



ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING



INITIAL OPERATIONS AND MAINTENANCE REPORT

Harbour Point Cleaners
Mukilteo Speedway Center
13619 Mukilteo Speedway
Lynnwood, Washington 98037

Washington State Department of Ecology

F/S No. 41352598
VCP Project No. NW2902

May 2, 2017

Submitted by:
Simon Payne, L.G.
ATC Group Services LLC
Seattle, Washington 98107
Tel 206-781-1449
simon.payne@atcassociates.com



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BUILDING SCIENCES • MATERIALS TESTING

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**OPERATIONS AND MAINTENANCE REPORT
(Initial Event, March, 2017)**

**Harbour Point Cleaners
Mukilteo Speedway Center
13619 Mukilteo Speedway
Lynnwood, Washington 98037**

**Washington State Department of Ecology Facility/Site No 41352598
VCP Project No. NW2902**

Prepared for:

**Weingarten Realty Investors
2600 Citadel Plaza Drive, Suite 300
Houston, Texas 77008**

Submitted to:

**Ms. Glynis Carrosino
Washington State Department of Ecology
Toxic Cleanup Program, NWRO
3190 160th Avenue SE
Bellevue, Washington 98008-5452**

ATC Project No. 282 EM 00171

May 2, 2017

Prepared by:

**Simon Payne, L.G.
Project Manager**

Reviewed by:

**Andrew Stuart
Client Program Manager**

**OPERATIONS AND MAINTENANCE REPORT
(Initial Event, March, 2017)**

Harbour Point Cleaners
13619 Mukilteo Speedway
Lynnwood, Washington 98037

This report summarizes the results of the initial operations and maintenance (O&M) event conducted for Weingarten Realty Investors (WRI) by ATC Group Services, Inc. (ATC) on the sub-slab depressurization (SSD) system installed on January 23, 2017 at the Harbour Point Cleaners, a commercial dry cleaning facility located in Suite B-5 of the Mukilteo Speedway Center at 13619 Mukilteo Speedway in Lynnwood, Washington.

The SSD system consists of schedule 40 polyvinyl chloride (PVC) riser pipe plumbed vertically from the sub-slab to a one horse power regenerative blower mounted to the building roof. The vertical riser pipe is secured against a shared wall between the west-adjacent tenant space and the Harbour Point Cleaners tenant spaces and consists of 4-inch diameter pipe from the slab to approximately three feet above grade reduced to 2-inch diameter pipe above. The effluent air is discharged from the blower through a stack constructed of schedule 80 PVC. Effluent air samples are collected from an access port installed directly on the stack. The SSD system was started up at 15:00 on January 23, 2017.

The SSD system was installed in order to mitigate vapor intrusion from underlying soil previously identified as impacted with volatile organic compounds (VOCs) through the concrete floor slab into the building, to reduce risk to human health and the environment, and to further comply with the Model Toxics Control Act (MTCA) and its implementing regulations, Chapter 70.105D of the Revised Code of Washington (RCW) and Chapter 173-340 of the Washington Administrative Code (WAC). Based on ATC's September 17, 2015 *Feasibility Study and Disproportionate Cost Analysis*, the Washington State Department of Ecology's (Ecology) April 4, 2016 Opinion Letter, and a June 28, 2016 meeting between Ecology, WRI, and ATC, WRI selected soil vapor extraction through SSD as a viable cleanup alternative that will best protect human health from the potential vapor intrusion migration pathway.

The initial O&M event was conducted on March 13, 2017 in order to assess the performance of the newly installed system after approximately 4 weeks of runtime. The event included the collection of an effluent air sample from the sample port located on the effluent stack, an 8-hour indoor ambient air sample from within the Harbour Point dry cleaning facility (ambient air sample IA-1-031317), and an 8-hour indoor ambient air sample from within the west-adjacent tenant space (ambient air sample IA-2-031317). The sample locations were selected in order to match ambient sample locations IA-01 and IA-02, collected on July 2, 2015. All three samples were collected within 6-liter (L) laboratory certified Summa canisters. The two indoor ambient air samples were equipped with flow regulators that allowed the canisters to remain open for sample collection over an 8-hour period. Laboratory analysis was performed by Fremont Analytical, an Ecology accredited analytical laboratory; each sample was analyzed for VOCs by United States Environmental Protection Agency (EPA) Method TO-15. Air samples are analyzed for those VOCs associated with tetrachloroethene (PCE [tetrachloroethylene, perchloroethylene]), which includes degradation compounds, produced through the de-chlorination of PCE: trichloroethene (trichloroethylene [TCE]), cis-1,2-dichloroethene (cis-1,2-dichloroethylene [cis-DCE]), trans-1,2-dichloroethene (trans-1,2-dichloroethylene [trans-DCE]), 1,1-dichloroethene (1,1-dichloroethylene [1,1-DCE]), and vinyl chloride.

Along with vacuum and flow readings, the effluent air sample will be used to monitor the efficiency of the SSD system. Laboratory analytical data and system performance data is summarized below. The ambient indoor air samples will be compared to previous samples in order to assess indoor air quality and compliance with MTCA cleanup levels. A baseline ambient indoor air sampling event was conducted prior to SSD system startup on July 2, 2015 (**Table 1**). The laboratory analytical data from the ambient indoor air samples are also summarized below. Future O&M events are proposed to occur monthly with indoor air sampling to occur quarterly.

OPERATIONS AND MAINTENANCE REPORT**(Initial Event, March, 2017)**Harbour Point Cleaners
13619 Mukilteo Speedway
Lynnwood, Washington 98037**SITE INFORMATION:**

ATC Group Services LLC (ATC) Contact Person:	Simon Payne, L.G.
Date of previous monitoring and sampling event:	Initial event; indoor air monitored on July 2, 2015 prior to SSD system startup
Current remediation technique(s):	SSD and Natural Attenuation

SYSTEM PERFORMANCE

Date(s) monitored and/or sampled:	03/13/17
Blower run time (hours)	1,164
Pipe diameter at pitot tube (inches):	2
Flow (standard cubic feet per minute [SCFM]):	170
Previous flow measurement (SCFM):	Initial event
Vacuum (inches WC):	22
Previous vacuum (inches WC):	Initial event
Estimated Vapor Phase PCE removed this period (lbs.)	0.00447
Estimated Vapor Phase PCE removed previous period (lbs.)	Initial event

