

Detterman, Mark, Env. Health

From: Detterman, Mark, Env. Health
Sent: Wednesday, September 07, 2011 10:42 AM
To: 'pdking0000@aol.com'
Cc: donaldjaym@comcast.net
Subject: RE: California Linen Preliminary Soil Gas Results and Proposed Additional Investigation

Paul,
Thanks for the update, tables, and analytical data. The proposed soil gas and soil bore locations appear to be a reasonable attempt to understand local contaminant patterns and potential impacts to the subject site from potential offsite sources. Please use this email as approval of the proposed additional scope of work.

*Mark Detterman
Senior Hazardous Materials Specialist, PG, CEG
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510.567.6876
Fax: 510.337.9335
Email: mark.detterman@acgov.org*

PDF copies of case files can be downloaded at:

<http://www.acgov.org/aceh/lop/ust.htm>

From: pdking0000@aol.com [<mailto:pdking0000@aol.com>]
Sent: Tuesday, September 06, 2011 7:02 PM
To: Detterman, Mark, Env. Health
Cc: donaldjaym@comcast.net
Subject: California Linen Preliminary Soil Gas Results and Proposed Additional Investigation

Hi Mark,

You will find attached the following documents related to recent subsurface investigation at the California Linen site.

- o 0304R19 Table 1.pdf (summary table of temporary soil gas well sample results)
- o 0304R19 Table 2.pdf (summary table of permanent soil gas well sample results)

- o 0304.R19 Figure XX.pdf (showing soil gas TPH-G results for the most recent sample collection locations and proposed sample collection locations)

- o 1108117A_d.pdf (temporary well soil gas sample TO-3 results lab report)
- o 1108117ACOC.pdf (temporary well soil gas sample chain of custody document)
- o 1108117B_d.pdf (temporary well soil gas sample TO-15 results lab report)

- o 1108301A_d.pdf (permanent well soil gas sample TO-3 results lab report)
- o 1108301ACOC.pdf (permanent well soil gas sample chain of custody document)
- o 1108301B_d.pdf (permanent well soil gas sample TO-15 results lab report)
- o 1108301C_d.pdf (permanent well soil gas sample ASTM (O2, N2, CO2) results lab report)

- o 1107500_d.pdf (shroud atmosphere Tedlar bag tracer gas results lab report)
- o 1107500COC.pdf (shroud atmosphere Tedlar bag tracer gas chain of custody document)

Tedlar bag samples were collected from the shroud atmosphere at locations SG62 and SG63 to compare sample tracer gas concentrations with shroud atmosphere tracer gas concentrations. Review of Table 1 shows that the shroud atmosphere tracer gas concentration was 1,200,000 ug/m³.

Sample SG62 was collected adjacent to a suspected offsite upgradient UST pit where differential settlement was observed in the asphaltic concrete surface cover materials. Although 1,000,000 ug/m³ tracer gas was detected in the SG62 soil gas sample (indicating sample atmospheric dilution), the TPH-G result was 1,600,000 ug/m³ suggesting that without atmospheric dilution the TPH-G concentration would have been much higher.

Figure XX shows proposed groundwater grab sample location B89 adjacent to location SG62, and proposed soil gas locations SG62A through SG72. The rationale for these proposed soil gas sample collection locations is as follows.

- o SG62A - to evaluate soil gas conditions adjacent to the area of differential settlement without sample atmospheric dilution.
- o SG68 - at a location between SG63 and SG64 to evaluate conditions where we had previously discussed we would evaluate if we returned to this area for additional sampling.
- o SG69 and SG70 at the closest locations identified on the geophysical profile as coarser grained (light blue) to SG64. The TPH-G concentration at SG64 was one order of magnitude greater than the adjacent samples SG63 and SG65, and also the samples located across 41st Street (SG48, SG49, SG50). Location SG64 is suspected of being located close to a natural conduit that is associated with soil gas concentrations that are one order of magnitude greater than those encountered at SG64 (consistent with the soil gas concentrations observed at SG53).
- o SG71 and SG72 at the closest locations identified on the geophysical profile as coarser grained (light and dark blue) to SG66.

The proposed soil gas samples will be collected and analyzed in accordance with methods set forth in P&D's most recently approved subsurface investigation work plan. The proposed groundwater grab sample at proposed location B89 will be collected using a GeoProbe rig to continuously core to first encountered water, followed by collection of a water sample from slotted temporary PVC casing using a peristaltic pump and USEPA low flow sampling techniques.

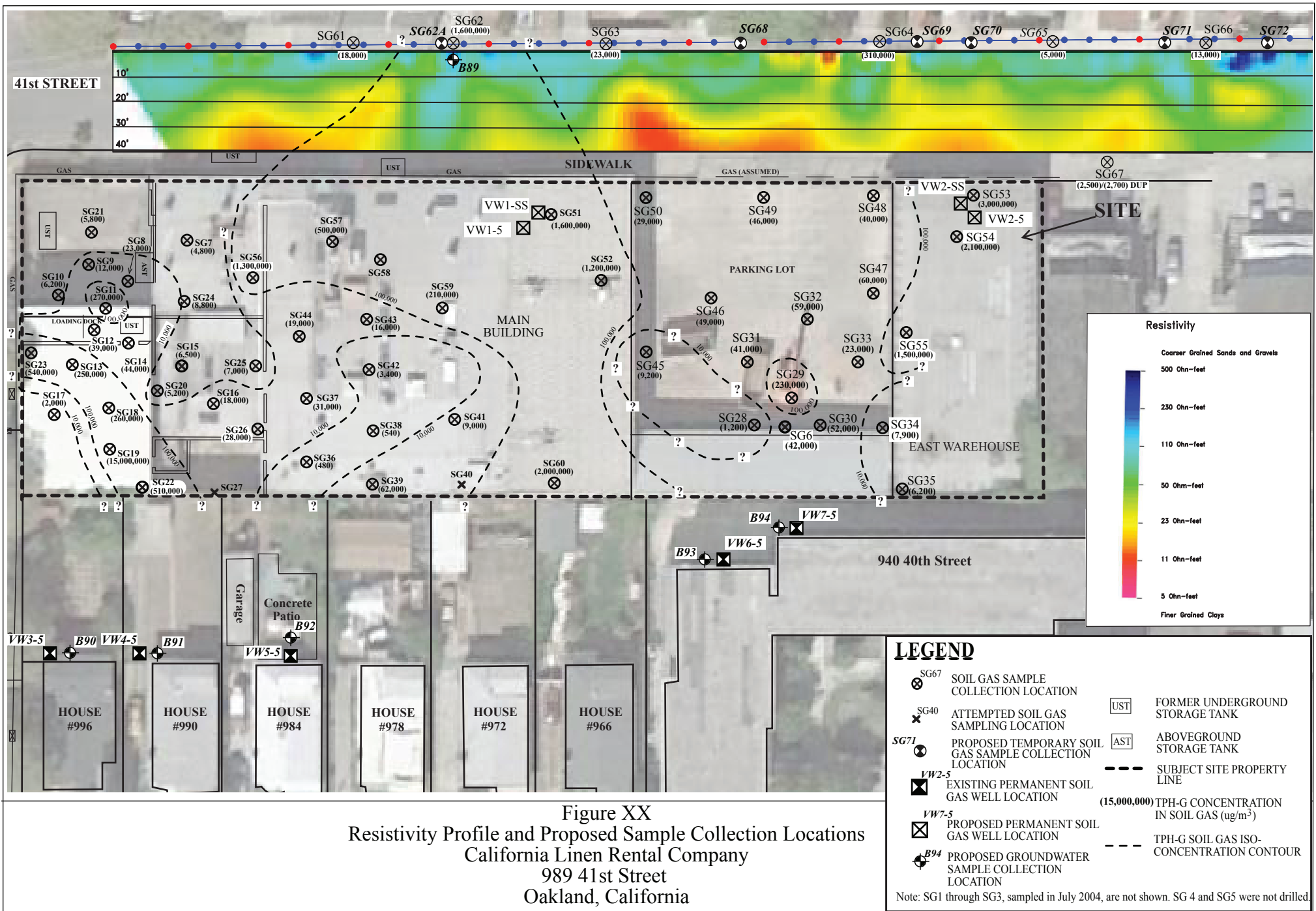
The driller is presently scheduled to drill for collection of the proposed samples on 41st Street shown on Figure XX for September 16, 2011. Please let me know if you have any questions. Thank you!

