December 18, 2015

## RECEIVED

By Alameda County Environmental Health 11:56 am, Dec 24, 2015

Ms. Karel Detterman Alameda County Health Care Services Agency 1131 Harbor Bay Parkway Alameda, CA 9502-6577

Subject:

Crow Canyon Dry Cleaners

7272 San Ramon Road Dublin, CA

RO# 000283

Dear Ms Detterman:

This enclosed report has been prepared by Endpoint Consulting, Inc. on behalf of the Burrows Company, Dwight & Carleton Perry, Gabriel H. Chui & Lai H. Trust, the Lee Family, Nam Sun and Seung Hee Park, and the Raphel-Roessler Retail Group.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge. If you have any questions, please contact Mr. Mehrdad Javaherian of Endpoint at 415-706-8935.

Sincerely,

James Roessler

Roessler Investment Group

ance Roess



December 17, 2015

Ms. Karel Detterman, P.G. Alameda County Health Care Services Agency (County) 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502

Subject: Indoor Air Quality Sampling

Crow Canyon Dry Cleaners 7272 San Ramon Road, Dublin, California

(RO#0002863)

Dear Ms. Detterman:

This letter summarizes the results of an indoor air sample collected by Endpoint Consulting, Inc. (Endpoint) at the location of onsite vapor monitoring well VM-9SS, which represents the sole monitoring location at the site where subsurface vapor concentrations, despite significant declines since implementation of soil vapor extraction remediation efforts, remain at above the cleanup goal established for tetrachloroethylene (PCE) in the Corrective Action Plan (CAP) for the site. This sampling was performed in lieu of additional theoretical vapor intrusion modeling and significant model sensitivity analysis requirements set forth by the County in its emails dated October 15<sup>th</sup> and October 29<sup>th</sup>, 2015. The option for performing indoor air sampling in lieu of theoretical, albeit conservative, vapor intrusion modeling was originally set forth by the County in a meeting dated April 14<sup>th</sup>, 2015, representing the most direct measurement of potential indoor air quality as opposed to theoretical model estimations. The modeling option was initially chosen by Endpoint without the understanding of the rigorous sensitivity analysis and other related requirements subsequently requested by the County via their October 15, 2015 email.

On December 3<sup>rd</sup>, 2015, Endpoint collected an indoor air sample using the standard operating procedures (SOPs) included herein as Attachment I. These SOPs have been approved by the Department of Toxic Substances Control (DTSC) on other projects implemented by Endpoint staff. As referenced above, the 8-hour indoor air sample was collected at the exact location of vapor monitoring well VM-9SS, representing the sole location where sub-surface vapor concentrations of PCE remain above the PCE screening level adopted in the CAP for the site. Moreover, the backdoor to the building near SM-9SS (see Figure 1) was closed throughout the entire 8-hr duration of the sampling, conservatively minimizing air exchange with outdoor air and the associated concentration dilution which would be expected with an open door during the sampling. The door is otherwise open on a daily basis. Consistent with the subsurface vapor sample analysis performed historically at the site, the indoor air sample was analyzed using Method TO-15 and reporting the 8010 list.

Per the SOPs, the weather conditions during sampling were noted as summarized in the matrix below. No substantial changes to these conditions were observed before or after the sampling event.



**Weather Conditions during Sampling** 

		0			
Variable	Start of Test	End of Test			
Indoor air temperature	63 F	68 F			
Outdoor air temperature	53 F	75 F			
Barometric pressure	29.97 In of mercury (Hg)				
Outdoor weather conditions	Cloudy, dry	Sunny, dry			

The matrix below summarizes the results of the indoor air samples for chemicals potentially related to dry cleaning operations, including PCE and its daughter products. The laboratory analytical report is included as Attachment 2. As indicated in the matrix below, low levels of PCE and TCE were detected in indoor air, but at levels well below both residential and commercial/industrial indoor air quality screening levels adopted by the DTSC and US EPA. The presence of PCE and TCE at these low levels is consistent with contributions of these chemical from ambient outdoor air, as both are commonly detected chemicals in outdoor air (see DTSC, 2012)<sup>1</sup>.

#### **Chemicals Potentially Related to Dry Cleaning Operations**

Sample ID	PCE	TCE	Cis-1,2-DCE	Trans-1,2-DCE	1,1,1-TCA	1,1-DCE	1,1-DCA	Vinyl Chloride
AA-1	0.13	0.038	<0.4	<0.4	<0.55	<0.1	<0.41	<0.013
Residential Indoor Air Screening Level (DTSC and USEPA Region 9)*	0.41	0.48	7.3	73	1,040	73	1.8	0.031
Commercial Indoor Air Screening Level (DTSC and USEPA Region 9)*	2.08	3.00	31	310	4,400	310	7.7	0.16

All concentrations in ug/m3

Importantly, none of the PCE/TCE daughter products were detected in the indoor air sample (see matrix above).