EFFLUENT SAMPLE:

Sample ID:	EFF-031317
Collection method:	6 L Summa Canister
Sample location:	Sample port EFF-1 located on effluent stack
PID reading (parts per million [ppm])	0.6
PCE concentration in (micrograms per cubic meter [$\mu\text{g}/\text{m}^3$]):	4.57
Previous event PCE concentration ($\mu\text{g}/\text{m}^3$):	Initial event
TCE concentration in ($\mu\text{g}/\text{m}^3$):	1.22
Previous event TCE concentration ($\mu\text{g}/\text{m}^3$):	Initial event
cis-DCE concentration in ($\mu\text{g}/\text{m}^3$):	<0.793
Previous event cis-DCE concentration ($\mu\text{g}/\text{m}^3$):	Initial event
trans-DCE concentration in ($\mu\text{g}/\text{m}^3$):	<0.793
Previous event trans-DCE concentration ($\mu\text{g}/\text{m}^3$):	Initial event
1,1-DCE concentration in ($\mu\text{g}/\text{m}^3$):	<0.793
Previous event 1,1-DCE concentration ($\mu\text{g}/\text{m}^3$):	Initial event
Vinyl chloride concentration in ($\mu\text{g}/\text{m}^3$):	<0.511
Previous event vinyl chloride concentration ($\mu\text{g}/\text{m}^3$):	Initial event

AMBIENT AIR SAMPLE (IA-1):

Sample ID:	IA-1-031317
Collection method:	6 L Summa Canister (over 8 hours)
Sample location:	Harbour Point Cleaners tenant space
PCE concentration in ($\mu\text{g}/\text{m}^3$):	2.20
Previous event PCE concentration ($\mu\text{g}/\text{m}^3$):	5.46
TCE concentration in ($\mu\text{g}/\text{m}^3$):	5.54
Previous event TCE concentration ($\mu\text{g}/\text{m}^3$):	7.60
cis-DCE concentration in ($\mu\text{g}/\text{m}^3$):	<0.793
Previous event cis-DCE concentration ($\mu\text{g}/\text{m}^3$):	<0.0793
trans-DCE concentration in ($\mu\text{g}/\text{m}^3$):	<0.793
Previous event trans-DCE concentration ($\mu\text{g}/\text{m}^3$):	<0.0238
1,1-DCE concentration in ($\mu\text{g}/\text{m}^3$):	<0.793
Previous event 1,1-DCE concentration ($\mu\text{g}/\text{m}^3$):	<0.0357

OPERATIONS AND MAINTENANCE REPORT

(Initial Event, March, 2017)

Harbour Point Cleaners
13619 Mukilteo Speedway
Lynnwood, Washington 98037

Vinyl chloride concentration in ($\mu\text{g}/\text{m}^3$):	<0.511
Previous event vinyl chloride concentration ($\mu\text{g}/\text{m}^3$):	<0.217

AMBIENT AIR SAMPLE (IA-2):

Sample ID:	IA-2-031317
Collection method:	6 L Summa Canister (over 8 hours)
Sample location:	West-adjacent tenant space
PCE concentration in ($\mu\text{g}/\text{m}^3$):	<6.46
Previous event PCE concentration ($\mu\text{g}/\text{m}^3$):	10.9
TCE concentration in ($\mu\text{g}/\text{m}^3$):	<3.41
Previous event TCE concentration ($\mu\text{g}/\text{m}^3$):	4.67
cis-DCE concentration in ($\mu\text{g}/\text{m}^3$):	<0.252
Previous event cis-DCE concentration ($\mu\text{g}/\text{m}^3$):	<0.0793
trans-DCE concentration in ($\mu\text{g}/\text{m}^3$):	<0.252
Previous event trans-DCE concentration ($\mu\text{g}/\text{m}^3$):	<0.0238
1,1-DCE concentration in ($\mu\text{g}/\text{m}^3$):	<0.252
Previous event 1,1-DCE concentration ($\mu\text{g}/\text{m}^3$):	<0.0357
Vinyl chloride concentration in ($\mu\text{g}/\text{m}^3$):	<1.62
Previous event vinyl chloride concentration ($\mu\text{g}/\text{m}^3$):	<0.217

ADDITIONAL INFORMATION AND COMMENTS:

Initial O&M event performed on March 13, 2017 indicates that SSD system is discharging PCE and TCE with concentrations of 4.57 and 1.22 $\mu\text{g}/\text{m}^3$ respectively detected in the effluent air sample collected from the sample port located on the effluent stack. Based on the measured performance parameters, approximately 0.00447 pounds of VOCs have been removed by SSD system since start up.

ATC also collected ambient air samples from locations previously sampled in July, 2015. The ambient air sample collected from inside the Harbour Point Cleaners tenant space (air sample IA-1-031317) indicates reduced ambient concentrations of PCE and TCE with PCE concentrations still below the MTCA Method B Indoor Air Screening Level for PCE of 9.62 $\mu\text{g}/\text{m}^3$, although concentrations of TCE remain above the MTCA Method B Indoor Air Screening Level for TCE of 0.37 $\mu\text{g}/\text{m}^3$. The ambient air sample collected from the adjacent west tenant space (air sample IA-2-031317) did not detect any of the PCE related compounds above laboratory method detection limits.

ATTACHMENTS:

Table 1 Summary of Air Analytical Results – Chlorinated Volatile Organic Compounds

Table 2 Summary of Vapor Extraction Removal Rates

Figure 1 Ambient Air Sample Locations

Appendix A Remediation System O&M Record Sheet

Appendix B Laboratory Analytical Date Report and Chain of Custody Documentation



Simon Payne, L.G.

