud:	780%	
Tracer Test Passed:	Yes	No
Notes:	O HELLOM	

General Observations/Notes:

BACKGROUND 40-60 ppb on wat PID, TEDLAR BAG = 28 wpb
SPUT SAMPLE WITH WORT
PASED STAUT IN TEST

Approximating One-Well Volume (for purging):

When using 1%-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.

Madiso	n Kipp Corporation	Soil Vapor Sample Collection Log		
		Sámple ID:	55U-2-6	
Client:	MADISON KIPP	Boring Equipment:		
Project:	MIKOISON KIPP	Sealant:		
Location:	MADISON WI	Tubing Information:		
Project #:	Posio.1000, COSIODIN	Miscellaneous Equipment:		
Samplers:	TA /AW	Subcontractor:		
Sample Point Location:	NE CORNER	Equipment		
Sampling Depth:		Moisture Content:		
Time and Date of Installation:		Approximate Purge Volume:		

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (Inches of Hg)	PID (ppb)
3/16/12	841	-30					
3/6/12	947	- 7-					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1L 2.7L 6L
Canister ID:	1149
Flow Controller	FC00651
Notes:	

Tracer Test Information (if applicable):

Initial Helium Shroud:		
Final Helium Shroud:	780%	
Tracer Test Passed:	Yer	No
Notes:	PASS WITH 5	1%

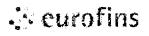
General Observations/Notes:

PASSED STUTT- VALLEST
SPLIT SAMPLE WITH WOIT
15.8% HEUUM FAIL ON 1ST TEST
17.1% HELIUM FAIL ON ZOU TEST, REMOVE IL AIR FROM SUB SLAB
Replace slab while shipeded rlug + retest - pass

Approximating One-Well Volume (for purging):

When using 1%-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.

ţ



an former

4/1/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203427B

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/20/2012 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.

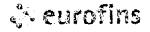
Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Scott-

Ausha Scott Project Manager

ાં કરવા દેશના આવેલા છે. આ જેવા છે. આ ગામમાં પ્રદેશના છે.



AR TRACS

WORK ORDER #: 1203427B

Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	P.O. #	WI001283.0001.00009
FAX:	317-231-6514	PROJECT #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED: DATE COMPLETED:	03/20/2012 04/01/2012	CONTACT:	Ausha Scott

FRACTION #	NAME	TEST	VACJPRES.	PRESSURE
03A	SSV-1-6	Modified TO-15	5.5 "Hg	5 psi
04A	SSV-2-6	Modified TO-15	6.0 "Hg	5 psi
05A	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:

مستعن تفاجا وجرج ويتغمر الممادي لمستك تتقافه

DATE: 04/01/12

DECEIPT

FINAT

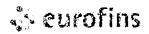
Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

Page 2 of 11



An Textos

LABORATORY NARRATIVE Modified TO-15 Arcadis U.S., Inc. Workorder# 1203427B

Two 6 Liter Summa Canister samples were received on March 20, 2012. 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
ICAL %RSD acceptance criteria	+- 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	= 30% Difference with four allowed out up to<br =40%.; flag and narrate outliers</p
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
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

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

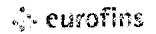
There were no analytical discrepancies.

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 and/or LCS.



AT TEACS

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



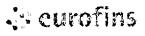
Re toze a

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

Client Sample ID: SSV-1-6

Lab ID#: 1203427B-03A	
-----------------------	--

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.16	5.8	1.1	40
Client Sample ID: SSV-2-6				
Lab ID#; 1203427B-04A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.17	0.79	1.1	5.3



Air Toxics

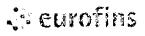
Client Sample ID: SSV-1-6 Lab ID#: 1203427B-03A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name: Dil. Factor:	e032215 1.64	••••		6/12 7:43:00 AM /12 08:09 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.16	Not Detected	0.42	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.65	Not Detected
cis-1.2-Dichloroethene	0.16	Not Detected	0.65	Not Detected
Trichloroethene	0.16	Not Detected	0.88	Not Detected
Tetrachloroethene	0.16	5.8	1.1	40

Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	108	70-130



An loaics

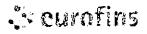
Client Sample ID: SSV-2-6 Lab ID#: 1203427B-04A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

Flie Name: Dif. Factor:	e032216 1.68	Date of Collection: 3/16/12 8:41:00 AM Date of Analysis: 3/22/12 09:02 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.17	Not Detected	0.43	Not Detected
trans-1.2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
cis-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Trichloroethene	0.17	Not Detected	0.90	Not Detected
Tetrachloroethene	0.17	0.79	1.1	5.3

Container Type: 6 Liter Summa Canister

Obligation Type. O Eller Galling Gallote		Method
Surrogates	%Recovery	Limits
1.2-Dichloroethane-d4	111	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	113	70-130



Air Joales

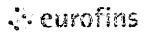
Client Sample ID: Lab Blank Lab ID#: 1203427B-05A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name: Dil. Factor:	e032206 1.00		Date of Collection: NA Date of Analysis: 3/22/12 12:55 PM			
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)		
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected		
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected		
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected		
Trichloroethene	0.10	Not Detected	0.54	Not Detected		
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected		

Container Type: NA - Not Applicable

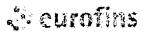
		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	104	70-130



Air Texacs

Client Sample ID: CCV Lab ID#: 1203427B-06A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e032202	Date of Collection: NA		
Dil. Factor:	1.00	Date of Analy	sis: 3/22/12 10:00 AM	
Compound			%Recovery	
Vinyl Chloride			98	
trans-1,2-Dichloroethene			104	
cis-1,2-Dichloroethene			108	
Trichloroethene			105	
Tetrachloroethene			112	
Container Type: NA - Not Ap	blicable			
			Method	
Surrogates		%Recovery	Limits	
1,2-Dichloroethane-d4		111	70-130	
Toluene-d8		101	70-130	
4-Bromofluorobenzene		112	70-130	

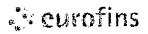


An Tarics

Client Sample ID: LCS Lab ID#: 1203427B-07A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

Flle Name: Dil. Factor:	e032203 1.90	Date of Collect Date of Analy	ction: NA sis: 3/22/12 10:43 AM
	1.00	Date of Allary	
Compound			%Recovery
Vinyl Chloride			109
trans-1,2-Dichloroethene			118
cis-1,2-Dichloroethene			112
Trichloroethene			98
Tetrachloroethene			109
Container Type: NA - Not App	licable		
			Method
Surrogates		%Recovery	Limits
1,2-Dichloroethane-d4		115	70-130
Toluene-d8		101	70-130
4-Bromofluorobenzene		111	70-130



ALL LULICS

Client Sample ID: LCSD Lab ID#: 1203427B-07AA MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e032204	Date of Collec	
Dil. Factor:	1.00	Date of Analy	sis: 3/22/12 11:22 AM
Compound			%Recovery
Vinyl Chloride			103
trans-1,2-Dichloroethene			118
cis-1,2-Dichloroethene			113
Trichloroethene			96
Tetrachloroethene			107
Container Type: NA - Not Applicat	ble		
•			Method
Surrogates		%Recovery	Limits
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		102	70-130
4-Bromofluorobenzene		105	70-130

XICS LTD. CHAIN-OF-CUSTODY RECORD

.....

Sample Transportation Notice

Relinquishing signature on this document indicates that sample is being shipped in compliance with 180 BLUE RAVINE ROAD, SUITE B 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. Holline (800) 467-4922

FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020

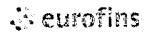
Page ____ of ____

Project Manager TEN				Projec	ct Info:		Turn Al Tim			Ôŋly urized bý:	
	TM AGESSI			P.O. #_			1 Nor	mal	Date	– Tri Serie Carlielle	allad d
Company <u>ACCADIS</u>	Email: Thur U. Th	KAR MILADS-J	Sicon	Draina	and the second second	<u>93,2001.00009</u>	🖵 Rus	Ŧ		urization (
Address 126 N. M. M. S.	State City ME MA ANDE Stat	e <u>₩7-</u> Zip <u>578</u>	202		- (
Phone 44-276-	7-7-47 Fax 414-27	16-7603		Project	Name MAC	NISON KIPP	spe	olty		Ne H	e
			D	ate	Time	:		Canist	er Pres	sure/Vac	uum
Lab I.D. Field Sa	ample I.D. (Location)	Can #	of Co	llection	of Collection	Analyses Reques	ted	Initial	Final	Receipt	Final (psł)
4T	B-6	1576	3/1	5/12	314	_TO-15		-27.0	-6.0		
NAMES OF A STREET	F-6	30839	311	5/12	811	TO-15	-	30.0	-8.0		
2	-1-6	34754	3/1	6/12	743	TO - 15	-	28.0	-5.0		
	-2-6	1149		6/12	841	TO-15	~	30.0	-70		r.
10/11 - 300	<u> </u>			0110		· · · · · · · · · · · · · · · · · · ·					
					·····	······································					and the second
										1	
			ļ								
	·····	·									
			L								
Relinquished by: (signature)		eived by: (signa		Date/Tin ? ? ? . / ?	2,092.5	Notes:	REPOR	مىسى دىم بە ²			
Relinquished by: (signature)		eived by: (signa	ture)	Date/Tin	ne		FUE				
							0.0	CC CHK	OLICE	-	1
Relinquished by: (signature)	Date/Time Rec	eived by: (signa	ture)	Date/Tin	ne		CLS TANK	-1,2-	DCE		
Lab Shipper Name	Air Bill #	7	emp (°C)	Condition	Custody Se	eals Inta	ct?	Work	Order #	2000 2000
Use Fid 7-2	7921,2057 52	0.51	Nt	1	6000	> Tes N	o Nor	ne	2.0	342	7
Only	and and a second se	······································				-					
In the local data and the second s	الأنبالية المتجرعة أأنيب فالبدوي والمترك فالتنابية والمترك المردا والروي ومريها	يتعبيبها ومراقعا والهيد وتتسب			اختلافته بمستحد الكعيدي					Eon	n 1293 rev.1

. . -

خج

- ----



An Den .

4/1/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203427A

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/20/2012 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.

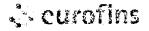
Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Scott-

Ausha Scott Project Manager

1992 For F. R. Marsh Marsh Direct B For Marsh (N.S. S. Marsh



As Instra

WORK ORDER #: 1203427A

Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	P.O. #	WI001283.0001.00009
FAX:	317-231-6514	PROJECT #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED: DATE COMPLETED:	03/20/2012 04/01/2012	CONTACT:	Ausha Scott

			RECEIT I	L LIVIL
FRACTION #	NAME	TEST	VAC./PRES.	<u>PRESSURE</u>
01A	IAB-6	Modified TO-15 SIM	7.5 "Hg	5 psi
02A	IAF-6	Modified TO-15 SIM	7.5 "Hg	5 psi
03A	Lab Blank	Modified TO-15 SIM	NA	NA
04A	CCV	Modified TO-15 SIM	NA	NA
05A	LCS	Modified TO-15 SIM	NA	NA
05AA	LCSD	Modified TO-15 SIM	NA	NA

CERTIFIED BY:

The start have been a start of the start of

DATE: 04/01/12

RECEIPT

UTNEAT

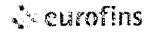
Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

Page 2 of 11



AB BLARS

LABORATORY NARRATIVE Modified TO-15 SIM Arcadis U.S., Inc. Workorder# 1203427A

Two 6 Liter Summa Canister (SIM Certified) samples were received on March 20, 2012. 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	<pre><!--=30% RSD with 2 compounds allowed out to < 40% RSD</pre--></pre>	Project specific; default criteria is =30% RSD with 10% of compounds allowed out to < 40% RSD</td
Daily Calibration	+- 30% Difference	Project specific; default criteria is $ Differencewith 10% of compounds allowed out up to .; flagand 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

There were no receiving discrepancies.

Analytical Notes

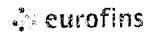
There were no analytical discrepancies.

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 and/or LCS.
- N The identification is based on presumptive evidence.



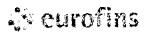
AL HISTORY

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

rl-File was requantified for the purpose of reissue



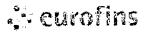
A. Tostes

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

Client Sample ID: IAB-6

Lab ID#: 1203427A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.036	0.046	0.24	0.31
Client Sample ID: IAF-6				
Lab ID#: 1203427A-02A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachioroethene	0.036	0.045	0.24	0.30



An Ibras

Client Sample ID: IAB-6 Lab ID#: 1203427A-01A MODIFIED EPA METHOD TO-15 GC/MS SIM

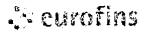
.

٦

Flie Name: Dil. Factor:	v032122sim 1.79	Date of Collection: 3/15/12 8:14:00 AM Date of Analysis: 3/21/12 11:13 PM			
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
Vinyl Chloride	0.018	Not Detected	0.046	Not Detected	
cis-1,2-Dichloroethene	0.036	Not Detected	0.14	Not Detected	
Trichloroethene	0.036	Not Detected	0.19	Not Detected	
Tetrachloroethene	0.036	0.046	0.24	0.31	
trans-1,2-Dichloroethene	0.18	Not Detected	0.71	Not Detected	

Container Type: 6 Liter Summa Canister (SIM Certified)

Container Type, o Elter Samme Semeter		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	107	70-130



An index

Client Sample ID: IAF-6 Lab ID#: 1203427A-02A <u>MODIFIED EPA METHOD TO-15 GC/MS SIM</u>

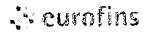
. .

-

File Name: Dil. Factor:	v032123sim 1.79	Date of Collection: 3/15/12 8:11:00 AM Date of Analysis: 3/21/12 11:52 PM			
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
Vinyl Chloride	0.018	Not Detected	0.046	Not Detected	
cis-1.2-Dichloroethene	0.036	Not Detected	0.14	Not Detected	
Trichloroethene	0.036	Not Detected	0.19	Not Detected	
Tetrachloroethene	0.036	0.045	0.24	0.30	
trans-1,2-Dichloroethene	0.18	Not Detected	0.71	Not Detected	

Container Type: 6 Liter Summa Canister (SIM Certified)

	(2	Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	107	70-130
Toiuene-d8	95	70-130
4-Bromofluorobenzene	104	70-130



ha and es

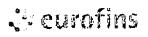
Client Sample ID: Lab Blank Lab ID#: 1203427A-03A <u>MODIFIED EPA METHOD TO-15 GC/MS SIM</u>

٦

File Name: Dil. Factor:	v032106sim 1.00	Date of Collection: NA Date of Analysis: 3/21/12 11:49 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

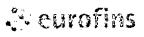
		Method		
Surrogates	%Recovery	Limits		
1.2-Dichloroethane-d4	105	70-130		
Toluene-d8	94	70-130		
4-Bromofluorobenzene	96	70-130		



AP FORTS

Client Sample ID: CCV Lab ID#: 1203427A-04A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: Dil. Factor:	v032102sim 1.00	Date of Collec Date of Analy	ction: NA sis:_3/21/12 08:58 AM
Compound			%Recovery
Vinyl Chloride			84
cis-1,2-Dichloroethene			91
Trichloroethene			92
Tetrachloroethene			90
trans-1,2-Dichloroethene			91
Container Type: NA - Not Ap	oplicable		
			Method
Surrogates		%Recovery	Limits
1.2-Dichloroethane-d4		104	70-130
Toluene-d8		99	70-130
4-Bromofluorobenzene		110	70-130



AN BRACK

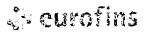
Client Sample ID: LCS Lab ID#: 1203427A-05A <u>MODIFIED EPA METHOD TO-15 GC/MS SIM</u>

٦

.

File Name:	v032103sim	Date of Collect	
DII. Factor: 1.00	1.00	Date of Analy	sis: 3/21/12 09:48 AM
Compound			%Recovery
Vinyl Chloride			100
cis-1.2-Dichloroethene			106
Trichloroethene			96
Tetrachloroethene			103
trans-1,2-Dichloroethene			118
Container Type: NA - Not A	pplicable		
-			Method
Surrogates		%Recovery	Limits
1,2-Dichloroethane-d4		103	70-130
Taluana d9		00	70 130

1,2-Dichloroethane-d4	103	70-13 0
Toluene-d8	99	70-130
4-Bromofluorobenzene	109	70-130



Client Sample ID: LCSD Lab ID#; 1203427A-05AA MODIFIED EPA METHOD TO-15 GC/MS SIM

Ĵ

٦

File Name: Díl. Factor:	v032104sim 1.00	Date of Collection: NA Date of Analysis: 3/21/12 10:32 AM	
Compound			%Recovery
Vinyl Chloride			100
cis-1,2-Dichloroethene			106
Trichloroethene			96
Tetrachioroethene			104
trans-1,2-Dichloroethene	м		118
Container Type: NA - Not Ap	plicable		
•		P/ Deseucer	Method Limits
Surrogates		%Recovery	
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		99	70-130
4-Bromofluorobenzene		109	70-130



10.11.0000-0000-000

Sample Transportation Notice

Relinquishing signature on this document indicates that sample is being shipped in compliance with 180 BLUE RAVINE ROAD, SUITE B 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

FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020

Page ____ of

Project Manager			Projec	ct Info:			Around me:	Lab Use Pressi	ony Irized by	
Collected by: (Print and Sign) TM ALESS				P.O. #		Normal		Date:		
Company ARCADIS Email			Project # 101001283,000 .00009		83,0001,00009	Rush		Pressurization Gas:		Gas:
Address 126 N. JEFFIKSUSZ, 5740 City Mr. WHALEE St Phone 414-276-7742 Fax 414-2	atows Zip 570 TK - 7603	<u>ol</u>					ecify		N ₂ H	
Phone <u>11-676-7776</u> Fax <u>11-6</u>			ate	Time					sure/Vac	
Lab LD. Field Sample I.D. (Location)	Can #		ate llection		Analyses Reques	sted	Initial	Final	Receipt	Finai (psi)
OA INB-6	1576	3/1	5/12	814	TO-15		-27.0	-6.0		
at IAF-6	30839		15/12	811	TU-15		-30.0	-8,0		
SSV-1-6	34754	ł	16/12	743	TO - 15		-28.0	-5,0	99999 1999 - 1999 1999 - 1999	
<u>550-7-0</u> <u>550-2-6</u>	1149	· · ·	16/12	841	TO-15		-30.0	-7.0		
n a fairean an 1971 - Sair Anna ann an Aonaichtean ann an Aonaichtean ann an Aonaichtean ann an Aonaichtean ann an Aonaichtean 1971 - Sair Anna ann an Aonaichtean		1								
記録(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(
Relinquished by: (signature) Date/Time Relinquished by: (signature) Relinquished by: (signature) Date/Time Relinquished by: (signature) Date/Time Relinquished by: (signature) Re	eceived by: (signa		Date/Tir 3, 2.0 J 2		Notes: OA도 ≺			<u> </u>	<u>, , , , , , , , , , , , , , , , , , , </u>	
Relinquished by: (signature) Date/Time R	eceived by: (signa					РС ТС- VV	é. URL CH	LOILIO	Ē	
Relinquished by: (signature) Date/Time R	eceived by: (signa	·····	Date/Tir	······		TRN	5-1,2-	OCE	<u>terreter</u>	
Lab Shipper Name Air Bill #	l	emp (n	Condition						
Use [Pod 7-2 7781 A157 1	220	ΝĮ	<u>}_</u>	6000	Yes N	o Ne	one	4. Z. U	34.2	<u> </u>
Only Cost Cr		2-1		المرجع ومعرف ومحدد ومعرو					En	rn 1293 rev.1



Madison-Kipp Corporation Post Office Box 8043 Madison, WI 53708-8043 201 Waubesa Street Madison, WI 53704-5728 **Telephone** 608-244-3511 Website www.Madison-Kipp.com

April 3, 2012

Mr. Patrick Hannon 128 S. Marquette Street Madison, WI 53704

RE: Results of Air Testing 128 S. Marquette Street, Madison, WI 53704

Dear Mr. Hannon:

On March 13 and 14, 2012, ARCADIS personnel, on behalf of Madison-Kipp, completed indoor air and sub-slab vapor sampling activities to measure levels of select volatile organic compounds (VOCs), below and/or within your home, located at 128 S. Marquette Street in Madison, Wisconsin. This work was completed in cooperation with and with the prior approval of the Wisconsin Department of Natural Resources (WDNR).

Specifically, the sampling was completed to test for the presence of tetrachloroethene (PCE), trichloroethene (TCE), cis- and trans-1,2-dichloroethene, and vinyl chloride. The homes that were sampled in your neighborhood were given a unique sample identification number when submitting the samples to the laboratory to ensure confidentiality. The following samples were collected from your home:

- SSV1-7 and SSV2-7 Sub-slab samples collected on March 14, 2012. The sub-slab samples were collected from the sample points that were installed in the basement floor of your home.
- IAB-7 Indoor air basement sample collected on March 13-14, 2012.
- IAF-7 Indoor air first floor sample collected on March 13-14, 2012.

Based on the laboratory results (below), PCE was detected in only one sub-slab sample. The level of PCE in the collected sample was below the sub-slab soil gas Residential Action Level provided by the WDNR. The WDNR Residential Action Level is based on the U.S. Environmental Protection Agency's Residential Air Screening Levels that represent health-protective concentrations an individual can be exposed to for 30 years for 24 hours a day.

Sample ID Results (part per billion (ppbv))		Residential Action Level (ppbv)
SSV1-7 0.18		60
SSV2-7	Not Detected	60
IAB-7 Not Detected		6
IAF-7 Not Detected		6

Copies of the laboratory data and field notes are enclosed for your reference.

-Sinçerely, < leell C.

Mark Meunier Madison-Kipp Corporation

cc: Michael Schmoller – WDNR Dr. Henry Nehls-Lowe – WDHS David C. Bender, Esq. David A. Crass, Esq.

Attachments: Laboratory Analytical Report Field Notes

. .

Indoor Air Quality Building Survey

	INDOOR AIR QUALITY BUILDING SURVEY Date: 03/06/2012 Project #: VI001283				
	Address: 128 Manuette Street, Madison, VZ				
	Property Contact: Patrick Hunnon				
	Phone: Home: (688) 239-3184 Work: () Cell: ()				
	Building Occupants: Children <13 Children age 13-18 Adults Z				
	Building Construction Characteristics: (Circle appropriate description)				
Single FamilyMultiple FamilySchoolCommercialRanch 2-FamilyRaised Ranch DuplexColonial # of unitsSplit Level CondominiumMobile HomeOther (specify)					
	General Description of Building Construction Materials, especially new materials;				
	WOOD CONSTRUCTION WITH ALUMINUM SIDING				
	How many occupied stories does the building have?				
	Has the building been weatherized with any of the following? (Circle all that apply) Insulation Storm Windows Energy-Efficient Windows Other (specify)				
<	What type of basement does the building have? (Circle all that apply) Full basement Crawlspace Slab-on-Grade Other (specify)				
	Basement Size 250 (ft ²)				
	Surveyor's Initials: End. Page 1 of 5				

Indoor Air Quality Building Survey

INDOOR AIR QUALITY BUILDING SURVEY

Describe Basement Floor and Walls: <u>CONCRETE FLOOR (PARTIAL TILE)</u>

REMENT BLOCK WALLS

Always Dry Always Wet Frequently Wet (Sometimes Wet) Moisure: Is a basement sump present? (YA) Is a sump pump present? (YA) (circle one) Does the basement have any preferential pathways that might permit soil vapor entry? (Circle all that apply) Sump pumps Unsealed Pipes/Utility Conduits Visible Cracks What type of ground cover surrounds the outside of building? (Circle all that apply) Other (specify) ____ Concrete Asphalt (frass) CBACK (WESTWALL) Heating and Ventilation System(s) Present: What type of heating system(s) is (are) used in this building? (Circle all that apply) Wood Stove Hot Air Circulation Heat Pump Steam Radiation Electric Baseboard Unvented Kerosene heater Hot Air Radiation Other (specify): ____ What type (s) of fuel(s) are used in this building? (Circle all that apply) Natural Gas (Electric) Coal Other (specify): Wood Solar Fuel Oil What type of mechanical ventilation systems are present and/or currently operating in the building? (Circle all that apply) Bathroom Fan Kitchen fan Central Air Conditioning Individual Air Conditioning Units Air-to-Air Heat Exchanger Other (specify): Open windows Septic system? Yes / Yes (but not used) Irrigation/private well? Yes / Yes (but not used) / Existing subsurface depressurization (radon) system in place? Yes (No If yes, is it running? Yes / No

A-3

Page 2 of 5

INDOOR AIR QUALITY BUILDING SURVEY

Sources of Chemical Contaminants:

Which of these items are present in the building?				
Potential Sources	Check if Present			

	Potential Sources	Check if Present	Removed Prior to
	Location(s)		Sampling? (Yes / No / NA)
LATTEX	Paints or paint thinners		
	Gas-powered equipment		
	Gasoline storage cans		
	Cleaning solvents		
	Air fresheners		
	Oven cleaners		
	Carpet/upholstery cleaners	I MONTH AC	
	Hairspray	/ (UPSTAIRS	
	Nail polish/polish remover	V (UPSTAIR	s)
	Bathroom cleaner	(KITCHEN)	·
	Appliance cleaner		
	Furniture/floor polish		
	Moth balls		
	Fuel tank		
	Wood stove		
	Fireplace		
	Perfume/colognes	V (BATHROOM	n
	Hobby supplies (e.g.,		•
	solvents, paints, lacquers,		
	glues, photographic		
	darkroom chemicals)		
	Scented trees, potpourri, etc.		
	Other:		
	Other:	<u></u>	
	Other:		

Do one or more smokers occupy this building on a regular basis (\sqrt{N}) ? How often? _____

Has anybody smoked in the building in the last 48 hours (Y/N)?

Does the building have an attached garage (YA)?	If so, is a car usually parked in the garage
(Y/N)?	

Do the occupants of the building frequently have their clothes dry-cleaned (Y()?

Was there any recent remodeling or painting done in the building (Y)?

Surveyor's Initials:

Page 3 of 5

f

A-4

Indoor Air Quality Building Survey

INDOOR AIR QUALITY BUILDING SURVEY

Are there any pressed wood products in the building (e.g., hardwood plywood wall paneling, particleboard, fiberboard) (Y/N)?

Are there any new upholstery, drapes or other textiles in the building (Y()?

Have the occupants ever noticed any unusual odors in the building? (YN)? If yes, describe odors, location(s), and conditions that seem to affect odors (especially rain, temperature, wind):

Any known spills of a chemical immediately outside or inside the building? (Y	N)
If yes, describe (location, age, type of chemical, any actions to clean up):	_

Has the building been treated (inside or outside) with any insecticides/pesticides(γ)? If so, what chemicals are used and how often are they applied:

Outdoor Sources of Contamination:

Nearby Gasoline Stations (distance and direction):

Surveyor's Initials:

Page 4 of 5

Indoor Air Quality Building Survey

INDOOR AIR QUALITY BUILDING SURVEY

Industrial Stack Emissions (distance and direction):

Automotive emission sources (e.g., highway; bus stop; high-traffic area):

Outside Temperature (°F):____

Prevailing wind speed and direction:

Describe the general weather conditions (e.g., sunny, cloudy, rain):____

Precipitation >0.1 inches within 12 hours preceding the sampling event (Y/N)? ______ General Comments: ______

Is there any other information about the structural features of this building, the habits of its occupants or potential sources of chemical contaminants to the indoor air that may be of importance in facilitating the evaluation of the indoor air quality of the building?

The responses documented on this survey are true, accurate and complete to the best of my knowledge and ability.

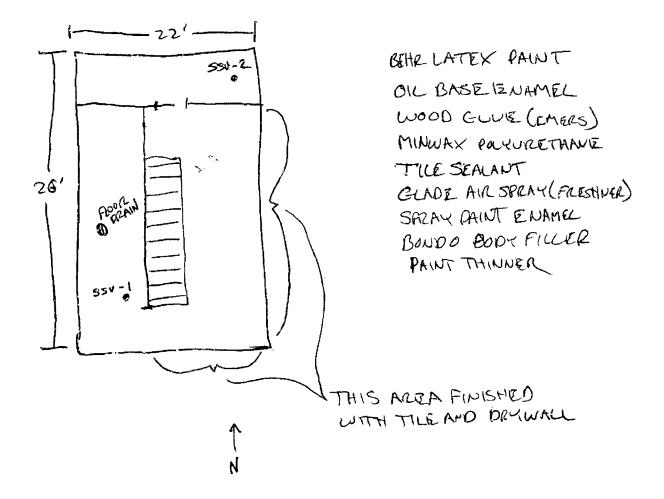
IM ALESSI Name of Surveyor And Signature 3/6/12

Date

Surveyor's Initials:

Page 5 of 5

A-6



1,28

Madisor	Madison Kipp Corporation		Vapor Sample election Log
		Sample ID:	55V-2-7
Client:	MADISON KUPP	Boring Equipment:	
Project:	MNOISON KIPP	Sealant:	
Location:	MADISON WI	Tubing Information:	
Project #:	WIG01283.0001.00009	Miscellaneous Equipment:	
Samplers:	TA/AW	Subcontractor:	
Sample Point Location:	WE CORNER	Equipment:	
Sampling Depth:	SUD SLAD	Moisture Content:	
Time and Date of Installation:		Approximate Purge Volume:	

Ţ

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (Inches of Hg)	PID (ppb)
3-14-12	17:51	-29.5					
3-14-12	J RASE	-5					
	1825						

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1L 2.7L 6L
Canister ID:	30841
Flow Controller	FL580
Notes:	

Tracer Test Information (if applicable):

i

Final Helium Shroud: 87.5 Tracer Test Passed: Tes No	Initial Hellum Shroud:	95,0	
Passed: (Tes) No		87.5	
		(Tes)	No
Notes: 500 pm HR in bag	Notes:	500 con the unb	zag

General Observations/Notes:

Vassed Rut-MAY			
128 Marguelle St	 		
0	 		
	 · · · · · · · · · · · · · · · · · · ·	<u> </u>	
	 	·····	

Approximating One-Well Volume (for purging):

Madiso	Madison Kipp Corporation		Vapor Sample ollection Log
		Sample ID:	55V-1-7
Client:	MADISON KIPP	Boring Equipment:	
Project:	MARISON KIPP	Sealant:	
Location:	MADISON WI	Tubing Information;	
Project #:	WI 0012820001.0009	Miscellaneous Equipment:	
Samplers:	TRAN	Subcontractor	
Sample Point Location;	SW CORNER	Equipment:	
Sampling Depth:	SUB SLAB	Moisture Content:	
Time and Date of Installation:		Approximate Purge Volume:	

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humicity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/12	1738	-29.5					
214112	1620	-5					
7							

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1L 2.7L 6L
Canister ID:	36049
Flow Controller ID;	FL3Ley
Notes:	

Tracer Test Information (if applicable):

Initial Hellum Shroud:	95.2	
Final Helium Shroud:	87.0	
Tracer Test Passed:	(eg	No
Notes:	2550 pour Hein	rbug

General Observations/Notes:

PASSED Shut-MAR
DUP-1 COLLECTED, INITIAL VACE >-30", fruch =-5
CAUSTER 10 - 34719
FLOW CONTROL 10 - UBS9
12-5 Marquette St.

Approximating One-Well Volume (for purging):

Madison Kipp Corporation	Soil Vapor Sample Collection Log
	Sample ID: ZAB-128
Client:	Equipment (AB-7-
Project	Sealant:
Location:	Information:
Project #:	Miscellaneous Equipment:
Samplere:	Subconfractor:
Sample Point Location:	Equipment:
Sampling Depth;	Molsture Content:
Time and Date of Installation:	Approximate Purge Volume:

للوي المراجع المحري -

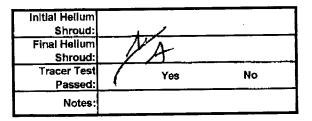
Date 🧃	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humid#ty (%)	Air Speed (mph)	Barometric Pressure (Inches of Hg)	PID (ppb)
31312	1902	-28.5				29.76	
3/19/12	1703	-3.0					
	•						

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1L 2.7L (6L)
Canister ID:	5697
Flow Controller ID:	40234
Notes:	

Tracer Test Information (if applicable):



General Observations/Notes:



Approximating One-Well Volume (for purging):

Madison Kipp Corporation	Soil Vapor Sample Collection Log
	Sample ID: JAC-128
Cilent:	Boring Equipment: (AF-7
Project:	Sealant:
Location:	Tubing Information:
Próject#	Miscellaneous Equipment:
Samplers:	Subcontractor.
Sample Point Location:	Equipment
Sampling Depth:	Moisture Content:
Time and Date of Installation:	Approximate Purge Volume:

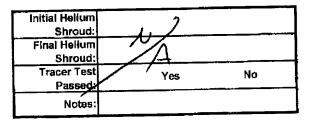
	· Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (Inches of Hg)	PID (ppb)
	313/12	1800	> -30				29,76	
3/14/12 1702 -9.5	3/14/12	1702	- 9.5			↓		

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1L 2.7L 6L
Canister ID:	32125
Flow Controller ID:	
Notes:	

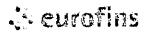
Tracer Test Information (if applicable):



General Observations/Notes:

(DASSID) SIDIT IN TSCT	
PASSED SHUT-IN TEST 128 MARIQUETTE ST	

Approximating One-Well Volume (for purging):



LAR RESES

3/28/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: W1001283.0001.00009 Workorder #: 1203370A

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/16/2012 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.

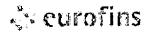
Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Scott-

Ausha Scott Project Manager

Letteric dam a horigan en d Folgen angen



An Tomes

WORK ORDER #: 1203370A

Work Order Summary

CLJENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	P.O. #	WI001283.0001.00009
FAX:	317-231-6514	PROJECT #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED:	03/16/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	03/28/2012		

FRACTION #	NAME	TEST	RECEIPT <u>VAC./PRES.</u>	FINAL <u>PRESSURE</u>
01A	IAB-7	Modified TO-15 SIM	5.4 "Hg	5 psi
02A	IAF-7	Modified TO-15 SIM	9.0 "Hg	5 psi
03A	Lab Blank	Modified TO-15 SIM	NA	NA
04A	CCV	Modified TO-15 SIM	NA	NA
05A	LCS	Modified TO-15 SIM	NA	NA
05AA	LCSD	Modified TO-15 SIM	NA	NA

CERTIFIED BY:

in the part of the server a server

DATE: 03/28/12

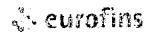
Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

Page 2 of 11



All Lock 5

LABORATORY NARRATIVE Modified TO-15 SIM Arcadis U.S., Inc. Workorder# 1203370A

Two 6 Liter Summa Canister (SIM Certified) samples were received on March 16, 2012. 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<br compounds allowed out to < 40% RSD	Project specific; default criteria is =30% RSD with 10% of compounds allowed out to < 40% RSD</td
Daily Calibration	+- 30% Difference	Project specific; default criteria is $ Differencewith 10% of compounds allowed out up to .; flagand 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

There were no receiving discrepancies.

Analytical Notes

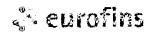
There were no analytical discrepancies.

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 and/or LCS.
- N The identification is based on presumptive evidence.



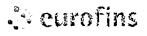
ALC TOSILS

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

rl-File was requantified for the purpose of reissue



Air Toxins

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

Client Sample ID: IAB-7

Lab ID#: 1203370A-01A No Detections Were Found.

Client Sample ID: IAF-7 Lab ID#: 1203370A-02A No Detections Were Found.



Ser Tostas

Client Sample ID: IAB-7 Lab ID#: 1203370A-01A MODIFIED EPA METHOD TO-15 GC/MS SIM

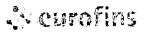
.