As expected, the TO15 analysis identified the presence of various other chemicals unrelated to dry cleaning operations; again, consistent with the presence of these other chemicals in ambient outdoor air, and the routine and consistent interaction between ambient outdoor air and indoor air. The matrix below summarizes the detection of chemicals unrelated to dry cleaning operations, but present in the indoor air sample collected at the site.

#### Chemicals Unrelated to Dry Cleaning Operations

	Bromodichloro methane		Carbon Tetrachloride	Chlroform	Chloromethane	1,2- Dibromo ethane	Dichloro	l methane	· '	1,2- Dichloropropane	Trichlorofluoro- methane
AA-1	0.018	0.43	0.57	0.13	0.7	0.0094	0.094	2.8	0.072	0.028	1.5
Residential Indoor Air Screening Level (DTSC and USEPA Region 9)*	0.076	0.52	0.47	0.12	9.4	0.0047	0.260	NA	0.110	0.280	73.000
Commercial Indoor Air Screening Level (DTSC and USEPA Region 9)*	0.33	2.20	2.0	0.53	39	0.020	1.100	NA	0.470	1.20	310.000

All concentrations in ug/m3

- DTSC: Human Health Risk Assessment Note Number 3, July 2014

<sup>-</sup> DTSC: Human Health Risk Assessment Note Number 3, July 2014

<sup>-</sup> USEPA Region 9: USEPA Region 9 RSLs, November 2014

<sup>\*</sup> For Trans-1,2-DCE, indoor air screening levels from upcoming update of Note 3 were utilized per DTSC input.

<sup>-</sup> USEPA Region 9: USEPA Region 9 RSLs, November 2014

 $<sup>{}^{1}\,\</sup>underline{https://www.dtsc.ca.gov/SiteCleanup/upload/Palace\_Dry\_Cleaner\_FS\_Environmental\_Investigation.pdf}$ 



As indicated in the matrix above, none of the chemicals were detected at levels exceeding the commercial/industrial indoor air quality criteria. Three chemicals, all commonly detected in ambient outdoor air, were detected at levels slightly exceeding residential indoor air screening levels.

Based on the results of the indoor air sampling conducted at the site, Endpoint is of the opinion that the subsurface vapor concentrations detected at VM-9SS do not pose an unacceptable vapor intrusion risk at the site. Based on these results, together with the results of the past vapor remediation and monitoring efforts at the site previously documented in the Vapor Monitoring and Request for Site Closure Report (Endpoint, 2014)<sup>2</sup>, Endpoint recommends that the site be considered for closure.

#### **CLOSING**

As always, Endpoint greatly appreciates the County's continued assistance with this project. If you have any questions, please contact Mehrdad Javaherian at 415-706-8935, or at mehrdad@endpoint-inc.com.

Sincerely,

**Endpoint Consulting, Inc.** 

Moderaheria

Mehrdad Javaherian, Ph.D., MPH, PE, LEED®GA

Program Manager

Enclosures:

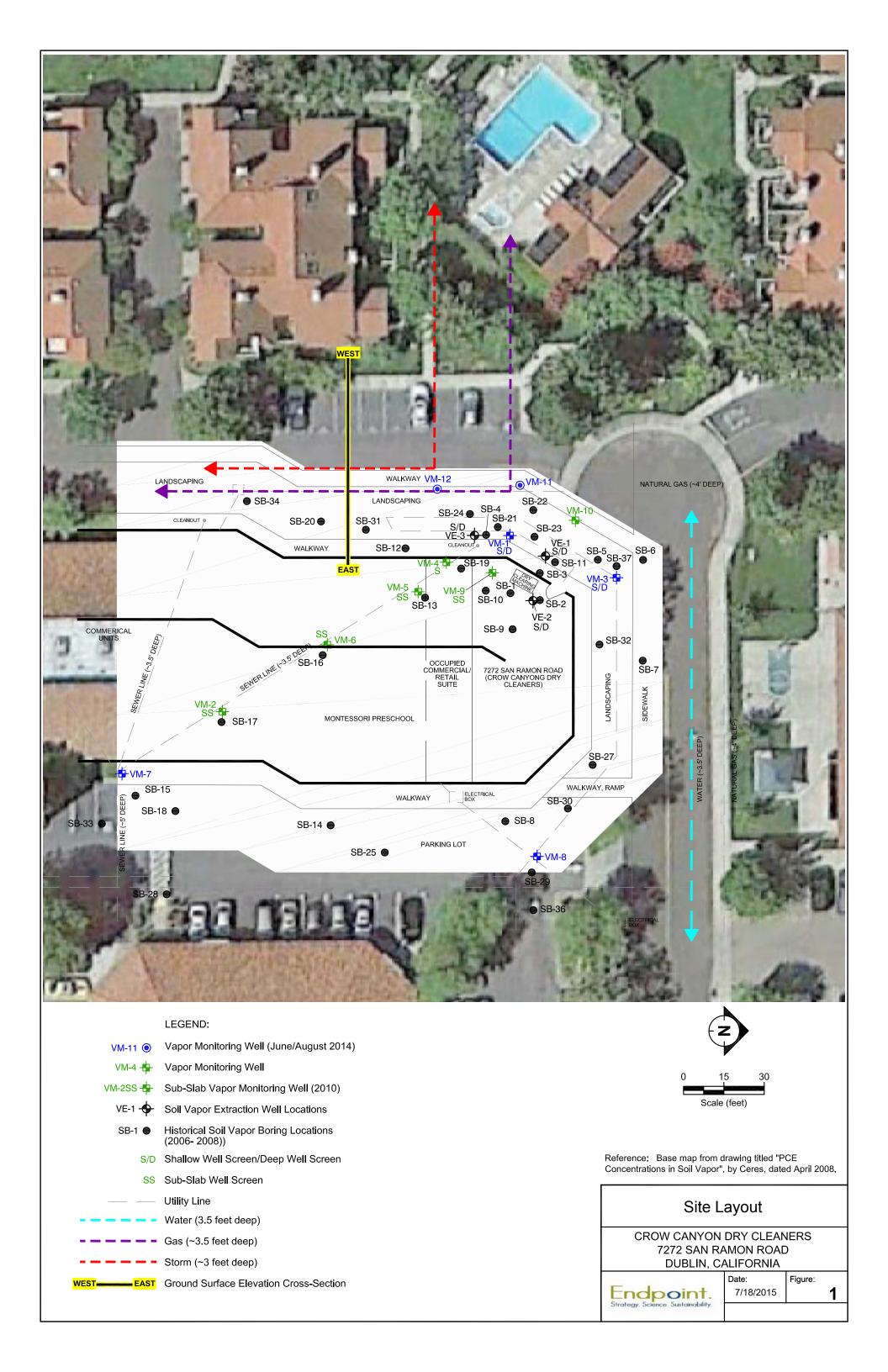
Figure 1: Site Layout

Attachment 1: Standard Operating Procedures for Indoor Air Sampling

Attachment 2: Laboratory Analytical Report

<sup>2</sup> Endpoint, 2014. Post Remediation Vapor Monitoring and Request for Closure Report, Crow Canyon Dry Cleaners, September 29<sup>th</sup>.

3



# Attachment 1



#### **ATTACHMENT 1**

## Standard Operating Procedures Indoor Air Sampling

Indoor and ambient outdoor air sampling will be conducted in accordance to the procedures summarized herein. Prior to initiation of this sampling, the following steps will be taken:

- Sampling personnel will avoid activities immediately before and during the sampling that may impact the results of the sample, including using markers, fueling vehicles, etc.);
- Every effort shall be made to remove likely background sources of indoor air contamination from the building several days prior to the indoor air sampling;
- Weather information (i.e, temperature, barometric pressure, relative humidity, wind speed, and wind direction) and indoor temperature and humidity at the beginning of the sampling event will be recorded. Similarly, substantial changes to these conditions that may have occurred over the past 24 to 48 hours and that do occur during the course of sampling will be noted.

In implementing the sampling, the following procedures will be implemented:

- An evacuated and calibrated Summa canister provided by McCampbell Analytical Laboratories will be used to collect each sample.
- The flow controller on the canister will be pre-calibrated by the laboratory for the desired flow rate of less than 0.2 liter per minute (lpm) and duration of sample collection (8 hours).
- The indoor air sample will be collected from breathing height (e.g., 3 to 5 feet above ground), with the canister mounted on a stable platform.
- Weather conditions previously described herein for the sub-slab samples will be adhered to during the ambient and indoor air sampling.
- As the pre-calibrated flow controller is connected to each canister, the identification numbers for the canisters and flow controllers will be recorded, as will the initial canister pressures on the vacuum gauge
- The valve on the vacuum pressure in each canister will be opened and the time that each valve was opened (beginning of sampling) will be recorded together with the canister pressure on the vacuum gauge.