Washington Licensed Geologist No. 2712

simon.payne@atcassociates.com

TABLES

Table 1
Summary of Air Analytical Results - Chlorinated Volatile Organic Compounds
Harbour Point Cleaners
13619 Mukileteo Speedway
Lynnwood, Washington
ATC Project No. 282 EM 00171

Sample Location	Sample ID	Fill Time	Sample Date	Select Chlorinated Volatile Organic Compounds (cVOCs) ¹ in ug/m ³					
				PCE	TCE	cis-DCE	trans-DCE	1,1-DCE	Vinyl Chloride
Effluent discharge from sub-slab depressurization system	Eff-031317	Grab	3/13/2017	4.57	1.22	<0.793	<0.793	<0.793	<0.511
Location IA-1 in Harbour Point Cleaners tenant space	IA-01	8-Hour	7/2/2015	5.46	7.60	<0.0793	<0.0238	<0.0357	<0.217
	IA-1-031317	8-Hour	3/13/2017	2.20	5.54	<0.793	<0.793	<0.793	<0.511
Location IA-2 in tenant space B5	IA-02	8-Hour	7/2/2015	10.9	4.67	<0.0793	<0.0238	<0.0357	<0.217
	IA-2-031317	8-Hour	3/13/2017	<6.46	<3.41	<2.52	<2.52	<2.52	<1.62
2015 MTCA Method B Indoor Air Screening Level				9.62	0.37	16	32	91.43	0.28

Notes:

ug/m³ = micrograms per cubic meter

ppmv = parts per million by volume

PCE = Tetrachloroethene (Tetrachloroethylene, perchloroethylene)

TCE = Trichloroethene (Trichloroethylene)

cis-DCE = cis-1,2-Dichloroethene (cis-1,2-Dichloroethylene)

trans-DCE = trans-1,2-Dichloroethene (trans-1,2-Dichloroethylene)

1,1-DCE = 1,1-Dichloroethene (1,1-Dichloroethylene)

MTCA - Washington State Department of Ecology Model Toxics Control Act

Bold denotes concentration at or above regulatory cleanup level

1 = Analytical results by EPA Method TO-15

2 = Analytical results by EPA Method 3C

3 = Analytical results by gas chromatography/thermal conductivity detector

All analytical results reported in micrograms per cubic meter (µg/m³)

A complete list of VOC data is provided in Appendix B.

NA = No applicable data

Table 2
Summary of Soil Vapor Extraction Removal Rates
Harbour Point Cleaners
13619 Mukileteo Speedway
Lynnwood, Washington
ATC Project No. 282 EM 00171

Sample Date	System Run Time (hrs)	Vacuum (inches WC)	Flow Rate (cfm)	PID (ppm)	PCE ¹ (ppmv)	TCE ¹ (ppmv)	VOC Recovery Rate (lbs/day)	VOC Recovered Per Period (lbs)	Total VOC Recovered (lbs)
01/23/2017 - Initial System Start Up									
3/13/2017	1,164	22	170	0.6	0.000673	0.000226	0.0000913	0.00447	0.00447

Notes:

hrs = hours
inches WC = inches water column
cfm = cubic feet per minute
ppm = parts per million
ppmv = parts per million by volume
PCE = Tetrachloroethene (Tetrachloroethylene, perchloroethylene)
TCE = Trichloroethene (Trichloroethylene)
1 = Analytical results by EPA Method TO-15
NA= No applicable data
3/13/17 Flow rate taken using anemometer probe

Total Daily Emissions are calculated using the following equation:

$$R = (V \times C \times MW \times F1) / (F2 \times F3)$$

R = Rate (lb/day)

F1 = minute to day conversion (1,440 min/day)

F2 = Conversion factor (1,000,000/ppm)

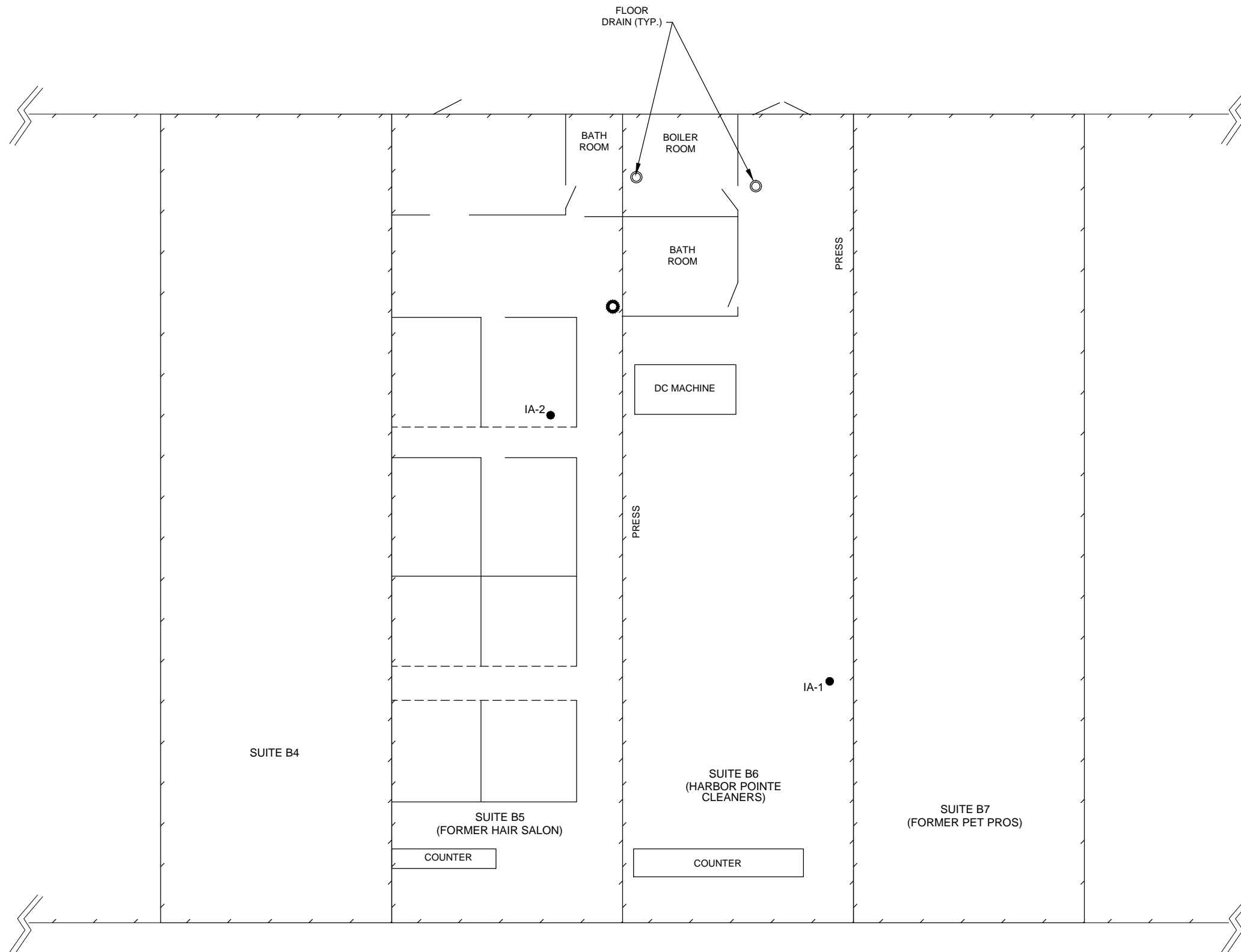
F3 = ideal gas mass conversion (379 ft³/lb-mole)

V = Flow rate (cfm) averaged between sampling events.