Paul

Paul H. King
Professional Geologist

P&D Environmental, Inc.
55 Santa Clara Avenue, Suite 240
Oakland, CA 94610

(510) 658-6916 telephone
(510) 834-0152 facsimile
(510) 387-6834 cellular
Paul.King@pdenviro.com



Base Map From:
 California Utility Survey Utility Sketch Plan,
 Feb. 14, 2005, Google Earth, June 2007,
 and JR Associates, June 2011

P&D Environmental, Inc.
 55 Santa Clara Avenue, Suite 240
 Oakland, CA 94610

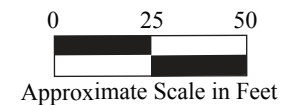


Table 1
Summary of Soil Gas Sample Analytical Results

Sample ID	Sample Date	TPH-G	MTBE	Benzene	Toluene	Ethylbenzene	m,p-Xylenes	o-Xylenes	2-Propanol
SG61	7/28/2011	18,000	ND<4.1	51	370	21	70	19	9,900,a
SG62	7/28/2011	<u>1,600,000</u>	ND<910	ND<800	ND<950	ND<1,100	ND<1,100	ND<1,100	1,000,000, a
SG63	7/28/2011	23,000	ND<4.9	48	1,200	92	330	110	ND<13
SG64	7/27/2011	<u>310,000</u>	ND<41	ND<36	13,000	1,100	3,800	1,400	ND<110
SG65	7/27/2011	5,000	ND<4.4	6.9	220	16	55	19	240
SG66	7/27/2011	13,000	ND<13	23	660	42	130	49	56
SG67	7/27/2011	2,500	ND<4.5	9.7	78	7.6	30	10	57
SG67-Dup	7/27/2011	2,700	ND<4.4	9.2	77	8.0	30	11	52
SG62, b	7/28/2011	NA	NA	NA	NA	NA	NA	NA	1,200,000
SG63, b	7/28/2011	NA	NA	NA	NA	NA	NA	NA	1,200,000
<i>ESL¹</i>		<i>10,000</i>	<i>9,400</i>	<i>84</i>	<i>63,000</i>	<i>980</i>	<i>21,000 combined</i>		<i>None</i>
<i>ESL²</i>		<i>29,000</i>	<i>31,000</i>	<i>280</i>	<i>180,000</i>	<i>3,300</i>	<i>58,000 combined</i>		<i>None</i>

NOTES:

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

MTBE = Methyl-tert-Butyl Ether.

2-Propanol = used as leak detector during sample collection.

ND = Not Detected.

NA = Not Analyzed.

a = Laboratory Note: Exceeds Instrument Calibration Range.

b = Tedlar bag samples collected from shroud to quantify amount of 2-Propanol inside sampling chamber.

ESL¹ = Environmental Screening Level, developed by San Francisco Bay – Regional Water Quality Control Board (SF-RWQCB), from Table E – Indoor Air and Soil Gas (Vapor Intrusion Concerns) Shallow Soil Gas Screening Levels for Residential Land Use.

ESL² = Environmental Screening Level, developed by San Francisco Bay – Regional Water Quality Control Board (SF-RWQCB), from Table E – Indoor Air and Soil Gas (Vapor Intrusion Concerns) Shallow Soil Gas Screening Levels for Commercial/Industrial Land Use.

Values in bold exceed their respective ESL¹ values.

Underlined Values exceed their respective ESL² values.

Results and ESLs in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), unless otherwise indicated.

Table 2
Summary of Vapor Well Soil Gas Sample Analytical Results

Sample ID	Sample Date	TPH-G	MTBE	Benzene	Toluene	Ethylbenzene	m,p-Xylenes	o-Xylenes	2-Propanol	Oxygen (%)	Nitrogen (%)	Methane (%)	Carbon Dioxide (%)
VW1-SS	8/10/2011	390	ND<4.4	ND<3.9	ND<4.6	ND<5.2	ND<5.2	ND<5.2	100	9.6	88	0.00084	2.3
VW1-5	8/10/2011	6,200	ND<16	ND<14	63	30	86	25	760	14	83	0.031	2.9
VW2-SS	8/10/2011	ND<220	ND<3.9	ND<3.4	ND<4.1	ND<4.7	ND<4.7	ND<4.7	41	8.5	80	0.00038	11
VW2-5	8/10/2011	65,000	ND<46	90	1,700	810	2,600	850	28,000, a	5.7	91	0.00092	2.8
VW2-5 Dup	8/10/2011	480,000	ND<620	ND<550	1,100	ND<750	1,800	ND<750	400,000, a	9.6	88	0.00084	2.3
<i>ESL¹</i>		<i>10,000</i>	<i>9,400</i>	<i>84</i>	<i>63,000</i>	<i>980</i>	<i>21,000 combined</i>	<i>None</i>	<i>None</i>	<i>None</i>	<i>None</i>	<i>None</i>	<i>None</i>
<i>ESL²</i>		<i>29,000</i>	<i>31,000</i>	<i>280</i>	<i>180,000</i>	<i>3,300</i>	<i>58,000 combined</i>	<i>None</i>	<i>None</i>	<i>None</i>	<i>None</i>	<i>None</i>	<i>None</i>

NOTES:

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

MTBE = Methyl-tert-Butyl Ether.

2-Propanol = used as leak detector during sample collection.

ND = Not Detected.

a = Laboratory Note: Exceeds Instrument Calibration Range.

ESL¹ = Environmental Screening Level, developed by San Francisco Bay – Regional Water Quality Control Board (SF-RWQCB), from Table E – Indoor Air and Soil Gas (Vapor Intrusion Concerns) Shallow Soil Gas Screening Levels for Residential Land Use.

ESL² = Environmental Screening Level, developed by San Francisco Bay – Regional Water Quality Control Board (SF-RWQCB), from Table E – Indoor Air and Soil Gas (Vapor Intrusion Concerns) Shallow Soil Gas Screening Levels for Commercial/Industrial Land Use.

Values in bold exceed their respective ESL¹ values.

Underlined Values exceed their respective ESL² values.

Results and ESLs in micrograms per cubic meter (µg/m³), unless otherwise indicated.

P & D ENVIRONMENTAL, INC.

55 Santa Clara Ave, Suite 240
Oakland, CA 94610
(510) 658-6916

CHAIN OF CUSTODY RECORD

1107500

PAGE 1 OF 1

PROJECT NUMBER: 0304		PROJECT NAME: California Linen Company Oakland				NUMBER OF CONTAINERS	ANALYSIS(ES): <i>2-Deposited by TO15</i>	PRESERVATIVE	REMARKS
SAMPLED BY: (PRINTED AND SIGNATURE) Steve Carmack <i>[Signature]</i>									
SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION					
<i>OIA</i> SG 62	7/28/11	1245	AIR		1	X		None Normal Turnaround	
<i>OZA</i> SG 63	↓	1305	AIR		1	X	↓	↓ ↓ ↓	
RELINQUISHED BY: (SIGNATURE) <i>[Signature]</i>		DATE 7/28/11	TIME 1445	RECEIVED BY: (SIGNATURE) FED EX	TOTAL NO. OF SAMPLES (THIS SHIPMENT) 2	TOTAL NO. OF CONTAINERS (THIS SHIPMENT) 2	LABORATORY: Air Toxics LTD		
RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RECEIVED BY: (SIGNATURE)	LABORATORY CONTACT: Kyle Vagaderi		LABORATORY PHONE NUMBER: (916) 985-1000		
RELINQUISHED BY: (SIGNATURE)		DATE 7/28/11	TIME 0900	RECEIVED FOR LABORATORY BY: (SIGNATURE) <i>[Signature]</i>	SAMPLE ANALYSIS REQUEST SHEET ATTACHED: () YES (X) NO				
Results and billing to: P&D Environmental, Inc. lab@pdenviro.com				REMARKS: Tedlar bags					FED EX CUSTODY SEAL INTACT? Y N NOU TEMP N/A

8/10/2011
Mr. Paul King
P & D Environmental
55 Santa Clara
Suite 240
Oakland CA 94610

Project Name: California Linen Company, Oakland
Project #: 0304
Workorder #: 1107500

Dear Mr. Paul King

The following report includes the data for the above referenced project for sample(s) received on 7/29/2011 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 (5&20 ppbv) 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: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kyle Vagadori
Project Manager

WORK ORDER #: 1107500

Work Order Summary

CLIENT:	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610	BILL TO:	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610
PHONE:	510-658-6916	P.O. #	
FAX:	510-834-0772	PROJECT #	0304 California Linen Company,
DATE RECEIVED:	07/29/2011	CONTACT:	Oakland Kyle Vagadori
DATE COMPLETED:	08/10/2011		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	SG 62	Modified TO-15 (5&20 ppbv	Tedlar Bag	Tedlar Bag
02A	SG 63	Modified TO-15 (5&20 ppbv	Tedlar Bag	Tedlar Bag
03A	Lab Blank	Modified TO-15 (5&20 ppbv	NA	NA
04A	CCV	Modified TO-15 (5&20 ppbv	NA	NA
05A	LCS	Modified TO-15 (5&20 ppbv	NA	NA
05AA	LCSD	Modified TO-15 (5&20 ppbv	NA	NA

CERTIFIED BY: 

DATE: 08/10/11

Laboratory Director

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11

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 Air Toxics Ltd.