\*

- Observations pertinent to ambient outdoor air sampling will be recorded, including sampling location, location of potential outdoor air sources, and paved areas. Also other information related to odors, readings from field instrumentation, and significant activities in the vicinity that may result in air emissions will be noted.
- Sample collection will be stopped after the scheduled duration of sample collection (8 hours), ensuring that the canister has a minimum amount of vacuum remaining based on input from the laboratory. Samples with no vacuum remaining will be rejected.
- The final vacuum pressure will be recorded and the canister valves will be closed, recording related date and time.
- The canisters will be labeled and submitted to the laboratory following removal of the flow controller from each canister.





## McCampbell Analytical, Inc.

"When Quality Counts"

## **Analytical Report**

**WorkOrder:** 1512254

Report Created for: Endpoint

1534 Plaza Lane #243 Burlingame, CA 94010

**Project Contact:** Mehrdad Javaher

**Project P.O.:** 

**Project Name:** TM Dublin

**Project Received:** 12/07/2015

Analytical Report reviewed & approved for release on 12/11/2015 by:

Angela Rydelius, Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.



## **Glossary of Terms & Qualifier Definitions**

Client: Endpoint
Project: TM Dublin
WorkOrder: 1512254

#### **Glossary Abbreviation**

95% Interval 95% Confident Interval

DF Dilution Factor

DI WET (DISTLC) Waste Extraction Test using DI water

DISS Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)

DLT Dilution Test
DUP Duplicate

EDL Estimated Detection Limit

ITEF International Toxicity Equivalence Factor

LCS Laboratory Control Sample

MB Method Blank

MB % Rec % Recovery of Surrogate in Method Blank, if applicable

MDL Method Detection Limit

ML Minimum Level of Quantitation

MS Matrix Spike

MSD Matrix Spike Duplicate

N/A Not Applicable

ND Not detected at or above the indicated MDL or RL

NR Data Not Reported due to matrix interference or insufficient sample amount.

PDS Post Digestion Spike

PDSD Post Digestion Spike Duplicate

PF Prep Factor

RD Relative Difference

RL Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)

RPD Relative Percent Deviation
RRT Relative Retention Time

SPK Val Spike Value

SPKRef Val Spike Reference Value

SPLP Synthetic Precipitation Leachate Procedure
TCLP Toxicity Characteristic Leachate Procedure

TEQ Toxicity Equivalents

WET (STLC) Waste Extraction Test (Soluble Threshold Limit Concentration)



## **Analytical Report**

**Client:** Endpoint WorkOrder: 1512254 **Date Received:** 12/7/15 14:36 **Extraction Method: TO15 Date Prepared:** 12/7/15 **Analytical Method: TO15 Project:** Unit: TM Dublin