C = contaminant concentration (ppmv) averaged between the sampling events. Half detection limit used when reported as non-detect. Thus reported levels are conservative.

MW = molecular weight (PCE = 165.83 lb/lb-mole; TCE = 131.39 lb/lb-mole).

FIGURES



LEGEND

- LOCATION OF SUB-SLAB DEPRESSURIZATION SYSTEM RISER PIPE
- 8-HOUR AMBIENT AIR SAMPLE LOCATION



NOTE: SCALE AND LOCATIONS ARE APPROXIMATE

SSD PILOT TESTING LOCATIONS

HARBOR POINT CLEANERS
 13619 MUKILTEO SPEEDWAY
 LYNWOOD, WA

ATC
 6347 Seaview Avenue NW
 Seattle, Washington 98107
 Ph: (206) 781-1449 *** Fax: (206) 781-1543

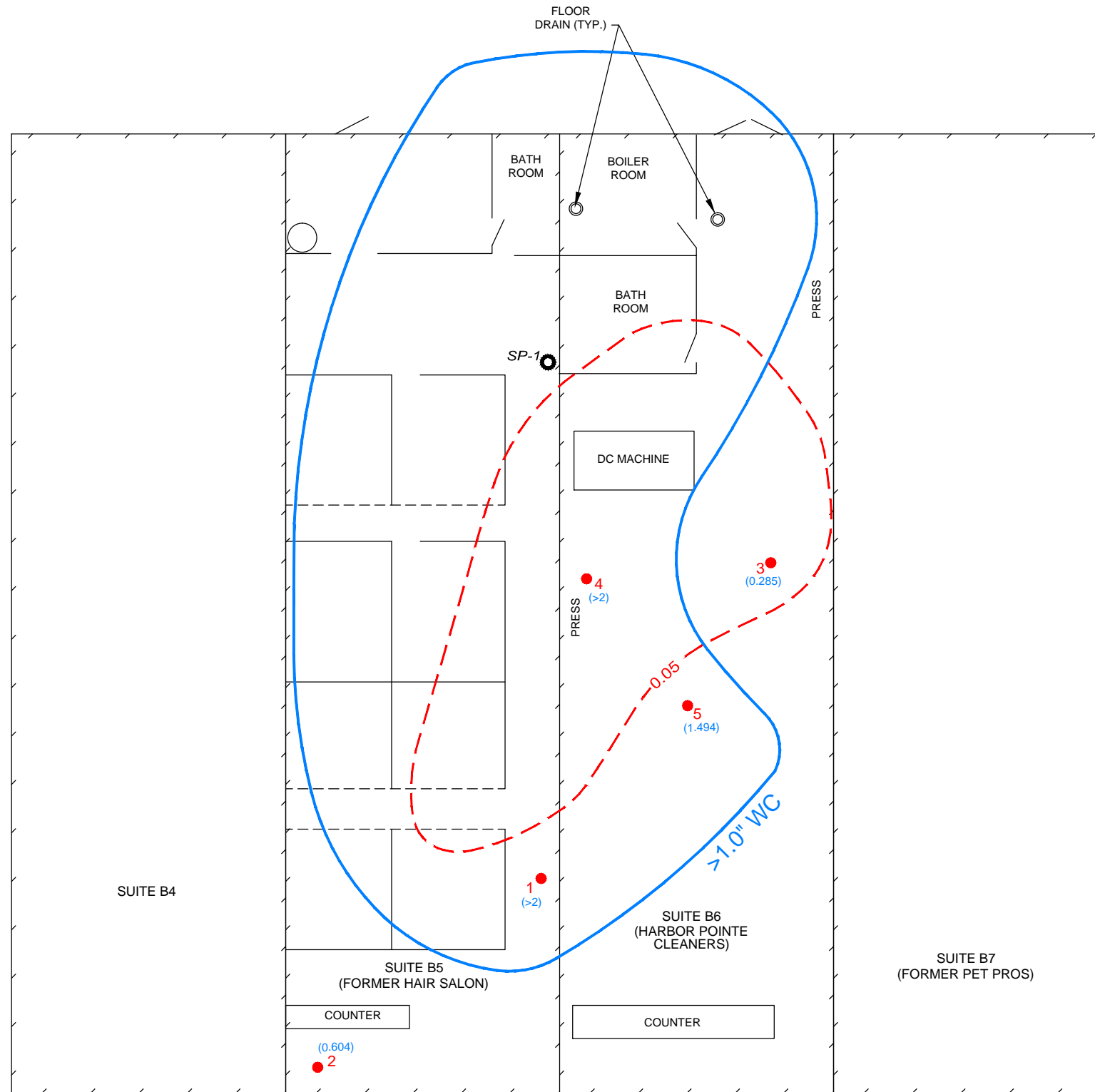
S:\Projects\B2\WEINGARTEN\HARBOR POINT CLEANERS 282EM001712_VACLOC.S.dwg

LEGEND

- VACUUM TEST LOCATION
- ⊙ SYSTEM RISER PIPE
- - - PCE IN SOIL ISOCONTOUR, mg/kg
- (0.285) VACUUM RESPONSE IN INCHES WATER COLUMN OBSERVED AT APPLIED VACUUM OF 10" WC AND FLOW RATE OF 22 CFM
- NEGATIVE PRESSURE ISOCONTOUR (IN INCHES WATER COLUMN)



NOTE: SCALE AND LOCATIONS ARE APPROXIMATE



VACUUM TEST LOCATIONS

SPEEDWAY SHOPPING CENTER
13632 HIGHWAY 99
LYNWOOD, WA

PROJECT NUMBER: 282EM00171

DATE: 4/27/17

FIGURE 2



6347 Seaview Avenue NW
Seattle, Washington 98107

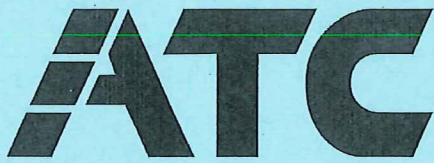
Ph: (206) 781-1449 Fax: (206) 781-1543

DRAWN BY: BK

SP

APPROVED BY:

APPENDIX A
Remediation System O&M Record Sheet



6347 Seaview Ave NW
 Seattle, Washington 98107
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 (206) 781-1449
 Fax (206) 781-1543

Remediation System O&M Record Sheet

Note: NEATLY fill in ALL blanks. If not applicable denote with "N/A". If not recorded denote with "NR".