٦

File Name: Dll. Factor:	v031921sim 1.63	Date of Collection: 3/13/12 5:03:00 PM Date of Analysis: 3/19/12 10:55 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	Not Detected	0.18	Not Detected
Tetrachloroethene	0.033	Not Detected	0.22	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.65	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Container Type. 6 Liter Summa Camster	Method	
Surrogates	%Recovery	Limits
1.2-Dichloroethane-d4	105	70-130
Toluene-d8	96	70~130
4-Bromofluorobenzene	102	70-130



An loxies

Client Sample ID: IAF-7 Lab ID#: 1203370A-02A MODIFIED EPA METHOD TO-15 GC/MS SIM

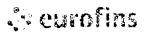
:

٦

File Name: Dil. Factor:	v031922sim 1.91	Date of Collection: 3/13/12 5:02:00 PM Date of Analysis: 3/20/12 08:43 AM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinvl Chloride	0.019	Not Detected	0.049	Not Detected
cis-1.2-Dichloroethene	0.038	Not Detected	0.15	Not Detected
Trichloroethene	0.038	Not Detected	0.20	Not Detected
Tetrachloroethene	0.038	Not Detected	0.26	Not Detected
trans-1,2-Dichloroethene	0.19	Not Detected	0.76	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

	(•	Method
Surrogates	%Recovery	Limits
1.2-Dichloroethane-d4	104	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	100	70-130



анг Тохисс

Client Sample ID: Lab Blank Lab ID#: 1203370A-03A MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: Dil. Factor:	v031906sim 1.00	Date of Collection: NA Date of Analysis: 3/19/12 12:30 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

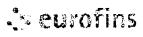
Container type, na - not Applicable	Method	
Surrogates	%Recovery	Limits
1.2-Dichloroethane-d4	102	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	96	70-130



der Toldes

Client Sample ID: CCV Lab ID#: 1203370A-04A <u>MODIFIED EPA METHOD TO-15 GC/MS SIM</u>

File Name: Dil. Factor:	v031902slm 1.00	Date of Collec Date of Analys	tion: NA sis: 3/19/12 09:36 AM
Compound			%Recovery
Vinyl Chloride			85
cis-1,2-Dichloroethene			91
Trichloroethene			90
Tetrachloroethene			89
trans-1,2-Dichloroethene			91
Container Type: NA - Not Ap	plicable		Method
Surrogates		%Recovery	Limits
1.2-Dichloroethane-d4		102	70-130
Toluene-d8		99	70-130
4-Bromofluorobenzene		108	70-130

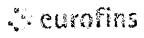


An lost y

Client Sample ID: LCS Lab ID#: 1203370A-05A MODIFIED EPA METHOD TO-15 GC/MS SIM

7

File Name: Dil. Factor:	v031903sim 1.00		Date of Collection: NA Date of Analysis: 3/19/12 10:26 AM	
	1.00		515. 0/10/12 10.20 AM	
Compound			%Recovery	
Vinyl Chloride			101	
cis-1,2-Dichloroethene			108	
Trichloroethene			97	
Tetrachloroethene			105	
trans-1,2-Dichloroethene			120	
Container Type: NA - Not Ap	plicable			
			Method	
Surrogates		%Recovery	Limits	
1,2-Dichloroethane-d4		101	70-130	
Toluene-d8		98	70-130	
4-Bromofluorobenzene		103	70-130	



AIR TOULS

Client Sample ID: LCSD Lab ID#: 1203370A-05AA MODIFIED EPA METHOD TO-15 GC/MS SIM

÷

٦

File Name: Dil. Factor:	v031904sim 1.00		Date of Collection: NA Date of Analysis: 3/19/12 11:17 AM		
Compound			%Recovery		
Vinyl Chloride			101		
cis-1,2-Dichloroethene			106		
Trichloroethene			95		
Tetrachloroethene			102		
trans-1,2-Dichloroethene			118		
Container Type: NA - Not Ap	plicable				
oonamer type: the theirty			Method		
Surrogates		%Recovery	Limits		
1.2-Dichloroethane-d4		101	70-130		
Toluene-d8		100	70-130		
4-Bromofluorobenzene		108	70-130		

KICS 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 hoki harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection broading, or shipping of samples, D.O.T. Hotime, (800) 467-4922

and the second secon

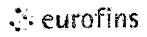
180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020

CHAIN-CF-CUSTODY RECORD 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. Hotime (800) 467-4922									ge <u> </u>	of		
Project Manager	JENNINE TR	ASK			Project Info: Turn Ard Time					nd Lab.Use Only Pressurized by:		
Collected by: (Print	ollected by: (Print and Sign) TIM ALESSI Sole 10-				P.O. #			8 NO		Date:		
Company ALCADIS Email DENDUDE TEAM CARADIS-53 Ca			-53.634			83.000.00009						
Address 126 U. TEFNERSCU ST., STE400 City MULUMUKEE State 12 Zip 53207			202	Project #(1) ICO /283.000 .0009					Pressurization Gas			
Phone 414-	276-7742	_Fax 414-27	6-7603		Project	t Name MADi	SON KIPP	s;	pecify		N ₂ Hi	
					ate	Time	n di Domo		·		sure/Vac	N 14 19
Lab I.D.	Field Sample I.D.	(Location)	Can #	of Co	llection	of Collection	Analyses Reque		initial	Final	Receipt	Final (##0
DI A	IAB -7		5697	31	3/12	1703	TO-13		-28.5	-5.0		1
024	IAF-7		32125	3/1	3/12	1702	TU-15		7-30.0	-9.5		
	55V-1-7		36049	3/14	4/12	1820	TO-15		-74,5	-5.0		
	SSV-2-7		30841	1	4/12	1825	T0-15		-29,5	-5,0		
	33V-C 1			+ 			······					
				+								
				+								
				<u> </u>		<u> </u>						
					Deto/Tir		Notes:			<u> </u>	Maria and	
Relinquished by:			W 2 A			Z 0900		nt a	LEPORT			
Relinquished by:	<u> </u>		ived by: (signa						PCE			
Reinquished by.	(aignature) Eator firm			,					TCE VINK	CHUR	DE	i
Relinquished by:	(signature) Date/Time	e Rece	ived by: (signa	iture)	Date/Tr	ne			CIS -17 TRANS-1	Z·PCE		
		<u> </u>						Laté E		-	- Order #	
Lab Ship	oper Name	Air Bill #		Temp ((°C)	Condition		· · · · · · · · · · · · · · · · · · ·				
Use	BDE			14	+	6302	Yes N	io N	one	120	387	8
Only												

ALCONT.

Contraction of the second

Form 1293 rev.11



AR PEARS

3/30/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203370B

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/16/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

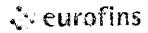
Regards,

cett--

Ausha Scott Project Manager

and the second second

1898年6月1日年6月1日4日20日 1998年日。 2月19日 天天祭師(第) 1.1.100の話でのCCCC
 1.1.100の話では2000の
 1.1.100の話では2000の



AP TO REC

WORK ORDER #: 1203370B

Work Order Summary

CLDENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	P.O. #	WI001283.0001.00009
FAX:	317-231-6514	PROJECT #	WI001283.0001,00009 MADISON KIPP
DATE RECEIVED: DATE COMPLETED:	03/16/2012 03/30/2012	CONTACT:	Ausha Scott

			NIXLIII I	
FRACTION #	NAME	TEST	VAC/PRES,	PRESSURE
03A		Modified TO-15	4.4 "Hg	5 psi
04A	SSV-2-7	Modified TO-15	3.6 "Hg	5 psi
05A	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:

Contrator and anna a sea

DATE: 03/30/12

FINAL

RECEIPT

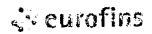
Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins | Alr Toxics, Inc.

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

Page 2 of 11



Ar Bouss

LABORATORY NARRATIVE Modified TO-15 Arcadis U.S., Inc. Workorder# 1203370B

Two 6 Liter Summa Canister samples were received on March 16, 2012. 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
ICAL %RSD acceptance criteria	+- 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	= 30% Difference with four allowed out up to<br =40%.; flag and narrate outliers</p
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
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

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

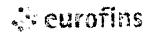
Definition of Data Qualifying Flags

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 and/or LCS.



Par foxes

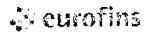
N - The identification is based on presumptive evidence.

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



ALL DOCKES

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

۰.

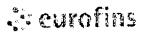
Client Sample ID: SSV-1-7

Lab ID#: 1203370B-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
Tetrachloroethene	0.16	0.18	1.1	1.2	

Client Sample ID: SSV-2-7

Lab ID#: 1203370B-04A No Detections Were Found.



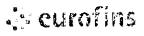
An Texas

Client Sample ID: SSV-1-7 Lab ID#: 1203370B-03A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	v032016 1. 5 7	Date of Collection: 3/14/12 6:20:00 PM Date of Analysis: 3/20/12 08:45 PM			
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
Vinyl Chloride	0.16	Not Detected	0.40	Not Detected	
trans-1,2-Dichloroethene	0.16	Not Detected	0.62	Not Detected	
cis-1,2-Dichloroethene	0.16	Not Detected	0.62	Not Detected	
Trichloroethene	0.16	Not Detected	0.84	Not Detected	
Tetrachloroethene	0.16	0.18	1.1	1.2	

Container Type: 6 Liter Summa Canister

Container Type: 6 Liter Summa Canister		Method
Surrogates	%Recovery	Limits
1.2-Dichloroethane-d4	111	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	102	70-130



AND TOXICS

Client Sample ID: SSV-2-7 Lab ID#: 1203370B-04A <u>MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN</u>

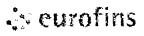
. ...

ı.

File Name: Dil. Factor:	v032019 1.52		of Collection: 3/1 of Analysis: 3/20/	
Compound	Rpt. Limit Amount (ppbv) (ppbv)		Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0,15	Not Detected	0.39	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	0.60	Not Detected
cis-1,2-Dichloroethene	0.15	Not Detected	0.60	Not Detected
Trichloroethene	0.15	Not Detected	0.82	Not Detected
Tetrachloroethene	0.15	Not Detected	1.0	Not Detected

Container Type: 6 Liter Summa Canister

Container Type, o Ener Gamma Gambal		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	97	70-130



THE DECKIES.

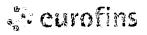
Client Sample ID: Lab Blank Lab ID#: 1203370B-05A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

1

File Name: Dil. Factor:	v032006 1.00	Date of Collection: NA Date of Analysis: 3/20/12 12:43 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0,10	Not Detected	0.26	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Trichloroethene	0.10	Not Detected	0.54	Not Detected
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected

Container Type: NA - Not Applicable

		Method
Surrogates	%Recovery	Limits
1.2-Dichloroethane-d4	105	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	93	70-130



4-Bromofluorobenzene

Ant Lagues

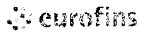
Client Sample ID: CCV Lab ID#: 1203370B-06A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

.

70-130

File Name: Dil. Factor:	v032002 1.00	Date of Collec Date of Analy	ction: NA sis: 3/20/12 10:02 AM
Compound			%Recovery
Vinyl Chloride			93
trans-1,2-Dichloroethene			91
cis-1.2-Dichloroethene			94
Trichloroethene			106
Tetrachloroethene			99
Container Type: NA - Not App	blicable		
			Method
Surrogates		%Recovery	Limits
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		100	70-130
		405	70 400

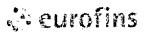
105



An lefte.

Client Sample ID: LCS Lab ID#: 1203370B-07A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	v032003 1.00	Date of Collec Date of Analy	sis: 3/20/12 10:46 AM
Compound			%Recovery
Vinyl Chloride			111
trans-1,2-Dichloroethene			120
cis-1,2-Dichloroethene			111
Trichloroethene			108
Tetrachloroethene			112
Container Type: NA - Not Ap	plicable		
			Method
Surrogates		%Recovery	Limits
1.2-Dichloroethane-d4		104	70-130
Toluene-d8		99	70-130
4-Bromofluorobenzene		103	70-130



AU DOMES

Client Sample ID: LCSD Lab ID#: 1203370B-07AA MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: DII. Factor:	v032004 1.00	Date of Collec Date of Analy	ction: NA sis: 3/20/12 11:28 AM
Compound			%Recovery
Vinyl Chloride			108
trans-1,2-Dichloroethene			116
cis-1,2-Dichloroethene			109
Trichloroethene			1 1 1
Tetrachloroethene			114
Container Type: NA - Not Ap	plicable		
••			Method
Surrogates		%Recovery	Limits
1.2-Dichloroethane-d4		103	70-130
Toluene-d8		100	70-130
4-Bromofluorobenzene		100	70-130

OXICS LTD. CHAIN-OF-CUSTODY RECORD

* Ann ansarg automotive service

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 kilod. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping 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

Page 1

of

Project Manager TENNINE TRASK		[Projec	ct Info:		Turn Around Time:	Lab Use Only Fressulized by:
Collected by: (Print and Sign) TIM ALESS	<u></u>		P.O. #_		·····	VINormal	Date
Company <u>ACADIS</u> Email <u>CLADUS</u> . Address <u>126 N. TEFENGUST, STECO</u> City <u>MUMULES</u> State			Project	#(1)Im(2)	83.000 .00009	🖸 Rush	Pressurization Gas
Address V. 1. 7 FF (1505), 55 40 City Fit with and City Phone City Fax 414-2.3	6-7603		Project	Name VADIS	SONJ KIPP	specify	N _z He
	T		ate	Time			ter Pressure/Vacuum
Lab D Field Sample I.D. (Location)	Can #	of Co	llection	of Collection	Analyses Reques	ted Initial	Final <u>Receipt</u> Final-
IA8-7	5697	311	3/12	1703	TO-13	-78,5	
	32125		3/12	1702	T0-15	7-30.0	-9.5
03A <u>55V-1-7</u>	36049		4/12	1820	TORIS		-5.0
	30841		4/12	1825	TO-IS	-29,5	-5.0
		1	-17		· · · · ·		
						······	
Relinquished by: (signature) Date/Time Rec	eived by: (signa				Notes:		
	NZ A		- X	2 0900	ON	IL C REPORT FUE	
Relinquished by: (signature) Date/Time Rec	eived by: (signa	ature)	vate/ 11	116		TCE	1 m . m . m . T
Relinquished by: (signature) Date/Time Rec	eived by: (signa	iture)	Date/Tir	ne		C15-17	CHLORIDE 72-DE
	- · · ·				<u></u>	TEX45-1	1,2- DCE
Shippet Name Atr Bill #		Temp ((°C)	Condition			World Order #
Use EED E		NP	<u>}</u> (502	Yes	o None	1203370
				and the second secon			Form 1293 rev



Madison-Kipp Corporation Post Office Box 8043 Madison, WI 53708-8043 201 Waubesa Street Madison, WI 53704-5728 **Telephone** 608-244-3511 Website www.Madison-Kipp.com

March 30, 2012

Mr. Barry Carleson 130 S. Marquette Street Madison, WI 53704

RE: Results of Air Testing 130 S. Marquette Street, Madison, WI 53704

Dear Mr. Carleson:

On March 13 and 14, 2012, ARCADIS personnel, on behalf of Madison-Kipp, completed indoor air and sub-slab vapor sampling activities to measure levels of select volatile organic compounds (VOCs), below and/or within your home, located at 130 S. Marquette Street in Madison, Wisconsin. This work was completed in cooperation with and with the prior approval of the Wisconsin Department of Natural Resources (WDNR).

Specifically, the sampling was completed to test for the presence of tetrachloroethene (PCE), trichloroethene (TCE), cis- and trans-1,2-dichloroethene, and vinyl chloride. The homes that were sampled in your neighborhood were given a unique sample identification number when submitting the samples to the laboratory to ensure confidentiality. The following samples were collected from your home:

- SSV1-8 and SSV2-8 Sub-slab samples collected on March 14, 2012. The sub-slab samples were collected from the sample points that were installed in the basement floor of your home.
- IAB-8 Indoor air basement sample collected on March 13-14, 2012.
- IAF-8 Indoor air first floor sample collected on March 13-14, 2012.

Based on the laboratory results (below), only PCE was detected in these samples. The levels of PCE in the collected samples were below the sub-slab soil gas and indoor air Residential Action Levels provided by the WDNR. The WDNR Residential Action Level is based on the U.S. Environmental Protection Agency's Residential Air Screening Levels that represent health-protective concentrations an individual can be exposed to for 30 years for 24 hours a day.

Sample ID	Results (part per billion (ppbv))	Residential Action Level (ppbv)
SSV1-8	2.4	60
SSV2-8	0.46	60
IAB-8	0.036	6
IAF-8	Not Detected	6

Copies of the laboratory data and field notes are enclosed for your reference.

Sincerely, • Heald

Mark Meunier Madison-Kipp Corporation

cc: Michael Schmoller – WDNR Dr. Henry Nehls-Lowe – WDHS Norman Berger, Esq. David A. Crass, Esq.

Attachments: Laboratory Analytical Report Field Notes

INDOOR AIR QUALITY BUILDING SURVEY	
Date: 03/67/12 Project #: WI00 238	
Address: 130 Marquette Street, Madison, WI	<u></u>
Property Contact: Barry Carleson	
Phone: Home: (60x) 772-0827 Work: () Cell: ()	
Building Occupants: Children <13 Children age 13-18 Adults 2	
Building Construction Characteristics: (Circle appropriate description)	
Single FamilyMultiple FamilySchoolCommercialRanch 2-FamilyRaised Ranch DuplexColonial # of unitsSplit Level CondominiumMobile HomeOther (specify)General Description of Building Construction Materials, especially new materials:	
Z STORY, SLATE SIDING, WOOD COUSTILUCTION	
How many occupied stories does the building have?	
Has the building been weatherized with any of the following? (Circle all that apply) (Insulation Storm Windows) Other (specify)	
What type of basement does the building have? (Circle all that apply) Full basement Crawlspace Slab-on-Grade Other (specify)	
Basement Size 500 (ft ³)	
Surveyor's Initials: Page 1 of	5

INDOOR AIR QUALITY BUILDING SURVEY

Describe Basement Floor and Walls: CONCRETE, PUINED CONCRETE WHILS, SOME CHAPTET, SOME TILE (Sometimes Wet) DL- FUL STULAR - KARS Always Dry Always Wet Frequently Wet Moisure: Is a basement sump present? (Y(X)) Is a sump pump present? (Y(X)) (circle one) Does the basement have any preferential pathways that might permit soil vapor entry? (Circle all that apply) Visible Cracks) Unsealed Pipes/Utility Conduits Sump pumps What type of ground cover surrounds the outside of building? (Circle all that apply) Other (specify) _ Grass) Concrete (Asphalt) Heating and Ventilation System(s) Present: What type of heating system(s) is (are) used in this building? (Circle all that apply) Wood Stove (Hot Air Circulation) Heat Pump Steam Radiation Electric Baseboard Unvented Kerosene heater Hot Air Radiation Other (specify): What type (s) of fuel(s) are used in this building? (Circle all that apply) Other (specify): (Electric) Coal (Natural Gas) Fuel Oil Wood Solar What type of mechanical ventilation systems are present and/or currently operating in the building? (Circle all that apply) (Kitchen fan) Bathroom Fan Central Air Conditioning Individual Air Conditioning Units Air-to-Air Heat Exchanger Other (specify): Open windows Septic system? Yes / Yes (but not used) (No) Irrigation/private well? Yes / Yes (but not used) /No Existing subsurface depressurization (radon) system in place? Yes (No)

If yes, is it running? Yes / No

A-3

Page 2 of 5

INDOOR AIR QUALITY BUILDING SURVEY

Sources of Chemical Contaminants:

Which of these items are present in the building?

Potential Sources	Check if Present	Removed Prior to
Location(s)		Sampling? (Yes / No / NA)
Paints or paint thinners	/ LATEX	
Gas-powered equipment		
Gasoline storage cans		
Cleaning solvents		
Air fresheners		
Oven cleaners		
Carpet/upholstery cleaners		
Hairspray		
Nail polish/polish remover		
Bathroom cleaner	/ (CITELE CASED)	
Appliance cleaner	· · · · · ·	
Furniture/floor polish		
Moth balls		
Fuel tank		
Wood stove		
Fireplace		
Perfume/colognes		
Hobby supplies (e.g.,		
solvents, paints, lacquers,		
glues, photographic		
darkroom chemicals)		
Scented trees, potpourri, etc.	MOMATE OIL	(د
Other:	`	······································
Other:		
Other:		

Do one or more smokers occupy this building on a regular basis (YN)? How often?

Has anybody smoked in the building in the last 48 hours (YAN)

Does the building have an attached garage (Y()?	If so, is a car usually parked in the garage
(Y/N)?	

Do the occupants of the building frequently have their clothes dry-cleaned (Y(N)?

Was there any recent remodeling or painting done in the building (VN)?

UPSTAINS BEDROOM (3 WEEKS OLD)

Surveyor's Initials!

Page 3 of 5

.

A-4

INDOOR AIR QUALITY BUILDING SURVEY

Are there any pressed wood products in the building (e.g., hardwood plywood wall paneling, particleboard, fiberboard) (Y(N))

Are there any new upholstery, drapes or other textiles in the building (Y(N))

Have the occupants ever noticed any unusual odors in the building? (Y(N)) If yes, describe odors, location(s), and conditions that seem to affect odors (especially rain, temperature, wind):

Any known spills of a chemical immediately outside or inside the building? (YN) If yes, describe (location, age, type of chemical, any actions to clean up):

Has the building been treated (inside or outside) with any insecticides/pesticides(YN) If so, what chemicals are used and how often are they applied:

Outdoor Sources of Contamination:

Nearby Gasoline Stations (distance and direction):

Page 4 of 5

INDOOR AIR QUALITY BUILDING SURVEY

Industrial Stack Emissions (distance and direction):

Automotive emission sources (e.g., highway; bus stop; high-traffic area):

Weather Conditions During Sampling:

Outside Temperature (°F):____

Prevailing wind speed and direction:

Describe the general weather conditions (e.g., sunny, cloudy, rain):

Precipitation >0.1 inches within 12 hours preceding the sampling event (Y/N)? ______ General Comments:______

Is there any other information about the structural features of this building, the habits of its occupants or potential sources of chemical contaminants to the indoor air that may be of importance in facilitating the evaluation of the indoor air quality of the building?

The responses documented on this survey are true, accurate and complete to the best of my knowledge and ability.

TIM ALRSS!	
Name of Surveyor	
- and him	
Signature	
3/7/12	

Date

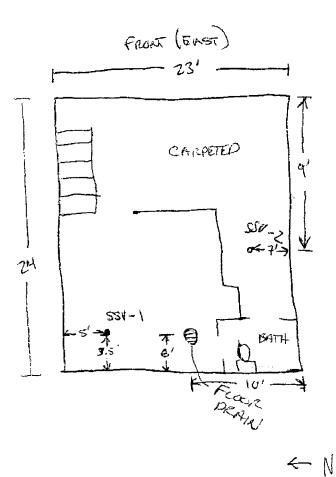
Surveyor's Initials!

Page 5 of 5

5

÷

A-6



- ZUM LAS LAUNDER SONP (CLARMICAL FREE) NO VOC'S
- SHUR-FINE LEMON SCENT BLEVEH
- ZOUT STAIN REMOVER (NO INGREDIENT CIST)
- JOE MANGANO'S MIRACLE CLEAN FABRIC SOFTMER (NO INGREDIENT CIST) (STATES ALL NATURAL)

Madiso	Madison Kipp Corporation		Vapor Sample ollection Log
		Sample (D:	-IAB-130 1AB-8
Client:		Boring Equipment:	
Project:		Sealant:	
Location:	WATER SOPTNER	Tubing Information:	
Project #:		Miscellaneous Equipment:	
Samplers:		Subcontractor:	
Sample Point Location:	· · · · · · · · · · · · · · · · · · ·	Equipment:	
Sampling Deptis;		Moisture Content:	
Time and Date of Installation:		Approximate Purge Volume:	

Î

÷

		Da	te	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
	3	13	10	80	-29				29.94	
-	<u> </u>		Her	700-						
	3	119	110	702	-7				29.94	
	(a) 1	Seco	rd conie	ter information at	a minimum at the	heninning and	and of sampling			

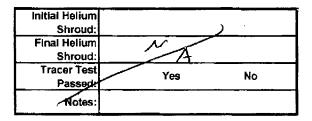
(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

	^~
Size (circlə one):	1L 2.7L (6L)
Canister ID:	9950
Flow Controller ID:	40303
Notes:	

Tracer Test Information (if applicable):

.



General Observations/Notes:

PASSED SPLIT-IN TEST LADQUETTES 20

Approximating One-Well Volume (for purging):

When using 1¼-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

Madiso	Madison Kipp Corporation		Soil Vapor Sample Collection Log		
		Sample ID:	JAR TSOLAF-8		
Cilent:		Boring Equipment:			
Project:		Sealant:			
Location:	BETWEEN DINING/LIVING-ROCM	Tubing Information:			
Project #:		Miscellaneous Equipment:			
Samplers:		Subcontractor:			
Sample Point Location:		Equipment:			
Sampling Depth:		Moisture Content:			
Time and Date of Installation:		Approximate Purge Volume:			

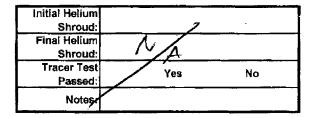
Date	lime	Canister Vacuum (a) (inches of Hg)	Temperature (*F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/3/2 8	205	-30	70			29.94	
3/19/12 3	702						
3 412	700	-115				29.94	

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Tracer Test Information (if applicable):

Size (circle one):	1L 2.7L 6L
Canister ID:	21001
Flow Controller ID:	40060 - 40040
Notes:	



General Observations/Notes:

PASSED SHUT-IN TES BO MANOUETTE ST	1		
BO MADQUETTE ST	UET	 	

Approximating One-Well Volume (for purging):

When using 1%-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.

Madiso	Madison Kipp Corporation		Vapor Sample ollection Log
		Sample ID:	55V-1 (13 0)
Client:	MADISON KIPP	Boring Equipment:	55V-1-8
Project:	MAASON KIPP	Sealant:	
Location:	MARSON WI	Tubing Information:	
Project #:	WI001283.0001.00008	Miscellaneous Equipment:	
Samplers:	TALAW	Subcontractor:	
Sample Point Location:	NW CORNER OF UNSEMENT	Equipment:	
Sampling Depth:	SUD SLAD	Moisture Content:	
Time and Date of Installation:		Approximate Purge Volume:	200ml c 200ml mon

Date	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
314/12 750	-28.5				79.91	
3/14/12 856	-5.0				29.9/	

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one): 1L 2.7L 6L Canister ID: 36032 Flow Controller ID: 0000006362 Notes:

Tracer Test Information (if applicable):

13

Initial Helium Shroud:	95.2	
Final Hellum Shroud:	780°10	
Tracer Test Passed:	Yes	No
Notes:	10,800 He M	bacy.

General Observations/Notes:

PASSED SMAT- IN TEST				
SPUT SAMPLE	with	what		
BO MAQUETTEST			 	

Approximating One-Well Volume (for purging):

When using 1%-Inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.

Madison Kipp Corporation		Soil Vapor Sample Collection Log		
		Sample ID:	SSU-2 (130)	
Client:	MADISON KIPP	Boring Equipment:	55U-2-8	
Project;	MAQSON HUPP	Sealant:		
Location:	MADISON WI	Tubing Information:		
Project #:	Para 1000 EBS 100 TW	Miscellaneous Equipment:		
Samplers:	1	Subcontractor:		
Sample Point Location:		Equipment:		
Sampling Depth:		Molsture Content:		
Time and Date of Installation:		Approximate Purge Volume:	200ml e 200ml/min	

ŕ

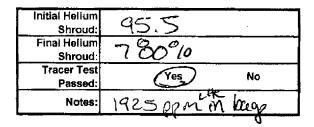
Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humicity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
314112	83/	-28.5				79.91	
3/14/12	978	-5.0				29.91	

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1L 2.7L 6L
Canister ID:	23997
Flow Controller ID:	FC 445
Notes:	

Tracer Test information (if applicable):

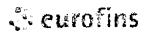


General Observations/Notes:

PASSED SHUT-INTEST	
SPLIT SAMPLE WITH WOH	
130 MALQUETTEST	
	· · · · · · · · · · · · · · · · · · ·

Approximating One-Well Volume (for purging):

When using 1%-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.



Sir houses

3/28/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203368B

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/16/2012 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.

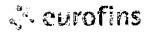
Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Scott-

Ausha Scott Project Manager

uad dies Beens Base als de la Bergan die gesche



AR DUMES

WORK ORDER #: 1203368B

Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	P.O. #	WI001283.0001.00009
FAX:	317-231-6514	PROJECT #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED:	03/16/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	03/28/2012		

			KECEH I	1.174247
FRACTION #	<u>NAME</u>	<u>TEST</u>	VAC./PRES.	PRESSURE
03A	SSV-1-8	Modified TO-15	6.2 "Hg	5 psi
04A	SSV-2-8	Modified TO-15	5.0 "Hg	5 psi
05A	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:

Something Prominger

DATE: 03/28/12

RECEIPT

FINAL.

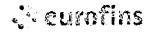
Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

Page 2 of 11



An Tuking

LABORATORY NARRATIVE Modified TO-15 Arcadis U.S., Inc. Workorder# 1203368B

Two 6 Liter Summa Canister samples were received on March 16, 2012. 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
ICAL %RSD acceptance criteria	+- 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	= 30% Difference with four allowed out up to<br =40%.; flag and narrate outliers</p
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
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

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

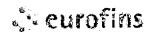
Definition of Data Qualifying Flags

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 and/or LCS.



Au Listin

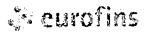
N - The identification is based on presumptive evidence.

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

rl-File was requantified for the purpose of reissue



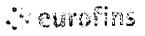
An boxies

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

Client Sample ID: SSV-1-8

Lab ID#	: 1203368B-03A	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.17	2.4	1.1	16
Client Sample ID: SSV-2-8				
Lab ID#: 1203368B-04A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.16	0.46	1.1	3.1



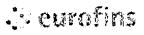
A.C. BoxICS

Client Sample ID: SSV-1-8 Lab ID#: 1203368B-03A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	v032011 1.69	Date of Collection: 3/14/12 7:50:00 Date of Analysis: 3/20/12 04:52 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.17	Not Detected	0.43	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
cis-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Trichloroethene	0.17	Not Detected	0.91	Not Detected
Tetrachloroethene	0.17	2.4	1.1	16

Container Type: 6 Liter Summa Canister

Container Type. o Elici Commi Comotor		Method
Surrogates	%Recovery	Limits
1.2-Dichloroethane-d4	108	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	89	70-130



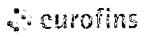
Sa fode.

Client Sample ID: SSV-2-8 Lab ID#: 1203368B-04A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	v032012 1.61	Date of Collection: 3/14/12 8:31:00 Date of Analysis: 3/20/12 05:52 PN		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.16	Not Detected	0.41	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
Trichloroethene	0.16	Not Detected	0.86	Not Detected
Tetrachloroethene	0.16	0.46	1.1	3.1

Container Type: 6 Liter Summa Canister

Container Type, o Libir Continu Contocor		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	108	70-130	
Toluene-d8	93	70-130	
4-Bromofluorobenzene	87	70-130	



An fours

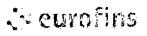
Client Sample ID: Lab Blank Lab ID#: 1203368B-05A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name: v032006 Dil. Factor: 1.00		Date of Collection: NA Date of Analysis: 3/20/12 12:43 PM					
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)			
Vinvl Chloride	0.10	Not Detected	0.26	Not Detected			
trans-1.2-Dichloroethene	0.10	Not Detected	0.40	Not Detected			
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected			
Trichloroethene	0.10	Not Detected	0.54	Not Detected			
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected			

Container Type: NA - Not Applicable

		Method
Surrogates	%Recovery	Limits
1.2-Dichloroethane-d4	105	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	93	70-130



der Faxere

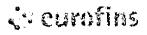
Client Sample ID: CCV Lab ID#: 1203368B-06A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

÷

٦

Flle Name: Dil. Factor:	v032002 1.00	Date of Collec Date of Analys	tion: NA sis: 3/20/12 10:02 AM
Compound			%Recovery
Vinyl Chloride			93
trans-1,2-Dichloroethene			91
cis-1,2-Dichloroethene			94
Trichloroethene			106
Tetrachloroethene			99
Container Type: NA - Not Applicab	le		
0		% Baseyon	Method Limits
Surrogates		%Recovery	

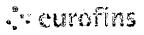
Surrogates	78NOCOVELY	Elititor
1.2-Dichloroethane-d4	103	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	105	70-130



An Ibours

Client Sample ID: LCS Lab ID#: 1203368B-07A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v032003	Date of Collec	ction: NA		
Dil. Factor:	1.00	Date of Analy	Date of Analysis: 3/20/12 10:46 AM		
Compound			%Recover		
Vinyl Chloride			111		
trans-1,2-Dichloroethene			120		
cis-1,2-Dichloroethene			111		
Trichloroethene			108		
Tetrachloroethene			112		
Container Type: NA - Not App	licable				
			Method		
Surrogates		%Recovery	Limits		
1,2-Dichloroethane-d4		104	70-130		
Toluene-d8		99	70-130		
4-Bromofluorobenzene		103	70-130		



ALC LORRES

Client Sample ID: LCSD Lab ID#: 1203368B-07AA <u>MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN</u>

٦

File Name: Dil. Factor:	v032004 1.00	Date of Collection: NA Date of Analysis: 3/20/12 11:28 AM		
Compound		%Recovery		
Vinyl Chloride		108		
trans-1,2-Dichloroethene		116		
cis-1,2-Dichloroethene		109		
Trichloroethene		11 1		
Tetrachloroethene		114		

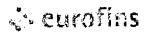
Surrogates	%Recovery	Limits
1.2-Dichloroethane-d4	103	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	100	70-130



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 Ilability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and incernnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the

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

roject Manag	OF JENNINE TRASK		ng, or shipping c	[et Info:			Around ime:	Lah-Use Pressi	Only Hized by:	
ollected by: (F	Print and Sign) TTM AUESS1	- cetai	<u>, C</u>	= Ì	P.O. #_			A N	lormal	Date		2999 ed 20
ompany <u>A</u>	READISEmails	ENNWE	KASLENCHOS	-1360	_		3.0001.00009				urization (e e e
	JEFFFISOUSI, JE WOLLING MILLING NEE					-		1 - 1		19 - C.		
hone 41	4-7.76-7747 Fax 4	4-27	6-7603	[Project	Name MAOI	SIN KIPP	:	specity	-	N ₂ He	
				1	ite	Time			Canis	ter Pres	ssure/Vac	
Lab hD.	Field Sample I.D. (Location)		Can #	of Col	ection	of Collection	Analyses Reque	ested	Initial	Final	Receipt	Final (ps)
	JAG-8		9950	3/14	112	702	TO-15		-24.0	-7.0		
	JAF-8		21001	3/14	,	7:00	70-15		-30.0	-11.5		
03A	SSV-1-8		36032	3/14		750	TO-15		-28.5	-5.0		
C4A	<u>- 55V - 2 - 8</u>		23997	3/1-		831	70-15		-28.5	-5,0		
				1						:		
				1						i		- 22
<u> </u>				-			·····					
										:		
				-		1						
	by: (signature) Date/Time 3/1린17 1449		eived by: (signa	NZ Z	- <u>(</u>	20900	Notes:	~ RE	foet :-		<u> </u>	<u></u>
Relinquished	by: (signature) Date/Time		aived by: (signa		Date/Tin				E E WYL CH		z	
Relinquished	by: (signature) Date/Time	Rex	elved by: (signa						5-1,2-1	NE DLE		
Lab ⁹	hipper Name Alf I	39H #		Temp (C)	Condition			<u> </u>	Work	Order #) 	8
Use	GO GX			ALA	<	500	(Tes)	No I	lone	T W /	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	— —
Only												



Section Constant

3/28/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203368A

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/16/2012 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.