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

**LABORATORY NARRATIVE
EPA Method TO-15 Soil Gas
P & D Environmental
Workorder# 1107500**

Two 1 Liter Tedlar Bag samples were received on July 29, 2011. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 50 mLs of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

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.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Dilution was performed on samples SG 62 and SG 63 due to the presence of high level target species.

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
EPA METHOD TO-15 GC/MS**

Client Sample ID: SG 62

Lab ID#: 1107500-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	2000	500000	4900	1200000

Client Sample ID: SG 63

Lab ID#: 1107500-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	2000	490000	4900	1200000

Client Sample ID: SG 62

Lab ID#: 1107500-01A

EPA METHOD TO-15 GC/MS

File Name:	14073011	Date of Collection: 7/28/11 12:45:00 PM
Dil. Factor:	100	Date of Analysis: 7/30/11 01:52 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	2000	500000	4900	1200000

Container Type: 1 Liter Tedlar Bag

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	97	70-130



Client Sample ID: SG 63

Lab ID#: 1107500-02A

EPA METHOD TO-15 GC/MS

File Name:	14073015	Date of Collection:	7/28/11 1:05:00 PM
Dil. Factor:	100	Date of Analysis:	7/30/11 03:56 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	2000	490000	4900	1200000

Container Type: 1 Liter Tedlar Bag

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	92	70-130

Client Sample ID: Lab Blank

Lab ID#: 1107500-03A

EPA METHOD TO-15 GC/MS

File Name:	14073006	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/30/11 10:34 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	20	Not Detected	49	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	91	70-130

Client Sample ID: CCV

Lab ID#: 1107500-04A

EPA METHOD TO-15 GC/MS

File Name:	14073002	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/30/11 08:35 AM

Compound	%Recovery
2-Propanol	88

Container Type: NA - Not Applicable

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

Client Sample ID: LCS

Lab ID#: 1107500-05A

EPA METHOD TO-15 GC/MS

File Name:	14073003	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/30/11 09:00 AM

Compound	%Recovery
2-Propanol	76

Container Type: NA - Not Applicable

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

Client Sample ID: LCSD

Lab ID#: 1107500-05AA

EPA METHOD TO-15 GC/MS

File Name:	14073004	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 7/30/11 09:18 AM

Compound	%Recovery
2-Propanol	75

Container Type: NA - Not Applicable

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

P & D ENVIRONMENTAL, INC.

55 Santa Clara Ave, Suite 240
Oakland, CA 94610
(510) 658-6916

CHAIN OF CUSTODY RECORD

1108117
PAGE 1 OF 1

PROJECT NUMBER: 0304		PROJECT NAME: CALIFORNIA LINEN RENTAL CO. OAKLAND					NUMBER OF CONTAINERS	ANALYSIS(ES): <i>TRH G BY TA-3 MUTEX AND 2-PP-PHAG BY TD-15</i>	PRESERVATIVE	REMARKS	
SAMPLED BY: (PRINTED AND SIGNATURE) <i>Michael Deschamps Michael Deschamps</i>											
SAMPLE NUMBER	DATE	TIME	TYPE	INIT. VAC.	SAMPLE LOCATION	FINAL VAC.	PID				
01A SG 61	7/22/11	151540	2014	-30	33726	-5	0 PPM	1	X X	None	ABNORMAL TURN AROUND
02A SG 62	↓	125840		-28	36402	-5	0	1	X X	"	
03A SG 63	↓	151120		-30	8036	-5	0	1	X X	"	
04A SG 64	7/27/11	163305		-29	8011	-5	64	1	X X	"	
05A SG 65	↓	152130		-30	8023	-5	0.4	1	X X	"	
06A SG 66	↓	165500		-26	8031	-23.5	0	1	X X	"	
07A SG 67	↓	144520		-30	7999	-5	0	1	X X	"	
08A SG 67 DIP	↓	144520	↓	-30	8018	-5	0	1	X X	"	
							FEDERAL CHAIN OF CUSTODY Y N NONE / EMPNA				
RELINQUISHED BY: (SIGNATURE) <i>Michael Deschamps</i>		DATE	TIME	RECEIVED BY: (SIGNATURE) <i>Fed Ex</i>		TOTAL NO. OF SAMPLES (THIS SHIPMENT) 8		LABORATORY: <i>AIR TOXICS LTD.</i>			
RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RECEIVED BY: (SIGNATURE)		TOTAL NO. OF CONTAINERS (THIS SHIPMENT) 8		LABORATORY CONTACT: <i>Kyle VAGATOR</i>			
RELINQUISHED BY: (SIGNATURE)		DATE 8/4/11	TIME 1315	RECEIVED FOR LABORATORY BY: (SIGNATURE) <i>R. Duthie etc</i>		LABORATORY PHONE NUMBER: <i>(916) 985-1000</i>					
Results and billing to: P&D Environmental, Inc. lab@pdenviro.com				REMARKS:							

8/17/2011

Mr. Paul King
P & D Environmental
55 Santa Clara
Suite 240
Oakland CA 94610

Project Name: CALIFORNIA LINEN RENTAL CO. OAKLAND
Project #: 0304
Workorder #: 1108117A

Dear Mr. Paul King

The following report includes the data for the above referenced project for sample(s) received on 8/4/2011 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-3 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: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,




Kyle Vagadori
Project Manager

WORK ORDER #: 1108117A

Work Order Summary

CLIENT:	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610	BILL TO:	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610
PHONE:	510-658-6916	P.O. #	
FAX:	510-834-0772	PROJECT #	0304 CALIFORNIA LINEN RENTAL
DATE RECEIVED:	08/04/2011	CONTACT:	CO. OAKLAND Kyle Vagadori
DATE COMPLETED:	08/17/2011		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	SG61	Modified TO-3	3.6 "Hg	15 psi
02A	SG62	Modified TO-3	6.0 "Hg	15 psi
03A	SG63	Modified TO-3	7.6 "Hg	15 psi
04A	SG64	Modified TO-3	3.2 "Hg	15 psi
05A	SG65	Modified TO-3	5.0 "Hg	15 psi
06A	SG66	Modified TO-3	21.4 "Hg	15 psi
07A	SG67	Modified TO-3	5.6 "Hg	15 psi
08A	SG67 DUP	Modified TO-3	5.4 "Hg	15 psi
09A	Lab Blank	Modified TO-3	NA	NA
10A	LCS	Modified TO-3	NA	NA
10AA	LCSD	Modified TO-3	NA	NA

CERTIFIED BY: 
Laboratory Director

DATE: 08/17/11

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,
 NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
 Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11
 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 Air Toxics Ltd.

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

LABORATORY NARRATIVE
Modified TO-3
P & D Environmental
Workorder# 1108117A

Eight 1 Liter Summa Canister samples were received on August 04, 2011. The laboratory performed analysis for volatile organic compounds in air via modified EPA Method TO-3 using gas chromatography with flame ionization detection. The method involves concentrating up to 200 mL of sample. The concentrated aliquot is then dry purged to remove water vapor prior to entering the chromatographic system. The TPH (Gasoline Range) results are calculated using the response factor of Gasoline. A molecular weight of 100 is used to convert the TPH (Gasoline Range) ppmv result to ug/L.