Date: 03/13/17 Site ID: Harbour Point Cleaners: Sub-Slab Depressurization System H&S Plan Expiration Date: NR

Arrival Time: 0900 Departure Time: 1100 Fire Extinguisher Expiration Date: None

Project No.: 282EM00171 Task No.: 1

Location (address, city): 13619 Mukilteo Speedway Lynwood, Snohomish County Washington

Weather Conditions: Rain

Employee(s): S. Payne Initial: SP (Note: All on-site employees must sign HASP)

System operating upon arrival: Yes No If No, explain: _____

O&M items (check all that apply "X"): Screened Sampled Air

Electrical Hour Meter Reading: ~ 1,164 hrs

Sample Port ID:	FLOW	Flow SCFM	VACUUM (in. WC)	PID (ppm)	Pipe Dia. (inches)
	DIFF. PRESSURE (in. WC)				
<u>EFF 1</u>	<u>NR</u>	<u>170</u>	<u>22</u>	<u>0.6</u>	<u>2</u>

Comments: Flow measured w/ hand held anemometer
collect 8-hr indoor ambient air samples
IA-2-031317 in dry cleaning space
IA-2-031317 in adjacent west space

PID Calibration:

Battery Check OK?	Zero Adjust OK?	Calibration Gas (PPM)	Reading (PPM)	Leak Check	Comments
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>100 ppm isobutylene</u>	<u>100</u>	<u>Y</u>	
Model #: <u>Mini Rae 3000</u>		Serial #: <u>592-906538</u>			

APPENDIX B

Laboratory Analytical Data Report and Chain of Custody Document



ATC Group Services, Inc.
Simon Payne
6347 Seaview Ave NW
Seattle, WA 98107

RE: Harbour Point Cleaners
Work Order Number: 1703152

March 21, 2017

Attention Simon Payne:

Fremont Analytical, Inc. received 3 sample(s) on 3/14/2017 for the analyses presented in the following report.

Volatile Organic Compounds by EPA Method TO-15

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Chelsea Ward
Project Manager

CLIENT: ATC Group Services, Inc.
Project: Harbour Point Cleaners
Work Order: 1703152

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1703152-001	IA-1-031317	03/13/2017 9:30 AM	03/14/2017 9:37 AM
1703152-002	IA-2-031317	03/13/2017 9:35 AM	03/14/2017 9:37 AM
1703152-003	EFF-031317	03/13/2017 1:00 PM	03/14/2017 9:37 AM

CLIENT: ATC Group Services, Inc.

Project: Harbour Point Cleaners

WorkOrder Narrative:

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Air samples are reported in ppbv and ug/m3.

The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Standard temperature and pressure assumes 24.45 = (25C and 1 atm).

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Client: ATC Group Services, Inc.

WorkOrder: 1703152

Project: Harbour Point Cleaners

Client Sample ID: IA-1-031317

Date Sampled: 3/13/2017

Lab ID: 1703152-001A

Date Received: 3/14/2017

Sample Type: Summa Canister

Analyte	Concentration	Reporting Limit	Qual	Method	Date/Analyst
<u>Volatile Organic Compounds by EPA Method TO-15</u>					
	(ppbv)	(ug/m ³)	(ppbv)	(ug/m ³)	
1,1,1-Trichloroethane	<0.200	<1.09	0.200	1.09	EPA-TO-15 03/17/2017 BC
1,1,2,2-Tetrachloroethane	<0.300	<2.06	0.300	2.06	EPA-TO-15 03/17/2017 BC
CFC-113	<0.500	<3.83	0.500	3.83	EPA-TO-15 03/17/2017 BC
1,1,2-Trichloroethane (TCA)	<0.500	<2.73	0.500	2.73	EPA-TO-15 03/17/2017 BC
1,1-Dichloroethane	<0.200	<0.810	0.200	0.810	EPA-TO-15 03/17/2017 BC
1,1-Dichloroethene (DCE)	<0.200	<0.793	0.200	0.793	EPA-TO-15 03/17/2017 BC
1,2,4-Trichlorobenzene	<0.300	<2.23	0.300	2.23	EPA-TO-15 03/17/2017 BC
1,2-Dichlorobenzene	<0.500	<3.01	0.500	3.01	EPA-TO-15 03/17/2017 BC
1,2-Dichloroethane	<0.200	<0.809	0.200	0.809	EPA-TO-15 03/17/2017 BC
1,2-Dichloropropane	<0.500	<2.31	0.500	2.31	EPA-TO-15 03/17/2017 BC
1,3-Dichlorobenzene	<0.300	<1.80	0.300	1.80	EPA-TO-15 03/17/2017 BC
1,4-Dichlorobenzene	0.859	5.16	0.300	1.80	EPA-TO-15 03/17/2017 BC
Benzyl chloride	<0.500	<2.59	0.500	2.59	EPA-TO-15 03/17/2017 BC
Dichlorobromomethane	<0.300	<2.01	0.300	2.01	EPA-TO-15 03/17/2017 BC
Carbon tetrachloride	<0.200	<1.26	0.200	1.26	EPA-TO-15 03/17/2017 BC
Chlorobenzene	<0.200	<0.921	0.200	0.921	EPA-TO-15 03/17/2017 BC
Dibromochloromethane	<0.500	<4.26	0.500	4.26	EPA-TO-15 03/17/2017 BC
Chloroethane	<0.500	<1.32	0.500	1.32	EPA-TO-15 03/17/2017 BC
Chloroform	<0.200	<0.977	0.200	0.977	EPA-TO-15 03/17/2017 BC
Chloromethane	<0.500	<1.03	0.500	1.03	EPA-TO-15 03/17/2017 BC
cis-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793	EPA-TO-15 03/17/2017 BC
cis-1,3-dichloropropene	<0.500	<2.27	0.500	2.27	EPA-TO-15 03/17/2017 BC
Dichlorodifluoromethane (CFC-12)	<0.300	<1.48	0.300	1.48	EPA-TO-15 03/17/2017 BC
Dichlorotetrafluoroethane (CFC-114)	<0.500	<3.50	0.500	3.50	* EPA-TO-15 03/17/2017 BC
Hexachlorobutadiene	<1.00	<10.7	1.00	10.7	EPA-TO-15 03/17/2017 BC
Methylene chloride	<1.50	<5.21	1.50	5.21	EPA-TO-15 03/17/2017 BC
Tetrachloroethene (PCE)	0.324	2.20	0.300	2.03	EPA-TO-15 03/17/2017 BC
trans-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793	EPA-TO-15 03/17/2017 BC
trans-1,3-dichloropropene	<0.500	<2.27	0.500	2.27	EPA-TO-15 03/17/2017 BC
Trichloroethene (TCE)	1.03	5.54	0.200	1.07	EPA-TO-15 03/17/2017 BC