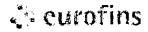
Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

475cott-

Ausha Scott Project Manager

1997 For 2 annua 1976 - 2019 - 20 19 annua 1979 - 2019 ۰.



All Lates

WORK ORDER #: 1203368A

Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	P.O. #	WI001283.0001.00009
FAX:	317-231-6514	PROJECT #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED:	03/16/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	03/28/2012		

			KECEII I	1.1.1445
FRACTION #	NAME	TEST	VAC./PRES.	PRESSURE
01A	IAB-8	Modified TO-15 SIM	7.6 "Hg	5 psi
02A	IAF-8	Modified TO-15 SIM	11.2 "Hg	5 psi
03A	Lab Blank	Modified TO-15 SIM	NA	NA
04A	CCV	Modified TO-15 SIM	NA	NA
05A	LCS	Modified TO-15 SIM	NA	NA
05AA	LCSD	Modified TO-15 SIM	NA	NΛ

CERTIFIED BY:

- Constant of Freemannes

DATE: 03/28/12

DECEIPT

FINAT

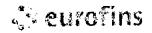
Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

Page 2 of 11



AR TOARS

LABORATORY NARRATIVE Modified TO-15 SIM Arcadis U.S., Inc. Workorder# 1203368A

Two 6 Liter Summa Canister (SIM Certified) samples were received on March 16, 2012. 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	<pre><!--=30% RSD with 2 compounds allowed out to < 40% RSD</pre--></pre>	Project specific; default criteria is =30% RSD with 10% of compounds allowed out to < 40% RSD</td
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

There were no receiving discrepancies.

Analytical Notes

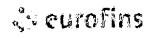
There were no analytical discrepancies.

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 and/or LCS.
- N The identification is based on presumptive evidence.



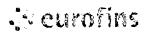
Jan Do ate

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



April Land

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

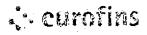
Client Sample ID: IAB-8

Lab ID#: 1203368A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
Tetrachloroethene	0.036	0.036	0.24	0.25	

Client Sample ID: IAF-8

Lab ID#: 1203368A-02A No Detections Were Found.



An Longs

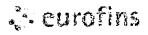
Client Sample ID: IAB-8 Lab ID#: 1203368A-01A <u>MODIFIED EPA METHOD TO-15 GC/MS SIM</u>

٦

File Name: Dil. Factor:	v031917sim 1.79	Date of Collection: 3/14/12 7:02:00 AM Date of Analysis: 3/19/12 08:22 PM				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)		
Vinyl Chloride	0.018	Not Detected	0.046	Not Detected		
cis-1,2-Dichloroethene	0.036	Not Detected	0.14	Not Detected		
Trichloroethene	0.036	Not Detected	0.19	Not Detected		
Tetrachloroethene	0.036	0.036	0.24	0.25		
trans-1,2-Dichloroethene	0.18	Not Detected	0.71	Not Detected		

Container Type: 6 Liter Summa Canister (SIM Certified)

	(Method
Surrogates	%Recovery	Limits
1.2-Dichloroethane-d4	105	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	103	70-130



NE TRAFS

Client Sample ID: IAF-8 Lab ID#: 1203368A-02A <u>MODIFIED EPA METHOD TO-15 GC/MS SIM</u>

١.

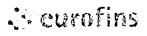
.

٦

File Name: Dil. Factor:	v031918sim 2.14	Date of Collection: 3/14/12 7:00:00 AM Date of Analysis: 3/19/12 09:05 PM				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)		
Vinyl Chloride	0.021	Not Detected	0.055	Not Detected		
cis-1,2-Dichloroethene	0.043	Not Detected	0.17	Not Detected		
Trichloroethene	0.043	Not Detected	0.23	Not Detected		
Tetrachioroethene	0.043	Not Detected	0.29	Not Detected		
trans-1,2-Dichloroethene	0.21	Not Detected	0.85	Not Detected		

Container Type: 6 Liter Summa Canister (SIM Certified)

	(Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	102	70-130



an Ingen

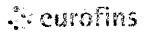
Client Sample ID: Lab Blank Lab ID#: 1203368A-03A MODIFIED EPA METHOD TO-15 GC/MS SIM

1

File Name: Dil. Factor:	v031906sim 1.00	Date of Collection: NA Date of Analysis: 3/19/12 12:30 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

		Method		
Surrogates	%Recovery	Limits		
1.2-Dichloroethane-d4	102	70-130		
Toluene-d8	96	70-130		
4-Bromofluorobenzene	96	70-130		

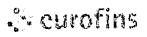


PH CARS

Client Sample ID: CCV Lab ID#: 1203368A-04A MODIFIED EPA METHOD TO-15 GC/MS SIM

4

File Name: v031902slm Dil. Factor: 1.00		Date of Collection: NA Date of Analysis: 3/19/12 09:36 AM		
Compound			%Recovery	
Vinyl Chloride			85	
cis-1.2-Dichloroethene			91	
Trichloroethene			90	
Tetrachloroethene			89	
trans-1,2-Dichloroethene			91	
Container Type: NA - Not Ap	oplicable			
Surrogates		%Recovery	Method Limits	
1.2-Dichloroethane-d4		102	70-130	
Toluene-d8		99	70-130	
4-Bromofluorobenzene		108	70-130	



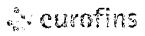
Au Tours

Client Sample ID: LCS Lab ID#: 1203368A-05A

MODIFIED	EPA	METHOD	TO-15 GC/MS SIM	

٦

		of Collection: NA of Analysis: 3/19/12 10:26 AM	
		%Recovery	
		101	
		108	
		97	
		105	
		120	
pplicable			
		Method	
	%Recovery	Limits	
	101	70-130	
	98	70-130	
	103	70-130	
		pplicable %Recovery 101 98	



AL TORICS

Client Sample ID: LCSD Lab ID#: 1203368A-05AA MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	v031904sim	Date of Collec	
Dil. Factor:	1.00	Date of Analy	sls: 3/19/12 11:17 AM
Compound			%Recovery
Vinyl Chloride			101
cis-1.2-Dichloroethene			106
Trichloroethene			95
Tetrachloroethene			102
trans-1,2-Dichloroethene			118
Container Type: NA - Not Ap	plicable		
			Method
Surrogates		%Recovery	Limits
1,2-Dichloroethane-d4		101	70-130
Toluene-d8		100	70-130
4-Bromofluorobenzene		108	70-130

.



Ĺ

Sample Transportation Notice

Relinquishing signature on this document indicates that sample is being shipped in compliance with 180 BLUE RAVINE ROAD, SUITE B 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 indext minity 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

FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020

Page ____ of ____

•	ager JENNINE TRASK			Proje	ct Info:			Around me:	Lab Use Pressi	Only inized by:	
-	P.O. #						🖾 Normal		Date		
	ARCADISEmail JE			Project	1#1 JE0G128	3.0001,00009		ush		Jrization (Aas
	, JEFHERSONST, STEAUCHY MILWADICEE		<u>32</u>		t Name MAO					영화 같은 것	한 옷을 다
Phone	14-276-7747_ Fax 414	- 276-7603					S	oecify		N ₂ He sure/Vac	
Lab I.D.	Field Sample I.D. (Location)	Can #		ate llection	Time of Collection	Analyses Reque	sted	Initial	Final	Receipt	Final
al A	IAG-8	9950	3/14	liz	702	TO-15		-29.0	-7.0		
oz A	IAF-8	21001		1/12	700	TO-15		-30,0	-11.5		
	SSV-1-8	36032		1/12	750	TO-15		-28.5	-5.0		
	55V-2-8	23997		+/iz	831	70-15		-28.5	-5, O		
<u> </u>									:		
Relinquished	d by: (signature) Date/Time = - 3/i5/iz 1449	Received by: (signat	2	5/16/0	2 0900	Notes:	PER	OFT			
	d by: (signature) Date/Time	Received by: (signat	-				PCI	E Z U < L CH			
Relinquished	d by: (signature) Date/Time	Received by: (signa	ture)	Date/Tin	<u> </u>		CIS THIN	-1,2-D 5-1,2-D	UL VE	· · · · · · · · · · · · · · · · · · ·	
Lab	Shipper Name Air Bill	الأفريق ويراحا الأخار	emp (°C)	Condition						, ,
Use Only	FED GX	/	iA	<	JUD		o No	one 🔒	20.	3363)
	-									and the second state	

Form 1293 rev;11

M′C

Madison-Kipp Corporation Post Office Box 8043 Madison, WI 53708-8043 201 Waubesa Street Madison, WI 53704-5728 *Telephone* 608-244-3511

Website www.Madison-Kipp.com

April 4, 2012

Ms. Amy Crikelair 134 S. Marquette Street Madison, WI 53704

RE: Results of Air Testing 134 S. Marquette Street, Madison, WI 53704

Dear Ms. Crikelair:

On March 15 and 16, 2012, ARCADIS personnel, on behalf of Madison-Kipp, completed indoor air and sub-slab vapor sampling activities to measure levels of select volatile organic compounds (VOCs), below and/or within your home, located at 134 S. Marquette Street in Madison, Wisconsin. This work was completed in cooperation with and with the prior approval of the Wisconsin Department of Natural Resources (WDNR).

Specifically, the sampling was completed to test for the presence of tetrachloroethene (PCE), trichloroethene (TCE), cis- and trans-1,2-dichloroethene, and vinyl chloride. The homes that were sampled in your neighborhood were given a unique sample identification number when submitting the samples to the laboratory to ensure confidentiality. The following samples were collected from your home:

- SSV1-9 and SSV2-9 Sub-slab samples collected on March 16, 2012. The sub-slab samples were collected from the sample points that were installed in the basement floor of your home.
- IAB-9 Indoor air basement sample collected on March 15-16, 2012.
- IAF-9 Indoor air first floor sample collected on March 15-16, 2012.

Based on the laboratory results (below), only PCE was detected in the sub-slab samples. The levels of PCE in the collected samples were below the sub-slab soil gas and indoor air Residential Action Levels provided by the WDNR. The WDNR Residential Action Level is based on the U.S. Environmental Protection Agency's Residential Air Screening Levels that represent health-protective concentrations an individual can be exposed to for 30 years for 24 hours a day.

Sample ID	Results (part per billion (ppbv))	Residential Action Level (ppbv)
SSV1-9	6.2	60
SSV2-9	1.6	60
IAB-9	0.14	6
IAF-9	0.035	6

The compound trans-1,2-dichloroethene was also detected in the indoor air samples at levels of 5.5 ppbv (sample IAB-9) and 0.54 ppbv (sample IAF-9). Trans-1,2-dichloroethene was not detected in the subslab samples, which indicates an indoor source. In addition, the detected concentrations are below the WDNR Residential Action Level of 16 ppbv. Copies of the laboratory data and field notes are enclosed for your reference.

Sincerely, Uuli lu

Mark Meunier Madison-Kipp Corporation

cc: Michael Schmoller – WDNR Dr. Henry Nehls-Lowe – WDHS Norman Berger, Esq. David A. Crass, Esq.

Attachments: Laboratory Analytical Report Field Notes

• • •

Indoor Air Quality Building Survey

	DOOR AIR QUA			
Date: 03/07/	'12 Project #:	WIGOI	238	
Address: 34	Marquette	Street,	Mudison,	WI
Property Contact:	Amn Crike	llair		
Phone: Home: (603)	241-1503 Work: ()	Cell: ()
Building Occupants: C	Children <13	Children age	. 13-18	_ Adults Z
Building Construction	n Characteristics: ((Circle appropri	ate descriptio	n)
Single Family Ranch 2-Family Split Level Condomini	Raised Ranch um Mobile Home	Duplex Other	Colonial # ((specify)	of units
General Description of	Building Constructio	on Materials, e	specially new	materials:
Lucop	CONSTRUCTIO.	$N, \omega \infty C$	SIDINE	
		v—		
How many occupied st	ories does the buildir	ng have? Z	<u>-</u>	
Has the building been Insulation (Storm V Other (specify)	Window			
What type of basement Full basement Crawlsp		<u>ve? (C</u> ircle all <u>n-Grad</u>		ify)
Basement Size	_ (ft ²)			
Surveyor's Initials:	a			Page 1 of 5

INDOOR AIR QUALITY BUILDING SURVEY ,

Describe Basement Floor and Walls:

CONCRETE FLOOP, POURED CONCRETE WALLS

·				·····
Moisure:	Always Dry Al	lways Wet Fro	equently Wet	Sometimes Wet
Is a baseme	nt sump present? (Y	N Is a sump	pump present? (Y (circle one)
Does the bas that apply) Visible Crac	• •	ferential pathwa Pipes/Utility C		ermit soil vapor entry? (Ci ap pumps
VISIBLE Crac	iks Olisealed	ripes/ounty C	ondants 2011	յի իրախչ
What type o		ounds the outsid sphalt		Circle all that apply)
	d Ventilation System			
	f heating system(s)			
	ulation Heat Pum liation Unvented			Wood Stove
	fy):			CITIC DASCOUALU
Chief (Speer				
What type (s	s) of fuel(s) are used			
Natural Gas			Other (spec	ify):
Fuel Oil	Wood	Solar		
What type o	f mechanical ventila	tion systems ar	e present and/or	currently operating in the
building? (C	Lircle all that apply)	line by beening an	• F	
Central Air	Conditioning	Bathroom	Fan	(Kitchen fan)
	ir Conditioning Uni		Heat Exchange	
Open windo	WS	Other (spe	cify):	
Septic system Irrigation/pr	m? Yes / Yes (but no ivate well? Yes / Ye	ot used) (No s (but not used)		
	surface depressuriza unning? Yes / No	ation (radon) sy	stem in place? Y	es (N)

A-3

Page 2 of 5

INDOOR AIR QUALITY BUILDING SURVEY

Sources of Chemical Contaminants:

Which of these items are present in the building?

Potential Sources	Check if Present	Removed Prior to
Location(s)		Sampling? (Yes / No / NA)
Paints or paint thinners		
Gas-powered equipment		
Gasoline storage cans		
Cleaning solvents		
Air fresheners		
Oven cleaners	L	
Carpet/upholstery cleaners		
Hairspray		
Nail polish/polish remover		
Bathroom cleaner	$\overline{}$	
Appliance cleaner		
Furniture/floor polish		
Moth balls		
Fuel tank		
Wood stove		
Fireplace	V (GAS)	
Perfume/colognes		
Hobby supplies (e.g.,		
solvents, paints, lacquers,		
glues, photographic		
darkroom chemicals)		
Scented trees, potpourri, etc.		
Other:		
Other:		
Other:		

Do one or more smokers occupy this building on a regular basis (Y)? How often?

Has anybody smoked in the building in the last 48 hours (YN)

Does the building have an attached garage (Y/N)? If so, is a car usually parked in the garage (Y/N)?

Do the occupants of the building frequently have their clothes dry-cleaned (Y(N))?

Was there any recent remodeling or painting done in the building (Y)?

Surveyor's Initials:

Page 3 of 5

A-4

INDOOR AIR QUALITY BUILDING SURVEY

Are there any pressed wood products in the building (e.g., hardwood plywood wall paneling, particleboard, fiberboard) (Y/N)?

Are there any new upholstery, drapes or other textiles in the building (Y/N)?

Have the occupants ever noticed any unusual odors in the building? (Y/N)? If yes, describe odors, location(s), and conditions that seem to affect odors (especially rain, temperature, wind):

Any known spills of a chemical immediately outside or inside the building? (Y/N)? If yes, describe (location, age, type of chemical, any actions to clean up):

Has the building been treated (inside or outside) with any insecticides/pesticides(Y/N)? If so, what chemicals are used and how often are they applied:

Outdoor Sources of Contamination:

Nearby Gasoline Stations (distance and direction):

34

Surveyor's Initials:

Page 4 of 5

•

INDOOR AIR QUALITY BUILDING SURVEY

Industrial Stack Emissions (distance and direction).

Automotive emission sources (e.g., highway; bus stop; high-traffic area):

Outside Temperature (°F):____

Prevailing wind speed and direction:

Describe the general weather conditions (e.g., sunny, cloudy, rain):

Precipitation >0.1 inches within 12 hours preceding the sampling event (Y/N)? ______ General Comments: ______

Is there any other information about the structural features of this building, the habits of its occupants or potential sources of chemical contaminants to the indoor air that may be of importance in facilitating the evaluation of the indoor air quality of the building?

The responses documented on this survey are true, accurate and complete to the best of my knowledge and ability.

-	TIM AUESSI	_
-	Name of Surveyor	-
	- L-i	
	Signature	
	3/7/12	
	Date	

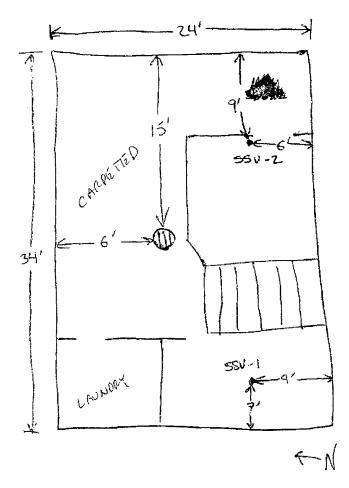
. _____

Surveyor's Initials:

Page 5 of 5

۴.

A-6



SPRAY PAINT_

PUTCH BOY ALCHLIC ENAMEL RUST-OLEUM ENAMEL MAR-HXPE ONE STEP RUST CONVERTER ACETON E DIMETHY ETHER 2-BUTOXYETHANOL MCCLOSHY CATCHLE AUST OLEUM CACQUER CONTINE

EMSON MIRKUE SHAAD TOOL SHAPENNE FLUID FINISH LINE FOO-TECH CLEANER/DEGREASER COLEMAN FUEL MINIMAX FOLLULETHANE BEHR LATEX PAINT GLIDDEN INTERIOR/RATERIOR MINWAX WOOD STAIN DUTCH BOY PURA-CLEAN DAP WINDOW GLAZING ELMER'S SPRAY ADHESIUE RUST OLEUM LATEX MAUTZ LATEK WATCO DANISH OIL KLEENSTRIP ROLLER AND BRUSHCLEAUGK (MAX UCC 790 g/L) MCCLOSKEY MARINE VARNISH ALKYD ROSIN MINERALSHRATS TUNGOIL PHENDIC RESIN EXEMPT MINELAL SPIRITS REGULAR MUNICIAN SPIRITS NCE ROHAL LATEK ALE ALETONE

- GREEN THURD FORMUL WATER HULETHILL TRALOFLETICIN d-trans ALLETHICIN
 - VICTOR ROACH KILLING POWDER BARICACID (100 %)

HEET

K-MART POWER STEERING FLUID

PETROLEUM HYDROCARGONS (647742-53-6)(64741-88-1)

OLYMPIC WOOD STAIN

WO-40

OFF YARD JOECK DEEMETHEN

d-cistmans ALLETHICLU

BARTLEY PASTE WOOD FILLER NEPHELINE SYENITE ALKLYD RESIN POWORTHANE CALGUM CARSONATE EXEMPT MONER SPIRES, FORES

:34

Madison Kipp Corporation		Soil Vapor Sample Collection Log		
			1AB-9	
Client:	Martine LOP	Boring Equipment:		
Project:	MINDISON KIPP	Sealant:		
Location:		Tubing Information:		
Project #:	WTa012831,9	Miscellaneous Equipment:		
Samplers:	AWATA	Subcontractor:		
Sample Point Location:		Equipment:		
Sampling Depth:		Moisture Content:		
Time and Date of Installation:		Approximate Purge Volume:		

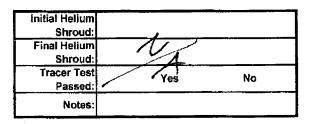
	Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
	315-12	1710	-29					
-	3/16/12	1745	-19					
- [

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one): Canister ID: Flow Controller ID: Notes:

Tracer Test Information (if applicable):



General Observations/Notes:

etssed shut - un TEST Bu Marque Hest

Approximating One-Well Volume (for purging):

When using 1%-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.

Madiso	Madison Kipp Corporation		Vapor Sample ollection Log
		Sample ID:	1AF-9
Client:	Mudison Kipp	Boring Equipment:	
Projecti	MADISONKIAP	Sealant:	
Location:	MADISONLIZ	Tubing Information	
Project #:		Miscellaneous Equipment:	
Samplers:	AWATA	Subcontractor:	
Sample Point Location;		Equipment:	
Sampling		Moisture Content:	
Depth:		Approximate	
Time and Date of Installation:		Purge Volume:	

Ţ

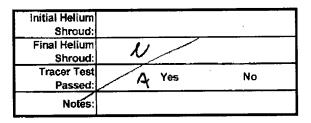
	Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
•	3.15.12-12	108	29.5					
	3/16/12 11	733	-6.5					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one): 1L 2.7L 6L Canister ID: 34371 Flow Controller ID: 40039 Notes:

Tracer Test Information (if applicable):



General Observations/Notes:

PASSED SHAT IN TEST 134 MARQUETTEST.

Approximating One-Well Volume (for purging):

When using 1%-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.

Madison Kipp Corporation		Soil Vapor Sample Collection Log		
			550-1-9	
Client:	MADISON KIPP	Boring Equipment:		
Project:	MADISONKIPP	Sealant:		
Location:	MADISON WI	Tubing Information:		
Project #:	WID01283.1.9	Miscellaneous Equipment:		
Samplers:	TALAW	Subcontractor:		
Sample Point Location:		Equipment		
Sampling Depth:	SUB SLAB	Molsture Content:		
Time and Date of Installation:		Approximate Purge Volume:		

Ŧ

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
316112	1637	-79.5					
3/16/12	17(3	-5					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one): 1L 2.7L 6L Canister ID: 35(36) Flow Controller ID: FC 967 Notes: Interview Interview

Tracer Test Information (if applicable):

Initial Helium Shroud:	95.4	
Final Helium Shroud:	83.1	
Tracer Test Passed:	(95)	No
Notes:	CIV.	

General Observations/Notes:

Approximating One-Well Volume (for purging):

When using 1%-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.

Madison Kipp Corporation		Soil Vapor Sample Collection Log		
			550-2-9	
Client:	MADISON MAPP	Boring Equipment:		
Project:	MADISON KIPP	Sealant:		
Locetion:	MUNDISON WE	Tubing Information:		
Project #:	WI-001283.1.9	Miscellaneous Equipment		
Sampters:	TALAW	Subcontractor:		
Sample Point Location:	· · ·	Equipment:		
Sampling Depth:	SUB SLAB	Moisture Content:		
Time and Date of Installation:		Approximate Purge Volume:		

Date	Canister Vacuum (a) (inches of Hg	- I (*F)	Relative Humicity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
316/12 165	2 >-30					
3/16/12 72	75					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle 1L 2.7L (6L) one): 34203 Canister ID: Flow Controller FC250 ID: Notes:

Tracer Test Information (if applicable):

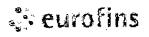
Initial Helium Shroud:	Ļ	75.1	
Final Helium		0.12	
Shroud:		274 . 7	
Tracer Test	×	(es)	No
Passed:	(NU
Notes:	211/2		

General Observations/Notes:

.

Approximating One-Well Volume (for purging):

When using 1%-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL.



Ar Indics

4/1/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203429A

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/20/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

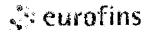
Regards,

Scott-

Ausha Scott Project Manager

Eductions where Recently Res.

180 Black Conferences and Black Formation (IN String) The BERGER LECT Mile Dig BM DRUD WRA DE BASHAR



An Loston

WORK ORDER #: 1203429A

Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	P.O. #	WI001283.0001.00009
FAX:	317-231-6514	PROJECT #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED:	03/20/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	04/01/2012		

<u>SURE</u>
osi
osi
A
A
A
A

CERTIFIED BY:

Carden S. Freemanne

DATE: 04/01/12

RECEIPT

FINAL

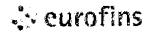
Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

Page 2 of 11



Air TOXICS

LABORATORY NARRATIVE Modified TO-15 SIM Arcadis U.S., Inc. Workorder# 1203429A

Two 6 Liter Summa Canister (SIM Certified) samples were received on March 20, 2012. 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<br compounds allowed out to < 40% RSD	Project specific; default criteria is =30% RSD with 10% of compounds allowed out to < 40% RSD</td
Daily Calibration	+- 30% Difference	Project specific; default criteria is = 30% Difference<br with 10% of compounds allowed out up to =40%.; flag<br 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 IAB-9 was received with significant vacuum remaining in the canister. The residual canister vacuum resulted in elevated reporting limits.

Analytical Notes

There were no analytical discrepancies.

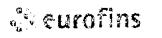
Definition of Data Qualifying Flags

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 and/or LCS.
- N The identification is based on presumptive evidence.

Page 3 of 11



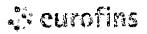
Air Toxics

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



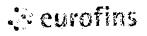
AIR TOXICS.

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

Client Sample ID: IAB-9

Lab ID#: 1203429A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.073	0.14	0.50	0.94
trans-1,2-Dichloroethene	0.36	5.5	1.4	22
Client Sample ID: IAF-9				
Lab ID#: 1203429A-02A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.035	0.035	0.24	0.24
trans-1,2-Dichloroethene	0.18	0.54	0.69	2.2



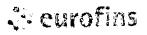
Air Times

Client Sample ID: IAB-9 Lab ID#: 1203429A-01A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: Dil. Factor:	e032211sim 3.65	Date of Collection: 3/15/12 5:45:00 PM Date of Analysis: 3/22/12 05:00 PM				
Compound	Rpt. Limit (ppbv)	Amount Rpt. Limit (ppbv) (ug/m3)		Amount (ug/m3)		
Vinyl Chloride	0.036	Not Detected	0.093	Not Detected		
cis-1.2-Dichlaroethene	0.073	Not Detected	0.29	Not Detected		
Trichloroethene	0.073	Not Detected	0.39	Not Detected		
Tetrachloroethene	0.073	0.14	0.50	0.94		
trans-1,2-Dichloroethene	0.36	5.5	1.4	22		

Container Type: 6 Liter Summa Canister (SIM Certified)

Container Type: 8 Liter Summa Camster		Method
Surrogates	%Recovery	Limits
1.2-Dichloroethane-d4	93	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	108	70-130



Arr Toxics

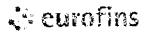
Client Sample ID: IAF-9 Lab ID#: 1203429A-02A MODIFIED EPA METHOD TO-15 GC/MS SIM

.: •

File Name: Dil. Factor:	e032212sim 1.75	Date of Collection: 3/15/12 5:08:00 PM Date of Analysis: 3/22/12 05:45 PM				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt Limit (ug/m3)	Amount (ug/m3)		
Vinyl Chloride	0.018	Not Detected	0.045	Not Detected		
cis-1,2-Dichloroethene	0.035	Not Detected	0.14	Not Detected		
Trichloroethene	0.035	Not Detected	0.19	Not Detected		
Tetrachloroethene	0.035	0.035	0.24	0.24		
trans-1,2-Dichloroethene	0.18	0.54	0.69	2.2		

Container Type: 6 Liter Summa Canister (SIM Certified)

Container Type, o Ener Summa Sumston		Method
Surrogates	%Recovery	Limits
1.2-Dichloroethane-d4	95	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	106	70-130



Aut Toates

Client Sample ID: Lab Blank Lab ID#: 1203429A-03A <u>MODIFIED EPA METHOD TO-15 GC/MS SIM</u>

•

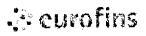
٦

.

File Name: DII. Factor:	e03220 6 sim 1.00	Date of Collection: NA Date of Analysis: 3/22/12 12:55 PM				
Compound	Rpt. Limit (ppbv)	Атоunt Rpt. Limit (ppbv) (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. 1 1	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

Container Type, IAA - Not Applicable		Method
Surrogates	%Recovery	Limits
1.2-Dichloroethane-d4	111	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	105	70-130

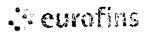


ALL HORICS

Client Sample ID: CCV Lab ID#: 1203429A-04A MODIFIED EPA METHOD TO-15 GC/MS SIM

;

File Name: Dil. Factor:	e032202sim 1.00	Date of Collection: NA Date of Analysis: 3/22/12 10:00 AM			
Compound			%Recovery		
Vinyl Chloride			86		
cis-1,2-Dichloroethene			102		
Trichloroethene			95		
Tetrachloroethene			88		
trans-1,2-Dichloroethene			96		
Container Type: NA - Not Ap	plicable		Bit o bla and		
Surrogates		%Recovery	Method Limits		
1,2-Dichloroethane-d4		111	70-130		
Toluene-d8		103	70-130		
4-Bromofluorobenzene		107	70-130		



Arribates

Client Sample ID: LCS Lab ID#: 1203429A-05A <u>MODIFIED EPA METHOD TO-15 GC/MS SIM</u>

.

File Name:	e032203sim	Date of Collection: NA Date of Analysis: 3/22/12 10:43 AM				
Dil. Factor:	1.00	Date of Analy	SIS: 5/22/12 10:43 AM			
Compound			%Recover,			
Vinyl Chloride			94			
cis-1.2-Dichloroethene			102			
Trichloroethene			90			
Tetrachloroethene			87			
trans-1,2-Dichloroethene			109			
Container Type: NA - Not Ap	plicable					
			Method			
Surrogates		%Recovery	Limits			
1,2-Dichloroethane-d4		114	70-130			
Toluene-d8		104	70-130			
4-Bromofluorobenzene		107	70-130			



An Toxics

Client Sample ID: LCSD Lab ID#: 1203429A-05AA <u>MODIFIED EPA METHOD TO-15 GC/MS SIM</u>

File Name: Dil. Factor:	e032204sim 1.00	Date of Collec Date of Analy	on: NA s: 3/22/12 11:22 AM		
Compound			%Recovery		
Vinyl Chloride			90		
cis-1.2-Dichloroethene			102		
Trichloroethene			88		
Tetrachloroethene			86		
trans-1,2-Dichloroethene			108		
Container Type: NA - Not Ap	plicable		¥= - 411		
Surrogates		%Recovery	Method Limits		
1,2-Dichloroethane-d4		112	70-130		
Toluene-d8		104	70-130		
4-Bromofluorobenzene		104	70-130		

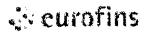


.

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, of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, (916) 985-1000 FAX (916) 985-1020 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

Page of

Project Mana	roject Manager JENNINE TRASK								um Around Lab Use Only Time: Pressurized by			
	(Print and Sign) TLM ALESSI	+1:- 1		i	P.O. #_			1. No	rmal	Date:	Date.	
	ECADIS Email JER JEFFELSON ST., JER 400 City MILLIANCE		WILZip 53	1	Project # UJIQ0 1283.0001.00009			🖵 Rush		Pressurization Gas:		Gas:
	hone 414-276-7742 Fax 444-276-76				Project	Name MHO	SON KIPP	sp	ectfy		N₂ H	e
					ate	Time					sure/Va	
Lab I.D.	Field Sample I.D. (Location)		Can #	of Co	llection	of Collection	Analyses Reques	sted	Initial	Final	Receipt	Finat (Pai)
QA	TAB-9		5764	31	5/12	1745	TO-15		-21.0	-19.0		
SLA	IAF-9		34371	3/1	5/12	1708	70-15		-29:5	-6.5		
	SSV-1-9	-	35136	3/1	6/12	1637	70-15		29.5	-5,0		
	581-2-9		34203	311	6/12	1652	TO-15		>-30 è	~5.D		
	_				-		•					
				1								
1 · ·	by: (signature) Date/Time	Recei	ived by: (signa		Date/Tir		Notes:					
	≈. (3/19/12 1637	V	m M		ر <u>27 . ک</u> Date/Tir	12 0920	ONCY		و م و ال			
Relinquished	d by: (signature) Date/Time	Hece	ived by: (signa	ure)		118		PCE				
Relinquished by: (signature) Date/Time Receiv			eceived by: (signature) Date/Time					US-1-2, OC US-1-2, OC 7255-1-2, OC				
	Shipper Name Air Bill	<u></u>	٢	emp (°C)	Condition	Custody S	eals inte	act?	Work	Order #	
Lab Lise	Ted Ita	<u></u> .	and the second secon	NA	5 m 1	Groot		o No	ne	120	<u>.</u>	Ð
Onty -					I							
						فنحد محمد معناك فتنف هدميني				كثشار بنارية بإركار المراجع	For	rm 1293 rev.11



Alt Toxics

4/1/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203429B

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/20/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Scott-

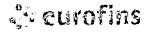
Ausha Scott Project Manager

• • • •

Educada Dago del

1958 Date Alexandrate, 20 20 11 Private SA Victoria 1 - 190 - 2010, 1979 - - - Sto 985 1985 - 2882 2970 - 1940

Page 1 of 11



Aur Boaus

WORK ORDER #: 1203429B

Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	P.O. #	W1001283.0001.00009
FAX:	317-231-6514	PROJECT #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED:	03/20/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	04/01/2012		

			NECEH 1	FINAL
FRACTION #	NAME	TEST	VAC./PRES.	PRESSURE
03A	SSV-1-9	Modified TO-15	6.0 "Hg	5 psi
04A	SSV-2-9	Modified TO-15	5.0 "Hg	5 psi
05A	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:

Stand and Freeman

DATE: 04/01/12

FINAL

DECEIPT

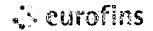
Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reptoduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

Page 2 of 11



A.r DAIGH

LABORATORY NARRATIVE Modified TO-15 Arcadis U.S., Inc. Workorder# 1203429B

Two 6 Liter Summa Canister samples were received on March 20, 2012. 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
ICAL %RSD acceptance criteria	+- 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	= 30% Difference with four allowed out up to =40%.; flag and narrate outliers</p
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
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

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

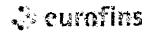
Definition of Data Qualifying Flags

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 and/or LCS.



Air Texics

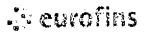
N - The identification is based on presumptive evidence.