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

<i>Requirement</i>	<i>TO-3</i>	<i>ATL Modifications</i>
Daily Calibration Standard Frequency	Prior to sample analysis and every 4 - 6 hrs	Prior to sample analysis and after the analytical batch ≤ 20 samples
Initial Calibration Calculation	4-point calibration using a linear regression model	5-point calibration using average Response Factor
Initial Calibration Frequency	Weekly	When daily calibration standard recovery is outside 75 - 125 %, or upon significant changes to procedure or instrumentation
Moisture Control	Nafion system	Sorbent system
Minimum Detection Limit (MDL)	Calculated using the equation $DL = A + 3.3S$, where A is intercept of calibration line and S is the standard deviation of at least 3 reps of low level standard	40 CFR Pt. 136 App. B
Preparation of Standards	Levels achieved through dilution of gas mixture	Levels achieved through loading various volumes of the gas mixture

Receiving Notes

Sample SG66 was received with significant vacuum remaining in the canister. The residual canister vacuum resulted in elevated reporting limits.

Analytical Notes

The hydrocarbon profile present in sample SG62 did not resemble that of commercial gasoline. Results were calculated using the response factor derived from the current gasoline linear calibration.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

B - Compound present in laboratory blank greater than reporting limit.

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 detection limit.

M - Reported value may be biased due to apparent matrix interferences.

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-3 GC/FID**

Client Sample ID: SG61

Lab ID#: 1108117A-01A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.058	0.24	4.5	18

Client Sample ID: SG62

Lab ID#: 1108117A-02A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.70	2.9	390	1600

Client Sample ID: SG63

Lab ID#: 1108117A-03A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.068	0.28	5.6	23

Client Sample ID: SG64

Lab ID#: 1108117A-04A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.11	0.46	75	310

Client Sample ID: SG65

Lab ID#: 1108117A-05A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.060	0.25	1.2	5.0

Client Sample ID: SG66

Lab ID#: 1108117A-06A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
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**Summary of Detected Compounds
MODIFIED EPA METHOD TO-3 GC/FID**

Client Sample ID: SG66

Lab ID#: 1108117A-06A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.18	0.72	3.3	13

Client Sample ID: SG67

Lab ID#: 1108117A-07A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.062	0.25	0.62	2.5

Client Sample ID: SG67 DUP

Lab ID#: 1108117A-08A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.062	0.25	0.65	2.7

Client Sample ID: SG61

Lab ID#: 1108117A-01A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d080807	Date of Collection: 7/28/11 3:15:00 PM
Dil. Factor:	2.30	Date of Analysis: 8/8/11 11:22 AM

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.058	0.24	4.5	18

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	95	75-150

Client Sample ID: SG62

Lab ID#: 1108117A-02A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d080813	Date of Collection:	7/28/11 12:58:00 PM
Dil. Factor:	28.0	Date of Analysis:	8/8/11 03:19 PM

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.70	2.9	390	1600

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	106	75-150

Client Sample ID: SG63

Lab ID#: 1108117A-03A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d080809	Date of Collection: 7/28/11 3:16:00 PM
Dil. Factor:	2.70	Date of Analysis: 8/8/11 12:39 PM

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.068	0.28	5.6	23

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	93	75-150

Client Sample ID: SG64

Lab ID#: 1108117A-04A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d080812	Date of Collection: 7/27/11 4:33:00 PM
Dil. Factor:	4.52	Date of Analysis: 8/8/11 02:33 PM

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.11	0.46	75	310

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	99	75-150

Client Sample ID: SG65

Lab ID#: 1108117A-05A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d080811	Date of Collection:	7/27/11 3:21:00 PM
Dil. Factor:	2.42	Date of Analysis:	8/8/11 01:48 PM

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.060	0.25	1.2	5.0

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	98	75-150

Client Sample ID: SG66

Lab ID#: 1108117A-06A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d080814	Date of Collection:	7/27/11 4:55:00 PM
Dil. Factor:	7.05	Date of Analysis:	8/8/11 04:07 PM

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.18	0.72	3.3	13

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	104	75-150

Client Sample ID: SG67

Lab ID#: 1108117A-07A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d080815	Date of Collection:	7/27/11 2:45:00 PM
Dil. Factor:	2.48	Date of Analysis:	8/8/11 04:39 PM

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.062	0.25	0.62	2.5

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	100	75-150



Client Sample ID: SG67 DUP

Lab ID#: 1108117A-08A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d080816	Date of Collection:	7/27/11 2:45:00 PM
Dil. Factor:	2.46	Date of Analysis:	8/8/11 05:40 PM

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.062	0.25	0.65	2.7

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	103	75-150

Client Sample ID: Lab Blank

Lab ID#: 1108117A-09A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d080804	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/8/11 08:54 AM

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.025	0.10	Not Detected	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	104	75-150

Client Sample ID: LCS

Lab ID#: 1108117A-10A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d080802	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/8/11 07:33 AM

Compound	%Recovery
TPH (Gasoline Range)	101

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	105	75-150



Client Sample ID: LCSD

Lab ID#: 1108117A-10AA

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d080819	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/8/11 07:23 PM

Compound	%Recovery
TPH (Gasoline Range)	91

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	107	75-150

8/17/2011

Mr. Paul King
P & D Environmental
55 Santa Clara
Suite 240
Oakland CA 94610

Project Name: CALIFORNIA LINEN RENTAL CO. OAKLAND
Project #: 0304
Workorder #: 1108117B

Dear Mr. Paul King

The following report includes the data for the above referenced project for sample(s) received on 8/4/2011 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: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kyle Vagadori
Project Manager

WORK ORDER #: 1108117B

Work Order Summary

CLIENT:	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610	BILL TO:	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610
PHONE:	510-658-6916	P.O. #	
FAX:	510-834-0772	PROJECT #	0304 CALIFORNIA LINEN RENTAL
DATE RECEIVED:	08/04/2011	CONTACT:	CO. OAKLAND Kyle Vagadori
DATE COMPLETED:	08/17/2011		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	SG61	Modified TO-15	3.6 "Hg	15 psi
02A	SG62	Modified TO-15	6.0 "Hg	15 psi
03A	SG63	Modified TO-15	7.6 "Hg	15 psi
04A	SG64	Modified TO-15	3.2 "Hg	15 psi
05A	SG65	Modified TO-15	5.0 "Hg	15 psi
06A	SG66	Modified TO-15	21.4 "Hg	15 psi
07A	SG67	Modified TO-15	5.6 "Hg	15 psi
08A	SG67 DUP	Modified TO-15	5.4 "Hg	15 psi
09A	Lab Blank	Modified TO-15	NA	NA
09B	Lab Blank	Modified TO-15	NA	NA
10A	CCV	Modified TO-15	NA	NA
10B	CCV	Modified TO-15	NA	NA
11A	LCS	Modified TO-15	NA	NA
11AA	LCS	Modified TO-15	NA	NA
11B	LCS	Modified TO-15	NA	NA
11BB	LCS	Modified TO-15	NA	NA

CERTIFIED BY: 

DATE: 08/17/11

Laboratory Director

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11

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 Air Toxics Ltd.

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

**LABORATORY NARRATIVE
EPA Method TO-15
P & D Environmental
Workorder# 1108117B**

Eight 1 Liter Summa Canister samples were received on August 04, 2011. The laboratory performed analysis via 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.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Dilution was performed on samples SG62 and SG64 due to the presence of high level target species.