Client: ATC Group Services, Inc.

WorkOrder: 1703152

Project: Harbour Point Cleaners

Client Sample ID: IA-1-031317

Date Sampled: 3/13/2017

Lab ID: 1703152-001A

Date Received: 3/14/2017

Sample Type: Summa Canister

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst
<u>Volatile Organic Compounds by EPA Method TO-15</u>							
	(ppbv)	(ug/m ³)	(ppbv)	(ug/m ³)			
Trichlorofluoromethane (CFC-11)	0.569	3.20	0.300	1.69		EPA-TO-15	03/17/2017 BC
Vinyl chloride	<0.200	<0.511	0.200	0.511		EPA-TO-15	03/17/2017 BC
Surr: 4-Bromofluorobenzene	80.6 %Rec	--	70-130	--		EPA-TO-15	03/17/2017 BC

NOTES:

* - Flagged value is not within established control limits.



Client: ATC Group Services, Inc.

WorkOrder: 1703152

Project: Harbour Point Cleaners

Client Sample ID: IA-2-031317

Date Sampled: 3/13/2017

Lab ID: 1703152-002A

Date Received: 3/14/2017

Sample Type: Summa Canister

Analyte	Concentration	Reporting Limit	Qual	Method	Date/Analyst
<u>Volatile Organic Compounds by EPA Method TO-15</u>					
	(ppbv)	(ug/m ³)	(ppbv)	(ug/m ³)	
1,1,1-Trichloroethane	<0.635	<3.46	0.635	3.46	EPA-TO-15 03/17/2017 BC
1,1,2,2-Tetrachloroethane	<0.952	<6.54	0.952	6.54	EPA-TO-15 03/17/2017 BC
CFC-113	<1.59	<12.2	1.59	12.2	EPA-TO-15 03/17/2017 BC
1,1,2-Trichloroethane (TCA)	<1.59	<8.66	1.59	8.66	EPA-TO-15 03/17/2017 BC
1,1-Dichloroethane	<0.635	<2.57	0.635	2.57	EPA-TO-15 03/17/2017 BC
1,1-Dichloroethene (DCE)	<0.635	<2.52	0.635	2.52	EPA-TO-15 03/17/2017 BC
1,2,4-Trichlorobenzene	<0.952	<7.07	0.952	7.07	EPA-TO-15 03/17/2017 BC
1,2-Dichlorobenzene	<1.59	<9.54	1.59	9.54	EPA-TO-15 03/17/2017 BC
1,2-Dichloroethane	<0.635	<2.57	0.635	2.57	EPA-TO-15 03/17/2017 BC
1,2-Dichloropropane	<1.59	<7.34	1.59	7.34	EPA-TO-15 03/17/2017 BC
1,3-Dichlorobenzene	<0.952	<5.73	0.952	5.73	EPA-TO-15 03/17/2017 BC
1,4-Dichlorobenzene	<0.952	<5.73	0.952	5.73	EPA-TO-15 03/17/2017 BC
Benzyl chloride	<1.59	<8.22	1.59	8.22	EPA-TO-15 03/17/2017 BC
Dichlorobromomethane	<0.952	<6.38	0.952	6.38	EPA-TO-15 03/17/2017 BC
Carbon tetrachloride	<0.635	<3.99	0.635	3.99	EPA-TO-15 03/17/2017 BC
Chlorobenzene	<0.635	<2.92	0.635	2.92	EPA-TO-15 03/17/2017 BC
Dibromochloromethane	<1.59	<13.5	1.59	13.5	EPA-TO-15 03/17/2017 BC
Chloroethane	<1.59	<4.19	1.59	4.19	EPA-TO-15 03/17/2017 BC
Chloroform	<0.635	<3.10	0.635	3.10	EPA-TO-15 03/17/2017 BC
Chloromethane	<1.59	<3.28	1.59	3.28	EPA-TO-15 03/17/2017 BC
cis-1,2-Dichloroethene	<0.635	<2.52	0.635	2.52	EPA-TO-15 03/17/2017 BC
cis-1,3-dichloropropene	<1.59	<7.20	1.59	7.20	EPA-TO-15 03/17/2017 BC
Dichlorodifluoromethane (CFC-12)	<0.952	<4.71	0.952	4.71	EPA-TO-15 03/17/2017 BC
Dichlorotetrafluoroethane (CFC-114)	<1.59	<11.1	1.59	11.1	* EPA-TO-15 03/17/2017 BC
Hexachlorobutadiene	<3.17	<33.9	3.17	33.9	EPA-TO-15 03/17/2017 BC
Methylene chloride	<4.76	<16.5	4.76	16.5	EPA-TO-15 03/17/2017 BC
Tetrachloroethene (PCE)	<0.952	<6.46	0.952	6.46	EPA-TO-15 03/17/2017 BC
trans-1,2-Dichloroethene	<0.635	<2.52	0.635	2.52	EPA-TO-15 03/17/2017 BC
trans-1,3-dichloropropene	<1.59	<7.20	1.59	7.20	EPA-TO-15 03/17/2017 BC
Trichloroethene (TCE)	<0.635	<3.41	0.635	3.41	EPA-TO-15 03/17/2017 BC



Client: ATC Group Services, Inc.
WorkOrder: 1703152
Project: Harbour Point Cleaners

Client Sample ID: IA-2-031317
Lab ID: 1703152-002A
Sample Type: Summa Canister

Date Sampled: 3/13/2017
Date Received: 3/14/2017

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst
<u>Volatile Organic Compounds by EPA Method TO-15</u>							
	(ppbv)	(ug/m ³)	(ppbv)	(ug/m ³)			
Trichlorofluoromethane (CFC-11)	<0.952	<5.35	0.952	5.35		EPA-TO-15	03/17/2017 BC
Vinyl chloride	<0.635	<1.62	0.635	1.62		EPA-TO-15	03/17/2017 BC
Surr: 4-Bromofluorobenzene	78.5 %Rec	--	70-130	--		EPA-TO-15	03/17/2017 BC

NOTES:

* - Flagged value is not within established control limits.