Ha	logenated Vola	tile Organic	Compounds in µ	ıg/m³		
Client ID	Lab ID	Matrix	Date Collected	Instrun	nent	Batch ID
AA-1	1512254-001A	Indoor Air	12/03/2015 15:00	GC24		113879
Initial Pressure (psia)	Final Pressure	e (psia)				Analyst(s)
13.31	13.31					AK
<u>Analytes</u>		<u>Result</u>		<u>RL</u>	<u>DF</u>	Date Analyzed
Bromodichloromethane		0.018		0.0070	1	12/07/2015 17:47
Bromoform		ND		1.1	1	12/07/2015 17:47
Bromomethane		0.43		0.39	1	12/07/2015 17:47
Carbon Tetrachloride		0.57		0.0064	1	12/07/2015 17:47
Chlorobenzene		ND		0.47	1	12/07/2015 17:47
Chloroethane		ND		0.27	1	12/07/2015 17:47
Chloroform		0.13		0.025	1	12/07/2015 17:47
Chloromethane		0.70		0.21	1	12/07/2015 17:47
Dibromochloromethane		ND		0.87	1	12/07/2015 17:47
1,2-Dibromoethane (EDB)		0.0094		0.0078	1	12/07/2015 17:47
1,2-Dichlorobenzene		ND		0.61	1	12/07/2015 17:47
1,3-Dichlorobenzene		ND		0.61	1	12/07/2015 17:47
1,4-Dichlorobenzene		0.094		0.030	1	12/07/2015 17:47
Dichlorodifluoromethane		2.8		0.50	1	12/07/2015 17:47
1,1-Dichloroethane		ND		0.41	1	12/07/2015 17:47
1,2-Dichloroethane (1,2-DCA)		0.072		0.0041	1	12/07/2015 17:47
1,1-Dichloroethene		ND		0.10	1	12/07/2015 17:47
cis-1,2-Dichloroethene		ND		0.40	1	12/07/2015 17:47
trans-1,2-Dichloroethene		ND		0.40	1	12/07/2015 17:47
1,2-Dichloropropane		0.028		0.0047	1	12/07/2015 17:47
cis-1,3-Dichloropropene		ND		0.12	1	12/07/2015 17:47
trans-1,3-Dichloropropene		ND		0.12	1	12/07/2015 17:47
1,2-Dichloro-1,1,2,2-tetrafluoroethane		ND		0.71	1	12/07/2015 17:47
Freon 113		ND		0.78	1	12/07/2015 17:47
Hexachlorobutadiene		ND		1.1	1	12/07/2015 17:47
Methylene chloride		ND		0.88	1	12/07/2015 17:47
1,1,1,2-Tetrachloroethane		ND		0.0070	1	12/07/2015 17:47
1,1,2,2-Tetrachloroethane		ND		0.0070	1	12/07/2015 17:47
Tetrachloroethene		0.13		0.069	1	12/07/2015 17:47
1,2,4-Trichlorobenzene		ND		0.75	1	12/07/2015 17:47
1,1,1-Trichloroethane		ND		0.55	1	12/07/2015 17:47
1,1,2-Trichloroethane		ND		0.0055	1	12/07/2015 17:47
Trichloroethene		0.038		0.027	1	12/07/2015 17:47

(Cont.)



1534 Willow Pass Road, Pittsburg, CA 94565-1701 Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269 http://www.mccampbell.com / E-mail: main@mccampbell.com

## **Analytical Report**

Client:EndpointWorkOrder:1512254Date Received:12/7/15 14:36Extraction Method:TO15Date Prepared:12/7/15Analytical Method:TO15Project:TM DublinUnit: $\mu g/m^3$ 

Client ID	Lab ID	Matrix	<b>Date Collected</b>	Instrum	nent	Batch II			
AA-1	1512254-001A	Indoor Air	12/03/2015 15:00	12/03/2015 15:00 GC24					
Initial Pressure (psia)	Final Pressur	e (psia)				Analyst(s)			
13.31	13.31					AK			
<u>Analytes</u>		<u>Result</u>		<u>RL</u>	<u>DF</u>	Date Analyzed			
Trichlorofluoromethane		1.5		0.57	1	12/07/2015 17:47			
Vinyl Chloride		ND		0.013	1	12/07/2015 17:47			
<u>Surrogates</u>		REC (%)		<u>Limits</u>					
1,2-DCA-d4		100		70-130		12/07/2015 17:47			
Toluene-d8		103		70-130		12/07/2015 17:47			
4-BFB		98		70-130		12/07/2015 17:47			

SPK

MB SS

LCS

LCS



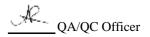
## **Quality Control Report**

**Client:** Endpoint WorkOrder: 1512254 **Date Prepared:** 12/7/15 **BatchID:** 113879 **Date Analyzed:** 12/7/15 **Extraction Method: TO15 Instrument:** GC24 **Analytical Method: TO15 Matrix:** Soilgas Unit: nL/L