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

rl-File was requantified for the purpose of reissue



Air Toxics

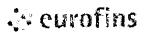
Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

÷

Client Sample ID: SSV-1-9

Lab ID#: 1203429B-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.17	6.2	1.1	42
Client Sample ID: SSV-2-9				
Lab ID#: 1203429B-04A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0,16	1.6	1.1	11



AN TORICS

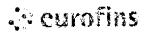
Client Sample ID: SSV-1-9 Lab ID#: 1203429B-03A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name: Dil. Factor:	e03221 9 1.68	Date of Collection: 3/16/12 4:37:00 PM Date of Analysis: 3/22/12 11:43 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit Amou (ug/m3) (ug/n	
Vinyl Chloride	0.17	Not Detected	0.43	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
cis-1.2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Trichloroethene	0.17	Not Detected	0.90	Not Detected
Tetrachloroethene	0.17	6.2	1.1	42

Container Type: 6 Liter Summa Canister

Container Type, o Little Guining Guinotor		Method
Surrogates	%Recovery	Limits
1.2-Dichloroethane-d4	117	70-130
Toluene-d8	93	70-130
4-Bromofluorobenzene	105	70-130



An lexies

Client Sample ID: SSV-2-9 Lab ID#: 1203429B-04A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

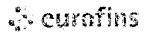
:

٦

File Name: Dil. Factor:	e032220 1.61	Date of Collection: 3/16/12 4:52:00 PM Date of Analysis: 3/23/12 07:47 AM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Llmit (ug/m3)	Amount (ug/m3)
Vinvl Chloride	0.16	Not Detected	0.41	Not Detected
trans-1.2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
Trichloroethene	0.16	Not Detected	0.86	Not Detected
Tetrachloroethene	0.16	1.6	1.1	11

Container Type: 6 Liter Summa Canister

Container Type, o Eiter Gamma Gamoter		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	118	70-130	
Toluene-d8	91	70-130	
4-Bromofluorobenzene	109	70-130	



An Toxics

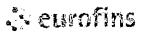
Client Sample ID: Lab Blank Lab ID#: 1203429B-05A <u>MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN</u>

1

File Name: Dil. Factor:	e032206 1.00	Date of Collection: NA Date of Analysis: 3/22/12 12:55 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit Amour (ug/m3) (ug/m3	
Vinvl Chloride	0.10	Not Detected	0.26	Not Detected
trans-1.2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Trichloroethene	0.10	Not Detected	0.54	Not Detected
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected

Container Type: NA - Not Applicable

		Method
Surrogates	%Recovery	Limits
1.2-Dichloroethane-d4	112	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	104	70-130

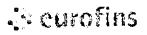


All Toxics

Client Sample D: CCV Lab ID#: 1203429B-06A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

-1

File Name: Dil. Factor:	e032202 1.00	Date of Collection: NA Date of Analysis: 3/22/12 10:00 AM	
Compound			%Recovery
Vinyl Chloride			98
trans-1,2-Dichloroethene			104
cis-1,2-Dichloroethene			108
Trichloroethene			105
Tetrachloroethene			112
Container Type: NA - Not Ap	plicable		Method
Surrogates		%Rесоvегу	Limits
1,2-Dichloroethane-d4	······································	111	70-130
Toluene-d8		101	70-130
4-Bromofluorobenzene		112	70-130



Air Ipacs

Client Sample ID: LCS Lab ID#: 1203429B-07A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil, Factor:	e032203 1.00	Date of Collec Date of Analys	tion: NA sis: 3/22/12 10:43 AM
Compound			%Recovery
Vinyl Chloride			109
trans-1,2-Dichloroethene			118
cis-1,2-Dichloroethene			112
Trichloroethene			98
Tetrachloroethene			109
Container Type: NA - Not Appli	cable		
			Method
Surrogates		%Recovery	Limits
1.2-Dichloroethane-d4		115	70-130

1,2-Dichloroethane-d4	115	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	111	70-130



AV TOXICS

Client Sample ID: LCSD Lab ID#: 1203429B-07AA MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

۰.

File Name: Dil. Factor:	e032204 1.00	Date of Collection: NA Date of Analysis: 3/22/12 11:22 AM		
			%Recover	
Compound		_ · ·		
Vinyl Chloride			103	
trans-1,2-Dichloroethene			118	
cis-1,2-Dichloroethene			113	
Trichloroethene			96	
Tetrachloroethene			107	
Container Type: NA - Not Ap	plicable			
••			Method	
Surrogates		%Recovery	Limits	
1.2-Dichloroethane-d4		106	70-130	
Toluene-d8		102	70-130	
4-Bromofluorobenzene		105	70-130	



Sample Transportation Notice Reilinguishing 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 (916) 985-1000 FAX (916) 985-1020 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, cr shipping of samples. D.O.T. Hotline (800) 467-4922

(916) 985-1000 FAX (916) 985-1020

Page ____ of ___

Project Manager TENNING TIZKSK			Project Info:			Turn Around Time:		Lab Use Only Pressurized by				
Collected by: (Print and Sign) T. M. A. 1755			P.O. #			Normal		Date				
Company N.C. ACIS Email JONNIE JONSEPARADOLOGIEM Address 126 N.JKFF. 25W ST JALO City MICHARDE State LT Zip 53202			Project # 1.5300 1283.0001.00009			🖵 Rush		Pressurization Gas:				
	14-276-77-17 Fax			ar	Project	t Name_Mtd)	SOL KIEP		pecify		N ₂ H	e 8.94.
			<u>.</u>		ate	Time			Canis	ter Pres	sure/Vac	euum
Lab I.D.	Field Sample I.D. (Locatio	м)	Can #	of Co	llection	of Collection	Analyses Requ	ested	Initial	Final	Receipt	Final (ee)
	TAR-9	• ••	5764	31	5/12	1745	TD-15	•	-74.0	-19.0		
	IAE ² 9	و این میکند. مکلی در این میلی در این	34371		5/12	1708	TU-15		-2945	-6.5		
DZA	55J=P-9		35136	3/1	6/12	1637	-TO-15		-21.5	-5.0		
644	SAV-2-4		341203	3/1	6/12	1652	TO-15		2.30 A	-5.D		
		ie c										
				· ·		,	·					
		a maria di se										
	d by: (signature) Date/Time	1	ived by: (signa		Date/Tin		Notes:			÷		
	d by: (signature) Date/Time		wed by: (signa	***	<u>⇒ 7.2</u> Date/Tin	1 <u>2 29</u> 70	0144		R.T.,			
Relinquisne	d by: (signature) Date/Time	neve	aved by, (signa	1010)	Caterin			FCFE				i
Relinquished by: (signature) Date/Time Received by: (signature) Date/Time				C 5-	-cikok 1-2,00	£_						
	and the second statement of war when here					· · · · · · · · · · · · · · · · · · ·	يو و بر بر بر اي نسب سو		1,21 R	Second Second	n and a state	
l rao	- 《教授》"原因我的你们的问题,就是中国教育中心的中心。" 经济	ur Bill #	<u> </u>	emp (Condition				-7.4	Order #	<u> 1975 - 197</u> 19
Use Only	17878	· · · · ·		NA	<u> </u>	67000	> Yes	NO N	ON E	120	3421	.



Madison-Kipp Corporation

Post Office Box 8043 Madison, WI 53708-8043 Madison, WI 53704-5728

201 Waubesa Street

Telephone 608-244-3511 Website www.Madison-Kipp.com

March 30, 2012

Mr. Ken Hennrich 142 S. Marguette Street Madison, WI 53704

RE: **Results of Air Testing** 142 S. Marguette Street, Madison, WI 53704

Dear Mr. Hennrich:

On March 13 and 14, 2012, ARCADIS personnel, on behalf of Madison-Kipp, completed indoor air and sub-slab vapor sampling activities to measure levels of select volatile organic compounds (VOCs), below and/or within your home, located at 142 S. Marquette Street in Madison, Wisconsin. This work was completed in cooperation with and with the prior approval of the Wisconsin Department of Natural Resources (WDNR).

Specifically, the sampling was completed to test for the presence of tetrachloroethene (PCE), trichloroethene (TCE), cis- and trans-1,2-dichloroethene, and vinyl chloride. The homes that were sampled in your neighborhood were given a unique sample identification number when submitting the samples to the laboratory to ensure confidentiality. The following samples were collected from your home:

- SSV1-11 and SSV2-11 Sub-slab samples collected on March 14, 2012. The subslab samples were collected from the sample points that were installed in the basement floor of your home.
- IAB-11 Indoor air basement sample collected on March 13-14, 2012. •
- IAF-11 Indoor air first floor sample collected on March 13-14, 2012.

Based on the laboratory results (below), only PCE was detected in the sub-slab samples. The levels of PCE in the collected samples were below the sub-slab soil gas and indoor air Residential Action Levels provided by the WDNR. The WDNR Residential Action Level is based on the U.S. Environmental Protection Agency's Residential Air Screening Levels that represent health-protective concentrations an individual can be exposed to for 30 years for 24 hours a day.

Sample ID	Results (part per billion (ppbv))	Residential Action Level (ppbv)
SSV1-11	1.4	60
SSV2-11	0.52	60
IAB-11	Not Detected	6
IAF-11	Not Detected	6

Copies of the laboratory data and field notes are enclosed for your reference.

Sincerely ۴ Valo he

Mark Meunier Madison-Kipp Corporation

cc: Michael Schmoller – WDNR Dr. Henry Nehls-Lowe – WDHS Norman Berger, Esq. David A. Crass, Esq.

Attachments: Laboratory Analytical Report Field Notes

.

Indoor Air Quality Building Survey

INDOOR AIR QUALITY BUILDING SURVEY	
Date: 3/7/12 Project #: <u>wI001283</u>	
Address: 142 MARQUETTE ST.	
MADISON WT	
Property Contact: KEN HENNBICH	
Phone: Home: (231) <u>620-4/98</u> Work: () Cell: ()	
Building Occupants: Children <13 Children age 13-18 Adults (LENTAL (UPSTRIES) AT LEAST ONE ADULT UPSTRIES, AT LEAST Building Construction Characteristics: (Circle appropriate description)	
Single FamilyMultiple FamilySchoolCommercialRanch 2-FamilyRaised Ranch DuplexColonial # of unitsSplit Level CondominiumMobile HomeOther (specify)General Description of Building Construction Materials, especially new materials:	
WOOD FRAME, MODE SIDING ON BACK, FRONT IS	
BRICK, 2nd STORY SLATTE TILE	
How many occupied stories does the building have?	
Has the building been weatherized with any of the following? (Circle all that apply)InsulationStorm WindowsEnergy-Efficient WindowsOther (specify)	
What type of basement does the building have? (Circle all that apply) Full basement Crawlspace Slab-on-Grade Other (specify)	
Basement Size 40^{6} (ft ²)	

Surveyor's Initials:

Page 1 of 5

Indoor Air Quality Building Survey

142

:

INDOOR AIR QUALITY BUILDING SURVEY

Describe Basement Floor and Walls:	
CONCRETE WALLS	SICONCRETE FLOCK
Moisure: Always Dry Always Wet	wAilly Simur
Is a basement sump present? (Y/M) Is a s	ump pump present? (MA) (circle one)
Does the basement have any preferential p that apply) Visible Cracks Unsealed Pipes/Util	athways that might permit soil vapor entry? (Circle all ity Conduits Sump pumps
What type of ground cover surrounds the c Grass Concrete Asphalt	outside of building? (Circle all that apply) Other (specify)
Heating and Ventilation System(s) Prese What type of heating system(s) is (are) use Hot Air Circulation Heat Pump Stear Hot Air Radiation Unvented Kerosene Other (specify):	d in this building? (Circle all that apply) n Radiation Wood Stove heater Electric Baseboard
What type (s) of fuel(s) are used in this but Natural Gas Electric Coal Fuel Oil Wood Solar	Other (specify):
building? (Circle all that apply) Central Air Conditioning Bath Individual Air Conditioning Units Air-t Open windows Othe	ms are present and/or currently operating in the room Fan Kitchen fan o-Air Heat Exchanger r (specify):
Septic system? Yes / Yes (but not used) (Irrigation/private well? Yes / Yes (but not Existing subsurface depressurization (rado If yes, is it running? Yes / No	used) AND

Surveyor's Initials:

Page 2 of 5

INDOOR AIR QUALITY BUILDING SURVEY

Sources of Chemical Contaminants:

Which of these items are present in the building?

Potential Sources	Check if Present	Removed Prior to
Location(s)		Sampling? (Yes / No / NA)
Paints or paint thinners		
Gas-powered equipment		
Gasoline storage cans	/ (LIGHTER FLUX)	
Cleaning solvents		
Air fresheners		······································
Oven cleaners		
Carpet/upholstery cleaners		
Hairspray		
Nail polish/polish remover		
Bathroom cleaner		
Appliance cleaner		
Furniture/floor polish		
Moth balls		
Fuel tank		
Wood stove		
Fireplace		
Perfume/colognes		
Hobby supplies (e.g.,	PAINT STRUPPER	
solvents, paints, lacquers,	PLASTIC WOOP	
glues, photographic	VE NUME WORT	
darkroom chemicals)		
Scented trees, potpourri, etc.		
Other:		
Other:		
Other:		

Do one or more smokers occupy this building on a regular basis (Y/N)? How often?

Has anybody smoked in the building in the last 48 hours (Y/N)?

Does the building have an attached garage ($Y_{(N)}$? If so, is a car usually parked in the garage (Y/N)?

Do the occupants of the building frequently have their clothes dry-cleaned (Y/N)?

Was there any recent remodeling or painting done in the building (Y/N)?

Page 3 of 5

A-4

Indoor Air Quality Building Survey

INDOOR AIR QUALITY BUILDING SURVEY

Are there any pressed wood products in the building (e.g., hardwood plywood wall paneling, particleboard, fiberboard) (Y/N)?

Are there any new upholstery, drapes or other textiles in the building (Y/N)?

.....

Have the occupants ever noticed any unusual odors in the building? (Y/N)? If yes, describe odors, location(s), and conditions that seem to affect odors (especially rain, temperature, wind):

Any known spills of a chemical immediately outside or inside the building? (Y/N)? If yes, describe (location, age, type of chemical, any actions to clean up):

Has the building been treated (inside or outside) with any insecticides/pesticides(Y/N)? If so, what chemicals are used and how often are they applied:

Outdoor Sources of Contamination:

Nearby Gasoline Stations (distance and direction):

Surveyor's Initials: 549

Page 4 of 5

Indoor Air Quality Building Survey

INDOOR AIR QUALITY BUILDING SURVEY

i -

Industrial Stack Emissions (distance and direction):

Automotive emission sources (e.g., highway; bus stop; high-traffic area):

Weat	ther (Conditions	During	Sampling:
------	--------	------------	--------	-----------

Outside Temperature (°F):____

Prevailing wind speed and direction:

Describe the general weather conditions (e.g., sunny, cloudy, rain):____

Precipitation >0.1 inches within 12 hours preceding the sampling event (Y/N)? _____ General Comments:______

Is there any other information about the structural features of this building, the habits of its occupants or potential sources of chemical contaminants to the indoor air that may be of importance in facilitating the evaluation of the indoor air quality of the building?

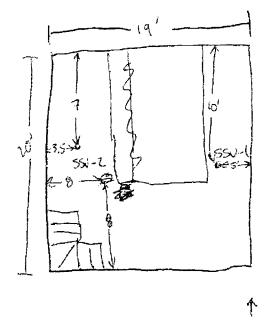
The responses documented on this survey are true, accurate and complete to the best of my knowledge and ability.

TIM ALESSI Name of Surveyor - and the Signature 3/7/12

Date

Surveyor's Initials:

Page 5 of 5



Ň

RUST-OLEUM SPRAK PAINT TOWENE ACETONE XYLENES RUST-OLEUM ACETONE XYLENES ACE STRIPPER METHANOL METHYLENE GLYCOL N-BUTANE PROPANE SULFACTANT WP-40 PETEREUM DISTILLATES KINESFORD CHARCOAL LIGHTER FLUIP DAR PIKSTIL WOOD ACETONE N-BUTYL ACETATE 150 PR-OPANOL TURTLE MAX OXY INTERIOR 1 CUTTER BALLYARD BUG CONTROL LAMBOA - CY HALOTHKIN

Madison Kipp Corporation		Soil Vapor Sample Collection Log		
		Sample ID:	65V-1-(14 2)	
Client:	MADISON KIPP	Boring Equipment:	SSV-1-11	
Project:	MARISON KIPP	Sealant:		
Location:	MADISON WE	Tubing Information:		
Project #:	WI 001287.0001.00009	Miscellaneous Equipment:		
Samplers:	TTA/AW	Subcontractor:		
Sample Point Location:	EAST BDE	Equipment:		
Sampling Depth:		Moisture Content:		
Time and Date of Installation:		Approximate Purge Volume:	200ml e 200my un	

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/19/12	1105	-29				29,91	
314117	1140	-55		_		29.91	
						· · · · · · · · · · · · · · · · · · ·	

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one):	1L 2.7L 6L
Canister ID:	12682
Flow Controller ID:	FL00507
Notes:	

Tracer Test Information (if applicable):

••

Initial Hellum Shroud:	95.4
Final Hellum Shroud:	83.7
Tracer Test Passed:	Yes No
Notes:	L1% He intedlar beg

General Observations/Notes:

Plessed shut in test. 142 MARQUETEST.

Approximating One-Well Volume (for purging):

When using 1¼-lnch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

Madison Kipp Corporation		Soil Vapor Sample Collection Log		
		Sample ID:	550-2 (1 42)	
Client:	MADISON KIPP	Boring Equipment:	ssu. 2 - 11	
Project:	MADISON KIPP	Sealant:		
Location:	MADISON WE	Tubing Information:		
Project#:	WI 001283. 0001.00009	Miscellaneous Equipment:		
Samplers:	TR/AW	Subcontractor:		
Sample Point Location:	WESTSIDE	Equipment		
Sampling Depth:	SUB SLAB	Moisture Content:		
Time and Date of Installation:		Approximate Purge Volume:	200 ML C 200 M/mm	

- <u>5</u>

Date	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/14/12 1029	>-30				29.91	
3/14/12 11/29	6.5				29.91	

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (circle one): 1L 2.7L (6L) Canister ID: 34189 Flow Controller ID: HOTOFFC8(65 Notes:

Tracer Test Information (if applicable):

Initial Hellum Shroud:	95%	
Final Helium Shroud:	780%	
Tracer Test Passed:	Yes	No
Notes:	% He inter	dlar buy

General Observations/Notes:

ONSED 6	MIT-INT			
	SPLITS		ITH WOH	
IND S A	1 AD QUETT	<u><u></u><u></u><u></u><u></u><u></u></u>	······································	

Approximating One-Well Volume (for purging):

When using 1%-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.

Madison Kipp Corporation		Soil Vapor Sample Collection Log		
	Sample ID: TA	F-142		
Client:	Boring (A Equipment:	F-		
Project;	Sealant:			
Location;	Tubing Information:			
Project #:	Miscellaneous Equipment:			
Samplers:	Subcontractor:			
Sample Point Location;	Equipment:			
Sampling Depth;	Moisture Content:			
Time and Date of Installation:	Approximate Purge Volume:			

and the second sec

Date	Tìme	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/13/12	1021	-29				30.02	
YIHIY.	921	-6					

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (clrcle one): 1L 2.7L B Canister ID: 34732 Flow Controller ID: 40291 Notes:

Tracer Test Information (if applicable):

Initial Hellum Shroud:		
Final Hellum Shroud:	~~~	
Tracer Test Passed:	Ass	No
Notes:		

General Observations/Notes:

PASSED STUT- IN TEST	
142 MALQUETTE ST.	

Approximating One-Well Volume (for purging):

When using 1%-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.

Madison Kipp Corporation		Soil Vapor Sample Collection Log		
	Sample ID:	TAB-142		
Client:	Boring Equipment:	1AB-11		
Project:	Sealant:			
Location:	Tubing Information:			
Project #:	Miscellaneous Equipment:			
Samplers;	Subcontractor:			
Sample Point Location;	Equipment:			
Sampling Depth:	Moisture Content:			
Time and Date of Installation:	Approximate Purge Volume:	<u></u>		

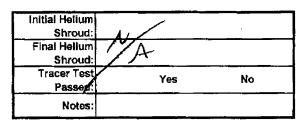
Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
3/13/12	1019	-300				30.02	
3/14/12	924	-4					
					_		

(a) Record canister information at a minimum at the beginning and end of sampling

SUMMA Canister Information:

Size (clrcle one):	1L 2.7L (6L)
Canister ID:	34447
Flow Controller	40425
Notes:	

Tracer Test Information (if applicable):



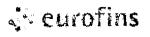
۶.

General Observations/Notes:

PASSED SMUT-INTEST NO. MARQUETTE ST	

Approximating One-Well Volume (for purging):

When using 1%-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of %-inch tubing will have a volume of approximately 10 mL.



AD BURGS

3/28/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203371B

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/16/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

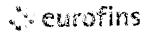
Regards,

Scistf--

Ausha Scott Project Manager

Easthing Astrophysics (SNL)

- 129 Chu Anna Are 2010 B Foisge Chairteac 1 - 1436-1485-1480 1- 7 - 2366-986 1626 9846-1433 68 68 496



An Lorics

WORK ORDER #: 1203371B

Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Areadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	P.O. #	WI001283.0001.00009
FAX:	317-231-6514	PROJECT #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED: DATE COMPLETED:	03/16/2012 03/28/2012	CONTACT:	Ausha Scott

FRACTION #	NAME	TEST	VAC./PRES.	PRESSURE
03A	SSV-1-11	Modified TO-15	5.2 "Hg	5 psi
04A	SSV-2-11	Modified TO-15	4.6 "Hg	5 psi
05A	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:

and a start of the start of the start of the

DATE: 03/28/12

DECEIPT

FINAT

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofius | Air Toxics, Inc.

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

Page 2 of 11



487 (L. 1810) M

LABORATORY NARRATIVE Modified TO-15 Arcadis U.S., Inc. Workorder# 1203371B

Two 6 Liter Summa Canister samples were received on March 16, 2012. 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
ICAL %RSD acceptance criteria	+- 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	= 30% Difference with four allowed out up to<br =40%.; flag and narrate outliers</p
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
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

Receiving Notes

There were no receiving discrepancies.

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 and/or LCS.



RIT LIGHTS

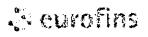
N - The identification is based on presumptive evidence.

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



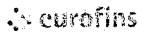
Ar Tosics

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

Client Sample ID: SSV-1-11

Lab ID#: 1203371B-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.16	1.4	1.1	9.7
Client Sample ID: SSV-2-11				
Lab ID#: 1203371B-04A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.16	0.52	1.1	3.5



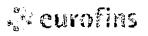
Str Tonic

Client Sample ID: SSV-1-11 Lab ID#: 1203371B-03A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	v032113 1.62	Date of Collection: 3/14/12 11:05:00 AM Date of Analysis: 3/21/12 04:22 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.16	Not Detected	0.41	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
Trichloroethene	0.16	Not Detected	0.87	Not Detected
Tetrachloroethene	0.16	1.4	1.1	9.7

Container Type: 6 Liter Summa Canister

Container Type, o Eller ourning outlieter		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	108	70-130	
Toluene-d8	95	70-130	
4-Bromofluorobenzene	99	70-130	



S. CAN

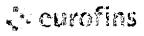
Client Sample ID: SSV-2-11 Lab ID#: 1203371B-04A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

.

File Name: Dil. Factor:	v032116 1.58	Date of Collection: 3/14/12 10:24:00 AM Date of Analysis: 3/21/12 06:49 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.16	Not Detected	0.40	Not Detected
trans-1.2-Dichloroethene	0.16	Not Detected	0.63	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.63	Not Detected
Trichloroethene	0.16	Not Detected	0.85	Not Detected
Tetrachloroethene	0.16	0.52	1.1	3.5

Container Type: 6 Liter Summa Canister

		Method Limits	
Surrogates	%Recovery		
1.2-Dichloroethane-d4	106	70-130	
Toluene-d8	97	70-130	
4-Bromofluorobenzene	98	70-130	



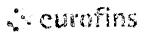
Gu Tracs

Client Sample ID: Lab Blank Lab ID#: 1203371B-05A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	v032106 1.00	Date of Collection: NA Date of Analysis: 3/21/12 11:49 AM			
Compound	Rpt. Limit (ppbv)			Amount (ug/m3)	
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected	
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected	
cis-1.2-Dichloroethene	0.10	Not Detected	0.40	Not Detected	
Trichloroethene	0.10	Not Detected	0.54	Not Detected	
Tetrachloroethene	0,10	Not Detected	0.68	Not Detected	

Container Type: NA - Not Applicable

		Method	
Surrogates	%Recovery	Limits	
1.2-Dichloroethane-d4	106	70-130	
Toluene-d8	94	70-130	
4-Bromofluorobenzene	91	70-130	

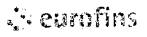


AR KATES

Client Sample ID: CCV Lab ID#: 1203371B-06A <u>MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN</u>

٦

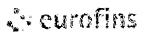
File Name: v032102 Dil. Factor: 1.00		Date of Collection: NA Date of Analysis: 3/21/12 08:58 AM	
Compound			%Recovery
Vinyl Chloride			91
trans-1,2-Dichloroethene			90
cis-1,2-Dichloroethene			93
Trichloroethene			105
Tetrachloroethene			98
Container Type: NA - Not Applicat	ole		
			Method
Surrogates		%Recovery	Limits
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		98	70-130
4-Bromofluorobenzene		106	70-130



AR THREE

Client Sample ID: LCS Lab ID#: 1203371B-07A <u>MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN</u>

File Name: Dil. Factor:	v032103 1.00	Date of Collec Date of Analy	ction: NA sis: 3/21/12 09:48 AM
Compound		<u></u>	%Recovery
Vinyl Chloride			108
trans-1,2-Dichloroethene			116
cis-1,2-Dichloroethene			108
Trichloroethene			1 1 0
Tetrachloroethene			115
Container Type: NA - Not Appl	icable		
			Method
Surrogates		%Recovery	Limits
1.2-Dichloroethane-d4		104	70-130
Toluene-d8		99	70-130
4-Bromofluorobenzene		107	70-130



Au Tastus

Client Sample ID: LCSD Lab ID#: 1203371B-07AA MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

.

. .

File Name: Dil. Factor:	v032104 1.00	Date of Collect Date of Analy	ction: NA /sis: 3/21/12 10:32 AM
Compound			%Recovery
Vinyl Chloride			1 11
trans-1,2-Dichloroethene			120
cis-1,2-Dichloroethene			112
Trichloroethene			109
Tetrachloroethene			115
Container Type: NA - Not Applica	ıble		
			Method
Surrogates		%Recovery	Limits
1,2-Dichloroethane-d4		106	70-130

1,2-Dichloroethane-d4	106	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	10 7	70-130

) Air IToxics 270. CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice

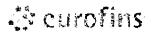
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of FOLSOM, CA 95630-4719 any kind. Air Toxics Limited assumes no liability with respect to the collection, 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

Loss and the second second

FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020

Page of

Project Manager	·		Projec	et Info:			Around me:	Lab Use Press	<i>Only</i> urized by	
Collected by: (Print and Sign) TIM ALESS	<u>c</u>		P.O. #			X No		Date		
Company ARCADIS Email TELEVICE	LASA @ NEW)IS-	USGM	Duslant	# (TT ~)) 0	80000 1000 S				- 1	
Address 17 UNTEFERSUAL, SEDUCITY UNUALES Stat	e <u>(.)[</u> Zip <u>537</u>	<u>07</u>		-	<u> 90000, 1000, 50</u>				urization	
Phone 414-736-7742 Fax 414-2	76-7603_		Project	Name <u>MAON</u>	SON KIPP	sp	becify		N ₂ H	
			ate	Time			L		ssure/Vac	- Contraction of the second
Lab I.D. Field Sample I.D. (Location)	Can #	of Co	liection	of Collection	Analyses Reques	sted	Initial	Final	Receipt	Einal (pel)
TAB-11	34447	3/1	4/12	924	TO-15		-30.0	-8.0		
IAF-11	34732	3/1	4/12	921	TO -15		-29,0	-6.0		
084 SSV -1 - 11	12682	311	4/12	1105	10-15		-29.0	-\$.5		
04A 55V-2-11	34189		4/12		TO-15		>-30.0	-6.5		
		1								
			<u> </u>					ļ		
		1								
		<u> </u>						!' :	1000	
							· · ·	İ		i i
					a			1	7.9 7.9 75 6	
Relinguished by: (signature) Date/Time Rec	eived bý? (signa	iture)	Date/Tim	1 <u>/</u> 10	Notes:		<u> </u>		<u></u>	
	Mrs.	AR :	3161	2 0900	ON		FOG			
Relinquished by: (signature) Date/Time Rec	eived by. (signa	iturə)	Date/Tim	9 0 .		PC	JE. TE.	:		
			Data TTa			Ù	INJUL C	ALURI	D:2	
Relinquished by: (signature) Date/Time Rec	eived by: (signa	uure)	Date/Tim	le			15-1,2- (165-1,2-			
Lab Shipper Name Air Bill #		iemp (°C)	Condition	Custody Si	eals Int	act?	Work	Order #	
Use FCD FC	<u></u>	U.P	<u></u>	<u>、</u> 、 、 、 、 、 、 、 、 、 、 、 、 、 、 、 、 、 、	Yes Ni	1			337	
Only Yev		<u> </u>		1. 2012			<u></u>			
	The Party of the State of The S	and the state of the				<u>'e : N </u>			For	in 1293 rev.1



Air Toxas

3/29/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203371A

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/16/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

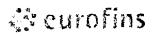
Regards,

75cott-

Ausha Scott Project Manager

na fan ar stan ar fan skaper fan Frysjoe ar fan skrie fan skriet fan skriet fan skriet fan skriet fan skriet fa En skriet fan skriet fa

ী। সাইক রিজন বিজ্ঞানিয়ে প্রার্থ মুদ্র টুয়ে হৈয় কল্পায় বাং বিজ্ঞান



AR IDARS

WORK ORDER #: 1203371A

Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	P.O. #	WI001283.0001.00009
FAX:	317-231-6514	PROJECT #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED: DATE COMPLETED:	03/16/2012 03/27/2012	CONTACT:	Ausha Scott

		275 C/P	RECEIPT VAC./PRES.	FINAL PRESSURE
FRACTION #	NAME	<u>TEST</u>	VAC./IRES.	
01A	IAB-11	Modified TO-15 SIM	7.0 "Hg	5 psi
02A	IAF-11	Modified TO-15 SIM	7.8 "Hg	5 psi
03A	Lab Blank	Modified TO-15 SIM	NA	NA
04A	CCV	Modified TO-15 SIM	NA	NA
05A	LCS	Modified TO-15 SIM	NA	NA
05AA	LCSD	Modified TO-15 SIM	NA	NA

CERTIFIED BY:

Andre & A Freemannes

DATE: <u>03/29/12</u>

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

Page 2 of 11

🔮 eurofins

An losids

LABORATORY NARRATIVE Modified TO-15 SIM Arcadis U.S., Inc. Workorder# 1203371A

Two 6 Liter Summa Canister (SIM Certified) samples were received on March 16, 2012. 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<br compounds allowed out to < 40% RSD	Project specific; default criteria is =30% RSD with 10% of compounds allowed out to < 40% RSD</td
Daily Calibration	+- 30% Difference	Project specific; default criteria is = 30% Difference<br with 10% of compounds allowed out up to =40%.; flag<br 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

There were no receiving discrepancies.

Analytical Notes

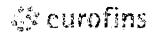
There were no analytical discrepancies.

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 and/or LCS.
- N The identification is based on presumptive evidence.



ALC CEALS

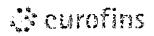
File extensions may have been used on the data analysis sheets and indicates as follows:

. -

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue



AIR LOXICS

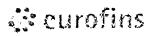
Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS SIM

Client Sample ID: IAB-11

Lab ID#: 1203371A-01A No Detections Were Found.

Client Sample ID: IAF-11

Lab ID#: 1203371A-02A No Detections Were Found.



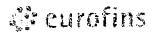
Air Ionais

Client Sample ID: IAB-11 Lab ID#: 1203371A-01A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: Dil. Factor:	v032007sim 1.75	Date of Collection: 3/14/12 9:24:00 / Date of Analysis: 3/20/12 01:40 PM			
Compound	Rpt. Limit (ppb∨)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
Vinyl Chloride	0.018	Not Detected	0.045	Not Detected	
cis-1,2-Dichloroethene	0.035	Not Detected	0.14	Not Detected	
Trichloroethene	0.035	Not Detected	0.19	Not Detected	
Tetrachloroethene	0.035	Not Detected	0.24	Not Detected	
trans-1,2-Dichloroethene	0.18	Not Detected	0.69	Not Detected	

Container Type: 6 Liter Summa Canister (SIM Certified)

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

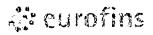


Client Sample ID: IAF-11 Lab ID#: 1203371A-02A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: Dil. Factor:	v032008sim 1.81		of Collection: 3/1 of Analysis: 3/20/	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	Not Detected	0.046	Not Detected
cis-1,2-Dichloroethene	0.036	Not Detected	0.14	Not Detected
Trichloroethene	0.036	Not Detected	0.19	Not Detected
Tetrachloroethene	0.036	Not Detected	0.24	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.72	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Container Type, o Eiter Gunnia Ganisa		Method		
Surrogates	%Recovery	Limits		
1,2-Dichloroethane-d4	104	70-130		
Toluene-d8	94	70-130		
4-Bromofluorobenzene	96	70 -130		



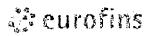
Client Sample ID: Lab Blank Lab ID#: 1203371A-03A MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: Dil. Factor:	v032006sim 1.00	Date of Collection: NA Date of Analysis: 3/20/12 12:43 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

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	98	70-130



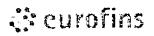
Air Joards

Client Sample ID: CCV Lab ID#: 1203371A-04A <u>MODIFIED EPA METHOD TO-15 GC/MS SIM</u>

File Name: DII. Factor:	v032002sim 1.00	Date of Collection: NA Date of Analysis: 3/20/12 10:02 AM
Compound		%Recovery
Vinyl Chloride		86
cis-1,2-Dichloroethene		92
Trichloroethene		92
Tetrachloroethene		90
trans-1,2-Dichloroethene		92

Container Type: NA - Not Applicable

eonamon i per inter inter i per inter		Method		
Surrogates	%Recovery	Limits		
1,2-Dichloroethane-d4	103	70-130		
Toluene-d8	100	70-130		
4-Bromofluorobenzene	111	70-130		

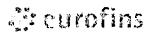


Air Louice

Client Sample ID: LCS Lab ID#: 1203371A-05A MODIFIED EPA METHOD TO-15 GC/MS SIM

. .

File Name: Dil. Factor:	v032003sim 1.00	Date of Collec Date of Analy	:tion: NA sis: 3/20/12 10:46 AM
Compound			%Recovery
Vinyl Chloride			98
cis-1,2-Dichloroethene			105
Trichloroethene			95
Tetrachloroethene			103
trans-1,2-Dichloroethene			117
Container Type: NA - Not App	licable		
			Method
Surrogates		%Recovery	Limits
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		99	70-130
4-Bromofluorobenzene		108	70-130



Air Tourcs

Client Sample ID: LCSD Lab ID#: 1203371A-05AA <u>MODIFIED EPA METHOD TO-15 GC/MS SIM</u>

.

File Name: Dil. Factor:	v032004sim 1.00	Date of Collect Date of Analy	ction: NA /sis: 3/20/12 11:28 AM
	1.00	Duct of Analy	
Compound			%Recovery
Vinyl Chloride			100
cis-1,2-Dichloroethene			106
Trichloroethene			96
Tetrachloroethene			104
trans-1,2-Dichloroethene			118
Container Type: NA - Not Ap	plicable		
			Method
Surrogates		%Recovery	Limits
1.2-Dichloroethane-d4		102	70-130
Toluene-d8		99	70-130
4-Bromofluorobenzene		105	70-130

KICS LTD. CHAIN-OF-CUSTODY RECORD

BREAK MONTH A CONTRACT OF A

rational sector of the

Sample Transportation Notice

Relinquishing signature on this document indicates that sample is being shipped in compliance with 180 BLUE RAVINE ROAD, SUITE B 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

(a) Second se Second s Second seco

FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020

بالمتحديث فيستقولها المتدريات الحجاف جرافي ولهون الرواحات

Page

Dject Manager JENNINE TRASK							Only urized by:	20 O C C U		
ollected by: (Print and Sign) TM ALESSI				P.O. #			- XI Normal Date:			
Company <u>APCADIS</u> Email JEWINE TR Address <u>IX U, JEPFERSU SI, 5E40</u> City <u>MULUA/ILL</u> State					3.0001.0009	🖵 Ru	sh		urization (
Phone 414-276-7742 Fax 414-27	6-7603		Project	Name_MADi	SONKIPP	sp	vecify		N ₂ H	
Lab I.D. Field Sample I.D. (Location)	Can #		Date	Time of Collection	Analyses Reques	sted	Canist Initial		sure/Vac	1
ELA IAB-11	34447	3/1	4/12	924	TO-15		-30.0	-8.0		
IAF-11	34732		4/12	921	TO -15		-28.0	-6.0		
SSV-1-11	12682		14/12	1105	70-15		-29.0	-5.5		
SSV-2-11	34189	3/1	14/12	1024	TO-15		7-30,0	-6,5		
								-		
								-		
								[
									S. alarmatics	
Relinquished by: (signature) Date/Time Rece	vived by (signation			ne 12 0900	Notes: のへ	JUY R	LEFORT			
	eived by: (signa					PC				
inquished by: (signature) Date/Time Received by: (signature) Date/Time Cis-1, 2 - OCE TRANS-1, 2 - OCE										
Lab Shipper Name Air Bill #	1	Temp ('°Ç)	Condition	Custedy S	eals int	act?	Work	Order #	
Use Red Fx		U.P		2000		lo Ni	one 1	20	337 1	P
	-			weist and an and a state of the			2. 			
		. –	_	_					Fo	rm 1299 rev:



4/1/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203430A

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/20/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Scott

Ausha Scott Project Manager

A Eurofins Lancaster Laboratories Company

Eurofins Air Toxics, Inc.