Client: ATC Group Services, Inc.

WorkOrder: 1703152

Project: Harbour Point Cleaners

Client Sample ID: EFF-031317

Date Sampled: 3/13/2017

Lab ID: 1703152-003A

Date Received: 3/14/2017

Sample Type: Summa Canister

Analyte	Concentration	Reporting Limit	Qual	Method	Date/Analyst
<u>Volatile Organic Compounds by EPA Method TO-15</u>					
	(ppbv)	(ug/m ³)	(ppbv)	(ug/m ³)	
1,1,1-Trichloroethane	<0.200	<1.09	0.200	1.09	EPA-TO-15 03/17/2017 BC
1,1,2,2-Tetrachloroethane	<0.300	<2.06	0.300	2.06	EPA-TO-15 03/17/2017 BC
CFC-113	<0.500	<3.83	0.500	3.83	EPA-TO-15 03/17/2017 BC
1,1,2-Trichloroethane (TCA)	<0.500	<2.73	0.500	2.73	EPA-TO-15 03/17/2017 BC
1,1-Dichloroethane	<0.200	<0.810	0.200	0.810	EPA-TO-15 03/17/2017 BC
1,1-Dichloroethene (DCE)	<0.200	<0.793	0.200	0.793	EPA-TO-15 03/17/2017 BC
1,2,4-Trichlorobenzene	<0.300	<2.23	0.300	2.23	EPA-TO-15 03/17/2017 BC
1,2-Dichlorobenzene	<0.500	<3.01	0.500	3.01	EPA-TO-15 03/17/2017 BC
1,2-Dichloroethane	<0.200	<0.809	0.200	0.809	EPA-TO-15 03/17/2017 BC
1,2-Dichloropropane	<0.500	<2.31	0.500	2.31	EPA-TO-15 03/17/2017 BC
1,3-Dichlorobenzene	<0.300	<1.80	0.300	1.80	EPA-TO-15 03/17/2017 BC
1,4-Dichlorobenzene	0.696	4.19	0.300	1.80	EPA-TO-15 03/17/2017 BC
Benzyl chloride	<0.500	<2.59	0.500	2.59	EPA-TO-15 03/17/2017 BC
Dichlorobromomethane	<0.300	<2.01	0.300	2.01	EPA-TO-15 03/17/2017 BC
Carbon tetrachloride	<0.200	<1.26	0.200	1.26	EPA-TO-15 03/17/2017 BC
Chlorobenzene	<0.200	<0.921	0.200	0.921	EPA-TO-15 03/17/2017 BC
Dibromochloromethane	<0.500	<4.26	0.500	4.26	EPA-TO-15 03/17/2017 BC
Chloroethane	<0.500	<1.32	0.500	1.32	EPA-TO-15 03/17/2017 BC
Chloroform	0.497	2.43	0.200	0.977	EPA-TO-15 03/17/2017 BC
Chloromethane	<0.500	<1.03	0.500	1.03	EPA-TO-15 03/17/2017 BC
cis-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793	EPA-TO-15 03/17/2017 BC
cis-1,3-dichloropropene	<0.500	<2.27	0.500	2.27	EPA-TO-15 03/17/2017 BC
Dichlorodifluoromethane (CFC-12)	<0.300	<1.48	0.300	1.48	EPA-TO-15 03/17/2017 BC
Dichlorotetrafluoroethane (CFC-114)	<0.500	<3.50	0.500	3.50	* EPA-TO-15 03/17/2017 BC
Hexachlorobutadiene	<1.00	<10.7	1.00	10.7	EPA-TO-15 03/17/2017 BC
Methylene chloride	23.7	82.4	10.0	34.7	EPA-TO-15 03/20/2017 BC
Tetrachloroethene (PCE)	0.673	4.57	0.300	2.03	EPA-TO-15 03/17/2017 BC
trans-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793	EPA-TO-15 03/17/2017 BC
trans-1,3-dichloropropene	<0.500	<2.27	0.500	2.27	EPA-TO-15 03/17/2017 BC
Trichloroethene (TCE)	0.226	1.22	0.200	1.07	EPA-TO-15 03/17/2017 BC



Client: ATC Group Services, Inc.

WorkOrder: 1703152

Project: Harbour Point Cleaners

Client Sample ID: EFF-031317

Date Sampled: 3/13/2017

Lab ID: 1703152-003A

Date Received: 3/14/2017

Sample Type: Summa Canister

Analyte	Concentration	Reporting Limit	Qual	Method	Date/Analyst
<u>Volatile Organic Compounds by EPA Method TO-15</u>					
	(ppbv)	(ug/m ³)	(ppbv)	(ug/m ³)	
Trichlorofluoromethane (CFC-11)	0.325	1.83	0.300	1.69	EPA-TO-15 03/17/2017 BC
Vinyl chloride	<0.200	<0.511	0.200	0.511	EPA-TO-15 03/17/2017 BC
Surr: 4-Bromofluorobenzene	81.6 %Rec	--	70-130	--	EPA-TO-15 03/17/2017 BC

NOTES:

* - Flagged value is not within established control limits.