**Project:** TM Dublin **Sample ID:** MB/LCS-113879

	QC Sur	nmary Repo	rt for TO15
Analyte	MB Result	LCS Result	RL

Analyte	Result	Result	NL .	Val	%REC	%REC	Limits	
Acetone	ND	-	12	-	-	-	-	
Acrolein	ND	-	1.2	-	-	-	-	
Acrylonitrile	ND	-	0.25	-	-	-	-	
tert-Amyl methyl ether (TAME)	ND	-	0.25	-	-	-	-	
Benzene	ND	-	0.25	-	-	-	-	
Benzyl chloride	ND	-	0.25	-	-	-	-	
Bromodichloromethane	ND	26.3	0.25	25	-	105	60-140	
Bromoform	ND	29.2	0.25	25	-	117	60-140	
Bromomethane	ND	33.7	0.25	25	-	135	60-140	
1,3-Butadiene	ND	-	0.25	-	-	-	-	
2-Butanone (MEK)	ND	-	12	-	-	-	-	
t-Butyl alcohol (TBA)	ND	-	5.0	-	-	-	-	
Carbon Disulfide	ND	-	0.25	-	-	-	-	
Carbon Tetrachloride	ND	30.0	0.25	25	-	120	60-140	
Chlorobenzene	ND	25.8	0.25	25	-	103	60-140	
Chloroethane	ND	27.4	0.25	25	-	110	60-140	
Chloroform	ND	22.9	0.25	25	-	91	60-140	
Chloromethane	ND	24.1	0.25	25	-	96	60-140	
Cyclohexane	ND	-	2.5	-	-	-	-	
Dibromochloromethane	ND	27.6	0.25	25	-	110	60-140	
1,2-Dibromo-3-chloropropane	ND	23.9	0.0060	25	-	96	60-140	
1,2-Dibromoethane (EDB)	ND	25.2	0.25	25	-	101	60-140	
1,2-Dichlorobenzene	ND	26.1	0.25	25	-	104	60-140	
1,3-Dichlorobenzene	ND	26.0	0.25	25	-	104	60-140	
1,4-Dichlorobenzene	ND	24.3	0.25	25	-	97	60-140	
Dichlorodifluoromethane	ND	27.7	0.25	25	=	111	60-140	
1,1-Dichloroethane	ND	25.5	0.25	25	=	102	60-140	
1,2-Dichloroethane (1,2-DCA)	ND	25.8	0.25	25	=	103	60-140	
1,1-Dichloroethene	ND	24.5	0.25	25	-	98	60-140	
cis-1,2-Dichloroethene	ND	23.8	0.25	25	-	95	60-140	
trans-1,2-Dichloroethene	ND	24.7	0.25	25	-	99	60-140	
1,2-Dichloropropane	ND	22.1	0.25	25	-	89	60-140	
cis-1,3-Dichloropropene	ND	26.6	0.25	25	-	107	60-140	
trans-1,3-Dichloropropene	ND	27.1	0.25	25	-	108	60-140	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	26.6	0.25	25	-	107	60-140	
Diisopropyl ether (DIPE)	ND	-	0.25	-	-	-	-	
1,4-Dioxane	ND	-	0.25	=	-		-	





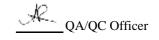
## **Quality Control Report**

**Client:** Endpoint WorkOrder: 1512254 **Date Prepared:** 12/7/15 **BatchID:** 113879 **Date Analyzed:** 12/7/15 **Extraction Method: TO15 Instrument:** GC24 **Analytical Method: TO15 Matrix:** Soilgas Unit: nL/L

**Project:** TM Dublin Sample ID: MB/LCS-113879

QC Summary	Report for	<b>TO15</b>
------------	------------	-------------

	20 Summing 110P010101 1 0 10										
Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits				
Ethanol	ND	-	25	-	-	-	-				
Ethyl acetate	ND	-	0.25	=	-	-	-				
Ethyl tert-butyl ether (ETBE)	ND	-	0.25	=	-	-	-				
Ethylbenzene	ND	-	0.25	=	-	-	-				
4-Ethyltoluene	ND	-	0.25	=	-	-	-				
Freon 113	ND	25.1	0.25	25	-	100	60-140				
Heptane	ND	-	2.5	=	-	-	-				
Hexachlorobutadiene	ND	28.9	0.25	25	=	116	60-140				
Hexane	ND	-	2.5	-	-	-	-				
2-Hexanone	ND	-	0.25	-	-	-	-				
4-Methyl-2-pentanone (MIBK)	ND	-	0.25	-	-	-	-				
Methyl-t-butyl ether (MTBE)	ND	-	0.25	=	-	-	-				
Methylene chloride	ND	22.1	1.2	25	-	88	60-140				
Methyl methacrylate	ND	-	0.25	=	-	-	-				
Naphthalene	ND	-	0.50	=	-	-	-				
Propene	ND	-	25	-	-	-	-				
Styrene	ND	-	0.25	=	-	-	-				
1,1,1,2-Tetrachloroethane	ND	24.2	0.25	25	-	97	60-140				
1,1,2,2-Tetrachloroethane	ND	23.2	0.25	25	-	93	60-140				
Tetrachloroethene	ND	25.6	0.25	25	-	102	60-140				
Tetrahydrofuran	ND	-	0.50	=	-	-	-				
Toluene	ND	-	0.25	-	-	-	-				
1,2,4-Trichlorobenzene	ND	31.2	0.25	25	-	125	60-140				
1,1,1-Trichloroethane	ND	27.6	0.25	25	-	110	60-140				
1,1,2-Trichloroethane	ND	25.0	0.10	25	-	100	60-140				
Trichloroethene	ND	24.7	0.25	25	=	99	60-140				
Trichlorofluoromethane	ND	29.7	0.25	25	-	119	60-140				
1,2,4-Trimethylbenzene	ND	-	0.25	-	-	-	-				
1,3,5-Trimethylbenzene	ND	-	0.25	-	-	-	-				
Vinyl Acetate	ND	-	2.5	-	-	-	-				
Vinyl Chloride	ND	24.2	0.25	25	-	97	60-140				
Xylenes, Total	ND	-	0.75	=	-	-	-				