180 Blue Ravine Road, Suite B Folsom, CA 95630 T | 916-985-1000 F | 916-985-1020 www.airtoxics.com



WORK ORDER #: 1203430A

Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	P.O. #	WI001283.0001.00009
FAX:	317-231-6514	PROJECT #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED:	03/20/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	04/01/2012	connen	Ausilu Scott

			KEUEIF I	FINAL
FRACTION #	NAME	<u>TEST</u>	VAC./PRES.	PRESSURE
01A	IAB-1	Modified TO-15 SIM	5.5 "Hg	5 psi
02A	IAF-1	Modified TO-15 SIM	5.5 "Hg	5 psi
03A	Lab Blank	Modified TO-15 SIM	NA	NA
04A	CCV	Modified TO-15 SIM	NA	NA
05A	LCS	Modified TO-15 SIM	NA	NA
05AA	LCSD	Modified TO-15 SIM	NA	NA

CERTIFIED BY:

Sinda d. Fruman

04/01/12 DATE:

DECEIDT

FINAT

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

> > Page 2 of 11

LABORATORY NARRATIVE Modified TO-15 SIM Arcadis U.S., Inc. Workorder# 1203430A

Two 6 Liter Summa Canister (SIM Certified) samples were received on March 20, 2012. 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<br compounds allowed out to < 40% RSD	Project specific; default criteria is =30% RSD with 10% of compounds allowed out to < 40% RSD</td
Daily Calibration	+- 30% Difference	Project specific; default criteria is = 30% Difference<br with 10% of compounds allowed out up to =40%.; flag<br 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

🛟 eurofins

There were no receiving discrepancies.

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 and/or LCS.
- 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



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

Client Sample ID: IAB-1

Lab ID#: 1203430A-01A No Detections Were Found.

Client Sample ID: IAF-1

Lab ID#: 1203430A-02A No Detections Were Found.



Client Sample ID: IAB-1 Lab ID#: 1203430A-01A MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: Dil. Factor:	e032213sim 1.64	Date of Collection: 3/16/12 8:33:00 AM Date of Analysis: 3/22/12 06:33 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	Not Detected	0.18	Not Detected
Tetrachloroethene	0.033	Not Detected	0.22	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.65	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	96	70-130	
Toluene-d8	95	70-130	
4-Bromofluorobenzene	106	70-130	



Client Sample ID: IAF-1 Lab ID#: 1203430A-02A MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: Dil. Factor:	e032214sim 1.64	Date of Collection: 3/16/12 8:35:00 AM Date of Analysis: 3/22/12 07:16 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	Not Detected	0.18	Not Detected
Tetrachloroethene	0.033	Not Detected	0.22	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.65	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	98	70-130	
Toluene-d8	96	70-130	
4-Bromofluorobenzene	105	70-130	



Client Sample ID: Lab Blank Lab ID#: 1203430A-03A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: Dil. Factor:	e032206sim 1.00	Date of Collection: NA Date of Analysis: 3/22/12 12:55 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

		Method Limits	
Surrogates	%Recovery		
1,2-Dichloroethane-d4	111	70-130	
Toluene-d8	98	70-130	
4-Bromofluorobenzene	105	70-130	



Client Sample ID: CCV Lab ID#: 1203430A-04A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: Dil. Factor:	e032202sim 1.00	Date of Collection: NA Date of Analysis: 3/22/12 10:00 AM					
Compound		%Recovery					
Vinyl Chloride		86					
cis-1,2-Dichloroethene		102					
Trichloroethene		95					
Tetrachloroethene		88					
trans-1,2-Dichloroethene		96					

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	107	70-130



Client Sample ID: LCS Lab ID#: 1203430A-05A

MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name:	e032203sim	Date of Collection: NA					
Dil. Factor:	1.00	Date of Analysis: 3/22/12 10:43 AM					
Compound		%Recovery					
Vinyl Chloride		94					
cis-1,2-Dichloroethene		102					
Trichloroethene		90					
Tetrachloroethene		87					
trans-1,2-Dichloroethene		109					

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	114	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	107	70-130



Client Sample ID: LCSD Lab ID#: 1203430A-05AA

MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name:	e032204sim	Date of Collection: NA					
Dil. Factor:	1.00	Date of Analysis: 3/22/12 11:22 AM					
Compound		%Recovery					
Vinyl Chloride		90					
cis-1,2-Dichloroethene		102					
Trichloroethene		88					
Tetrachloroethene		86					
trans-1,2-Dichloroethene		108					

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	104	70-130

ад	CINY	use TIS BA	Lab Shipper Name Air Bill #	Relinquished by: (signature) Date/Time	Relinquished by: (signature) Date/Time	Relinquished by: (signature) Date/Time				SSV-2-1	1-1-NSS	JULA I AF-1	0/1 TAB-1	Lab I.D. Field Sample I.D. (Location)			r, STEALO CITY IMIL		and Sign) TTM ALESSI	Project Manager JENNINE TRASK	CHAIN-OF-CUSTODY RECORD and in collect
		tw	1# Temp (°C)	Received by: (signature)	Received by: (signature)	Received by: (signature)				25249 31	440 3/1	5562 311	4369 3/4	Can # of Col		1-276-7603	L State VI Zip SJ22	Email JULY TESSA CARLADIS -5, COM	Sar & C		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 incemnity 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
		6,~~~0	C) Condition	Date/Time	Date/Time	Date/Time 3,2012 6920				3117112 830	3/17/12 925	3/16/12 835	3/16/12 833	tion of (Date Time	Project Name MINO/SON	i 2 <u>92.200 # بالمحمد</u> # Project	P.O. #		Project Info:	indicates that sample is being s al, and international laws, regu ability with respect to the collec re also indicates agreement tr any claim, demand, or action, o ss. D.O.T. Hotline (800) 467-49
(Yes No	Custody Seals Intact?	RV CIS	TCE	> Ouce herald,				10-15	70-15	70-15	10-15	Analyses Requested		NKIPP	10000		1	Tu	
·		None 7		12-12-002 12-12-002 12-002	612.4	PORT,				-30.0	-245-	-300 -	-24.5	Initial	Caniste	specify	L Rush	X Normal	130814	Dru Drug	80 BLUE RA FOLSON 916) 985-100
Form 1293 (ev.11		203430	Work Order #	hi Lib) ``					-410	5	-5,0	51 0	Final Receipt Final	Canister Pressure/Vacuum	N ₂ He	Pressurization Gas:	Date:	Pressurized by:	Lab Use Only	180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020 Page 1 of 1



4/20/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1204335

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 4/17/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Scott

Ausha Scott Project Manager

A Eurofins Lancaster Laboratories Company

Eurofins Air Toxics, Inc.

180 Blue Ravine Road, Suite B Folsom, CA 95630 T | 916-985-1000 F | 916-985-1020 www.airtoxics.com



WORK ORDER #: 1204335

Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	P.O. #	WI001283.0001.00012
FAX:	317-231-6514	PROJECT #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED:	04/17/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	04/20/2012	continent	Aushu Scott

			RECEIPT	FINAL
FRACTION #	NAME	<u>TEST</u>	VAC./PRES.	PRESSURE
01A	SSV-1-1	Modified TO-15	3.5 "Hg	5 psi
02A	SSV-2-1	Modified TO-15	2.5 "Hg	5 psi
03A	Lab Blank	Modified TO-15	NA	NA
04A	CCV	Modified TO-15	NA	NA
05A	LCS	Modified TO-15	NA	NA
05AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:

Sinda d. Fruman

04/20/12 DATE:

DECEIDT

FINAT

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

> > Page 2 of 11

LABORATORY NARRATIVE Modified TO-15 Arcadis U.S., Inc. Workorder# 1204335

Two 6 Liter Summa Canister samples were received on April 17, 2012. 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
ICAL %RSD acceptance criteria	+- 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	= 30% Difference with four allowed out up to </=40%.; flag and narrate outliers</td
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
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

Receiving Notes

🛟 eurofins

There were no receiving discrepancies.

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 and/or LCS.

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



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

Client Sample ID: SSV-1-1

Lab ID#: 1204335-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.15	0.96	1.0	6.5
Client Sample ID: SSV-2-1				
Lab ID#: 1204335-02A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.15	0.18	0.99	1.2



Client Sample ID: SSV-1-1 Lab ID#: 1204335-01A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	v041806 1.52	Date of Collection: 4/13/12 4:45:00 PM Date of Analysis: 4/18/12 05:11 PM						
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)				
Vinyl Chloride	0.15	Not Detected	0.39	Not Detected				
trans-1,2-Dichloroethene	0.15	Not Detected	0.60	Not Detected				
cis-1,2-Dichloroethene	0.15	Not Detected	0.60	Not Detected				
Trichloroethene	0.15	Not Detected	0.82	Not Detected				
Tetrachloroethene	0.15	0.96	1.0	6.5				

٦

Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	90	70-130



Client Sample ID: SSV-2-1 Lab ID#: 1204335-02A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	v041807 1.46	Date of Collection: 4/13/12 4:22:00 PM Date of Analysis: 4/18/12 05:56 PM					
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)			
Vinyl Chloride	0.15	Not Detected	0.37	Not Detected			
trans-1,2-Dichloroethene	0.15	Not Detected	0.58	Not Detected			
cis-1,2-Dichloroethene	0.15	Not Detected	0.58	Not Detected			
Trichloroethene	0.15	Not Detected	0.78	Not Detected			
Tetrachloroethene	0.15	0.18	0.99	1.2			

٦

Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	102	70-130



Client Sample ID: Lab Blank Lab ID#: 1204335-03A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name: Dil. Factor:	v041805 1.00		e of Collection: NA e of Analysis: 4/18/	/12 04:14 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected	
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected	
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected	
Trichloroethene	0.10	Not Detected	0.54	Not Detected	
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected	

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	106	70-130



Client Sample ID: CCV Lab ID#: 1204335-04A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v041802	Date of Collection: NA					
Dil. Factor:	1.00	Date of Analysis: 4/18/12 01:21 PM					
Compound		%Recovery					
Vinyl Chloride		100					
trans-1,2-Dichloroethene		93					
cis-1,2-Dichloroethene		94					
Trichloroethene		98					
Tetrachloroethene		96					

Je Ste Ste Ste Ste Ste Ste Ste Ste Ste St		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	106	70-130



Client Sample ID: LCS

Air Toxics

Lab ID#: 1204335-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name: Dil. Factor:	v041803 1.00	Date of Collection: NA Date of Analysis: 4/18/12 02:15 PM
Compound		%Recovery
Vinyl Chloride		117
trans-1,2-Dichloroethene		121
cis-1,2-Dichloroethene		109
Trichloroethene		107
Tetrachloroethene		106

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



Client Sample ID: LCSD Lab ID#: 1204335-05AA

Air Toxics

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name:	v041804	Date of Collection: NA
Dil. Factor:	il. Factor: 1.00 Date of Anal	
Compound		%Recovery
Vinyl Chloride		111
trans-1,2-Dichloroethene		117
cis-1,2-Dichloroethene		105
Trichloroethene		106
Tetrachloroethene		102

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	104	70-130

	Only Feder	Lah Shipper Name	Relinquished by: (signature) Date/Time		Relinquished by: (signature) Date/Time					NIA SSVI-1-1	Lab I.D. Field Sample I.D. (Location)		Phone 419-276-7742 Fax	Company NCAPIN Emailine Emailine	, TIM ALESS	Project Manager JENNINE TRASK	CHAIN-OF-CUSTODY RECORD
	NA Good	Air Bill # Temp (°C) Condition	Received by: (signature) Date/Time	Received by: (signature) Date/Time	B With Music 4/17/12 0845				22107 4/13/12 1622	33993 4/13/2 1645	Can # of Collection of (1	Email <u>Exhanse Rovers Surv</u> Project # <u>UTCO1283.0001.00009</u>	P.O. #	Project Info:	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 indemnity 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
	Yes No (None	Custody Seals Intact?	10000000000000000000000000000000000000	PCE TCE	Notes:				TO-15 -29.5	TO-15 >30	Analyses Requested Initial	Canis	ON KIPP specify	5.001.0001 Bush	X Normal	Turn Around Time:	
Form 1293 rev.11	1204335	Work Order #	2-10CE 2-0CE				·		5	ů.	Final Receipt Final (psi)	Canister Pressure/Vacuum	N ₂ He	Pressurization Gas:	Date:	Pressurized by:	180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020 Page 1 of 1

i i



4/1/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203428A

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/20/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Scott

Ausha Scott Project Manager

A Eurofins Lancaster Laboratories Company

Eurofins Air Toxics, Inc.

180 Blue Ravine Road, Suite B Folsom, CA 95630 T | 916-985-1000 F | 916-985-1020 www.airtoxics.com



WORK ORDER #: 1203428A

Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	P.O. #	WI001283.0001.00009
FAX:	317-231-6514	PROJECT #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED:	03/20/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	04/01/2012	continent	Ausia Scott

			KEUEIFI	FINAL
FRACTION #	NAME	TEST	VAC./PRES.	PRESSURE
01A	IAB-3	Modified TO-15 SIM	5.0 "Hg	5 psi
02A	IAF-3	Modified TO-15 SIM	5.5 "Hg	5 psi
03A	Lab Blank	Modified TO-15 SIM	NA	NA
04A	CCV	Modified TO-15 SIM	NA	NA
05A	LCS	Modified TO-15 SIM	NA	NA
05AA	LCSD	Modified TO-15 SIM	NA	NA

CERTIFIED BY:

Sinda d. Fruman

04/01/12 DATE:

DECEIDT

FINAT

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

> > Page 2 of 11

LABORATORY NARRATIVE Modified TO-15 SIM Arcadis U.S., Inc. Workorder# 1203428A

Two 6 Liter Summa Canister (SIM Certified) samples were received on March 20, 2012. 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	<pre><!--=30% RSD with 2 compounds allowed out to < 40% RSD</pre--></pre>	Project specific; default criteria is =30% RSD with 10% of compounds allowed out to < 40% RSD</td
Daily Calibration	+- 30% Difference	Project specific; default criteria is = 30% Difference<br with 10% of compounds allowed out up to =40%.; flag<br 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

🛟 eurofins

There were no receiving discrepancies.

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 and/or LCS.
- 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



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

Client Sample ID: IAB-3

Lab ID#: 1203428A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.032	0.060	0.22	0.41
Client Sample ID: IAF-3				
Lab ID#: 1203428A-02A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.033	0.060	0.22	0.41



Client Sample ID: IAB-3 Lab ID#: 1203428A-01A MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: Dil. Factor:	a032219sim 1.61	Date of Collection: 3/15/12 10:06:00 Date of Analysis: 3/22/12 08:39 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	Not Detected	0.17	Not Detected
Tetrachloroethene	0.032	0.060	0.22	0.41
trans-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	115	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	101	70-130



Client Sample ID: IAF-3 Lab ID#: 1203428A-02A MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: Dil. Factor:	a032220sim 1.64	Date of Collection: 3/15/12 10:04:00 Date of Analysis: 3/22/12 09:20 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	Not Detected	0.18	Not Detected
Tetrachloroethene	0.033	0.060	0.22	0.41
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	116	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	102	70-130



Client Sample ID: Lab Blank Lab ID#: 1203428A-03A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: Dil. Factor:	a032207sim 1.00	Date of Collection: NA Date of Analysis: 3/22/12 11:47 AM		/12 11:47 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

1

		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	108	70-130	
Toluene-d8	99	70-130	
4-Bromofluorobenzene	103	70-130	



Client Sample ID: CCV Lab ID#: 1203428A-04A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:a032202simDil. Factor:1.00		Date of Collection: NA Date of Analysis: 3/22/12 08:39 AM	
Vinyl Chloride		80	
cis-1,2-Dichloroethene		81	
Trichloroethene		83	
Tetrachloroethene		85	
trans-1,2-Dichloroethene		83	

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	103	70-130



Client Sample ID: LCS Lab ID#: 1203428A-05A

MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: Dil. Factor:	a032203sim 1.00	Date of Collection: NA Date of Analysis: 3/22/12 09:20 AM			
Compound		%Recovery			
Vinyl Chloride		80			
cis-1,2-Dichloroethene		80			
Trichloroethene		80			
Tetrachloroethene		82			
trans-1,2-Dichloroethene		90			

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	102	70-130



Client Sample ID: LCSD Lab ID#: 1203428A-05AA

MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name:	a032204sim	Date of Collection: NA				
Dil. Factor:	1.00	Date of Analysis: 3/22/12 09:57 AM				
Compound		%Recovery				
Vinyl Chloride		81				
cis-1,2-Dichloroethene		80				
Trichloroethene		81				
Tetrachloroethene		82				
trans-1,2-Dichloroethene		91				

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	102	70-130

									6	and a							_	_		
	OnV	lab J	Relinquish	Relinquish	Relinquish					Ø	mA.	ति	Lab I.D.		Phone	Address 12	Company	Collected b	Project Manager	CHAIN-
	Ledra	Shipper Name	Relinquished by: (signature) Date/Time	Relinquished by: (signature) Date/Time	Relinquished by: (signature) Date/Time				SW-2-3	SSV-1-3	TAF-3	TAB-3	Field Sample I.D. (Location)		4/14-276-7742 Fax	ST., SE420 City Much		Collected by: (Print and Sign) TIM RUES	Inager JENNINE TRASK	CHAIN-OF-CUSTODY RECORD
		Air Bill #	Recei	Receiv	1637 Recei								ition)		414-276-7603	Multer State	Email JENNIE TUSKE MUNDS - 5 201	RESSI THE	SK	Sample Transportation Notice Relinquishing signature on this documen all applicable local, State, Federal, natio any kind. Air Toxics Limited assumes no of these samples. Relinquishing signat and indemnify Air Toxics Limited against collection, handling, or shipping of samp
			Received by: (signature)	Received by: (signature)	Received by: (signature)				33984	3146	R-18	431	Can #		5-7603	State	She Heros	Lene -		sportation hature of this do ature of this do assuit. State, Federa s. Limited assu s. Relinquishing Toxics Limited Toxics Limited ag, or shipping of
	NK	Temp (°C)	ature) Date/Time	ature) Date/Time	ature) Date/Time ス. 20.12				3/16/12	3/17/12	3/15/12	3/15/12	of Callection of Callection	Date	Project			0 0 0	Project Info:	Sample Transportation Notice Relinquishing signature on this document indicates that sample is being ship all applicable local, State, Federal, national, and international laws, regulati any kind. Air Toxics Limited assumes no liability with respect to the collectio of these samples. Relinquishing signature also indicates agreement to h and indemnify Air Toxics Limited against any claim, demand, or action, of a collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922
	cload)	Condition	Ē	Ð	e 0920				91116	1326	1004	1006	of Collection	Time	Project Name MADISON KIPP	Project # WWW283	- 		t Info:	hat sample is being ernational laws, re respect to the col dicates agreemen demand, or action demand, 800) 467-
	Ves No	Custody Seals Intact?			Notes:				10-15	10-15	70-15	10-15	Analyses Requested		SON KIPP	3.0001,00009				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
	None							-	-54,5	0*12-	0'£2-	-300	led Initial	Canis	specify	Ll Rush	X Normal		Turn Around	
	X 6 8 %	Work Ord							-5,0		5 0	5	Final Rec	Canister Pressure/Vacuum	N ₂	Pressurization Gas:	Date:		20 A 12 C	180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020 Page of
Form 1293 rev 11	2	3"# 2											Receipt Final	e/Vacuum	тe	ttion Gas:		,	<u>२</u> २	AD, SUITE B 30-4719 6) 985-1020



4/1/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203428B

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/20/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Scott

Ausha Scott Project Manager

A Eurofins Lancaster Laboratories Company

Eurofins Air Toxics, Inc.

180 Blue Ravine Road, Suite B Folsom, CA 95630 T | 916-985-1000 F | 916-985-1020 www.airtoxics.com



WORK ORDER #: 1203428B

Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	P.O. #	WI001283.0001.00009
FAX:	317-231-6514	PROJECT #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED:	03/20/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	04/01/2012	continent	Aushu Scott

			KEUEIP I	FINAL
FRACTION #	NAME	<u>TEST</u>	VAC./PRES.	PRESSURE
03A	SSV-1-3	Modified TO-15	5.0 "Hg	5 psi
04A	SSV-2-3	Modified TO-15	5.5 "Hg	5 psi
05A	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:

Sinda d. Fruman

04/01/12 DATE:

DECEIDT

FINAT

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

> > Page 2 of 11

LABORATORY NARRATIVE Modified TO-15 Arcadis U.S., Inc. Workorder# 1203428B

Two 6 Liter Summa Canister samples were received on March 20, 2012. 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
ICAL %RSD acceptance criteria	+- 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	= 30% Difference with four allowed out up to </=40%.; flag and narrate outliers</td
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
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

Receiving Notes

🛟 eurofins

There were no receiving discrepancies.

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 and/or LCS.



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



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

Client Sample ID: SSV-1-3

Lab ID#: 1203428B-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.16	1.5	1.1	10
Client Sample ID: SSV-2-3				
Lab ID#: 1203428B-04A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.16	0.28	1.1	1.9



Client Sample ID: SSV-1-3 Lab ID#: 1203428B-03A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	e032217 1.61	Date of Collection: 3/17/12 1:20:00 PM Date of Analysis: 3/22/12 10:08 PM				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)		
Vinyl Chloride	0.16	Not Detected	0.41	Not Detected		
trans-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected		
cis-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected		
Trichloroethene	0.16	Not Detected	0.86	Not Detected		
Tetrachloroethene	0.16	1.5	1.1	10		

٦

Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	93	70-130
4-Bromofluorobenzene	104	70-130



Client Sample ID: SSV-2-3 Lab ID#: 1203428B-04A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	e032218 1.64	Date of Collection: 3/16/12 11:16:00 AM Date of Analysis: 3/22/12 10:53 PM				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)		
Vinyl Chloride	0.16	Not Detected	0.42	Not Detected		
trans-1,2-Dichloroethene	0.16	Not Detected	0.65	Not Detected		
cis-1,2-Dichloroethene	0.16	Not Detected	0.65	Not Detected		
Trichloroethene	0.16	Not Detected	0.88	Not Detected		
Tetrachloroethene	0.16	0.28	1.1	1.9		

٦

Container Type: 6 Liter Summa Canister

		Method Limits
Surrogates	%Recovery	
1,2-Dichloroethane-d4	117	70-130
Toluene-d8	92	70-130
4-Bromofluorobenzene	111	70-130



Client Sample ID: Lab Blank Lab ID#: 1203428B-05A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name: Dil. Factor:	e032206 1.00			e of Collection: NA e of Analysis: 3/22/12 12:55 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected	
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected	
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected	
Trichloroethene	0.10	Not Detected	0.54	Not Detected	
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected	

		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	112	70-130	
Toluene-d8	97	70-130	
4-Bromofluorobenzene	104	70-130	



Client Sample ID: CCV Lab ID#: 1203428B-06A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e032202	Date of Collection: NA		
Dil. Factor:	1.00	Date of Analysis: 3/22/12 10:00 AM		
Compound		%Recovery		
Vinyl Chloride		98		
trans-1,2-Dichloroethene		104		
cis-1,2-Dichloroethene		108		
Trichloroethene		105		
Tetrachloroethene		112		

		Method		
Surrogates	%Recovery	Limits		
1,2-Dichloroethane-d4	111	70-130		
Toluene-d8	101	70-130		
4-Bromofluorobenzene	112	70-130		



Client Sample ID: LCS Lab ID#: 1203428B-07A

Air Toxics

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name: Dil. Factor:	e032203 1.00	Date of Collection: NA Date of Analysis: 3/22/12 10:43 AM
Compound		%Recovery
Vinyl Chloride		109
trans-1,2-Dichloroethene		118
cis-1,2-Dichloroethene		112
Trichloroethene		98
Tetrachloroethene		109

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	115	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	111	70-130



Client Sample ID: LCSD

Air Toxics

Lab ID#: 1203428B-07AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

1

File Name:	e032204	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/22/12 11:22 AM
Compound		%Recovery
Vinyl Chloride		103
trans-1,2-Dichloroethene		118
cis-1,2-Dichloroethene		113
Trichloroethene		96
Tetrachloroethene		107

		Method		
Surrogates	%Recovery	Limits		
1,2-Dichloroethane-d4	106	70-130		
Toluene-d8	102	70-130		
4-Bromofluorobenzene	105	70-130		

Form 1293 rev.11	Fo				-						
			 A state of the sta	and the second se	San					10 10 10 V	Only
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	ෝ දේද හ හ	80 00	None	<u> ∀es</u> ∕ No	6000	THAN .	-			and the summer of the	Use
	Work Order #	Wor	Intact?	Custody Seals Intact?	Condition	Temp (°C)	1	Air Bill #		Shipper Name	Lab
					٩		neceived by, (signature)			nelinquisitied by (signature)	neinquisie
				-	U	rira) Data/Tima	wined hur leignat			d bur (ninnatura)	
					CD	ture) Date/Time	Received by: (signature)	Rec	) Date/Time	Relinquished by: (signature)	Relinquishe
				-	0970	3.70.12	124 1	637 0	3/19/12 16	som / Communication	and the second sec
				Notes:	ω	ure) Date/Time	Received by: (signature)	Rec	) Date/Time	Relinquished by: (signature)	Relinquishe
										-	
				n and a start of the			-				
	2	-5,0	5.122-	70-15	211	3/16/12	33984		-2-3	SS-	éte A
	V	-40	0%2-	10-15	1376	31712	3146		5	SS	A 20
	0	-5,0	0'12-	70-15	1004	315)12	R-18.		R-3	TA	
	U U	5	-300	10-15	188	3/15/12	42		6-3	JAT	
Final (ps)	al Receipt	Final	Initial	Analyses Requested	of Collection	tion	Can #	ation)	Field Sample I.D. (Location)	Field S	Lab I.D.
cuum	Canister Pressure/Vacuum	ster Pr	Cani	-	Time	Date		-			
Нe	N ₂ F		specify	N K-NPP	Name <u>MPOSolu</u>	Project Name	76-7603	414-2-	-7742 Fax	-114-276-	Phone
Gas:	Pressurization Gas:	Prei	⊿ Rush	JTC02185,0001,00009	1000	202 Project #	State Zip <u>53202</u>	<u>vhukaž</u> Sta	, SECO City MUL	Address 320, JEffelSauS	Address 3
	Ċ.	Date:	Normal			<u>560</u> 	Email JERNIE, TRASLO MADS - & LON	Email <u>JENNINE</u>		READIS	Company
	Flessulized by.	 ק		Ĵ.			men of the construction of	SI SI	TIM PLESS	and	Collected by
	Lab Use Only		Turn Around	Tur	t Info:	Project Info:	-	SK	JENNINE TRASK		Project Manager
SUITE B 719 985-1020	т <u>6</u> 6 6	RAVIN	80 BLUE FOLS 916) 985-	ped in compliance with ions and ordinances of n, handling or shipping iold harmless, defend, any kind, related to the	Sample Transportation Notice Relinquishing signature on this document indicates that sample is being ship all applicable local, State, Federal, national, and international laws, regulat any kind. Air Toxics Limited assumes no liability with respect to the collectio of these samples. Relinquishing signature also indicates agreement to the and indemnify Air Toxics Limited against any claim, demand, or action, of a collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922	otice sument indicates the national, and interes no liability with signature also ind signature also ind gainst any claim, samples. D.O.T. F	Sample Transportation Notice Relinquishing signature on this documen all applicable local, State, Federal, natio any kind. Air Toxics Limited assumes no of these samples. Relinquishing signat and indemnify Air Toxics Limited agains collection, handling, or shipping of samp		CHAIN-OF-CUSTODY RECORD	<b>Air</b> <b>Toxi</b>	CHAIN-0

a.

पाल

藔



4/13/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: Project #: Workorder #: 1204018A

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 4/2/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Scott

Ausha Scott Project Manager

A Eurofins Lancaster Laboratories Company

Eurofins Air Toxics, Inc.

180 Blue Ravine Road, Suite B Folsom, CA 95630 T | 916-985-1000 F | 916-985-1020 www.airtoxics.com



#### WORK ORDER #: 1204018A

#### Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	<b>P.O.</b> #	WI001283.0001.00009
FAX:	317-231-6514	PROJECT #	
DATE RECEIVED: DATE COMPLETED:	04/02/2012 04/13/2012	CONTACT:	Ausha Scott

			KECEIF I	FINAL
FRACTION #	NAME	TEST	VAC./PRES.	PRESSURE
01A	IAB-4	Modified TO-15 SIM	0.5 "Hg	5 psi
02A	IAF-4	Modified TO-15 SIM	3.0 "Hg	5 psi
03A	Lab Blank	Modified TO-15 SIM	NA	NA
04A	CCV	Modified TO-15 SIM	NA	NA
05A	LCS	Modified TO-15 SIM	NA	NA
05AA	LCSD	Modified TO-15 SIM	NA	NA

CERTIFIED BY:

Sinda d. Fruman

04/13/12 DATE:

DECEIDT

**FINAT** 

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

> > Page 2 of 11

#### LABORATORY NARRATIVE Modified TO-15 SIM Arcadis U.S., Inc. Workorder# 1204018A

Two 6 Liter Summa Canister (SIM Certified) samples were received on April 02, 2012. 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<br compounds allowed out to < 40% RSD	Project specific; default criteria is =30% RSD with 10% of compounds allowed out to < 40% RSD</td
Daily Calibration	+- 30% Difference	Project specific; default criteria is = 30% Difference<br with 10% of compounds allowed out up to =40%.; flag<br 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**

🛟 eurofins

There were no receiving discrepancies.

### **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 and/or LCS.
- N The identification is based on presumptive evidence.

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

Page 3 of 11



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



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

## Client Sample ID: IAB-4

## Lab ID#: 1204018A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.027	0.084	0.18	0.57
Client Sample ID: IAF-4				
Lab ID#: 1204018A-02A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.030	0.092	0.20	0.63



## Client Sample ID: IAB-4 Lab ID#: 1204018A-01A MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: Dil. Factor:	a040311sim 1.36	Date of Collection: 3/29/12 9:45:00 AM Date of Analysis: 4/3/12 05:00 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.014	Not Detected	0.035	Not Detected
cis-1,2-Dichloroethene	0.027	Not Detected	0.11	Not Detected
Trichloroethene	0.027	Not Detected	0.15	Not Detected
Tetrachloroethene	0.027	0.084	0.18	0.57
trans-1,2-Dichloroethene	0.14	Not Detected	0.54	Not Detected

#### Container Type: 6 Liter Summa Canister (SIM Certified)

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	115	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	101	70-130



## Client Sample ID: IAF-4 Lab ID#: 1204018A-02A MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: Dil. Factor:	a040312sim 1.49	Date of Collection: 3/29/12 10:50:00 AM Date of Analysis: 4/3/12 05:47 PM							
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)					
Vinyl Chloride	0.015	Not Detected	0.038	Not Detected					
cis-1,2-Dichloroethene	0.030	Not Detected	0.12	Not Detected					
Trichloroethene	0.030	Not Detected	0.16	Not Detected					
Tetrachloroethene 0.030		0.092	0.20	0.63					
trans-1,2-Dichloroethene 0.15		Not Detected	0.59	Not Detected					

#### Container Type: 6 Liter Summa Canister (SIM Certified)

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	114	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	100	70-130



## Client Sample ID: Lab Blank Lab ID#: 1204018A-03A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: Dil. Factor:	a040307sim 1.00		of Collection: NA of Analysis: 4/3/1	2 01:23 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

٦

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	97	70-130



## Client Sample ID: CCV Lab ID#: 1204018A-04A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	a040303sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/3/12 10:12 AM
Compound		%Recovery
Vinyl Chloride		86
cis-1,2-Dichloroethene		85
Trichloroethene		86
Tetrachloroethene		88
trans-1,2-Dichloroethene		87

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	101	70-130



## Client Sample ID: LCS Lab ID#: 1204018A-05A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	a040304sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/3/12 11:02 AM
Compound		%Recovery
Vinyl Chloride		86
cis-1,2-Dichloroethene		83
Trichloroethene		84
Tetrachloroethene		84
trans-1,2-Dichloroethene		95

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	101	70-130



## Client Sample ID: LCSD Lab ID#: 1204018A-05AA MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	a040305sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/3/12 11:53 AM
Compound		%Recovery
Vinyl Chloride		84
cis-1,2-Dichloroethene		82
Trichloroethene		82
Tetrachloroethene		83
trans-1,2-Dichloroethene		93

Je Ste Ste Ste Ste Ste Ste Ste Ste Ste St		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	102	70-130

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Only	2	Relinquishe	Relinquishe	nemiquisie			-1 2 12	ALC A	f {	F F	410	ð(A	Lab I.D.		Phone 414	Address 12/2	Collected by	Project Man	CHAIN-0
Sample Transportation Notice         Remultion Notice         Remultion Notice         Remultion Notice         Remultion Notice         Any kind. Air Toxics Limited assumes no liability with respect to the collection, narding or shipping of samples. DOI: Holine (800) 467-4922         Project Info:         Project Info: <td< td=""><td>Feder</td><td>Shipper Name</td><td></td><td></td><td>1AP</td><td></td><td></td><td></td><td>L - 20</td><td>11-6/22</td><td>SSV-1-4</td><td>TAF-4</td><td>IAB-4</td><td>Field Samp</td><td></td><td>276-7742</td><td>v. Jefferson St #40</td><td>ign)</td><td>ager Jernine</td><td>F-CUSTODY F</td></td<>	Feder	Shipper Name			1AP				L - 20	11-6/22	SSV-1-4	TAF-4	IAB-4	Field Samp		276-7742	v. Jefferson St #40	ign)	ager Jernine	F-CUSTODY F
Indicates that sample is being shipped in compliance with respect to the and ordinances of any claim, demand, or action, of any kind, related to the se. D.O.T. Hotine (600) 467-4922       Turn Around Lab Use Only Project Info:         Project Info:       Time       Time:       Date       Time:       Project Info:       Project Info:<		Air Bi	te/Time	te/Time		h /Timo								le I.D. (Location)		Fax 414-2	Nil	Ţ	SK	-
Indicates that sample is being shipped in compliance with respect to the sample in vice indicates and ordinances of any claim, demand, or action, of any kind, related to the se. D.O.T. Hotline (600) 467-4922       Turn Around Lab Use Only Project Info:		#	Receive	Receive	0.1.0							9				276-7603	State U	Sher X	2	ple Transp quishing signat plicable local, at nd. Air Toxics nd. Air Toxics nd. Air Toxics tors, handling, tion, handling,
Indicates that sample is being shipped in compliance with international laws, regulations and ordinances of liability with respect to the collection, handling or shipping any claim, demand, or action, of any kind, related to the las, D.O.T. Hotline (800) 467-4922         Project Info:       Project Info:         P.O. #       Time         Project Info:       Image: Ima		Ī	d by: (signa	id by: (signa	nut be	h hv: feinna						9109		Can #			F Zip 53	On on dia		ortation N ure on this do State, Federa Limited assun Pelinquishing oxics Limited or shipping o
180 BLUE RAVINE ROAD         Folsom, ca 95630-         (916) 985-1000 FAX (916)         Page         Page       Page         Immai       Lab Use Only       Page         Imitial       Final       Pressurization         Specify       N2       N2         Initial       Final       Receive         2       -29       -29       -29         -29       -29       -5       -5         -29       -29       -5       -5         -29       -5       -5       -6         -29       -5       -29       -5         -29       -5       -29       -5         -29       -5       -29       -5         -29       -5       -29       -5         -29       -5       -29       -5         -10       -20       -20       -20       -20         Monoid       10       -20       -20       -20         Monoid       10       -20       -20       -20       -20         Monoid       10       -20       -20       -20 <th-20< th="">       -20       -20       &lt;</th-20<>		emp (°C)			(c 4/2				211.410	Zhalis	3/29/12		1291	of Collection	Date	Projec			Proje	lotice cument indicates II, national, and ir nes no liability with signature also ir against any clairr against any clairr f samples. D.O.T
	nod	Condition	ne	ne		5				1047	1045	1050	0945	of Collection	Time	5			ct Info:	that sample is bei ternational laws, i ternational laws, i transpect to the c dicates agreeme dicates agreeme
						~			Ì	77-	72-1	70-	4	Analys		son Kipp	3.0001.001			ng shipped in c regulations and ollection, hand ant to hold har on, of any kind 7-4922
		Custody Se	cis-1, trans	N'A'	ONLY REP	lotes:				Л	S	5	5	es Reques			0			ompliance with d ordinances c ling or shippin mless, defenc , related to th
JE RAVINE ROAD, LSOM, CA 95630-4 95-1000 FAX (916) 9 Page Page Page Pressurized b Pressurized b Pressurized b $N_2$ T $N_2$ T		als Intact?	-1,2-DCE	Chloride	ort:					-2	N	12	-2		ç	specify	🛛 Rush	📈 Norma	Turn Arou Time:	
Vie       Na       95630-4         Page       Surized by         ssurized by       Surized by         e:       Na       Heccelpt         ssurized by       Heccelpt         al       Reccelpt         al					.2		_								anister P		9 9 9		Na si dan	JE RAVIN LSOM, C
		rk Order #			Saxog C	Shinned .								al Receipt	ressure/Va	N₂ He	ssurization	<u>n</u>	Use Only ssurized by	VE ROAD, ( A 95630-4 AX (916) 9 Page



4/13/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: Project #: Workorder #: 1204018B

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 4/2/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Scott

Ausha Scott Project Manager

A Eurofins Lancaster Laboratories Company

Eurofins Air Toxics, Inc.