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
EPA METHOD TO-15 GC/MS FULL SCAN**

Client Sample ID: SG61

Lab ID#: 1108117B-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.6	4000 E	11	9900 E
Benzene	1.2	16	3.7	51
Toluene	1.2	98	4.3	370
Ethyl Benzene	1.2	4.9	5.0	21
m,p-Xylene	1.2	16	5.0	70
o-Xylene	1.2	4.5	5.0	19

Client Sample ID: SG62

Lab ID#: 1108117B-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	1000	400000 E	2500	1000000 E

Client Sample ID: SG63

Lab ID#: 1108117B-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.4	15	4.3	48
Toluene	1.4	320	5.1	1200
Ethyl Benzene	1.4	21	5.9	92
m,p-Xylene	1.4	75	5.9	330
o-Xylene	1.4	25	5.9	110

Client Sample ID: SG64

Lab ID#: 1108117B-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Toluene	11	3300	42	13000
Ethyl Benzene	11	250	49	1100
m,p-Xylene	11	880	49	3800
o-Xylene	11	330	49	1400

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

Client Sample ID: SG65

Lab ID#: 1108117B-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.8	99	12	240
Benzene	1.2	2.2	3.9	6.9
Toluene	1.2	60	4.6	220
Ethyl Benzene	1.2	3.6	5.2	16
m,p-Xylene	1.2	13	5.2	55
o-Xylene	1.2	4.3	5.2	19

Client Sample ID: SG66

Lab ID#: 1108117B-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	14	23	35	56
Benzene	3.5	7.1	11	23
Toluene	3.5	170	13	660
Ethyl Benzene	3.5	9.7	15	42
m,p-Xylene	3.5	31	15	130
o-Xylene	3.5	11	15	49

Client Sample ID: SG67

Lab ID#: 1108117B-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	5.0	23	12	57
Benzene	1.2	3.0	4.0	9.7
Toluene	1.2	20	4.7	78
Ethyl Benzene	1.2	1.8	5.4	7.6
m,p-Xylene	1.2	7.0	5.4	30
o-Xylene	1.2	2.4	5.4	10

Client Sample ID: SG67 DUP

Lab ID#: 1108117B-08A

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

Client Sample ID: SG67 DUP

Lab ID#: 1108117B-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.9	21	12	52
Benzene	1.2	2.9	3.9	9.2
Toluene	1.2	20	4.6	77
Ethyl Benzene	1.2	1.8	5.3	8.0
m,p-Xylene	1.2	6.9	5.3	30
o-Xylene	1.2	2.5	5.3	11

Client Sample ID: SG61

Lab ID#: 1108117B-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	6080908	Date of Collection: 7/28/11 3:15:00 PM
Dil. Factor:	2.30	Date of Analysis: 8/9/11 11:13 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.6	4000 E	11	9900 E
Methyl tert-butyl ether	1.2	Not Detected	4.1	Not Detected
Benzene	1.2	16	3.7	51
Toluene	1.2	98	4.3	370
Ethyl Benzene	1.2	4.9	5.0	21
m,p-Xylene	1.2	16	5.0	70
o-Xylene	1.2	4.5	5.0	19

E = Exceeds instrument calibration range.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	110	70-130
4-Bromofluorobenzene	103	70-130

Client Sample ID: SG62

Lab ID#: 1108117B-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	6080824	Date of Collection: 7/28/11 12:58:00 PM
Dil. Factor:	504	Date of Analysis: 8/8/11 10:39 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	1000	400000 E	2500	1000000 E
Methyl tert-butyl ether	250	Not Detected	910	Not Detected
Benzene	250	Not Detected	800	Not Detected
Toluene	250	Not Detected	950	Not Detected
Ethyl Benzene	250	Not Detected	1100	Not Detected
m,p-Xylene	250	Not Detected	1100	Not Detected
o-Xylene	250	Not Detected	1100	Not Detected

E = Exceeds instrument calibration range.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	102	70-130

Client Sample ID: SG63

Lab ID#: 1108117B-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	6080816	Date of Collection: 7/28/11 3:16:00 PM
Dil. Factor:	2.70	Date of Analysis: 8/8/11 05:47 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	5.4	Not Detected	13	Not Detected
Methyl tert-butyl ether	1.4	Not Detected	4.9	Not Detected
Benzene	1.4	15	4.3	48
Toluene	1.4	320	5.1	1200
Ethyl Benzene	1.4	21	5.9	92
m,p-Xylene	1.4	75	5.9	330
o-Xylene	1.4	25	5.9	110

Container Type: 1 Liter Summa Canister

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

Client Sample ID: SG64

Lab ID#: 1108117B-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	6080825	Date of Collection: 7/27/11 4:33:00 PM
Dil. Factor:	22.6	Date of Analysis: 8/8/11 11:12 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	45	Not Detected	110	Not Detected
Methyl tert-butyl ether	11	Not Detected	41	Not Detected
Benzene	11	Not Detected	36	Not Detected
Toluene	11	3300	42	13000
Ethyl Benzene	11	250	49	1100
m,p-Xylene	11	880	49	3800
o-Xylene	11	330	49	1400

Container Type: 1 Liter Summa Canister

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

Client Sample ID: SG65

Lab ID#: 1108117B-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	6080820	Date of Collection: 7/27/11 3:21:00 PM
Dil. Factor:	2.42	Date of Analysis: 8/8/11 08:03 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.8	99	12	240
Methyl tert-butyl ether	1.2	Not Detected	4.4	Not Detected
Benzene	1.2	2.2	3.9	6.9
Toluene	1.2	60	4.6	220
Ethyl Benzene	1.2	3.6	5.2	16
m,p-Xylene	1.2	13	5.2	55
o-Xylene	1.2	4.3	5.2	19

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	108	70-130
4-Bromofluorobenzene	101	70-130

Client Sample ID: SG66

Lab ID#: 1108117B-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	6080821	Date of Collection: 7/27/11 4:55:00 PM
Dil. Factor:	7.05	Date of Analysis: 8/8/11 08:54 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	14	23	35	56
Methyl tert-butyl ether	3.5	Not Detected	13	Not Detected
Benzene	3.5	7.1	11	23
Toluene	3.5	170	13	660
Ethyl Benzene	3.5	9.7	15	42
m,p-Xylene	3.5	31	15	130
o-Xylene	3.5	11	15	49

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	97	70-130

Client Sample ID: SG67

Lab ID#: 1108117B-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	6080822	Date of Collection: 7/27/11 2:45:00 PM
Dil. Factor:	2.48	Date of Analysis: 8/8/11 09:30 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	5.0	23	12	57
Methyl tert-butyl ether	1.2	Not Detected	4.5	Not Detected
Benzene	1.2	3.0	4.0	9.7
Toluene	1.2	20	4.7	78
Ethyl Benzene	1.2	1.8	5.4	7.6
m,p-Xylene	1.2	7.0	5.4	30
o-Xylene	1.2	2.4	5.4	10

Container Type: 1 Liter Summa Canister

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

Client Sample ID: SG67 DUP

Lab ID#: 1108117B-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	6080823	Date of Collection: 7/27/11 2:45:00 PM
Dil. Factor:	2.46	Date of Analysis: 8/8/11 10:05 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.9	21	12	52
Methyl tert-butyl ether	1.2	Not Detected	4.4	Not Detected
Benzene	1.2	2.9	3.9	9.2
Toluene	1.2	20	4.6	77
Ethyl Benzene	1.2	1.8	5.3	8.0
m,p-Xylene	1.2	6.9	5.3	30
o-Xylene	1.2	2.5	5.3	11

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	101	70-130

Client Sample ID: Lab Blank

Lab ID#: 1108117B-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	6080808	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/8/11 11:33 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	2.0	Not Detected	4.9	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	101	70-130

Client Sample ID: Lab Blank

Lab ID#: 1108117B-09B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	6080907	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/9/11 10:20 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	2.0	Not Detected	4.9	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	107	70-130
4-Bromofluorobenzene	105	70-130

Client Sample ID: CCV

Lab ID#: 1108117B-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	6080803	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/8/11 08:04 AM

Compound	%Recovery
2-Propanol	96
Methyl tert-butyl ether	103
Benzene	98
Toluene	99
Ethyl Benzene	99
m,p-Xylene	98
o-Xylene	97

Container Type: NA - Not Applicable

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

Client Sample ID: CCV

Lab ID#: 1108117B-10B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	6080902	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/9/11 07:14 AM

Compound	%Recovery
2-Propanol	91
Methyl tert-butyl ether	99
Benzene	99
Toluene	100
Ethyl Benzene	100
m,p-Xylene	98
o-Xylene	98

Container Type: NA - Not Applicable

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

Client Sample ID: LCS

Lab ID#: 1108117B-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	6080804	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/8/11 08:54 AM

Compound	%Recovery
2-Propanol	92
Methyl tert-butyl ether	99
Benzene	97
Toluene	93
Ethyl Benzene	95
m,p-Xylene	96
o-Xylene	95

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	105	70-130

Client Sample ID: LCSD

Lab ID#: 1108117B-11AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	6080805	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/8/11 09:15 AM

Compound	%Recovery
2-Propanol	91
Methyl tert-butyl ether	98
Benzene	96
Toluene	92
Ethyl Benzene	96
m,p-Xylene	94
o-Xylene	95

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	98	70-130

Client Sample ID: LCS

Lab ID#: 1108117B-11B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	6080903	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/9/11 07:59 AM

Compound	%Recovery
2-Propanol	93
Methyl tert-butyl ether	102
Benzene	93
Toluene	90
Ethyl Benzene	92
m,p-Xylene	92
o-Xylene	93

Container Type: NA - Not Applicable

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

Client Sample ID: LCSD

Lab ID#: 1108117B-11BB

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	6080904	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/9/11 08:20 AM

Compound	%Recovery
2-Propanol	92
Methyl tert-butyl ether	101
Benzene	96
Toluene	93
Ethyl Benzene	97
m,p-Xylene	96
o-Xylene	96

Container Type: NA - Not Applicable

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

P & D ENVIRONMENTAL, INC.