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## **Quality Control Report**

**Client:** Endpoint WorkOrder: 1512254 **Date Prepared:** 12/7/15 **BatchID:** 113879 **Date Analyzed:** 12/7/15 **Extraction Method: TO15 Instrument:** GC24 **Analytical Method: TO15 Matrix:** Soilgas **Unit:** nL/L

**Project:** TM Dublin Sample ID: MB/LCS-113879

	QC Sur	mmary Repor					
Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
1,2-DCA-d4	528	506		500	106	101	70-130
Toluene-d8	528	557		500	106	111	70-130
4-BFB	490	501		500	98	100	70-130

## McCampbell Analytical, Inc.

FAX:

#### 1534 Willow Pass Rd Pittsburg, CA 94565-1701 (925) 252-92

Report to:

415-706-8935

## **CHAIN-OF-CUSTODY RECORD**

Page 1 of 1

(925) 252-9262		Wor	kOrder: 1512254	ClientC	code: EPB		
	☐ WaterTrax ☐ WriteOn	EDF <b>✓</b>	Excel EQuIS	<b>✓</b> Email	HardCopy	ThirdParty	J-flag
eport to:			Bill to:		Req	uested TAT:	5 days;
Mehrdad Javaher	Email: mehrdad@endpoint-in-	c.com	Accounts Pay	able			
Endpoint	cc/3rd Party:		Endpoint				
1534 Plaza Lane #243	PO:		1534 Plaza La	ane #243	Dat	e Received:	12/07/2015
Burlingame, CA 94010	ProjectNo: TM Dublin		Burlingame, C	CA 94010	Dat	e Logged:	12/07/2015

mehrdad@endpoint-inc.com

				Requested Tests (See legend below)											
Lab ID	Client ID	Matrix	Collection Date Hold	1	2	3	4	5	6	7	8	9	10	11	12
		T													
1512254-001	AA-1	Indoor Air	12/3/2015 15:00	Α											

#### **Test Legend:**

1 TO15-8010_SCAN-SIM_Indoor(ug/m3)	2	3	4
5	6	7	8
9	10	11	12

Prepared by: Jena Alfaro

#### **Comments:**

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



1512254-001A AA-1

## McCampbell Analytical, Inc.

"When Quality Counts"

Indoor Air

TO15 (HVOCs, Scan SIM) (µg/m3)

1534 Willow Pass Road, Pittsburg, CA 94565-1701 Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269 http://www.mccampbell.com / E-mail: main@mccampbell.com

chlorinated

6L Summa

& Time

12/3/2015 15:00

### **WORK ORDER SUMMARY**

<b>Client Name:</b>	ENDPOINT				QC Level:	LEVEL 2	2			Work Order	: 1512254
Project:	TM Dublin				<b>Client Contact:</b>	Mehrdad	Javaher			Date Logged	: 12/7/2015
<b>Comments:</b>					Contact's Email:	mehrdad	@endpoint-inc.com				
		WaterTrax	WriteOn	EDF	<b>✓</b> Excel	Fax	<b></b> Email	HardCopy	ThirdParty	J-flag	
Lab ID	Client ID	Matrix	Test Name		Containe	ers Bottl	e & Preservative	De- Co	ollection Date	TAT Sedimer	nt Hold SubOut