180 Blue Ravine Road, Suite B Folsom, CA 95630 T | 916-985-1000 F | 916-985-1020 www.airtoxics.com



#### WORK ORDER #: 1204018B

#### Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	<b>P.O.</b> #	WI001283.0001.00009
FAX:	317-231-6514	<b>PROJECT</b> #	
DATE RECEIVED: DATE COMPLETED:	04/02/2012 04/13/2012	CONTACT:	Ausha Scott

			<b>KEUEIP</b> I	FINAL
FRACTION #	NAME	TEST	VAC./PRES.	PRESSURE
03A	SSV-1-4	Modified TO-15	5.0 "Hg	5 psi
04A	SSV-2-4	Modified TO-15	5.0 "Hg	5 psi
05A	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:

Sinda d. Fruman

04/13/12 DATE:

DECEIDT

**FINAT** 

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

> > Page 2 of 11

#### LABORATORY NARRATIVE Modified TO-15 Arcadis U.S., Inc. Workorder# 1204018B

Two 6 Liter Summa Canister samples were received on April 02, 2012. 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
ICAL %RSD acceptance criteria	+- 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	= 30% Difference with four allowed out up to </=40%.; flag and narrate outliers</td
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
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

### **Receiving Notes**

🛟 eurofins

There were no receiving discrepancies.

### **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 and/or LCS.



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



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

## Client Sample ID: SSV-1-4

## Lab ID#: 1204018B-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.16	1.7	1.1	12
Client Sample ID: SSV-2-4				
Lab ID#: 1204018B-04A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.16	0.27	0.86	1.5
Tetrachloroethene	0.16	0.50	1.1	3.4



## Client Sample ID: SSV-1-4 Lab ID#: 1204018B-03A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	a040317 1.61		e of Collection: 3/29/12 10:45:00 Al e of Analysis: 4/3/12 09:48 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.16	Not Detected	0.41	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
Trichloroethene	0.16	Not Detected	0.86	Not Detected
Tetrachloroethene	0.16	1.7	1.1	12

٦

#### Container Type: 6 Liter Summa Canister

		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	114	78-134	
Toluene-d8	100	91-106	
4-Bromofluorobenzene	98	87-118	



## Client Sample ID: SSV-2-4 Lab ID#: 1204018B-04A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	a040318 1.61		e of Collection:  3/29/12 10:40:00 A e of Analysis:  4/3/12 10:36 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.16	Not Detected	0.41	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
Trichloroethene	0.16	0.27	0.86	1.5
Tetrachloroethene	0.16	0.50	1.1	3.4

٦

#### Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	114	78-134
Toluene-d8	100	91-106
4-Bromofluorobenzene	101	87-118



## Client Sample ID: Lab Blank Lab ID#: 1204018B-05A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name: Dil. Factor:	a040307 1.00		of Collection: NA of Analysis: 4/3/12 01:23 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Trichloroethene	0.10	Not Detected	0.54	Not Detected
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	92	70-130



## Client Sample ID: CCV Lab ID#: 1204018B-06A

Air Toxics

## MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:a040303Dil. Factor:1.00		Date of Collection: NA		
		Date of Analysis: 4/3/12 10:12 AM		
Compound		%Recovery		
Vinyl Chloride		97		
trans-1,2-Dichloroethene		91		
cis-1,2-Dichloroethene		91		
Trichloroethene		94		
Tetrachloroethene		93		

Je Ste Ste Ste Ste Ste Ste Ste Ste Ste St		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	100	70-130



## Client Sample ID: LCS Lab ID#: 1204018B-07A MODIFIED FRA METHOD TO 15 CC/MS FULL SCAN

Air Toxics

File Name:	a040304	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/3/12 11:02 AM
Compound		%Recovery
Vinyl Chloride		96
trans-1,2-Dichloroethene		98
cis-1,2-Dichloroethene		91
Trichloroethene		88
Tetrachloroethene		88

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	100	70-130



## Client Sample ID: LCSD Lab ID#: 1204018B-07AA

Air Toxics

#### MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

1

File Name:	a040305	Date of Collection: NA				
Dil. Factor:	1.00	Date of Analysis: 4/3/12 11:53 AM				
Compound		%Recovery				
Vinyl Chloride		92				
trans-1,2-Dichloroethene		94				
cis-1,2-Dichloroethene		85				
Trichloroethene		70				
Tetrachloroethene		88				

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	79	70-130
4-Bromofluorobenzene	101	70-130

	ç ç	5	Rel	Hei	ב 2	Rel			iye na a	~~	Ø,	A malt	The alla	La		Phor	Addr	Colli	Proj	우 <b>(                                   </b>
	Use Fully	Lab Shipper Name	Relinquished by: (signature) Date	Kelinquisned by: (signature) – Dater Ime		Inature)				<u> </u>	03A SSV-1-4	OFF TAF-4	A IAB-4	Lab I.D. Field Sampl		Phone 414~つりし~7742	Address 176 N. Jefferson St #40	Collected by: (Print and Sign) Conf. Conversion	Project Manager Jernine Trask	CHAIN-OF-CUSTODY RECORD
a second a second se		Air Bill #	Date/Time Rece			ime Re								Field Sample I.D. (Location)		Fax 414-276-7603	City Milwauka State WF Zip 53202		Ň	
			Received by: (signature)	neceived by, (signature)	D. W. Witt New ATC	Received by: (signature)						99109		Can #		23	State WF Zip 53202			sportation insportation al, State, Fede ics Limited assi s. Relinquishin s. Relinquishin ir Toxics Limiter ing, or shipping
	NIA	Temp (°C)		Į	, r	. 0		5		3/29/12	3/29/12	3/29/12	3/29/12	of Collection	Date	- Pro			Pr	Notice bocument indic ral, national, ar umes no liabilit umes no liabilit ig signature al- ig signature al- ig signature al- of samples. D
	Groot	Condition	Date/Time		4/2/12 0050					1040	1045	1050	0945	of	Time	Project Name Madison Kipp	Project # WITCOLD8	P.O. #	Project Info:	Sample Transportation Notice Relinquishing signature on this document indicates that sample is bein all applicable local, State, Federal, national, and international laws, r any kind. Air Toxics Limited assumes no liability with respect to the co of these samples. Relinquishing signature also indicates agreeme and indemnity Air Toxics Limited against any claim, demand, or activ collection, handling, or shipping of samples. D.O.T. Hotline (800) 467
	(Yes) No	Custody Se	cis-1, trans-	Viny	PCE	Notes:				70-15	70-15	70-15	TD-15	Analyses Requested		son Kipp	3.0001,0010			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
	None	Custody Seals Intact?	cis-1,2-DCE trans-1,2-DCE	ret Viny Chloride	-	ort.				-29	-29	-29	-29	ted Initial	Can	specify	🗋 Rush	Normal	Turn Around Time:	1
	25	1.1			0,	1S				\ ហ	7 -5	13	0	Final	lister Pres		Press	Date:		E RAVINE RC SOM, CA 95( -1000 FAX (s Page
	204018	Work Order #			d boxes	-								Receipt Final	Canister Pressure/Vacuum	Ν₂	Pressurization Gas:		<i>Lab Use Only</i> Pressurized by:	180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020 Page of

Form 1293 rev.11

100



3/28/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203369A

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/16/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Scott

Ausha Scott Project Manager

A Eurofins Lancaster Laboratories Company

Eurofins Air Toxics, Inc.

180 Blue Ravine Road, Suite B Folsom, CA 95630 T | 916-985-1000 F | 916-985-1020 www.airtoxics.com



#### WORK ORDER #: 1203369A

#### Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	<b>P.O.</b> #	WI001283.0001.00009
FAX:	317-231-6514	<b>PROJECT</b> #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED:	03/16/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	03/28/2012	continen	Ausilu Scott

			<b>KEUEIF</b> I	FINAL
FRACTION #	NAME	TEST	VAC./PRES.	PRESSURE
01A	IAB-5	Modified TO-15 SIM	6.2 "Hg	5 psi
02A	IAF-5	Modified TO-15 SIM	9.8 "Hg	5 psi
03A	Lab Blank	Modified TO-15 SIM	NA	NA
04A	CCV	Modified TO-15 SIM	NA	NA
05A	LCS	Modified TO-15 SIM	NA	NA
05AA	LCSD	Modified TO-15 SIM	NA	NA

CERTIFIED BY:

Sinda d. Fruman

03/28/12 DATE:

DECEIDT

**FINAT** 

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

> > Page 2 of 11

#### LABORATORY NARRATIVE Modified TO-15 SIM Arcadis U.S., Inc. Workorder# 1203369A

Two 6 Liter Summa Canister (SIM Certified) samples were received on March 16, 2012. 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	<pre><!--=30% RSD with 2 compounds allowed out to < 40% RSD</pre--></pre>	Project specific; default criteria is =30% RSD with 10% of compounds allowed out to < 40% RSD</td
Daily Calibration	+- 30% Difference	Project specific; default criteria is = 30% Difference<br with 10% of compounds allowed out up to =40%.; flag<br 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**

🛟 eurofins

There were no receiving discrepancies.

### **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 and/or LCS.
- 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



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

## **Client Sample ID: IAB-5**

## Lab ID#: 1203369A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.034	0.14	0.23	0.92
Client Sample ID: IAF-5				
Lab ID#: 1203369A-02A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.040	0.061	0.27	0.41



## Client Sample ID: IAB-5 Lab ID#: 1203369A-01A MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: Dil. Factor:	v031919sim 1.69	Date of Collection: 3/13/12 3:10:00 PM Date of Analysis: 3/19/12 09:42 PM				
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	0.14	0.23	0.92		
trans-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected		

#### Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogatos	%/Becovery	Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	103	70-130



## Client Sample ID: IAF-5 Lab ID#: 1203369A-02A MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: Dil. Factor:	v031920sim 1.99	Date of Collection: 3/13/12 3:08:00 PM Date of Analysis: 3/19/12 10:18 PM				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)		
Vinyl Chloride	0.020	Not Detected	0.051	Not Detected		
cis-1,2-Dichloroethene	0.040	Not Detected	0.16	Not Detected		
Trichloroethene	0.040	Not Detected	0.21	Not Detected		
Tetrachloroethene	0.040	0.061	0.27	0.41		
trans-1,2-Dichloroethene	0.20	Not Detected	0.79	Not Detected		

#### Container Type: 6 Liter Summa Canister (SIM Certified)

		Method Limits
Surrogates	%Recovery	
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	101	70-130



## Client Sample ID: Lab Blank Lab ID#: 1203369A-03A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: Dil. Factor:	v031906sim 1.00		Date of Collection: NA Date of Analysis: 3/19/12 12:30 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	

1

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



# Client Sample ID: CCV Lab ID#: 1203369A-04A

#### MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: v031902sim		Date of Collection: NA		
Dil. Factor:	1.00	Date of Analysis: 3/19/12 09:36 AM		
Compound		%Recovery		
Vinyl Chloride		85		
cis-1,2-Dichloroethene		91		
Trichloroethene		90		
Tetrachloroethene		89		
trans-1,2-Dichloroethene		91		

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	108	70-130



# Client Sample ID: LCS Lab ID#: 1203369A-05A

# MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	v031903sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/19/12 10:26 AM
Compound		%Recovery
Vinyl Chloride		101
cis-1,2-Dichloroethene		108
Trichloroethene		97
Tetrachloroethene		105
trans-1,2-Dichloroethene		120

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	103	70-130



# Client Sample ID: LCSD Lab ID#: 1203369A-05AA

# MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	v031904sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/19/12 11:17 AM
Compound		%Recovery
Vinyl Chloride		101
cis-1,2-Dichloroethene		106
Trichloroethene		95
Tetrachloroethene		102
trans-1,2-Dichloroethene		118

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	108	70-130

Form 1293 rev.11	Form									
	I			(						Unly
	3369	ne 1903	No None	Yes N	SON	CH C	1		NO OST	J es (
	Work Order #		seals Intau	Custody Seals Intact?	Condition	Temp (°C)	Te	Air Bill #	Shipper Name	Lab
	Ĕ,	(13 1, 2 100- TRANS-1, 2 - OCÉ	<u></u> д (		Q	re) Date/Time	Received by: (signature)	Reco	Relinquished by: (signature) Date/Time	Relinquished
	5- 17 17 17	ういしょう しょうかいてい しょうしょう しょうしょう しょうかい しょうかい しょうかい しょうかい うちょう うちょう うちょう うちょう うちょう うちょう うちょう うちょ	してする		υ	re) Date/Time	Received by: (signature)	Reco	Relinquished by: (signature) Date/Time	Relinquished
		REPORT.	ONLY R	) Notes: CH	16/12 MA	Date/T	Received by:/stgnature)	HHH	Relinquished by: (signature) Date/Time	Relinquished
		-								
		-24.0 - S.O	ě	TO - IS	1650	3/13/12	1703		SSV-2-5	
	3	-29.0 -5.0		10-15	HZ 91	3/13/12	34023		SSV-1-5	
	0	7-30,0 - 10,0	7	10-15	88	3/13/12	ht52		IAF-5	92.A
		-29-5-6-5		10-15	1210	3/13/12	4209		IAB-5	OLA
(psi)	Receipt	Initial Final	 	Analyses Requested	of Collection	of Callection of Collection	Can #	(Location)	Field Sample I.D. (Location)	Lab I.D.
MM	essure/Vaci	Canister Pressure/Vacuum			Time	Date				
	N ₂ He	specify	spec	on kipp	Project Name MADISON		5-7603	Fax 414-276-7603	414-276-7412	Phone 4(4
yas:	Pressurization Gas:		L Rush	Project # 200283,0001,00009	# WI CO128		EWE Zip 532	Mulu hones State	Address 126 N. JEFRICONST. STEPACity MULWANNEL State WE Zip 53202	Address 126 N
			]				Email JENNIE WAR CALINIS- S.C.	Email JENNINE?	ACAONS	Company ARCAONS
		(algebrasid	X Normal			P.O. #	ſ	SI Sinch	Collected by: (Print and Sign) TIM AUESS	Collected by:
	Lab Use Only Proceduized by		Turn Around		t Info:	Project Info:		TRASK.	Project Manager JENNINE TRASK	Project Mana
19 5-1020	NE ROAD, SUI CA 95630-4719 FAX (916) 985- Page 1 of	180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020 Page 1 of 1		<b>Sample Transportation Notice</b> 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	Sample Transportation Notice Relinquishing signature on this document indicates that sample is being shippy all applicable local, State, Federal, national, and international laws, regulation any kind. Air Toxics Limited assumes no liability with respect to the collection, of these samples. Relinquishing signature also indicates agreement to ho and indemnify Air Toxics Limited against any claim, demand, or action, of an collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922	<b>tice</b> Inational, and intens no liability with ignature also ind gainst any claim, or gamples. D.O.T. F	Sample Transportation Notice Relinquishing signature on this documen all applicable local, State, Federal, natio any kind. Air Toxics Limited assumes no of these samples. Relinquishing signat and indemnify Air Toxics Limited againsi collection, handling, or shipping of samp		CHAIN-OF-CUSTODY RECORD	CHAIN-OI

enterna – Weinersteinerer einen



3/28/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203369B

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/16/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Scott

Ausha Scott Project Manager

A Eurofins Lancaster Laboratories Company

Eurofins Air Toxics, Inc.

180 Blue Ravine Road, Suite B Folsom, CA 95630 T | 916-985-1000 F | 916-985-1020 www.airtoxics.com



## WORK ORDER #: 1203369B

#### Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	<b>P.O.</b> #	WI001283.0001.00009
FAX:	317-231-6514	PROJECT #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED:	03/16/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	03/28/2012	continent	Aushu Scott

			<b>KEUEIP</b> I	FINAL
FRACTION #	NAME	<u>TEST</u>	VAC./PRES.	<b>PRESSURE</b>
03A	SSV-1-5	Modified TO-15	5.0 "Hg	5 psi
04A	SSV-2-5	Modified TO-15	5.6 "Hg	5 psi
05A	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:

Sinda d. Fruman

03/28/12 DATE:

DECEIDT

**FINAT** 

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

> > Page 2 of 11

### LABORATORY NARRATIVE Modified TO-15 Arcadis U.S., Inc. Workorder# 1203369B

Two 6 Liter Summa Canister samples were received on March 16, 2012. 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
ICAL %RSD acceptance criteria	+- 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	= 30% Difference with four allowed out up to </=40%.; flag and narrate outliers</td
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
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

## **Receiving Notes**

🛟 eurofins

There were no receiving discrepancies.

## **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 and/or LCS.



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



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

## Client Sample ID: SSV-1-5

#### Lab ID#: 1203369B-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.16	1.4	1.1	9.3
Client Sample ID: SSV-2-5				
Lab ID#: 1203369B-04A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.16	0.32	1.1	2.2



# Client Sample ID: SSV-1-5 Lab ID#: 1203369B-03A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	v032013 1.61	Date of Collection: 3/13/12 4:24:00 P Date of Analysis: 3/20/12 06:31 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.16	Not Detected	0.41	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
Trichloroethene	0.16	Not Detected	0.86	Not Detected
Tetrachloroethene	0.16	1.4	1.1	9.3

٦

#### Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	100	70-130



# Client Sample ID: SSV-2-5 Lab ID#: 1203369B-04A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name: Dil. Factor:	v032015 1.65		of Collection: 3/1 of Analysis: 3/20	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.16	Not Detected	0.42	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.65	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.65	Not Detected
Trichloroethene	0.16	Not Detected	0.89	Not Detected
Tetrachloroethene	0.16	0.32	1.1	2.2

#### Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	97	70-130



# Client Sample ID: Lab Blank Lab ID#: 1203369B-05A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name: Dil. Factor:	v032006 1.00		of Collection: NA of Analysis: 3/20/	/12 12:43 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Trichloroethene	0.10	Not Detected	0.54	Not Detected
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	93	70-130



# Client Sample ID: CCV Lab ID#: 1203369B-06A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v032002	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/20/12 10:02 AM
Compound		%Recovery
Vinyl Chloride		93
trans-1,2-Dichloroethene		91
cis-1,2-Dichloroethene		94
Trichloroethene		106
Tetrachloroethene		99

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	105	70-130



# Client Sample ID: LCS Lab ID#: 1203369B-07A

Air Toxics

#### MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name:	v032003	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/20/12 10:46 AM
Compound		%Recovery
Vinyl Chloride		111
trans-1,2-Dichloroethene		120
cis-1,2-Dichloroethene		111
Trichloroethene		108
Tetrachloroethene		112

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	103	70-130



# Client Sample ID: LCSD

Air Toxics

Lab ID#: 1203369B-07AA

#### MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name:	v032004	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/20/12 11:28 AM
Compound		%Recovery
Vinyl Chloride		108
trans-1,2-Dichloroethene		116
cis-1,2-Dichloroethene		109
Trichloroethene		111
Tetrachloroethene		114

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

Form 1293 rev 11						
120336¥	0 None	Yes No			1	Only FED TX
Work Order #	als Intact	Custody Seals Intact?	Condition	Temp (°C)	Te	Lab Shipper Name Air Bill #
TRANS-1,2-OCE	Tra		ne	ıre) Date/Time	Received by: (signature)	Relinquished by: (signature) Date/Time
	122		ne	ure) Date/Time	Received by: (signature)	Relinquished by: (signature) Date/Time
REPORT.	ONLY RE	Notes:	ne 16/172 2700	Ire) Date/Time	Received by: (signature)	Relinquished by: (signature) Date/Time F
			· · · ·			
				, " Taari		
						in an
·71.0 - 5.0	2-	70-15	1650	3/13/12	1703	ORA SSV-2-5
29,0-5.0		170-15	1624	3/13/12	34023	03A SSV-1-5
-30.0 - 10.0	V	5101	88	2112112	HL SS	TAC-5
P1:5 - 6:5	-7	10-15	012	3/13/12	4209	IAB-5
Initial Final Receipt Final		Analyses Requested	of Collection	of Collection	Can #	Lab I.D. Field Sample I.D. (Location)
Canister Pressure/Vacuum	0		Time	Date		
y N ₂ He	specify	JUN KUPP	Project Name MADISON	Project		-276-7742 Fax 414-2
Pressurization Gas:	🗋 Rush	5,0001,00009	t# UT 001293	Project #	LIMAIN CRUMPER VIEW CALLAND STOR	Company <u>FREE TO SEPECITY MANAGE</u>
ial Date:	🖾 Normal			P.O. #	- L Contraction	by: (Print and Sign) TIA AUX SSI
Sund         Lab Use Only           Pressurized by:         Pressurized by:	Turn Around Time:	· · · · · · · · · · · · · · · · · · ·	Project Info:	Proje		Project Manager JFNUWE TRASK
180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020 Page of		<b>Sample Transportation Notice</b> 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	that sample is being s tternational laws, regu th respect to the collec ndicates agreement t 1, demand, or action, 1 . Hotline (800) 467-49	viice ument indicates national, and in es no liability wit signature also ir gainst any claim samples. D.O.T.	Sample Transportation Notice Relinquishing signature on this document indicates that sample is being ship all applicable local, State, Federal, national, and international laws, regular any kind. Air Toxics Limited assumes no liability with respect to the collectic of these samples. Relinquishing signature also indicates agreement to the and indemnify Air Toxics Limited against any claim, demand, or action, of collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922	CHAIN-OF-CUSTODY RECORD Cleritor, h

ł



4/1/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203427A

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/20/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Scott

Ausha Scott Project Manager

A Eurofins Lancaster Laboratories Company

Eurofins Air Toxics, Inc.

180 Blue Ravine Road, Suite B Folsom, CA 95630 T | 916-985-1000 F | 916-985-1020 www.airtoxics.com



## WORK ORDER #: 1203427A

#### Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	<b>P.O.</b> #	WI001283.0001.00009
FAX:	317-231-6514	<b>PROJECT</b> #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED:	03/20/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	04/01/2012	connen	Ausilu Scott

			<b>NECEIFI</b>	FINAL
FRACTION #	NAME	TEST	VAC./PRES.	PRESSURE
01A	IAB-6	Modified TO-15 SIM	7.5 "Hg	5 psi
02A	IAF-6	Modified TO-15 SIM	7.5 "Hg	5 psi
03A	Lab Blank	Modified TO-15 SIM	NA	NA
04A	CCV	Modified TO-15 SIM	NA	NA
05A	LCS	Modified TO-15 SIM	NA	NA
05AA	LCSD	Modified TO-15 SIM	NA	NA

CERTIFIED BY:

Sinda d. Fruman

04/01/12 DATE:

DECEIDT

**FINAT** 

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

> > Page 2 of 11

### LABORATORY NARRATIVE Modified TO-15 SIM Arcadis U.S., Inc. Workorder# 1203427A

Two 6 Liter Summa Canister (SIM Certified) samples were received on March 20, 2012. 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	<pre><!--=30% RSD with 2 compounds allowed out to < 40% RSD</pre--></pre>	Project specific; default criteria is =30% RSD with 10% of compounds allowed out to < 40% RSD</td
Daily Calibration	+- 30% Difference	Project specific; default criteria is = 30% Difference<br with 10% of compounds allowed out up to =40%.; flag<br 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**

🛟 eurofins

There were no receiving discrepancies.

## **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 and/or LCS.
- 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



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

## Client Sample ID: IAB-6

## Lab ID#: 1203427A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.036	0.046	0.24	0.31
Client Sample ID: IAF-6				
Lab ID#: 1203427A-02A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.036	0.045	0.24	0.30



# Client Sample ID: IAB-6 Lab ID#: 1203427A-01A MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: Dil. Factor:	v032122sim 1.79	Date of Collection: 3/15/12 8:1 Date of Analysis: 3/21/12 11:13		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	Not Detected	0.046	Not Detected
cis-1,2-Dichloroethene	0.036	Not Detected	0.14	Not Detected
Trichloroethene	0.036	Not Detected	0.19	Not Detected
Tetrachloroethene	0.036	0.046	0.24	0.31
trans-1,2-Dichloroethene	0.18	Not Detected	0.71	Not Detected

#### Container Type: 6 Liter Summa Canister (SIM Certified)

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	107	70-130



# Client Sample ID: IAF-6 Lab ID#: 1203427A-02A MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: Dil. Factor:	v032123sim 1.79	Date of Collection: 3/15/12 8:11:00 Date of Analysis: 3/21/12 11:52 PI		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	Not Detected	0.046	Not Detected
cis-1,2-Dichloroethene	0.036	Not Detected	0.14	Not Detected
Trichloroethene	0.036	Not Detected	0.19	Not Detected
Tetrachloroethene	0.036	0.045	0.24	0.30
trans-1,2-Dichloroethene	0.18	Not Detected	0.71	Not Detected

#### Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	104	70-130



# Client Sample ID: Lab Blank Lab ID#: 1203427A-03A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: Dil. Factor:	v032106sim 1.00	Date of Collection: NA Date of Analysis: 3/21/12 11:49 AM		/12 11:49 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

1

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	96	70-130



# Client Sample ID: CCV Lab ID#: 1203427A-04A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:v032102simDil. Factor:1.00		Date of Collection: NA Date of Analysis: 3/21/12 08:58 AM	
Vinyl Chloride		84	
cis-1,2-Dichloroethene		91	
Trichloroethene		92	
Tetrachloroethene		90	
trans-1,2-Dichloroethene		91	

		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	104	70-130	
Toluene-d8	99	70-130	
4-Bromofluorobenzene	110	70-130	



# Client Sample ID: LCS Lab ID#: 1203427A-05A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	v032103sim	Date of Collection: NA		
Dil. Factor:	1.00	Date of Analysis: 3/21/12 09:48 AM		
Compound		%Recovery		
Vinyl Chloride		100		
cis-1,2-Dichloroethene		106		
Trichloroethene		96		
Tetrachloroethene		103		
trans-1,2-Dichloroethene		118		

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	109	70-130



# Client Sample ID: LCSD Lab ID#: 1203427A-05AA MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: Dil. Factor:	v032104sim	Date of Collection: NA		
DII. Factor:	1.00	Date of Analysis: 3/21/12 10:32 AM		
Compound		%Recovery		
Vinyl Chloride		100		
cis-1,2-Dichloroethene		106		
Trichloroethene		96		
Tetrachloroethene		104		
trans-1,2-Dichloroethene		118		

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	109	70-130

form 1293 rev.11							
		K					Only we cy
1203407	None	Yes No	Cleo y	AN T	022)	TYX 184	Use Tod 7+2
Work Order #	Ils Intact?	Custody Seals Intact?	Condition	Temp (°C)	_	Air Bill #	Lab Shipper Name
OCE	TROMS 1, 2 - DCE		ō	ŀ	ופכפועפת אלי (אולוושמט ב)		nelinquisited by. (signature)
S - DCF			ត	nra) Date/Time	Jongived by: (cinnat	-	Dolinguishod by: (classification)
	TCE		ē	ure) Date/Time	Received by: (signature)	Date/Time	Relinquished by: (signature)
	report,	Our Report	10 072-5	ure) Date/Time えどれる	Received by: (signature)	Date/Time	Relinquished by: (signature)
-7.0	-30,0	70-15	140	3/16/12	1149	3-2-6	- NSS
-5,0	-28.0	10-15	5HL	3/16/12	34754	-1-6	SS
0.8-	-30,0	70-15	81	3/15/12	30834	IAF-6	TI TI
-6.0	-27.0	10-15	11/8	3/15/12	1276	IAB-6	JA J
Final Receipt Final	ed Initial	Analyses Requested	of Collection	of Collection of Collection	Can #	Field Sample I.D. (Location)	Lab I.D. Field S
Canister Pressure/Vacuum	Canist	-	Time	Date			
N ₂ He	specify	NUR NUR	Project Name MIRONSCIA	Project	-276-7603	Fax 414	Phone 414-276-7742
Pressurization Gas:	L Rush	$Project # \underbrace{\mathbf{v} TCC(\mathcal{U}\mathcal{B}\mathcal{S},\mathcal{CC}\mathcal{D})}_{\mathcal{C}\mathcal{C}\mathcal{U}\mathcal{D}}$	# UTOOIU		State J Zip 5) 202	126 N. JEFFICEUSIJSELOO City MULWIMME	Address 126 N. JEHIKSUS
Dale.					Email TRULOC. MASKE ALLADIS - S. 101-4		Company ARCADIS
		~ 1		P.O. #		IM ALASSI -	Collected by: (Print and Sign)
Lab Use Only Pressurized by:	Turn Around Time:		x Info:	Project Info:		NINE TRASK	Project Manager JENNINE TRASK
180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020 Page of	180 BLUE R FOLSO (916) 985-10	<b>Sample Transportation Notice</b> 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 indemnity 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	that sample is being ernational laws, re r respect to the col dicates agreemen dicates agreemen dicates (800) 467-	otice curnent indicates t , national, and int nes no liability with signature also in against any claim, f samples. D.O.T.	Sample Transportation Notice Relinquishing signature on this document indicates that sample is being shipps all applicable local, State, Federal, national, and international laws, regulation any kind. Air Toxics Limited assumes no liability with respect to the collection, of these samples. Relinquishing signature also indicates agreement to hol and indemnify Air Toxics Limited against any claim, demand, or action, of an collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922		CHAIN-OF-CUSTODY RECORD



4/1/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203427B

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/20/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Scott

Ausha Scott Project Manager

A Eurofins Lancaster Laboratories Company

Eurofins Air Toxics, Inc.

180 Blue Ravine Road, Suite B Folsom, CA 95630 T | 916-985-1000 F | 916-985-1020 www.airtoxics.com



## WORK ORDER #: 1203427B

#### Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	<b>P.O.</b> #	WI001283.0001.00009
FAX:	317-231-6514	PROJECT #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED:	03/20/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	04/01/2012	continent	Aushu Scott

			<b>KEUEIP</b> I	FINAL
FRACTION #	NAME	<u>TEST</u>	VAC./PRES.	<b>PRESSURE</b>
03A	SSV-1-6	Modified TO-15	5.5 "Hg	5 psi
04A	SSV-2-6	Modified TO-15	6.0 "Hg	5 psi
05A	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:

Sinda d. Fruman

04/01/12 DATE:

DECEIDT

**FINAT** 

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

> > Page 2 of 11

### LABORATORY NARRATIVE Modified TO-15 Arcadis U.S., Inc. Workorder# 1203427B

Two 6 Liter Summa Canister samples were received on March 20, 2012. 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
ICAL %RSD acceptance criteria	+- 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	= 30% Difference with four allowed out up to </=40%.; flag and narrate outliers</td
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
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

## **Receiving Notes**

🛟 eurofins

There were no receiving discrepancies.