55 Santa Clara Ave, Suite 240
Oakland, CA 94610
(510) 658-6916

1108301

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

PROJECT NUMBER: 0304		PROJECT NAME: CALIFORNIA LINEN RENTAL 929 41ST ST. OAKLAND				NUMBER OF CONTAINERS	ANALYSIS(ES): TPH-E BY TO-3 MIBTEX AND 2-PROPANOL & DIB	PRESERVATIVE	REMARKS
SAMPLED BY: (PRINTED AND SIGNATURE) MICHAEL DESCHENES <i>Michael Deschenes</i>									
OIA O2A O3A O4A O5A	SAMPLE NUMBER	DATE	TIME	TYPE	INIT VAC	SUMMA#	FINAL PID		
	VW1-SS	8/10/11	051400	SIL/GAS	-39	37668	-5	0PPM	1
	VW1-5		161000		-30	36388	-29	0	1
	VW2-SS		115000		-30	2190	-5	0	1
	VW2-5		163000		-30	33712	-11	2	1
VW2-5 DHP		163000		-30	33398	-11	2	1	
RELINQUISHED BY: (SIGNATURE) <i>Michael Deschenes</i>		DATE 8/11/11	TIME	RECEIVED BY: (SIGNATURE) Fed Ex		TOTAL NO. OF SAMPLES (THIS SHIPMENT) 5	LABORATORY: AIR TOXICS, LTD.		
RELINQUISHED BY: (SIGNATURE)		DATE 8.15.11	TIME 1255	RECEIVED BY: (SIGNATURE) John ATL		LABORATORY CONTACT: KYLE VAGADERI		LABORATORY PHONE NUMBER: (916) 985-1000	
RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)		SAMPLE ANALYSIS REQUEST SHEET ATTACHED: () YES (X) NO			
Results and billing to: P&D Environmental, Inc. lab@pdenviro.com				REMARKS: 2-PROPANOL WAS OUR TRACER GAS					

CUSTOMER SEAL INTACT?
Y N NONE TEMP *✓*

8/26/2011
Mr. Paul King
P & D Environmental
55 Santa Clara
Suite 240
Oakland CA 94610

Project Name: California Linen Rental 989 41st St, Oak
Project #: 0304
Workorder #: 1108301A

Dear Mr. Paul King

The following report includes the data for the above referenced project for sample(s) received on 8/15/2011 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-3 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: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,




Kyle Vagadori
Project Manager

WORK ORDER #: 1108301A

Work Order Summary

CLIENT:	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610	BILL TO:	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610
PHONE:	510-658-6916	P.O. #	
FAX:	510-834-0772	PROJECT #	0304 California Linen Rental 989 41st
DATE RECEIVED:	08/15/2011	CONTACT:	St. Oak Kyle Vagadori
DATE COMPLETED:	08/26/2011		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	VW1-SS	Modified TO-3	5.0 "Hg	15 psi
02A	VW1-5	Modified TO-3	23.0 "Hg	15 psi
03A	VW2-SS	Modified TO-3	2.0 "Hg	15 psi
04A	VW2-5	Modified TO-3	10.8 "Hg	15 psi
05A	VW2-5 DUP	Modified TO-3	9.0 "Hg	15 psi
06A	Lab Blank	Modified TO-3	NA	NA
06B	Lab Blank	Modified TO-3	NA	NA
07A	LCS	Modified TO-3	NA	NA
07AA	LCSD	Modified TO-3	NA	NA
07B	LCS	Modified TO-3	NA	NA
07BB	LCSD	Modified TO-3	NA	NA

CERTIFIED BY: 
Laboratory Director

DATE: 08/26/11

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,
 NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
 Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11
 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 Air Toxics Ltd.

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

**LABORATORY NARRATIVE
Modified TO-3
P & D Environmental
Workorder# 1108301A**

Five 1 Liter Summa Canister samples were received on August 15, 2011. The laboratory performed analysis for volatile organic compounds in air via modified EPA Method TO-3 using gas chromatography with flame ionization detection. The method involves concentrating up to 200 mL of sample. The concentrated aliquot is then dry purged to remove water vapor prior to entering the chromatographic system. The TPH (Gasoline Range) results are calculated using the response factor of Gasoline. A molecular weight of 100 is used to convert the TPH (Gasoline Range) ppmv result to ug/L.

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

<i>Requirement</i>	<i>TO-3</i>	<i>ATL Modifications</i>
Daily Calibration Standard Frequency	Prior to sample analysis and every 4 - 6 hrs	Prior to sample analysis and after the analytical batch ≤ 20 samples
Initial Calibration Calculation	4-point calibration using a linear regression model	5-point calibration using average Response Factor
Initial Calibration Frequency	Weekly	When daily calibration standard recovery is outside 75 - 125 %, or upon significant changes to procedure or instrumentation
Moisture Control	Nafion system	Sorbent system
Minimum Detection Limit (MDL)	Calculated using the equation $DL = A + 3.3S$, where A is intercept of calibration line and S is the standard deviation of at least 3 reps of low level standard	40 CFR Pt. 136 App. B
Preparation of Standards	Levels achieved through dilution of gas mixture	Levels achieved through loading various volumes of the gas mixture

Receiving Notes

Sample VW1-5 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

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

B - Compound present in laboratory blank greater than reporting limit.

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 detection limit.

M - Reported value may be biased due to apparent matrix interferences.

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-3 GC/FID**

Client Sample ID: VW1-SS

Lab ID#: 1108301A-01A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.060	0.25	0.095	0.39

Client Sample ID: VW1-5

Lab ID#: 1108301A-02A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.22	0.88	1.5	6.2

Client Sample ID: VW2-SS

Lab ID#: 1108301A-03A

No Detections Were Found.

Client Sample ID: VW2-5

Lab ID#: 1108301A-04A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.079	0.32	16	65

Client Sample ID: VW2-5 DUP

Lab ID#: 1108301A-05A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.19	0.79	120	480

Client Sample ID: VW1-SS

Lab ID#: 1108301A-01A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d081713	Date of Collection: 8/10/11 3:14:00 PM
Dil. Factor:	2.42	Date of Analysis: 8/17/11 05:38 PM

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.060	0.25	0.095	0.39

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	90	75-150

Client Sample ID: VW1-5

Lab ID#: 1108301A-02A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d081714	Date of Collection: 8/10/11 4:10:00 PM
Dil. Factor:	8.66	Date of Analysis: 8/17/11 06:11 PM

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.22	0.88	1.5	6.2

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	107	75-150

Client Sample ID: VW2-SS

Lab ID#: 1108301A-03A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d081715	Date of Collection:	8/10/11 11:50:00 AM
Dil. Factor:	2.16	Date of Analysis:	8/17/11 06:44 PM

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.054	0.22	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	105	75-150

Client Sample ID: VW2-5

Lab ID#: 1108301A-04A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d081716	Date of Collection:	8/10/11 4:30:00 PM
Dil. Factor:	3.16	Date of Analysis:	8/17/11 07:17 PM

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.079	0.32	16	65

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	103	75-150

Client Sample ID: VW2-5 DUP

Lab ID#: 1108301A-05A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d081805	Date of Collection: 8/10/11 4:30:00 PM
Dil. Factor:	7.71	Date of Analysis: 8/18/11 10:31 AM

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.19	0.79	120	480

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	106	75-150

Client Sample ID: Lab Blank

Lab ID#: 1108301A-06A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d081706	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/17/11 09:58 AM

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.025	0.10	Not Detected	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	107	75-150

Client Sample ID: Lab Blank

Lab ID#: 1108301A-06B

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d081804	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/18/11 09:43 AM

Compound	Rpt. Limit (ppmv)	Rpt. Limit (ug/L)	Amount (ppmv)	Amount (ug/L)
TPH (Gasoline Range)	0.025	0.10	Not Detected	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	102	75-150