/Composites

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

Content

5 days

W Macamphall Analytical Inc					CHAIN OF CUSTODY RECORD												
	McCampbell Analytical, Inc.				TURN AROUND TIME: RUSH 1 Day 2 Day 3 Day 5 DAY												
1534 Willow	1534 Willow Pass Rd. / Pittsburg, Ca. 94565-1701 www.mccampbell.com / main@mccampbell.com Telephone: (877) 252-9262 / Fax: (925) 252-9269																
Telephone:	(877) 2	52-9262	2 / Fax: (925) 252-9:	269 5	UST Clean Up Fund Project Claim #												
Report To: Mehro			Bill To:	•	Analysis Requested Helium Shroud SN#												
Company: Ovopont	(	ens		9													
1534 PLAZA W	# 2	43		-5.4		13)	e, C	ie, circl	nr/						Notes: Please Specify units if different than		
Busingue	3		E-Mail:				ormaldehyde	Fixed Gas: CO2, Methane, Ethane, Ethylene, Acetylene, CO (please circle or indicate in notes) uL/L	Fixed Gas: O2, N2 (please circle) uL/L		70) orflorane, /m3	atic				OCs is ug/m3 and	
Tele: (40) 706 . 89			Fax: ( )							L/L %)		APH: Aliphatic and/or Aromatic (please circle) ug/m3		uL/L. Leak check default is IPA.			
Project #: The Dubl	2		Project Name:		m3)												
Project Location: 7272 Sampler Signature:	3137	VENT	non Rd	Julola	(gn)	n/gr	I, Fo	Met me,	2 (p	ne n	N N	c and/or					
Sampler Signature:		. 1		T	VOCs by TO-15 (ug/m3)	15 (1	PCF (2)	O2, etyle note	Fixed Gas: O2, N2 (pleas	ropa	IPA	tic a		Matrix			
	Collec	ction	Canister SN#	Sampler Kit SN#		0)	ug/n	S: C		S: Pl	Leak Check (PA, Norflorane, 1,1-difluroethane) ug/m3	pha					nister
Field Sample ID (Location)						8010 by TO-15 (TPH(p) (110/m3)	(ir	Ga ene,	l Ga	I Ga		Ali Se ci		sas	or	Pressure	e/ Vacuum
	Date	Time					LEEI Total	Fixec Ethyl or inc	Fixed	Fixed		APH: Aliphati	Other:	Soilgas	Indoor Air	Initial	Final
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Relinquished By:	Date:	Time:	Received By:		1												V
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1534 Willow Pass Road, Pittsburg, CA 94565-1701 Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269 http://www.mccampbell.com / E-mail: main@mccampbell.com

## **Sample Receipt Checklist**

Client Name:	Endpoint				Date and Time Received:	12/7/2015 11:50
Project Name:	TM Dublin	Matrice Indone Air			Date Logged:	12/7/2015
WorkOrder №: Carrier:	1512254 Client Drop-In	Matrix: <u>Indoor Air</u>			Received by: Logged by:	Maria Venegas Jena Alfaro
	<del></del>					
		Chain of C	ustody	/ (COC) I	<u>nformation</u>	
Chain of custody	present?		Yes	✓	No 🗆	
Chain of custody	signed when relinqu	ished and received?	Yes	✓	No 🗆	
Chain of custody	agrees with sample	labels?	Yes	✓	No 🗆	
Sample IDs note	d by Client on COC?		Yes	✓	No 🗆	
Date and Time o	f collection noted by	Client on COC?	Yes	✓	No 🗆	
Sampler's name	noted on COC?		Yes	✓	No 🗌	
		<u>Sampl</u>	e Rece	eipt Infor	mation	
Custody seals in	tact on shipping cont	ainer/cooler?	Yes		No 🗌	NA 🗹
Shipping contain	er/cooler in good con	dition?	Yes	<b>✓</b>	No 🗆	
Samples in prope	er containers/bottles?		Yes	•	No 🗌	
Sample containe	ers intact?		Yes	•	No 🗆	
Sufficient sample	e volume for indicated	d test?	Yes	✓	No 🗆	
		Sample Preservation	on and	Hold Tin	ne (HT) Information	
All samples rece	ived within holding tir	me?	Yes	<b>✓</b>	No 🗆	
Sample/Temp Bl	ank temperature			Temp:		NA 🗹
Water - VOA via	ls have zero headspa	ace / no bubbles?	Yes		No 🗆	NA 🗹
Sample labels ch	necked for correct pre	eservation?	Yes	•	No 🗌	
pH acceptable up	pon receipt (Metal: <2	2; 522: <4; 218.7: >8)?	Yes		No 🗆	NA 🗹
Samples Receive	ed on Ice?		Yes		No 🗹	
UCMR3 Samples	<u>s:</u>					
Total Chlorine	tested and acceptabl	e upon receipt for EPA 522?	Yes		No 🗆	NA 🗹
Free Chlorine t 300.1, 537, 539		e upon receipt for EPA 218.7,	Yes		No 🗆	na 🗹
* NOTE: If the "N	No" box is checked, s	ee comments below.				
Comments:	_=====	=======			_=======	=======