## **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 and/or LCS.



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



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

## Client Sample ID: SSV-1-6

## Lab ID#: 1203427B-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.16	5.8	1.1	40
Client Sample ID: SSV-2-6				
Lab ID#: 1203427B-04A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.17	0.79	1.1	5.3



# Client Sample ID: SSV-1-6 Lab ID#: 1203427B-03A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:         e032215           Dil. Factor:         1.64		Date of Collection: 3/16/12 7:43:00 AM Date of Analysis: 3/22/12 08:09 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.16	Not Detected	0.42	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.65	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.65	Not Detected
Trichloroethene	0.16	Not Detected	0.88	Not Detected
Tetrachloroethene	0.16	5.8	1.1	40

٦

#### Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	108	70-130



# Client Sample ID: SSV-2-6 Lab ID#: 1203427B-04A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name: Dil. Factor:	e032216         Date of Collection: 3/16/12 8:4           1.68         Date of Analysis: 3/22/12 09:0			
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.17	Not Detected	0.43	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
cis-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Trichloroethene	0.17	Not Detected	0.90	Not Detected
Tetrachloroethene	0.17	0.79	1.1	5.3

#### Container Type: 6 Liter Summa Canister

		Method Limits
Surrogates	%Recovery	
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	113	70-130



# Client Sample ID: Lab Blank Lab ID#: 1203427B-05A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name: Dil. Factor:	e032206 1.00			e of Collection: NA e of Analysis:  3/22/12 12:55 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected	
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected	
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected	
Trichloroethene	0.10	Not Detected	0.54	Not Detected	
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected	

		Method Limits	
Surrogates	%Recovery		
1,2-Dichloroethane-d4	112	70-130	
Toluene-d8	97	70-130	
4-Bromofluorobenzene	104	70-130	



### Client Sample ID: CCV Lab ID#: 1203427B-06A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: e032202		Date of Collection: NA		
Dil. Factor:	1.00	Date of Analysis: 3/22/12 10:00 AM		
Compound		%Recovery		
Vinyl Chloride		98		
trans-1,2-Dichloroethene		104		
cis-1,2-Dichloroethene		108		
Trichloroethene		105		
Tetrachloroethene		112		

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	112	70-130



### Client Sample ID: LCS Lab ID#: 1203427B-07A

Air Toxics

#### **MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN** File Name: **Date of Collection: NA** e032203 Dil. Factor: 1.00 Date of Analysis: 3/22/12 10:43 AM %Recovery Compound Vinyl Chloride 109 trans-1,2-Dichloroethene 118 112 cis-1,2-Dichloroethene 98 Trichloroethene 109 Tetrachloroethene

		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	115	70-130	
Toluene-d8	101	70-130	
4-Bromofluorobenzene	111	70-130	



# Client Sample ID: LCSD

Air Toxics

Lab ID#: 1203427B-07AA

### MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

1

File Name: e032204		Date of Collection: NA		
Dil. Factor:	1.00 Date of Analysis:			
Compound		%Recovery		
Vinyl Chloride		103		
trans-1,2-Dichloroethene		118		
cis-1,2-Dichloroethene		113		
Trichloroethene		96		
Tetrachloroethene		107		

		Method		
Surrogates	%Recovery	Limits		
1,2-Dichloroethane-d4	106	70-130		
Toluene-d8	102	70-130		
4-Bromofluorobenzene	105	70-130		

Manager       TTE HULWE       TLA ASX       Project Info:       Turn Arr po. #         ab by: (rem and set)       Email: Suster, L, RASK, M, MARS, M, MA								Conty
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	None	$\bigvee$		N LL	No.	- ±SRY 1862	ted by	2 See
TERMINE TRASK       Project Info:       Turn Ar         AOIS       Email Turn, Ar, CSSI       Project Info:       Pr	s Intact?	Custody Seals	Condition	3210323000		Air Bill #	Shipper Name	Lab
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	and an		me		Received by: (signa	ate/Time		Relinquish
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			me		Received by: (signa	ate/Time		Relinquish
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	EPONT	ONCY R	2501	I.V.		G		Helinquisn
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		Niotoo.					and the second se	
TELNUME TLASK       Project Info:       Turn Ar         and sign       TIM       HLESSI       Polect Info:       Time         ADIS       Email Transmut Takke Micross-Scient       Polect # Littocite3.acc) + courd       A Nor         ADIS       Email Transmut Takke Micross-Scient       Project # Littocite3.acc) + courd       A Nor         Project # Littocite3.acc) + courd       Project Name       A Nor       A Nor         Project Name       Macross-Scient       Project Name       A Nor       A Nor         Project Name       Macross-Scient       Project Name       A Nor       A Nor         TAB-6       Tar       11576       Sits/12       B H       TO - 15       Analyses Requested       Analyses Requested         TAF-6       34754       3/16/12       7413       TO - 15       A         SSU -1-6       34754       3/16/12       8411       TO - 15       A         SSU -2-6       1144       3/16/12       8411       TO - 15       A								
TELNULE TLASK       Project Info:       Turn Ar         and sign       TIM       RECSS       Email       Project       Project Info:       Image: State       Image: State       Image: State       Project       Image: State								
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $								
TE NNIME TRASKProject Info:Turm Ar Timand signTIMMCSSIProject Info:TimAOLSEmailEmailEmailProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectProjectPr							ų.	
Tre UNINE TRASKProject Info:Turn Ar Timand signTIMM.R.CSSEmail TOWAL TRASKM.A.005-S. sourdProject # Project # UTDA163.2001.0009Q NorrADISEmail TOWAL WALLERState UTZip 57.202Project # 								
TE NUME TRASKProject Info:Turn Ar TimA0/SEmail Email Email TANCE State - 276-7747Email FaxZip 57202Project # UTCORE State Project # Project Name Froject Name 	0.6-0.05	70-1-5	128	0		2-6	- 755	APIC
TENNUE TRASK       Project Info:       Turn Ar         ADIS       Email       Email       Email       Project Info:       Project Info:       Time         ADIS       Email       State       Zip       Size       Project Info:       Project Info:       Time         ADIS       Email       State       Zip       Size       Project Info:       Project Info: </td <td>-28.0 -5.0</td> <td>51 - CAL</td> <td>2HZ</td> <td>0</td> <td>34754</td> <td>5-</td> <td>- USS</td> <td>A 20</td>	-28.0 -5.0	51 - CAL	2HZ	0	34754	5-	- USS	A 20
TELNINE TRASK     Project Info:     Turn Ar       and Sign     TIM     BRGSS     Email: TOURDE State     P.O. #     P.O. #     P.O. #     Project # Lutoarc83.000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .0000   .00000   .0000   .0000   .0000   .	-30.0 -8.0	2-07	3	N.	30839		TAT	
TENNINE TRASK     Project Info:     Turn Ar       and Sign     TIM     MCSSI     Email: TURNE MCNOS-Score     P.O. #     P.O. #     P.O. #     P.O. #     Project Info:     P.O. #     P.O. #     P.O. #     P.O. #     P.O. #     Project Info:     P.O. #     P.O. #     P.O. #     Project #     Project #     Project #     P.O. #     Project # </td <td>-27.0 -6.0</td> <td>21-01</td> <td>e F</td> <td>ICA  </td> <td>7421</td> <td>5</td> <td>HAR</td> <td></td>	-27.0 -6.0	21-01	e F	ICA	7421	5	HAR	
TEWNING TRASK     Project Info:     Turn Ar       and Sign     TIM     MCSS     Email: TURNE MCNOS-Score     P.O. #     P.O.		Analyses Requester		of Collection	Can #	ple I.D. (Location)	Field Sam	Lab I.D.
TENNINE TRASK     Project Info:       and Sign     TIM     RECSSI     P.O. #       ADIS     Email: TRASK RECAUS-S.com     P.O. #       Email: TRASK RECAUS-S.com     Project Info:       Email: TRASK RECAUS-S.com     Project Info:       Project Info:     P.O. #       Email: TRASK RECAUS-S.com     Project Info:       Project Info:     Project Info:	Canister Pressure/Vacuum	•	Time	Date				
TENNUE TRASK Project Info: and Sign) THM ARESS C P.O. # PO. # Project # LITOO (283,000) .0009 Project # LITOO (283,000) .0009	specify	30		Projec		Ĺ	1 1 4	hone
and Sign) TTM RUCSS Project Info:	J Rush	icoart			State	W City My what		- 74CM
JENNINE TRASK Project Info:	J Normal				mon American A Carlos and State (All) San Y			Collected b
	urn Around Time:	1	ect Info:	Proje			1	^o roject Ma



3/28/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203370A

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/16/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Scott

Ausha Scott Project Manager

A Eurofins Lancaster Laboratories Company

Eurofins Air Toxics, Inc.

180 Blue Ravine Road, Suite B Folsom, CA 95630 T | 916-985-1000 F | 916-985-1020 www.airtoxics.com



### WORK ORDER #: 1203370A

#### Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	<b>P.O.</b> #	WI001283.0001.00009
FAX:	317-231-6514	<b>PROJECT</b> #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED:	03/16/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	03/28/2012	continen	Ausilu Scott

			<b>NECEIFI</b>	FINAL
FRACTION #	NAME	TEST	VAC./PRES.	<b>PRESSURE</b>
01A	IAB-7	Modified TO-15 SIM	5.4 "Hg	5 psi
02A	IAF-7	Modified TO-15 SIM	9.0 "Hg	5 psi
03A	Lab Blank	Modified TO-15 SIM	NA	NA
04A	CCV	Modified TO-15 SIM	NA	NA
05A	LCS	Modified TO-15 SIM	NA	NA
05AA	LCSD	Modified TO-15 SIM	NA	NA

CERTIFIED BY:

Sinda d. Fruman

03/28/12 DATE:

DECEIDT

**FINAT** 

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

> > Page 2 of 11

### LABORATORY NARRATIVE Modified TO-15 SIM Arcadis U.S., Inc. Workorder# 1203370A

Two 6 Liter Summa Canister (SIM Certified) samples were received on March 16, 2012. 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	<pre><!--=30% RSD with 2 compounds allowed out to < 40% RSD</pre--></pre>	Project specific; default criteria is =30% RSD with 10% of compounds allowed out to < 40% RSD</td
Daily Calibration	+- 30% Difference	Project specific; default criteria is = 30% Difference<br with 10% of compounds allowed out up to =40%.; flag<br 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**

🛟 eurofins

There were no receiving discrepancies.

### **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 and/or LCS.
- 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



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

**Client Sample ID: IAB-7** 

Lab ID#: 1203370A-01A No Detections Were Found.

**Client Sample ID: IAF-7** 

Lab ID#: 1203370A-02A No Detections Were Found.



### Client Sample ID: IAB-7 Lab ID#: 1203370A-01A MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: Dil. Factor:	v031921sim 1.63		Date of Collection: 3/13/12 5:03:00 PM Date of Analysis: 3/19/12 10:55 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	Not Detected	0.18	Not Detected	
Tetrachloroethene	0.033	Not Detected	0.22	Not Detected	
trans-1,2-Dichloroethene	0.16	Not Detected	0.65	Not Detected	

### Container Type: 6 Liter Summa Canister (SIM Certified)

	<b>**D</b>	Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	102	70-130



### Client Sample ID: IAF-7 Lab ID#: 1203370A-02A MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: Dil. Factor:			ate of Collection: 3/13/12 5:02:00 PM ate of Analysis: 3/20/12 08:43 AM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.019	Not Detected	0.049	Not Detected
cis-1,2-Dichloroethene	0.038	Not Detected	0.15	Not Detected
Trichloroethene	0.038	Not Detected	0.20	Not Detected
Tetrachloroethene	0.038	Not Detected	0.26	Not Detected
trans-1,2-Dichloroethene	0.19	Not Detected	0.76	Not Detected

### Container Type: 6 Liter Summa Canister (SIM Certified)

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	100	70-130



### Client Sample ID: Lab Blank Lab ID#: 1203370A-03A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: Dil. Factor:	v031906sim 1.00	Date of Collection: NA Date of Analysis: 3/19/12 12:30 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

1

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



### Client Sample ID: CCV Lab ID#: 1203370A-04A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: Dil. Factor:	v031902sim 1.00	Date of Collection: NA Date of Analysis: 3/19/12 09:36 AM
Compound		%Recovery
Vinyl Chloride		85
cis-1,2-Dichloroethene		91
Trichloroethene		90
Tetrachloroethene		89
trans-1,2-Dichloroethene		91

		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	102	70-130	
Toluene-d8	99	70-130	
4-Bromofluorobenzene	108	70-130	



### Client Sample ID: LCS Lab ID#: 1203370A-05A

### MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name:	v031903sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/19/12 10:26 AM
Compound		%Recovery
Vinyl Chloride		101
cis-1,2-Dichloroethene		108
Trichloroethene		97
Tetrachloroethene		105
trans-1,2-Dichloroethene		120

		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	101	70-130	
Toluene-d8	98	70-130	
4-Bromofluorobenzene	103	70-130	



### Client Sample ID: LCSD Lab ID#: 1203370A-05AA

### MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name:	v031904sim	Date of Collection: NA
Dil. Factor:	1.00 Date of Analysis: 3/19/12 11	
Compound		%Recovery
Vinyl Chloride		101
cis-1,2-Dichloroethene		106
Trichloroethene		95
Tetrachloroethene		102
trans-1,2-Dichloroethene		118

		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	101	70-130	
Toluene-d8	100	70-130	
4-Bromofluorobenzene	108	70-130	

Form 1293 rev.11								
203370	None <u>1</u>	Yes No	CaSE	NIA S			FRED ES	Only
Work Order #		Custody Seals Intact?	Condition	Temp (°C)	L	Air Bill #	Shipper Name	Lab
- DCE	CIS-172-DCE TRANS-1/2-DCE		1e	ture) Date/Time	Received by: (signature)		Relinquished by: (signature) Date/Time	Relinquis
CARCIELDE	TCE		ιθ	ture)	Récéived by: (signature)		Relinquished by: (signature) Date/Time	Relinquis
<b>v</b>	ONLY REPORT.	000	2 0900	1.1	W CM	IHHA	11	-
		Notes:	le	ture) Date/Time	Recejųearby: (signature)		Relinquished by: (signature) Date/Time	Relinquis
							1 <u>12</u> 71, UKS2	
		Å.						
S S S	~ S'82~	10-15	1825	3/14/12	30841		f-2-155	
-5,0	-245-	T0-15	02.81	3/14/12	36049		F-1-72	
-9,5	>-30.0 -	T0-15	1702	3/13/12	32125	X	TAF-7	024
-5.0	5'82-	70-13	1703	3/13/12	£697		IAB-7	0( A
Final Receipt Final (ps)	Initial	Analyses Requested	of Collection	of Collection of Collection	Can #	D. (Location)	Field Sample I.D. (Location)	Lab I.D.
Canister Pressure/Vacuum	Caniste		Time	Date			<u>制制 标准的</u>	
N ₂ He	specify	ON KUPP	Project Name MRDISON		414-276-7603	and the second	414-276-7712	Phone
Pressurization Gas:	Husn	1.24	22) 00 t Cu #		State WI Zip 53202	IN MULINAULEE Sta	Address 120 N. JEFFERSON ST., STECKED City MULWAUKEE	Address 🔀
					Email JELUWE. TEARLE ARCHOIS J. C.M	Emailorywe	Company RECADIS	Company.
		xí I		P.O. #	2C-+	3	Collected by: (Print and Sign)	Collected
Lab Use Only Pressurized by:	Turn Around	Т	xt Info:	Project Info:		TRASK	Project Manager JENNINE TRASK	Project N
Page 1 of 1		of these samples. Relinquishing signature also indicates agreement to hold harmless, deterind, 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	of these samples. Relinquishing signature also indicates agreement to n and indemnify Air Toxics Limited against any claim, demand, or action, of a collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922	signature also in against any claim, f samples. D.O.T.	Air Toxics Limited Air oxics Limited dling, or shipping o		CHAIN-OF-CUSTODY RECORD	CHAIN
180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020	180 BLUE RA FOLSON (916) 985-100		Sample Transportation Notice Relinquishing signature on this document indicates that sample is being shipp all applicable local, State, Federal, national, and international laws, regulation any kind. Air Toxics Limited assumes no liability with respect to the collection,	otice cument indicates t I, national, and int nes no liability with	Sample Transportation Notice Relinquishing signature on this documen all applicable local, State, Federal, natio any kind. Air Toxics Limited assumes no		Toxics LTD.	<b>(b</b> )
					1			



3/30/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203370B

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/16/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Scott

Ausha Scott Project Manager

A Eurofins Lancaster Laboratories Company

Eurofins Air Toxics, Inc.

180 Blue Ravine Road, Suite B Folsom, CA 95630 T | 916-985-1000 F | 916-985-1020 www.airtoxics.com



### WORK ORDER #: 1203370B

#### Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	<b>P.O.</b> #	WI001283.0001.00009
FAX:	317-231-6514	<b>PROJECT</b> #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED:	03/16/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	03/30/2012	continent	Ausia Scott

			RECEIPT	FINAL
FRACTION #	NAME	<u>TEST</u>	VAC./PRES.	<b>PRESSURE</b>
03A	SSV-1-7	Modified TO-15	4.4 "Hg	5 psi
04A	SSV-2-7	Modified TO-15	3.6 "Hg	5 psi
05A	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:

Sinda d. Fruman

03/30/12 DATE:

DECEIDT

**FINAT** 

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

> > Page 2 of 11

### LABORATORY NARRATIVE Modified TO-15 Arcadis U.S., Inc. Workorder# 1203370B

Two 6 Liter Summa Canister samples were received on March 16, 2012. 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
ICAL %RSD acceptance criteria	+- 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	= 30% Difference with four allowed out up to </=40%.; flag and narrate outliers</td
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
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

### **Receiving Notes**

🛟 eurofins

There were no receiving discrepancies.

### **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 and/or LCS.



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



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

### Client Sample ID: SSV-1-7

### Lab ID#: 1203370B-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
Tetrachloroethene	0.16	0.18	1.1	1.2	-

Client Sample ID: SSV-2-7

Lab ID#: 1203370B-04A

No Detections Were Found.



### Client Sample ID: SSV-1-7 Lab ID#: 1203370B-03A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	v032016 1.57		of Collection: 3/1 of Analysis: 3/20/	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.16	Not Detected	0.40	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.62	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.62	Not Detected
Trichloroethene	0.16	Not Detected	0.84	Not Detected
Tetrachloroethene	0.16	0.18	1.1	1.2

٦

### Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	102	70-130



### Client Sample ID: SSV-2-7 Lab ID#: 1203370B-04A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	v032019 1.52		of Collection: 3/1 of Analysis: 3/20/	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.15	Not Detected	0.39	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	0.60	Not Detected
cis-1,2-Dichloroethene	0.15	Not Detected	0.60	Not Detected
Trichloroethene	0.15	Not Detected	0.82	Not Detected
Tetrachloroethene	0.15	Not Detected	1.0	Not Detected

٦

### Container Type: 6 Liter Summa Canister

Summertee	1/ Decement	Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	97	70-130



### Client Sample ID: Lab Blank Lab ID#: 1203370B-05A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name: Dil. Factor:	v032006 1.00		of Collection: NA of Analysis: 3/20/	/12 12:43 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Trichloroethene	0.10	Not Detected	0.54	Not Detected
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected

		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	105	70-130	
Toluene-d8	95	70-130	
4-Bromofluorobenzene	93	70-130	



### Client Sample ID: CCV Lab ID#: 1203370B-06A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v032002	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/20/12 10:02 AM
Compound		%Recovery
Vinyl Chloride		93
trans-1,2-Dichloroethene		91
cis-1,2-Dichloroethene		94
Trichloroethene		106
Tetrachloroethene		99

		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	103	70-130	
Toluene-d8	100	70-130	
4-Bromofluorobenzene	105	70-130	



### Client Sample ID: LCS Lab ID#: 1203370B-07A

Air Toxics

### MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name: v032003		Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 3/20/12 10:46 AM	
Compound		%Recovery	
Vinyl Chloride		111	
trans-1,2-Dichloroethene		120	
cis-1,2-Dichloroethene		111	
Trichloroethene		108	
Tetrachloroethene		112	

		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	104	70-130	
Toluene-d8	99	70-130	
4-Bromofluorobenzene	103	70-130	



## Client Sample ID: LCSD

Air Toxics

Lab ID#: 1203370B-07AA

### MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name:	v032004	Date of Collection: NA				
Dil. Factor:	1.00	Date of Analysis: 3/20/12 11:28 AM				
Compound		%Recovery				
Vinyl Chloride		108				
trans-1,2-Dichloroethene		116				
cis-1,2-Dichloroethene		109				
Trichloroethene		111				
Tetrachloroethene		114				

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

Use Only	Lab Shipp	Relinquished by: (signature)	Relinquished by: (signature)	autoria (1998) autoria (1998)	Relinquished by: (signature)					Off	oSA			Lab I.D.		Phone (4)	N. JEE	Company A.P.C.	Collected by: (Print and Sign) TT NA	Project Manager	CHAIN-OF-C
S S S S S S S S S S S S S S S S S S S	Shipper Name	signature) Date/Time	signature) Date/Time	= = = = = = = = = = = = = = = = = = = =	signature) Date/Time			4	ätur(i,γ.).	5-2-7	F-1-122	TAF-7	TAA-7	Field Sample I.D. (Location)		276-77412 Fax	, Sti 400 City Mul	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	S	TT JUNN TT ASK	CHAIN-OF-CUSTODY RECORD
	Air Bill #	Received by: (signature)	Received by: (signature)	CAL BHA	Received by: (signature)					3084	36049	32122	£695	ation) Can #	-	414-276-760	www.cer State	Email. TO MARKE ALCODIS-US.C.M	more of the formation		<b>Sample Transportation Notice</b> 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
	Temp (°C)	ignature) Date/Time	ignature) Date/IIme		ignature) Date/Time		e e Y			3/14/12	211412	5 3/13/12	3/13/12	of Collection	Date	Project N	STOC Project #(	NOIS-% C#A	])	Project Info:	in Notice is document indicates the deral, national, and inter issumes no liability with r hing signature also indi tited against any claim, d ing of samples. D.O.T. H
1220	Condition			0900		 				1825	0281	1702	703	of Collection	Time	Project Name MADISON	Man (2			Info:	at sample is being rnational laws, reg respect to the colle cates agreement Jemand, or action lemand, of action
Yes No	Custody Seals Intact?			ONCX	Notes:					70-15	TOZS	70-15	10-15	Analyses Requested	. •	ON KIPP	10000, 1000 P		and the second		shipped in compliance with gulations and ordinances of ection, handling or shipping to hold harmless, defend, , of any kind, related to the t922
None	als Intact?	CIS-172-DCE TRANS-1/2-DCE		2						2,97~	-215-	>-30.0	-78,5	ted Initial	Canis	specify	Rush	KI Normal	Time:	Turn Around	
120337	Work Order #	12-0CE	CHURCH DE	4 	·					• 5,0	0.2	5,6-	0.5	Final Receipt	Canister Pressure/Vacuum	N ₂	Pressurization Gas:	Date:	Pressurized by	Lab Use Only	180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020 Page of
	#													ipt Final (psi)	Vacuum	Чe	on Gas:		by:		0, SUITE B -4719 ) 985-1020 of ↓



3/28/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203368A

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/16/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Scott

Ausha Scott Project Manager

A Eurofins Lancaster Laboratories Company

Eurofins Air Toxics, Inc.

180 Blue Ravine Road, Suite B Folsom, CA 95630 T | 916-985-1000 F | 916-985-1020 www.airtoxics.com



### WORK ORDER #: 1203368A

#### Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	<b>P.O.</b> #	WI001283.0001.00009
FAX:	317-231-6514	<b>PROJECT</b> #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED:	03/16/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	03/28/2012	continen	Ausilu Scott

			<b>KEUEIF</b> I	FINAL
FRACTION #	NAME	<u>TEST</u>	VAC./PRES.	PRESSURE
01A	IAB-8	Modified TO-15 SIM	7.6 "Hg	5 psi
02A	IAF-8	Modified TO-15 SIM	11.2 "Hg	5 psi
03A	Lab Blank	Modified TO-15 SIM	NA	NA
04A	CCV	Modified TO-15 SIM	NA	NA
05A	LCS	Modified TO-15 SIM	NA	NA
05AA	LCSD	Modified TO-15 SIM	NA	NA

CERTIFIED BY:

Sinda d. Fruman

03/28/12 DATE:

DECEIDT

**FINAT** 

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

> > Page 2 of 11

### LABORATORY NARRATIVE Modified TO-15 SIM Arcadis U.S., Inc. Workorder# 1203368A

Two 6 Liter Summa Canister (SIM Certified) samples were received on March 16, 2012. 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	<pre><!--=30% RSD with 2 compounds allowed out to < 40% RSD</pre--></pre>	Project specific; default criteria is =30% RSD with 10% of compounds allowed out to < 40% RSD</td
Daily Calibration	+- 30% Difference	Project specific; default criteria is = 30% Difference<br with 10% of compounds allowed out up to =40%.; flag<br 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**

🛟 eurofins

There were no receiving discrepancies.

### **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 and/or LCS.
- 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



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

### **Client Sample ID: IAB-8**

### Lab ID#: 1203368A-01A

Compound	Rpt. Limit	Amount	Rpt. Limit	Amount
	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Tetrachloroethene	0.036	0.036	0.24	0.25

**Client Sample ID: IAF-8** 

Lab ID#: 1203368A-02A No Detections Were Found.



### Client Sample ID: IAB-8 Lab ID#: 1203368A-01A MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: Dil. Factor:	v031917sim 1.79	Date of Collection: 3/14/12 7:02:00 AM Date of Analysis: 3/19/12 08:22 PM						
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)				
Vinyl Chloride	0.018	Not Detected	0.046	Not Detected				
cis-1,2-Dichloroethene	0.036	Not Detected	0.14	Not Detected				
Trichloroethene	0.036	Not Detected	0.19	Not Detected				
Tetrachloroethene	0.036	0.036	0.24	0.25				
trans-1,2-Dichloroethene	0.18	Not Detected	0.71	Not Detected				

### Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
Surroyates	/orcecovery	Lilling
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	103	70-130



### Client Sample ID: IAF-8 Lab ID#: 1203368A-02A MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: Dil. Factor:	v031918sim 2.14	Date of Collection: 3/14/12 7:00:00 AM Date of Analysis: 3/19/12 09:05 PM					
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)			
Vinyl Chloride	0.021	Not Detected	0.055	Not Detected			
cis-1,2-Dichloroethene	0.043	Not Detected	0.17	Not Detected			
Trichloroethene	0.043	Not Detected	0.23	Not Detected			
Tetrachloroethene	0.043	Not Detected	0.29	Not Detected			
trans-1,2-Dichloroethene	0.21	Not Detected	0.85	Not Detected			

### Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	102	70-130



### Client Sample ID: Lab Blank Lab ID#: 1203368A-03A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: Dil. Factor:	v031906sim 1.00	Date of Collection: NA Date of Analysis: 3/19/12 12:30 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			

1

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



# Client Sample ID: CCV Lab ID#: 1203368A-04A

### MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: Dil. Factor:	v031902sim 1.00	Date of Collection: NA Date of Analysis: 3/19/12 09:36 AM
Compound		%Recovery
Vinyl Chloride		85
cis-1,2-Dichloroethene		91
Trichloroethene		90
Tetrachloroethene		89
trans-1,2-Dichloroethene		91

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	108	70-130



# Client Sample ID: LCS Lab ID#: 1203368A-05A

### MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name:	v031903sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/19/12 10:26 AM
Compound		%Recovery
Vinyl Chloride		101
cis-1,2-Dichloroethene		108
Trichloroethene		97
Tetrachloroethene		105
trans-1,2-Dichloroethene		120

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	103	70-130



# Client Sample ID: LCSD Lab ID#: 1203368A-05AA

### MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name:	v031904sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/19/12 11:17 AM
Compound		%Recovery
Vinyl Chloride		101
cis-1,2-Dichloroethene		106
Trichloroethene		95
Tetrachloroethene		102
trans-1,2-Dichloroethene		118

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	108	70-130

Form 1293 rev 11										
. (	. 1	Г	- DSC			1401			TEN 17	Only
ය ස හ භ	202	None 1	Mes No	ACTIVE AND	1 2 3 7	а П 1				
Work Order #	Work (	Intact?	Custody Seals Intact?	Condition	Cono	Temp (°C)	L	Air Bill #	Shipper Name	
	668	Cus = 1, z = DCul Cus = 1, z = DCul Tachus = 1, z = DCul	100		ne	ture) Date/Time	Received by: (signature)	Rec	Relinquished by: (signature) Date/Time	Relinquished
	5		·					1		
					ne	1	Received by: (signature)	Red	Relinquished by: (signature) Date/Time	Relinquished
		BONT	ALLO DE ONT	000		1.1	a foll		M	
		and the second	Notes:		ne	ture) Date/Time	Received by: (signature)	Rec	Relinguished by: (signature) Date/Time	Relinguisher
	-52 O	-26:5	12-15		831	3/14/12	73997		SSV-2-8	
	-5,0	-28.5	51-0		05E	3/14/12	36032		8-1-VSS	
	S'IF	-30,0	TO-IS		00f	3/14/12	10012		IAF-8	oz A-
	-7.0	-29.0	0-15		202	3/14/12	9950		IAB-8	õ lo
Receipt Final	Final	Initial	Analyses Requested		of Collec	of Collection of Collection	Can #	ation)	Field Sample I.D. (Location)	Lab I.D.
Canister Pressure/Vacuum	ter Pres	Canis			Time	Date				ingen Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Burger Bur
N ₂ He		specify	KIPP	MADISIN	Project Name	Projec	414-276-7603	414-2	414-276-7742 Fax	Phone L
Pressurization Gas:	Press			Project # <u>المك من المحمد</u> / 400،285. Coult	1 # (J+C	.	State WI Zip 53202		Address 12 N. JEFFERSON ST. YEFEDOITY MILLUAULEE	Address <u>i &amp; k</u>
	Dale:				1		Email JENNING TRASH @MICHOS-JGOM	Email <u>JENNWE</u>	ARCADIS	Company
	, : ; ;	K Normal	8			  P.O. #	× /(		Collected by: (Print and Sign) TTM AUESSI	Collected by:
Lab Use Only Pressurized hv:	Lab Use Only Pressurize	Turn Around	Tu		Project Info:	Proje		SK	nager JENNINE TRASK	Project Manager
ge of 1	Page		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	or action, of ar )0) 467-4922	n, demand, c [. Hotline (80	against any claim of samples. D.O.T	and indemnity Air Toxics Limited against any claim, demand, or action, of a collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922	and indemnify collection, hand	CHAIN-OF-CUSTODY RECORD	CHAIN-O
180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020	DOO FAX	180 BLUE F FOLSC (916) 985-1(	ed in compliance with ns and ordinances of handling or shipping Id harmless, defend.	is being shipp laws, regulation the collection reement to ho	that sample nternational I th respect to	cument indicates II, national, and ir nes no liability wit	Relinquishing signature on this document indicates that sample is being shipp all applicable local, State, Federal, national, and international laws, regulatio any kind. Air Toxics Limited assumes no liability with respect to the collection, of these samples. Belinguishing signature also indicates agreement to ho	Relinquishing s all applicable lo any kind. Air To of these samp	Toxics LTD.	
] ) )         						lotice	Sample Transportation Notice	Sample Tra		



3/28/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203368B

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/16/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Scott

Ausha Scott Project Manager

A Eurofins Lancaster Laboratories Company

Eurofins Air Toxics, Inc.

180 Blue Ravine Road, Suite B Folsom, CA 95630 T | 916-985-1000 F | 916-985-1020 www.airtoxics.com



### WORK ORDER #: 1203368B

#### Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	<b>P.O.</b> #	WI001283.0001.00009
FAX:	317-231-6514	<b>PROJECT</b> #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED:	03/16/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	03/28/2012	continent	Aushu Scott

			<b>KEUEIPI</b>	FINAL
FRACTION #	NAME	TEST	VAC./PRES.	<b>PRESSURE</b>
03A	SSV-1-8	Modified TO-15	6.2 "Hg	5 psi
04A	SSV-2-8	Modified TO-15	5.0 "Hg	5 psi
05A	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:

Sinda d. Fruman

03/28/12 DATE:

DECEIDT

**FINAT** 

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

> > Page 2 of 11

### LABORATORY NARRATIVE Modified TO-15 Arcadis U.S., Inc. Workorder# 1203368B

Two 6 Liter Summa Canister samples were received on March 16, 2012. 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
ICAL %RSD acceptance criteria	+- 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	= 30% Difference with four allowed out up to </=40%.; flag and narrate outliers</td
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
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

### **Receiving Notes**

🛟 eurofins

There were no receiving discrepancies.

### **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 and/or LCS.



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



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

### Client Sample ID: SSV-1-8

#### Lab ID#: 1203368B-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.17	2.4	1.1	16
Client Sample ID: SSV-2-8				
Lab ID#: 1203368B-04A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.16	0.46	1.1	3.1



# Client Sample ID: SSV-1-8 Lab ID#: 1203368B-03A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	v032011 1.69	Date of Collection: 3/14/12 7:50:00 A Date of Analysis: 3/20/12 04:52 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.17	Not Detected	0.43	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
cis-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Trichloroethene	0.17	Not Detected	0.91	Not Detected
Tetrachloroethene	0.17	2.4	1.1	16

٦

### Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	89	70-130



# Client Sample ID: SSV-2-8 Lab ID#: 1203368B-04A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name: Dil. Factor:	v032012 1.61		of Collection: 3/1 of Analysis: 3/20	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.16	Not Detected	0.41	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
Trichloroethene	0.16	Not Detected	0.86	Not Detected
Tetrachloroethene	0.16	0.46	1.1	3.1

### Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	93	70-130
4-Bromofluorobenzene	87	70-130



# Client Sample ID: Lab Blank Lab ID#: 1203368B-05A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name: Dil. Factor:	v032006 1.00		of Collection: NA of Analysis: 3/20/	/12 12:43 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Trichloroethene	0.10	Not Detected	0.54	Not Detected
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	93	70-130



# Client Sample ID: CCV Lab ID#: 1203368B-06A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v032002	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/20/12 10:02 AM
Compound		%Recovery
Vinyl Chloride		93
trans-1,2-Dichloroethene		91
cis-1,2-Dichloroethene		94
Trichloroethene		106
Tetrachloroethene		99

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	105	70-130



# Client Sample ID: LCS Lab ID#: 1203368B-07A

Air Toxics

### MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name:	v032003	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/20/12 10:46 AM
Compound		%Recovery
Vinyl Chloride		111
trans-1,2-Dichloroethene		120
cis-1,2-Dichloroethene		111
Trichloroethene		108
Tetrachloroethene		112

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	103	70-130



# Client Sample ID: LCSD Lab ID#: 1203368B-07AA

### MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name: Dil. Factor:	v032004 1.00	Date of Collection: NA Date of Analysis: 3/20/12 11:28 AM
Compound		%Recovery
Vinyl Chloride		108
trans-1,2-Dichloroethene		116
cis-1,2-Dichloroethene		109
Trichloroethene		111
Tetrachloroethene		114

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

Date/Time Date/Time Date/Time (°C) Condition	Temp (°C)	Lab     Shipper Ivalitie       Use     CD       Only     CD
te/Time	Temp	Shipper Ivallie
Date/Time Date/Time Date/Time		
Date/Time	Received by: (signature)	Relinquished by: (signature) Date/Time
	Received by: (signature)	Relinquished by: (signature) Date/Time
		Helinquished by: (signature) Date/Time
7	•	
14/12 831	23997-31	04A 55V-2-8
4/12 750	36032 3/1	03A SSV-1-8
4 17 8 8	21001 3/1	JAF-8
4/12 702	9950 3/1	S-DAI
ollection of Collection	Can # of C	Lab I.D. Field Sample I.D. (Location)
Date Time		
Project Name <u>MAO</u>	276-7603	Phone 414-276-7747 Fax 414-
Project # (	tate <u>w</u> Zip <u>53702</u>	TO UN TREFFERSON SLITT DOCINY MULL
P.O. #	C. THASI @ MICAOS-US GA	
Droiect Info.		TENNINE TRAS
Indicates that sample is bein onal, and international laws, no liability with respect to the co- ture also indicates agreement ture also indicates agreement tany claim, demand, or actic oles. D.O.T. Hotline (800) 467	ransportation Notice y signature on this documer y local, State, Federal, natic Toxics Limited assumes no roples. Relinquishing signa ty Air Toxics Limited agains y Air Toxics Limited agains	CHAIN-OF-CUSTODY RECORD Sample T Belinquishir all applicable of these sa and indemn collection, h
	Project Info:         Piolect = Time         Analyses Reference         Ollection       of Collection         Analyses Reference         4/12       702         750       70-15         4/12       750         14/12       750         14/12       750         750       75-15         14/12       750         750       75-15	ation Notice on this document indicates that: ted assumes no liability with res sumiting signature also index sumited against any claim, der sumited against any claim, der sumited against any claim, der sumples. D.O.T. Hot Project Ir Project Ir Project Ir Project Ir Project Ir Project II Project II Project II Project II Project II Project II Project II Project II Project II



4/1/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203429A

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/20/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Scott

Ausha Scott Project Manager

A Eurofins Lancaster Laboratories Company

Eurofins Air Toxics, Inc.

180 Blue Ravine Road, Suite B Folsom, CA 95630 T | 916-985-1000 F | 916-985-1020 www.airtoxics.com



### WORK ORDER #: 1203429A

#### Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	<b>P.O.</b> #	WI001283.0001.00009
FAX:	317-231-6514	<b>PROJECT</b> #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED:	03/20/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	04/01/2012	continent	Ausilu Scott

			<b>KEUEIF</b> I	FINAL
FRACTION #	NAME	TEST	VAC./PRES.	PRESSURE
01A	IAB-9	Modified TO-15 SIM	19.0 "Hg	5 psi
02A	IAF-9	Modified TO-15 SIM	7.0 "Hg	5 psi
03A	Lab Blank	Modified TO-15 SIM	NA	NA
04A	CCV	Modified TO-15 SIM	NA	NA
05A	LCS	Modified TO-15 SIM	NA	NA
05AA	LCSD	Modified TO-15 SIM	NA	NA

CERTIFIED BY:

Sinda d. Fruman

04/01/12 DATE:

DECEIDT

**FINAT** 

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

> > Page 2 of 11

### LABORATORY NARRATIVE Modified TO-15 SIM Arcadis U.S., Inc. Workorder# 1203429A

Two 6 Liter Summa Canister (SIM Certified) samples were received on March 20, 2012. 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<br compounds allowed out to < 40% RSD	Project specific; default criteria is =30% RSD with 10% of compounds allowed out to < 40% RSD</td
Daily Calibration	+- 30% Difference	Project specific; default criteria is = 30% Difference<br with 10% of compounds allowed out up to =40%.; flag<br 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**

🛟 eurofins

Sample IAB-9 was received with significant vacuum remaining in the canister. The residual canister vacuum resulted in elevated reporting limits.