Client Sample ID: LCS

Lab ID#: 1108301A-07A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d081702	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/17/11 06:53 AM

Compound	%Recovery
TPH (Gasoline Range)	104

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	104	75-150

Client Sample ID: LCSD

Lab ID#: 1108301A-07AA

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d081718	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/17/11 08:44 PM

Compound	%Recovery
TPH (Gasoline Range)	105

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	126	75-150

Client Sample ID: LCS

Lab ID#: 1108301A-07B

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d081802	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/18/11 07:47 AM

Compound	%Recovery
TPH (Gasoline Range)	99

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	102	75-150

Client Sample ID: LCSD

Lab ID#: 1108301A-07BB

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d081819	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/18/11 09:03 PM

Compound	%Recovery
TPH (Gasoline Range)	91

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	108	75-150

8/26/2011
Mr. Paul King
P & D Environmental
55 Santa Clara
Suite 240
Oakland CA 94610

Project Name: California Linen Rental 989 41st St, Oak
Project #: 0304
Workorder #: 1108301B

Dear Mr. Paul King

The following report includes the data for the above referenced project for sample(s) received on 8/15/2011 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: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kyle Vagadori
Project Manager

WORK ORDER #: 1108301B

Work Order Summary

CLIENT:	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610	BILL TO:	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610
PHONE:	510-658-6916	P.O. #	
FAX:	510-834-0772	PROJECT #	0304 California Linen Rental 989 41st
DATE RECEIVED:	08/15/2011	CONTACT:	St. Oak Kyle Vagadori
DATE COMPLETED:	08/26/2011		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	VW1-SS	Modified TO-15	5.0 "Hg	15 psi
02A	VW1-5	Modified TO-15	23.0 "Hg	15 psi
03A	VW2-SS	Modified TO-15	2.0 "Hg	15 psi
04A	VW2-5	Modified TO-15	10.8 "Hg	15 psi
05A	VW2-5 DUP	Modified TO-15	9.0 "Hg	15 psi
06A	Lab Blank	Modified TO-15	NA	NA
06B	Lab Blank	Modified TO-15	NA	NA
07A	CCV	Modified TO-15	NA	NA
07B	CCV	Modified TO-15	NA	NA
08A	LCS	Modified TO-15	NA	NA
08AA	LCS	Modified TO-15	NA	NA
08B	LCS	Modified TO-15	NA	NA

CERTIFIED BY: 

DATE: 08/26/11

Laboratory Director

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11

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 Air Toxics Ltd.

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

**LABORATORY NARRATIVE
EPA Method TO-15
P & D Environmental
Workorder# 1108301B**

Five 1 Liter Summa Canister samples were received on August 15, 2011. The laboratory performed analysis via 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.

Receiving Notes

Sample VW1-5 was received with significant vacuum remaining in the canister. The residual canister vacuum resulted in elevated reporting limits.

Analytical Notes

Dilution was performed on samples VW2-5 and VW2-5 DUP due to high concentration levels of the leak check compound 2-Propanol.

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
EPA METHOD TO-15 GC/MS FULL SCAN**

Client Sample ID: VW1-SS

Lab ID#: 1108301B-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.8	43	12	100

Client Sample ID: VW1-5

Lab ID#: 1108301B-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	17	310	42	760
Toluene	4.3	17	16	63
Ethyl Benzene	4.3	7.0	19	30
m,p-Xylene	4.3	20	19	86
o-Xylene	4.3	5.7	19	25

Client Sample ID: VW2-SS

Lab ID#: 1108301B-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.3	17	11	41

Client Sample ID: VW2-5

Lab ID#: 1108301B-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	51	11000 E	120	28000 E
Benzene	13	28	40	90
Toluene	13	440	48	1700
Ethyl Benzene	13	180	55	810
m,p-Xylene	13	600	55	2600
o-Xylene	13	200	55	850

Client Sample ID: VW2-5 DUP

Lab ID#: 1108301B-05A

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

Client Sample ID: VW2-5 DUP

Lab ID#: 1108301B-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	690	160000 E	1700	400000 E
Toluene	170	290	650	1100
m,p-Xylene	170	420	750	1800

Client Sample ID: VW1-SS

Lab ID#: 1108301B-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2081826	Date of Collection: 8/10/11 3:14:00 PM
Dil. Factor:	2.42	Date of Analysis: 8/18/11 10:11 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.8	43	12	100
Methyl tert-butyl ether	1.2	Not Detected	4.4	Not Detected
Benzene	1.2	Not Detected	3.9	Not Detected
Toluene	1.2	Not Detected	4.6	Not Detected
Ethyl Benzene	1.2	Not Detected	5.2	Not Detected
m,p-Xylene	1.2	Not Detected	5.2	Not Detected
o-Xylene	1.2	Not Detected	5.2	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	101	70-130

Client Sample ID: VW1-5

Lab ID#: 1108301B-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2081827	Date of Collection: 8/10/11 4:10:00 PM
Dil. Factor:	8.66	Date of Analysis: 8/18/11 10:47 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	17	310	42	760
Methyl tert-butyl ether	4.3	Not Detected	16	Not Detected
Benzene	4.3	Not Detected	14	Not Detected
Toluene	4.3	17	16	63
Ethyl Benzene	4.3	7.0	19	30
m,p-Xylene	4.3	20	19	86
o-Xylene	4.3	5.7	19	25

Container Type: 1 Liter Summa Canister

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

Client Sample ID: VW2-SS

Lab ID#: 1108301B-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2081828	Date of Collection: 8/10/11 11:50:00 AM
Dil. Factor:	2.16	Date of Analysis: 8/18/11 11:20 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4.3	17	11	41
Methyl tert-butyl ether	1.1	Not Detected	3.9	Not Detected
Benzene	1.1	Not Detected	3.4	Not Detected
Toluene	1.1	Not Detected	4.1	Not Detected
Ethyl Benzene	1.1	Not Detected	4.7	Not Detected
m,p-Xylene	1.1	Not Detected	4.7	Not Detected
o-Xylene	1.1	Not Detected	4.7	Not Detected

Container Type: 1 Liter Summa Canister

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

Client Sample ID: VW2-5

Lab ID#: 1108301B-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2081922	Date of Collection: 8/10/11 4:30:00 PM
Dil. Factor:	25.3	Date of Analysis: 8/19/11 07:29 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	51	11000 E	120	28000 E
Methyl tert-butyl ether	13	Not Detected	46	Not Detected
Benzene	13	28	40	90
Toluene	13	440	48	1700
Ethyl Benzene	13	180	55	810
m,p-Xylene	13	600	55	2600
o-Xylene	13	200	55	850

E = Exceeds instrument calibration range.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	103	70-130

Client Sample ID: VW2-5 DUP

Lab ID#: 1108301B-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2081925	Date of Collection: 8/10/11 4:30:00 PM
Dil. Factor:	344	Date of Analysis: 8/19/11 09:58 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	690	160000 E	1700	400000 E
Methyl tert-butyl ether	170	Not Detected	620	Not Detected
Benzene	170	Not Detected	550	Not Detected
Toluene	170	290	650	1100
Ethyl Benzene	170	Not Detected	750	Not Detected
m,p-Xylene	170	420	750	1800
o-Xylene	170	Not Detected	750	Not Detected

E = Exceeds instrument calibration range.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	115	70-130

Client Sample ID: Lab Blank

Lab ID#: 1108301B-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2081805	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/18/11 08:40 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	2.0	Not Detected	4.9	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	101	70-130

Client Sample ID: Lab Blank

Lab ID#: 1108301B-06B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2081909	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/19/11 10:25 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	2.0	Not Detected	4.9	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected

Container Type: NA - Not Applicable

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

Client Sample ID: CCV

Lab ID#: 1108301B-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2081802	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/18/11 06:54 AM

Compound	%Recovery
2-Propanol	78
Methyl tert-butyl ether	74
Benzene	81
Toluene	81
Ethyl Benzene	87
m,p-Xylene	93
o-Xylene	97

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	112	70-130

Client Sample ID: CCV

Lab ID#: 1108301B-07B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2081906	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/19/11 08:45 AM

Compound	%Recovery
2-Propanol	80
Methyl tert-butyl ether	71
Benzene	81
Toluene	83
Ethyl Benzene	86
m,p-Xylene	93
o-Xylene	96

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	111	70-130

Client Sample ID: LCS

Lab ID#: 1108301B-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2081803	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/18/11 07:29 AM

Compound	%Recovery
2-Propanol	93
Methyl tert-butyl ether	86
Benzene	89
Toluene	87
Ethyl Benzene	95
m,p-Xylene	104
o-Xylene	106

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	109	70-130

Client Sample ID: LCSD

Lab ID#: 1108301B-08AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2081804	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/18/11 08:01 AM

Compound	%Recovery
2-Propanol	92
Methyl tert-butyl ether	86
Benzene	91
Toluene	89
Ethyl Benzene	95
m,p-Xylene	103
o-Xylene	104

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	88	70-130
4-Bromofluorobenzene	111	70-130

Client Sample ID: LCS

Lab ID#: 1108301B-08B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2081907	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/19/11 09:13 AM

Compound	%Recovery
2-Propanol	92
Methyl tert-butyl ether	80
Benzene	90
Toluene	89
Ethyl Benzene	97
m,p-Xylene	106
o-Xylene	108

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	114	70-130

8/26/2011
Mr. Paul King
P & D Environmental
55 Santa Clara
Suite 240
Oakland CA 94610

Project Name: California Linen Rental 989 41st St, Oak
Project #: 0304
Workorder #: 1108301C

Dear Mr. Paul King

The following report includes the data for the above referenced project for sample(s) received on 8/15/2011 at Air Toxics Ltd.

The data and associated QC analyzed by Modified ASTM D-1946 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: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kyle Vagadori
Project Manager

WORK ORDER #: 1108301C

Work Order Summary

CLIENT:	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610	BILL TO:	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610
PHONE:	510-658-6916	P.O. #	
FAX:	510-834-0772	PROJECT #	0304 California Linen Rental 989 41st
DATE RECEIVED:	08/15/2011	CONTACT:	St. Oak Kyle Vagadori
DATE COMPLETED:	08/26/2011		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	VW1-SS	Modified ASTM D-1946	5.0 "Hg	15 psi
02A	VW1-5	Modified ASTM D-1946	23.0 "Hg	15 psi
03A	VW2-SS	Modified ASTM D-1946	2.0 "Hg	15 psi
04A	VW2-5	Modified ASTM D-1946	10.8 "Hg	15 psi
05A	VW2-5 DUP	Modified ASTM D-1946	9.0 "Hg	15 psi
06A	Lab Blank	Modified ASTM D-1946	NA	NA
07A	LCS	Modified ASTM D-1946	NA	NA
07AA	LCSD	Modified ASTM D-1946	NA	NA

CERTIFIED BY: 

DATE: 08/26/11

Laboratory Director

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11

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 Air Toxics Ltd.

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

LABORATORY NARRATIVE
Modified ASTM D-1946
P & D Environmental
Workorder# 1108301C

Five 1 Liter Summa Canister samples were received on August 15, 2011. The laboratory performed analysis via Modified ASTM Method D-1946 for Methane and fixed gases in air using GC/FID or GC/TCD. The method involves direct injection of 1.0 mL of sample.

On the analytical column employed for this analysis, Oxygen coelutes with Argon. The corresponding peak is quantitated as Oxygen.

Since Nitrogen is used to pressurize samples, the reported Nitrogen values are calculated by adding all the sample components and subtracting from 100%.

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

<i>Requirement</i>	<i>ASTM D-1946</i>	<i>ATL Modifications</i>
Calibration	A single point calibration is performed using a reference standard closely matching the composition of the unknown.	A 3-point calibration curve is performed. Quantitation is based on a daily calibration standard which may or may not resemble the composition of the associated samples.
Reference Standard	The composition of any reference standard must be known to within 0.01 mol % for any component.	The standards used by ATL are blended to a $\geq 95\%$ accuracy.
Sample Injection Volume	Components whose concentrations are in excess of 5 % should not be analyzed by using sample volumes greater than 0.5 mL.	The sample container is connected directly to a fixed volume sample loop of 1.0 mL on the GC. Linear range is defined by the calibration curve. Bags are loaded by vacuum.
Normalization	Normalize the mole percent values by multiplying each value by 100 and dividing by the sum of the original values. The sum of the original values should not differ from 100% by more than 1.0%.	Results are not normalized. The sum of the reported values can differ from 100% by as much as 15%, either due to analytical variability or an unusual sample matrix.
Precision	Precision requirements established at each concentration level.	Duplicates should agree within 25% RPD for detections $> 5 X$'s the RL.

Receiving Notes

Sample VW1-5 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

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

B - Compound present in laboratory blank greater than reporting limit.

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 detection limit.

M - Reported value may be biased due to apparent matrix interferences.

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
NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

Client Sample ID: VW1-SS

Lab ID#: 1108301C-01A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.47	14
Nitrogen	0.47	81
Carbon Dioxide	0.047	4.8

Client Sample ID: VW1-5

Lab ID#: 1108301C-02A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.87	14
Nitrogen	0.87	83
Methane	0.00087	0.031
Carbon Dioxide	0.087	2.9

Client Sample ID: VW2-SS

Lab ID#: 1108301C-03A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	8.5
Nitrogen	0.22	80
Methane	0.00022	0.00038
Carbon Dioxide	0.022	11

Client Sample ID: VW2-5

Lab ID#: 1108301C-04A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.32	5.7
Nitrogen	0.32	91
Methane	0.00032	0.00092
Carbon Dioxide	0.032	2.8

Summary of Detected Compounds
NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

Client Sample ID: VW2-5 DUP

Lab ID#: 1108301C-05A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.77	9.6
Nitrogen	0.77	88
Methane	0.00077	0.00084
Carbon Dioxide	0.077	2.3



Client Sample ID: VW1-SS

Lab ID#: 1108301C-01A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9082406	Date of Collection:	8/10/11 3:14:00 PM
Dil. Factor:	4.69	Date of Analysis:	8/24/11 04:06 PM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.47	14
Nitrogen	0.47	81
Methane	0.00047	Not Detected
Carbon Dioxide	0.047	4.8

Container Type: 1 Liter Summa Canister



Client Sample ID: VW1-5

Lab ID#: 1108301C-02A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9082407	Date of Collection:	8/10/11 4:10:00 PM
Dil. Factor:	8.66	Date of Analysis:	8/24/11 04:29 PM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.87	14
Nitrogen	0.87	83
Methane	0.00087	0.031
Carbon Dioxide	0.087	2.9

Container Type: 1 Liter Summa Canister



Client Sample ID: VW2-SS

Lab ID#: 1108301C-03A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9082408	Date of Collection:	8/10/11 11:50:00 AM
Dil. Factor:	2.16	Date of Analysis:	8/24/11 04:54 PM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	8.5
Nitrogen	0.22	80
Methane	0.00022	0.00038
Carbon Dioxide	0.022	11

Container Type: 1 Liter Summa Canister



Client Sample ID: VW2-5

Lab ID#: 1108301C-04A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9082409	Date of Collection:	8/10/11 4:30:00 PM
Dil. Factor:	3.16	Date of Analysis:	8/24/11 05:26 PM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.32	5.7
Nitrogen	0.32	91
Methane	0.00032	0.00092
Carbon Dioxide	0.032	2.8

Container Type: 1 Liter Summa Canister



Client Sample ID: VW2-5 DUP

Lab ID#: 1108301C-05A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9082410	Date of Collection:	8/10/11 4:30:00 PM
Dil. Factor:	7.74	Date of Analysis:	8/24/11 05:49 PM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.77	9.6
Nitrogen	0.77	88
Methane	0.00077	0.00084
Carbon Dioxide	0.077	2.3

Container Type: 1 Liter Summa Canister



Client Sample ID: Lab Blank

Lab ID#: 1108301C-06A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9082405	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	8/24/11 03:40 PM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.10	Not Detected
Nitrogen	0.10	Not Detected
Methane	0.00010	Not Detected
Carbon Dioxide	0.010	Not Detected

Container Type: NA - Not Applicable

Client Sample ID: LCS

Lab ID#: 1108301C-07A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9082402	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/24/11 02:15 PM

Compound	%Recovery
Oxygen	100
Nitrogen	101
Methane	99
Carbon Dioxide	100

Container Type: NA - Not Applicable

Client Sample ID: LCSD

Lab ID#: 1108301C-07AA

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9082426	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/25/11 10:25 AM

Compound	%Recovery
Oxygen	94
Nitrogen	94
Methane	96
Carbon Dioxide	94

Container Type: NA - Not Applicable