### 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 and/or LCS.
- 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



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

### **Client Sample ID: IAB-9**

### Lab ID#: 1203429A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.073	0.14	0.50	0.94
trans-1,2-Dichloroethene	0.36	5.5	1.4	22
Charles D. LAF 0				

# Client Sample ID: IAF-9

Lab ID#: 1203429A-02A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.035	0.035	0.24	0.24
trans-1,2-Dichloroethene	0.18	0.54	0.69	2.2



# Client Sample ID: IAB-9 Lab ID#: 1203429A-01A MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: Dil. Factor:	e032211sim 3.65	Date of Collection: 3/15/12 5:45:00 PM Date of Analysis: 3/22/12 05:00 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.036	Not Detected	0.093	Not Detected
cis-1,2-Dichloroethene	0.073	Not Detected	0.29	Not Detected
Trichloroethene	0.073	Not Detected	0.39	Not Detected
Tetrachloroethene	0.073	0.14	0.50	0.94
trans-1,2-Dichloroethene	0.36	5.5	1.4	22

### Container Type: 6 Liter Summa Canister (SIM Certified)

		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	93	70-130	
Toluene-d8	95	70-130	
4-Bromofluorobenzene	108	70-130	



# Client Sample ID: IAF-9 Lab ID#: 1203429A-02A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: Dil. Factor:	e032212sim 1.75	Date of Collection: 3/15/12 5:08:00 PM Date of Analysis: 3/22/12 05:45 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	Not Detected	0.045	Not Detected
cis-1,2-Dichloroethene	0.035	Not Detected	0.14	Not Detected
Trichloroethene	0.035	Not Detected	0.19	Not Detected
Tetrachloroethene	0.035	0.035	0.24	0.24
trans-1,2-Dichloroethene	0.18	0.54	0.69	2.2

### Container Type: 6 Liter Summa Canister (SIM Certified)

	* <b>P</b>	Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	106	70-130



# Client Sample ID: Lab Blank Lab ID#: 1203429A-03A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: Dil. Factor:	e032206sim 1.00	Date of Collection: NA Date of Analysis: 3/22/12 12:55 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

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	105	70-130



# Client Sample ID: CCV Lab ID#: 1203429A-04A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	e032202sim	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 3/22/12 10:00 AM	
Compound		%Recovery	
Vinyl Chloride		86	
cis-1,2-Dichloroethene		102	
Trichloroethene		95	
Tetrachloroethene		88	
trans-1,2-Dichloroethene		96	

		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	111	70-130	
Toluene-d8	103	70-130	
4-Bromofluorobenzene	107	70-130	



# Client Sample ID: LCS Lab ID#: 1203429A-05A

### MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name:	e032203sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/22/12 10:43 AM
Compound		%Recovery
Vinyl Chloride		94
cis-1,2-Dichloroethene		102
Trichloroethene		90
Tetrachloroethene		87
trans-1,2-Dichloroethene		109

		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	114	70-130	
Toluene-d8	104	70-130	
4-Bromofluorobenzene	107	70-130	



# Client Sample ID: LCSD Lab ID#: 1203429A-05AA

### MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: Dil. Factor:	e032204sim 1.00	Date of Collection: NA Date of Analysis: 3/22/12 11:22 AM
Compound		%Recovery
Vinyl Chloride		90
cis-1,2-Dichloroethene		102
Trichloroethene		88
Tetrachloroethene		86
trans-1,2-Dichloroethene		108

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	104	70-130

Form 1293 rev.11							
		$\langle$					VIND
1202%10	None	Yes No	(200D	A		e todas	es Ose
Work Order #	als Intact?	Custody Seals Intact?	Condition	Temp (°C)	1	Shipper Name Air Bill #	Lab
er.	US-1-2, OCA	er.	B	ure) Date/Time	Received by: (signature)	Relinquished by: (signature) Date/Time Re	Relinqu
1000	and choicing						- Telliqu
	ONIX (AFOIL ,	ONCR			Received by: (signature)	Date/Time	Dolingu
	10,07	Notes:	- 7 のり2,2 西	re) Date/Time	Received by: (signature)	Relinquished by: (signature) Date/Time	Relinqu
				-			
-5.0	>-30 &	70-15	1652	3/16/12	34203	SN-2-9	
- S.O	-21,5	すい	1637	3/16/12	35136	SSU - 1 - 9	
5.2	2%5	70-15	8011	31512	34371	TAF-9	ATO
19,0	0.12-	TO-15	Shtl	3/15/12	1945	I IAB-9	OP P
Final Receipt Final	ed Initial	Analyses Requested	of Collection	tion	Can #	I.D. Field Sample I.D. (Location)	Lab I.D
Canister Pressure/Vacuum	Cani		Time	Date			
N ₂ He	specify	AN KIPP	Project Name MMOUSAU		414-276-7603	414-276-7742 Fax 414-2	Phone _
Pressurization Gas:	L Rush	Project # UIDO V283. cocy. cock 9	# 5700128		tate <u>LLL</u> Zip <u>S3</u>	W, JRFFERSON ST., SRE 400 City MIL	Address
Date:	Normal				Email JEUNIS MUSCENUMDES LON	any ACADIS Email JENNIN	Company
						Collected by: (Print and Sign) TVA ACTSSI	Collecte
Lab Use Only Pressurized hv	Turn Around		xt Info:	Project Info:		Project Manager JEWNINE TRASK	Project I
Page / of /		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	, demand, or action Hotline (800) 467-	gainst any claim, samples. D.O.T.	and indemnify Air Toxics Limited against any claim, demand, or action, of a collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922	CHAIN-OF-CUSTODY RECORD and indemnificont collection, ha	CHAIN
180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020		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. Belinguishing signature also indicates agreement to hold harmless, defend,	that sample is being ternational laws, rei n respect to the coll dicates agreement	ument indicates t national, and int es no liability with signature also inc	Relinquishing signature on this document indicates that sample is being shipp all applicable local, State, Federal, national, and international laws, regulation any kind. Air Toxics Limited assumes no liability with respect to the collection, of these samples. Belinguishing signature also indicates agreement to hol	TOXICS LTD. all applicable any kind. Air of these sam	
				tice	Sample Transportation Notice	Sample Tr	



4/1/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203429B

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/20/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Scott

Ausha Scott Project Manager

A Eurofins Lancaster Laboratories Company

Eurofins Air Toxics, Inc.

180 Blue Ravine Road, Suite B Folsom, CA 95630 T | 916-985-1000 F | 916-985-1020 www.airtoxics.com



### WORK ORDER #: 1203429B

#### Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	<b>P.O.</b> #	WI001283.0001.00009
FAX:	317-231-6514	<b>PROJECT</b> #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED:	03/20/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	04/01/2012	continent	Aushu Scott

			RECEIPT	FINAL
FRACTION #	NAME	<u>TEST</u>	VAC./PRES.	<b>PRESSURE</b>
03A	SSV-1-9	Modified TO-15	6.0 "Hg	5 psi
04A	SSV-2-9	Modified TO-15	5.0 "Hg	5 psi
05A	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:

Sinda d. Fruman

04/01/12 DATE:

DECEIDT

**FINAT** 

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

> > Page 2 of 11

### LABORATORY NARRATIVE Modified TO-15 Arcadis U.S., Inc. Workorder# 1203429B

Two 6 Liter Summa Canister samples were received on March 20, 2012. 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
ICAL %RSD acceptance criteria	+- 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	= 30% Difference with four allowed out up to </=40%.; flag and narrate outliers</td
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
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

### **Receiving Notes**

🛟 eurofins

There were no receiving discrepancies.

### **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 and/or LCS.



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



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

### Client Sample ID: SSV-1-9

# Lab ID#: 1203429B-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.17	6.2	1.1	42
Client Sample ID: SSV-2-9				
Lab ID#: 1203429B-04A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.16	1.6	1.1	11



# Client Sample ID: SSV-1-9 Lab ID#: 1203429B-03A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:			of Collection: 3/16/12 4:37:00 PM of Analysis: 3/22/12 11:43 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.17	Not Detected	0.43	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
cis-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Trichloroethene	0.17	Not Detected	0.90	Not Detected
Tetrachloroethene	0.17	6.2	1.1	42

٦

### Container Type: 6 Liter Summa Canister

		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	117	70-130	
Toluene-d8	93	70-130	
4-Bromofluorobenzene	105	70-130	



# Client Sample ID: SSV-2-9 Lab ID#: 1203429B-04A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	e032220 1.61	Date of Collection: 3/16/12 4:52:00 PM Date of Analysis: 3/23/12 07:47 AM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.16	Not Detected	0.41	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
Trichloroethene	0.16	Not Detected	0.86	Not Detected
Tetrachloroethene	0.16	1.6	1.1	11

٦

### Container Type: 6 Liter Summa Canister

		Method Limits	
Surrogates	%Recovery		
1,2-Dichloroethane-d4	118	70-130	
Toluene-d8	91	70-130	
4-Bromofluorobenzene	109	70-130	



# Client Sample ID: Lab Blank Lab ID#: 1203429B-05A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name: Dil. Factor:	e032206 1.00	Date of Collection: NA Date of Analysis: 3/22/12 12:55 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Trichloroethene	0.10	Not Detected	0.54	Not Detected
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected

		Method Limits	
Surrogates	%Recovery		
1,2-Dichloroethane-d4	112	70-130	
Toluene-d8	97	70-130	
4-Bromofluorobenzene	104	70-130	



# Client Sample ID: CCV Lab ID#: 1203429B-06A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e032202	Date of Collection: NA
Dil. Factor:	Date of Analysis: 3/22/12 10:00 AM	
Compound		%Recovery
Vinyl Chloride		98
trans-1,2-Dichloroethene		104
cis-1,2-Dichloroethene		108
Trichloroethene		105
Tetrachloroethene		112

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	112	70-130



# Client Sample ID: LCS Lab ID#: 1203429B-07A

Air Toxics

### MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name: e032203		Date of Collection: NA		
Dil. Factor:	Date of Analysis: 3/22/12 10:43 AM			
Compound		%Recovery		
Vinyl Chloride		109		
trans-1,2-Dichloroethene		118		
cis-1,2-Dichloroethene		112		
Trichloroethene		98		
Tetrachloroethene		109		

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	115	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	111	70-130



# Client Sample ID: LCSD

Air Toxics

Lab ID#: 1203429B-07AA

### MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name: e032204		Date of Collection: NA		
Dil. Factor:	Date of Analysis: 3/22/12 11:22 AM			
Compound		%Recovery		
Vinyl Chloride		103		
trans-1,2-Dichloroethene		118		
cis-1,2-Dichloroethene		113		
Trichloroethene		96		
Tetrachloroethene		107		

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	105	70-130

Form 1293 rev.11							
		$\langle$					VIND
1202%10	None	Yes No	(200D	A		e todas	es Ose
Work Order #	als Intact?	Custody Seals Intact?	Condition	Temp (°C)	1	Shipper Name Air Bill #	Lab
er.	135-1-2, OCA	er.	B	ure) Date/Time	Received by: (signature)	Relinquished by: (signature) Date/Time Re	Relinqu
1000	and choicing						- Telliqu
	ONIX (AFOIL ,	ONCR			Received by: (signature)	Date/Time	Dolingu
	10,01	Notes:	- 7 のり2,2 西	re) Date/Time	Received by: (signature)	Relinquished by: (signature) Date/Time	Relinqu
				-			
-5.0	>-30 &	70-15	1652	3/16/12	34203	SN-2-9	
- S.O	-21,5	すい	1637	3/16/12	35136	SSU - 1 - 9	
5.2	2%5	70-15	8011	31512	34371	TAF-9	QI.A
19,0	0.12-	TO-15	Shtl	3/15/12	1725	I IAB-9	OP P
Final Receipt Final	ed Initial	Analyses Requested	of Collection	tion	Can #	I.D. Field Sample I.D. (Location)	Lab I.D
Canister Pressure/Vacuum	Cani		Time	Date			
N ₂ He	specify	AN KIPP	Project Name MMOUSAU		414-276-7603	414-276-7742 Fax 414-2	Phone _
Pressurization Gas:	L Rush	Project # UIDO V283. cocy. cock 9	# 5700128		tate <u>LLL</u> Zip <u>S3</u>	W, JRFFERSON ST., SRE 400 City MIL	Address
Date:	Normal				Email JEUNIS MUSCENCODS S. W	any ACADIS Email JENNIN	Company
						Collected by: (Print and Sign) TVA ACTSSI	Collecte
Lab Use Only Pressurized hv	Turn Around		xt Info:	Project Info:		Project Manager JEWNINE TRASK	Project I
Page / of /		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	, demand, or action Hotline (800) 467-	gainst any claim, samples. D.O.T.	and indemnify Air Toxics Limited against any claim, demand, or action, of a collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922	CHAIN-OF-CUSTODY RECORD and indemnificont collection, ha	CHAIN
180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020		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. Belinguishing signature also indicates agreement to hold harmless, defend,	that sample is being ternational laws, rei n respect to the coll dicates agreement	ument indicates t national, and int es no liability with signature also inc	Relinquishing signature on this document indicates that sample is being shipp all applicable local, State, Federal, national, and international laws, regulation any kind. Air Toxics Limited assumes no liability with respect to the collection, of these samples. Belinguishing signature also indicates agreement to hol	TOXICS LTD. all applicable any kind. Air of these sam	
				tice	Sample Transportation Notice	Sample Tr	



4/1/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203429B

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/20/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Scott

Ausha Scott Project Manager

A Eurofins Lancaster Laboratories Company

Eurofins Air Toxics, Inc.

180 Blue Ravine Road, Suite B Folsom, CA 95630 T | 916-985-1000 F | 916-985-1020 www.airtoxics.com



## WORK ORDER #: 1203429B

#### Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	<b>P.O.</b> #	WI001283.0001.00009
FAX:	317-231-6514	<b>PROJECT</b> #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED:	03/20/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	04/01/2012	continent	Aushu Scott

			RECEIPT	FINAL
FRACTION #	NAME	<u>TEST</u>	VAC./PRES.	<b>PRESSURE</b>
03A	SSV-1-9	Modified TO-15	6.0 "Hg	5 psi
04A	SSV-2-9	Modified TO-15	5.0 "Hg	5 psi
05A	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:

Sinda d. Fruman

04/01/12 DATE:

DECEIDT

**FINAT** 

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

> > Page 2 of 11

## LABORATORY NARRATIVE Modified TO-15 Arcadis U.S., Inc. Workorder# 1203429B

Two 6 Liter Summa Canister samples were received on March 20, 2012. 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
ICAL %RSD acceptance criteria	+- 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	= 30% Difference with four allowed out up to </=40%.; flag and narrate outliers</td
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
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

# **Receiving Notes**

🛟 eurofins

There were no receiving discrepancies.

# **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 and/or LCS.



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



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

# Client Sample ID: SSV-1-9

# Lab ID#: 1203429B-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.17	6.2	1.1	42
Client Sample ID: SSV-2-9				
Lab ID#: 1203429B-04A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.16	1.6	1.1	11



# Client Sample ID: SSV-1-9 Lab ID#: 1203429B-03A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	e032219 1.68	Date of Collection: 3/16/12 4:37:00 Date of Analysis: 3/22/12 11:43 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.17	Not Detected	0.43	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
cis-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Trichloroethene	0.17	Not Detected	0.90	Not Detected
Tetrachloroethene	0.17	6.2	1.1	42

٦

## Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	117	70-130
Toluene-d8	93	70-130
4-Bromofluorobenzene	105	70-130



# Client Sample ID: SSV-2-9 Lab ID#: 1203429B-04A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	e032220 1.61		of Collection: 3/1 of Analysis: 3/23	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.16	Not Detected	0.41	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
Trichloroethene	0.16	Not Detected	0.86	Not Detected
Tetrachloroethene	0.16	1.6	1.1	11

٦

## Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	118	70-130
Toluene-d8	91	70-130
4-Bromofluorobenzene	109	70-130



# Client Sample ID: Lab Blank Lab ID#: 1203429B-05A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name: Dil. Factor:	e032206 1.00		of Collection: NA of Analysis: 3/22	/12 12:55 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Trichloroethene	0.10	Not Detected	0.54	Not Detected
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	104	70-130



# Client Sample ID: CCV Lab ID#: 1203429B-06A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	e032202	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/22/12 10:00 AM
Compound		%Recovery
Vinyl Chloride		98
trans-1,2-Dichloroethene		104
cis-1,2-Dichloroethene		108
Trichloroethene		105
Tetrachloroethene		112

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	112	70-130



# Client Sample ID: LCS Lab ID#: 1203429B-07A

Air Toxics

### MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name:	e032203	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/22/12 10:43 AM
Compound		%Recovery
Vinyl Chloride		109
trans-1,2-Dichloroethene		118
cis-1,2-Dichloroethene		112
Trichloroethene		98
Tetrachloroethene		109

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	115	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	111	70-130



# Client Sample ID: LCSD

Air Toxics

Lab ID#: 1203429B-07AA

### MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name:	e032204	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/22/12 11:22 AM
Compound		%Recovery
Vinyl Chloride		103
trans-1,2-Dichloroethene		118
cis-1,2-Dichloroethene		113
Trichloroethene		96
Tetrachloroethene		107

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	105	70-130

	1997 (1997)		(					Only
	None							Lab Use
Work Order #	als Infact?	Custody Seals Infact?	Condition		1	Δir Bill #		0
2,000	1000-1-2/	8	Ъ	ure) Date/Time	Received by: (signature)	R	Relinquished by: (signature) Date/Time	Relinquished
			Чe	ure) Date/Iime	Received by: (signature)	R	Relinquished by: (signature) Date/Time	Relinquished
~ * *	OMY REPORT,	0 mc ~ (	~260 ZI		Chan All	483	3/9/2	and a second
		Notes:		ure) Date/Time	Received by: (signature)		ne	Relinquished
			-					
						an Algeria - Alge		
					<ul> <li>A start of the sta</li></ul>	al 1 de como de como de la como de La como de la		
			-					
2-30A -5.0	>=3	TOHS	1652	3/16/12	201245		SN-2-9	ÁYÀ
	-21.5	70-15	ES3	3/16/12	35136	<ul> <li>A state of the sta</li></ul>	SSV-7-9	03A
5.3-5	5 42	21-0T	8061	3/12/12	54371	an suite ann an suit Suite anns anns anns anns anns anns anns ann	TAR 9	
0.91-0	240	10-15	Ţ Ţ S	3 5 12	NTC1		TAB-9	
Initial Final Receipt Final	 	Analyses Requested	of Collection	lion	Can #	cation)	Field Sample I.D. (Location)	Lab I.D.
Canister Pressure/Vacuum	0 0		Time	Date		ж	£	
, N ₂ He	specify	N KNPP	Name MMOSoA	Project Name	76	- KL-	2htt.	Phone 4
Pressurization Gas:	L Rush	33.0001.00009	:# <u>137001283</u>	by Project #	-	St Proving St	Str 400 City	10
al Date:	Normal			P.O. #_ ∽.@♪	A CAOSS ON CAOSS CON	Email	Print and Sign) 110 PA PACKS	Company NP. ( AC) (
Pressurized by:	Turn Around Time:		Project Info:	Projec	*	TRASK	NANC	Project Manager
180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020 Page of		<b>Sample Transportation Notice</b> 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	that sample is being ternational laws, re n respect to the col dicates agreement dicates agreement demand, or action Hotline (800) 467-	<b>tice</b> ument indicates t national, and int es no liability with signature also in gainst any claim, samples, D.O.T.	Sample Transportation Notice Relinquishing signature on this document indicates that sample is being ship all applicable local, State, Federal, national, and international laws, regulat any kind. Air Toxics Limited assumes no liability with respect to the collectio of these samples. Relinquishing signature also indicates agreement to h and indemnity Air Toxics Limited against any claim, demand, or action, of a collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922		CHAIN-OF-CUSTODY RECORD	CHAIN-OF



3/29/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203371A

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/16/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Scott

Ausha Scott Project Manager

A Eurofins Lancaster Laboratories Company

Eurofins Air Toxics, Inc.

180 Blue Ravine Road, Suite B Folsom, CA 95630 T | 916-985-1000 F | 916-985-1020 www.airtoxics.com



## WORK ORDER #: 1203371A

#### Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317.236.5207	<b>P.O.</b> #	WI001283.0001.00009
FAX:	317-231-6514	<b>PROJECT</b> #	WI001283.0001.00009 MADISON KIPP
DATE RECEIVED:	03/16/2012	CONTACT:	Ausha Scott
DATE COMPLETED:	03/27/2012	continent	Ausilu Scott

			<b>KECEIF</b> I	FINAL
FRACTION #	NAME	TEST	VAC./PRES.	<b>PRESSURE</b>
01A	IAB-11	Modified TO-15 SIM	7.0 "Hg	5 psi
02A	IAF-11	Modified TO-15 SIM	7.8 "Hg	5 psi
03A	Lab Blank	Modified TO-15 SIM	NA	NA
04A	CCV	Modified TO-15 SIM	NA	NA
05A	LCS	Modified TO-15 SIM	NA	NA
05AA	LCSD	Modified TO-15 SIM	NA	NA

CERTIFIED BY:

Sinda d. Fruman

03/29/12 DATE:

DECEIDT

**FINAT** 

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

> > Page 2 of 11

## LABORATORY NARRATIVE Modified TO-15 SIM Arcadis U.S., Inc. Workorder# 1203371A

Two 6 Liter Summa Canister (SIM Certified) samples were received on March 16, 2012. 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	<pre><!--=30% RSD with 2 compounds allowed out to < 40% RSD</pre--></pre>	Project specific; default criteria is =30% RSD with 10% of compounds allowed out to < 40% RSD</td
Daily Calibration	+- 30% Difference	Project specific; default criteria is = 30% Difference<br with 10% of compounds allowed out up to =40%.; flag<br 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**

🛟 eurofins

There were no receiving discrepancies.

# **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 and/or LCS.
- 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



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

**Client Sample ID: IAB-11** 

Lab ID#: 1203371A-01A No Detections Were Found.

**Client Sample ID: IAF-11** 

Lab ID#: 1203371A-02A No Detections Were Found.



# Client Sample ID: IAB-11 Lab ID#: 1203371A-01A MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: Dil. Factor:	v032007sim 1.75	Date of Collection: 3/14/12 9:24:00 AM Date of Analysis: 3/20/12 01:40 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	Not Detected	0.045	Not Detected
cis-1,2-Dichloroethene	0.035	Not Detected	0.14	Not Detected
Trichloroethene	0.035	Not Detected	0.19	Not Detected
Tetrachloroethene	0.035	Not Detected	0.24	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.69	Not Detected

### Container Type: 6 Liter Summa Canister (SIM Certified)

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



# Client Sample ID: IAF-11 Lab ID#: 1203371A-02A MODIFIED EPA METHOD TO-15 GC/MS SIM

٦

File Name: Dil. Factor:	v032008sim 1.81		of Collection: 3/1 of Analysis: 3/20	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	Not Detected	0.046	Not Detected
cis-1,2-Dichloroethene	0.036	Not Detected	0.14	Not Detected
Trichloroethene	0.036	Not Detected	0.19	Not Detected
Tetrachloroethene	0.036	Not Detected	0.24	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.72	Not Detected

### Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	96	70-130



# Client Sample ID: Lab Blank Lab ID#: 1203371A-03A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: Dil. Factor:	v032006sim 1.00		of Collection: NA of Analysis: 3/20/	/12 12:43 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

٦

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	98	70-130



# Client Sample ID: CCV Lab ID#: 1203371A-04A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name: Dil. Factor:	v032002sim 1.00	Date of Collection: NA Date of Analysis: 3/20/12 10:02 AM
Compound		%Recovery
Vinyl Chloride		86
cis-1,2-Dichloroethene		92
Trichloroethene		92
Tetrachloroethene		90
trans-1,2-Dichloroethene		92

		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	103	70-130	
Toluene-d8	100	70-130	
4-Bromofluorobenzene	111	70-130	



# Client Sample ID: LCS Lab ID#: 1203371A-05A MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	v032003sim	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 3/20/12 10:46 AM	
Compound		%Recovery	
Vinyl Chloride		98	
cis-1,2-Dichloroethene		105	
Trichloroethene		95	
Tetrachloroethene		103	
trans-1,2-Dichloroethene		117	

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	108	70-130



# Client Sample ID: LCSD Lab ID#: 1203371A-05AA

# MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	v032004sim	Date of Collection: NA				
Dil. Factor: 1.00		Date of Analysis: 3/20/12 11:28 AM				
Compound		%Recovery				
Vinyl Chloride		100				
cis-1,2-Dichloroethene		106				
Trichloroethene		96				
Tetrachloroethene		104				
trans-1,2-Dichloroethene		118				

and the second sec		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	105	70-130

	Only Reg Cx	Lab Shipper Name	Relinquished by: (signature) Date/Time	Relinquished by: (signature) Date/Time	Relinquished by: (signature) Date/Time				SSV-2-11	11-1-VSS	DA TAF-11	0/A IAB-11	Lab I.D. Field Sample I.D. (Location)		Phone 44-276-7742 Fax	Address 12 W. JEFERSON ST. St. 420City HAVE NAVELE	by: (Print and Sign) 1111/14CESS	1	CHAIN-OF-CUSTODY RECORD
		Air Bill #	Received by: (signature)	Received by: (signature)	Received by				34189	12682	34732	34447	ion) Can #		414-276-7603	Will State W. Zip SI 202			<b>Sample Transportation Notice</b> 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 indemnity 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
	ND SC	Temp (°C)	Inature) Date/Time	nature) Date/Time	(signature) Date/Time				3/14/12	3/14/12	3/14/12	3/14/12	of Collection	Date	 • • • • • • • • • • •		P.O. #	Project Info:	Notice document indicates that sate eral, national, and internat sumes no liability with resp signature also indicate ed against any claim, dem ed against any claim, dem
	NCOD	Condition			Coloo		90 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		1024 TO	1105 TO	921 70	924 70-	tion	Time	Project Name MADISON KI	Project # (1202)203.0001.00009		ю:	ample is being shipped in ional laws, regulations at sect to the collection, han as agreement to hold ha and, or action, of any kir ne (800) 467-4922
	Yes No N	Custody Seals Intact?	-0	C - J	Notes:				51-0	-15	-15	0-15	Analyses Requested		KIPP		N N	Turn	
	None 1 2		C15-1,2-00E TRANS-1,2-00E	TUP	ONLY REPORT -				 7-20.0 -6	3- 0'32-	9- 0'12-	-300 - 5	Initial Fi	Canister	specify	Rush   PI	凶 Normal Da	Turn Around Lat Time: Pr	0 BLUE RAV FOLSOM, 16) 985-1000
Form 1293 rev 1	03371	Work Order #	קדו קדו	ic lo z	1				\$. 	S S	-6:0	Co C	Final Receipt Final	Canister Pressure/Vacuum	N ₂ He	Pressurization Gas:	Date:	Lab Use Only Pressurized by:	180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA 95630-4719 (916) 985-1000 FAX (916) 985-1020 Page 1 of 1

阀



3/28/2012 Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800

Indianapolis IN 46204

Project Name: MADISON KIPP Project #: WI001283.0001.00009 Workorder #: 1203371B

Dear Mr. Rob Uppencamp

The following report includes the data for the above referenced project for sample(s) received on 3/16/2012 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: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Scott

Ausha Scott Project Manager

A Eurofins Lancaster Laboratories Company

Eurofins Air Toxics, Inc.

180 Blue Ravine Road, Suite B Folsom, CA 95630 T | 916-985-1000 F | 916-985-1020 www.airtoxics.com



## WORK ORDER #: 1203371B

#### Work Order Summary

CLIENT:	Mr. Rob Uppencamp Arcadis U.S., Inc. 251 East Ohio St., Suite 800 Indianapolis, IN 46204	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129	
PHONE:	317.236.5207	<b>P.O.</b> #	WI001283.0001.00009	
FAX:	317-231-6514	<b>PROJECT</b> #	WI001283.0001.00009 MADISON KIPP	
DATE RECEIVED:	03/16/2012	CONTACT:	Ausha Scott	
DATE COMPLETED:	03/28/2012	continent		

			RECEIPT	FINAL
FRACTION #	NAME	<u>TEST</u>	VAC./PRES.	<b>PRESSURE</b>
03A	SSV-1-11	Modified TO-15	5.2 "Hg	5 psi
04A	SSV-2-11	Modified TO-15	4.6 "Hg	5 psi
05A	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:

Sinda d. Fruman

03/28/12 DATE:

DECEIDT

**FINAT** 

Laboratory Director

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11, Expiration date: 06/30/12. Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards This report shall not be reproduced, except in full, without the written approval of Eurofins | Air Toxics, Inc.

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

> > Page 2 of 11

## LABORATORY NARRATIVE Modified TO-15 Arcadis U.S., Inc. Workorder# 1203371B

Two 6 Liter Summa Canister samples were received on March 16, 2012. 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
ICAL %RSD acceptance criteria	+- 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	= 30% Difference with four allowed out up to </=40%.; flag and narrate outliers</td
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
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

# **Receiving Notes**

🛟 eurofins

There were no receiving discrepancies.

# **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 and/or LCS.



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



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

# Client Sample ID: SSV-1-11

# Lab ID#: 1203371B-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.16	1.4	1.1	9.7
Client Sample ID: SSV-2-11				
Lab ID#: 1203371B-04A				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.16	0.52	1.1	3.5



# Client Sample ID: SSV-1-11 Lab ID#: 1203371B-03A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	v032113 1.62	Date of Collection: 3/14/12 11:05:00 AM Date of Analysis: 3/21/12 04:22 PM				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)		
Vinyl Chloride	0.16	Not Detected	0.41	Not Detected		
trans-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected		
cis-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected		
Trichloroethene	0.16	Not Detected	0.87	Not Detected		
Tetrachloroethene	0.16	1.4	1.1	9.7		

٦

## Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	99	70-130



# Client Sample ID: SSV-2-11 Lab ID#: 1203371B-04A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	v032116 1.58	Date of Collection: 3/14/12 10:24:00 AM Date of Analysis: 3/21/12 06:49 PM				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)		
Vinyl Chloride	0.16	Not Detected	0.40	Not Detected		
trans-1,2-Dichloroethene	0.16	Not Detected	0.63	Not Detected		
cis-1,2-Dichloroethene	0.16	Not Detected	0.63	Not Detected		
Trichloroethene	0.16	Not Detected	0.85	Not Detected		
Tetrachloroethene	0.16	0.52	1.1	3.5		

٦

## Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	98	70-130



# Client Sample ID: Lab Blank Lab ID#: 1203371B-05A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name: Dil. Factor:	v032106 1.00	Date of Collection: NA Date of Analysis: 3/21/12 11:49 AM								
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)						
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected						
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected						
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected						
Trichloroethene	0.10	Not Detected	0.54	Not Detected						
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected						

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	91	70-130



# Air Toxics Client Sample ID: CCV

# Lab ID#: 1203371B-06A

## MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

٦

File Name: Dil. Factor:	v032102 1.00	Date of Collection: NA Date of Analysis: 3/21/12 08:58 AM
Compound		%Recovery
Vinyl Chloride		91
trans-1,2-Dichloroethene		90
cis-1,2-Dichloroethene		93
Trichloroethene		105
Tetrachloroethene		98

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	106	70-130



# Client Sample ID: LCS Lab ID#: 1203371B-07A

Air Toxics

File Name: Dil. Factor:	v032103 1.00	Date of Collection: NA Date of Analysis: 3/21/12 09:48 AM
Compound		%Recovery
Vinyl Chloride		108
trans-1,2-Dichloroethene		116
cis-1,2-Dichloroethene		108
Trichloroethene		110
Tetrachloroethene		115

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	107	70-130



# Client Sample ID: LCSD Lab ID#: 1203371B-07AA

Air Toxics

# MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	v032104	Date of Collection: NA						
Dil. Factor:	1.00	Date of Analysis: 3/21/12 10:32 AM						
Compound		%Recovery						
Vinyl Chloride		111						
trans-1,2-Dichloroethene		120						
cis-1,2-Dichloroethene		112						
Trichloroethene		109						
Tetrachloroethene		115						

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	107	70-130

Turner discourse     To BLUE FA	Lab Shipper Name P	Relinquished by: (signature) Date/Time	Relinquished by: (signature) Date/Time	Relinquished by: (signature) Date/Time				04A SSV-2-11	074 SSV -1 - 11	TAF-11	TAB-11	Lab I.D. Field Sample I.D. (Location)		Phone 444-776-7742 Fax	2K N. JEFERRAN ST., SE WORTY HAVE		lan	Project Manager <u>JENNINE TRASK</u>	CHAIN-OF-CUSTODY RECORD
Tionicates that sample is being shipped in compliance with polability with respondent to hool harmless, defend, any claim, denand, or any kind, related to the polability with respondent to hool harmless, defend, any claim, denand, or any kind, related to the polability with respondent to hool harmless, defend, any claim, denand, or any kind, related to the polability with respondent to hool harmless, defend, project info:       Turn Around Page   Project Info:       Page   Project info:       P		Received by: (signat	Received by: (signat	Received by				34189	12682	34732	Lhhrs			14-276-	West_State J Zip 572	ail TELLING TASK & MONIS -1	and the second sec		Sample Iransportation Notice Relinquishing signature on this documen all applicable local, State, Federal, natio any kind. Air Toxics Limited assumes no of these samples. Relinquishing signat and indemnify Air Toxics Limited agains collection, handling, or shipping of samp
pedin compliance with iso BLUE RAVINE ROAD       FOLSOM, CA 95630-         n, handling or shipping on the structure       (916) 985-1000 FAX (916)         any kind, related to the any kind, rela			-	Date/Time				14/12.	14 12 110	2 4	14/12 92			11			J ) F	Project Info:	sument indicates that sample is bein sument indicates that sample is bein res no liability with respect to the cr signature also indicates agreemen igainst any claim, demand, or actic samples. D.O.T. Hotline (800) 467
	Custody Sea			Notes:				1	10-15		1	Analyses Request		S.	3.0001.00009				ig shipped in compliance with egulations and ordinances of election, handling or shipping nt to hold harmless, defend, n, of any kind, related to the 4922
NAVINE ROAD Page $ $ Page $ $ Pressurized Date: Pressurized Recei -8.0 -5.5 -5.5 -5.5 -6.0 -6.0 -8.0 -6.0 -8.0 -6.0 -8.5 -5.5 -6.0 -5.5 -5.5 -6.0 -6.0 -6.0 -6.0 -5.5 -5.5 -6.0 -5.5 -5.5 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -6.0 -7.0 -7.0 -7.0 -7.0 -7.0 -7.0 -7.0	als Intact?	NNA	PCR PCR	- REPORT	 		 t set e	7-30.6	-29.0	0.12-	-30.0		Canis	specify	🗋 Rush	KI Normal		Turn Around	
	rk Order #	ALORIDE		۶ ۲ ۲۰				54	-\$.S	-6.0	- 0.0	Final Receipt	ter Pressure/Va	N ₂ He	Pressurization Gas:	Date		Lab Use Only	RAVINE ROAD, DM, CA 95630-4 D000 FAX (916) 9 Page