Work Order: 1703152
CLIENT: ATC Group Services, Inc.
Project: Harbour Point Cleaners

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method TO-15

Sample ID	LCS-R35034	SampType:	LCS	Units:	ppbv	Prep Date:	3/17/2017	RunNo:	35034
Client ID:	LCSW	Batch ID:	R35034			Analysis Date:	3/17/2017	SeqNo:	669306

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	3.57	0.300	5.000	0	71.5	70	130				
Chloromethane	3.86	0.500	5.000	0	77.3	70	130				
Dichlorotetrafluoroethane (CFC-114)	3.41	0.500	5.000	0	68.2	70	130				S
Vinyl chloride	3.51	0.200	5.000	0	70.2	70	130				
Trichlorofluoromethane (CFC-11)	3.63	0.300	5.000	0	72.5	70	130				
Chloroethane	3.54	0.500	5.000	0	70.7	70	130				
1,1-Dichloroethene (DCE)	3.83	0.200	5.000	0	76.7	70	130				
Methylene chloride	3.82	1.50	5.000	0	76.3	70	130				
trans-1,2-Dichloroethene	4.14	0.200	5.000	0	82.8	70	130				
1,1-Dichloroethane	3.61	0.200	5.000	0	72.2	70	130				
cis-1,2-Dichloroethene	4.37	0.200	5.000	0	87.5	70	130				
Chloroform	3.59	0.200	5.000	0	71.8	70	130				
1,1,1-Trichloroethane	4.04	0.200	5.000	0	80.9	70	130				
Carbon tetrachloride	4.15	0.200	5.000	0	83.0	70	130				
1,2-Dichloroethane	4.09	0.200	5.000	0	81.9	70	130				
Trichloroethene (TCE)	4.20	0.200	5.000	0	84.1	70	130				
1,2-Dichloropropane	3.86	0.500	5.000	0	77.1	70	130				
Dichlorobromomethane	3.80	0.300	5.000	0	76.0	70	130				
cis-1,3-dichloropropene	3.88	0.500	5.000	0	77.6	70	130				
trans-1,3-dichloropropene	3.84	0.500	5.000	0	76.9	70	130				
1,1,2-Trichloroethane (TCA)	4.06	0.500	5.000	0	81.2	70	130				
Tetrachloroethene (PCE)	5.41	0.300	5.000	0	108	70	130				
Dibromochloromethane	4.62	0.500	5.000	0	92.4	70	130				
Chlorobenzene	4.45	0.200	5.000	0	89.0	70	130				
1,1,2,2-Tetrachloroethane	3.60	0.300	5.000	0	71.9	70	130				
Benzyl chloride	4.91	0.500	5.000	0	98.1	70	130				
1,3-Dichlorobenzene	4.81	0.300	5.000	0	96.2	70	130				
1,4-Dichlorobenzene	4.76	0.300	5.000	0	95.2	70	130				
1,2-Dichlorobenzene	4.77	0.500	5.000	0	95.4	70	130				
1,2,4-Trichlorobenzene	5.75	0.300	5.000	0	115	70	130				
Hexachlorobutadiene	6.25	1.00	5.000	0	125	70	130				

Work Order: 1703152
CLIENT: ATC Group Services, Inc.
Project: Harbour Point Cleaners

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method TO-15

Sample ID LCS-R35034	SampType: LCS	Units: ppbv	Prep Date: 3/17/2017	RunNo: 35034							
Client ID: LCSW	Batch ID: R35034		Analysis Date: 3/17/2017	SeqNo: 669306							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

CFC-113	4.06	0.500	5.000	0	81.3	70	130				
Surr: 4-Bromofluorobenzene	8.68		10.00		86.8	70	130				

NOTES:

S - Outlying spike recovery observed (low bias). Samples will be qualified with a *.

Sample ID MB-R35034	SampType: MBLK	Units: ppbv	Prep Date: 3/17/2017	RunNo: 35034							
Client ID: MBLKW	Batch ID: R35034		Analysis Date: 3/17/2017	SeqNo: 669307							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	0.300									
Chloromethane	ND	0.500									
Dichlorotetrafluoroethane (CFC-114)	ND	0.500									*
Vinyl chloride	ND	0.200									
Trichlorofluoromethane (CFC-11)	ND	0.300									
Chloroethane	ND	0.500									
1,1-Dichloroethene (DCE)	ND	0.200									
Methylene chloride	ND	1.500									
trans-1,2-Dichloroethene	ND	0.200									
1,1-Dichloroethane	ND	0.200									
cis-1,2-Dichloroethene	ND	0.200									
Chloroform	ND	0.200									
1,1,1-Trichloroethane	ND	0.200									
Carbon tetrachloride	ND	0.200									
1,2-Dichloroethane	ND	0.200									
Trichloroethene (TCE)	ND	0.200									
1,2-Dichloropropane	ND	0.500									
Dichlorobromomethane	ND	0.300									
cis-1,3-dichloropropene	ND	0.500									
trans-1,3-dichloropropene	ND	0.500									
1,1,2-Trichloroethane (TCA)	ND	0.500									
Tetrachloroethene (PCE)	ND	0.300									

Work Order: 1703152
CLIENT: ATC Group Services, Inc.
Project: Harbour Point Cleaners

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method TO-15

Sample ID MB-R35034	SampType: MBLK	Units: ppbv	Prep Date: 3/17/2017	RunNo: 35034							
Client ID: MBLKW	Batch ID: R35034		Analysis Date: 3/17/2017	SeqNo: 669307							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dibromochloromethane	ND	0.500									
Chlorobenzene	ND	0.200									
1,1,2,2-Tetrachloroethane	ND	0.300									
Benzyl chloride	ND	0.500									
1,3-Dichlorobenzene	ND	0.300									
1,4-Dichlorobenzene	ND	0.300									
1,2-Dichlorobenzene	ND	0.500									
1,2,4-Trichlorobenzene	ND	0.300									
Hexachlorobutadiene	ND	1.00									
CFC-113	ND	0.500									

Surr: 4-Bromofluorobenzene 7.95 10.00 79.5 70 130

NOTES:
 * - Flagged value is not within established control limits.

Sample ID 1703191-005AREP	SampType: REP	Units: ppbv	Prep Date: 3/18/2017	RunNo: 35034							
Client ID: BATCH	Batch ID: R35034		Analysis Date: 3/18/2017	SeqNo: 669304							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	0.300						0		30	
Chloromethane	ND	0.500						0		30	
Dichlorotetrafluoroethane (CFC-114)	ND	0.500						0		30	*
Vinyl chloride	ND	0.200						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.300						0		30	
Chloroethane	ND	0.500						0		30	
1,1-Dichloroethene (DCE)	ND	0.200						0		30	
Methylene chloride	130	1.50						126.8	2.11	30	E
trans-1,2-Dichloroethene	ND	0.200						0		30	
1,1-Dichloroethane	ND	0.200						0		30	
cis-1,2-Dichloroethene	ND	0.200						0		30	
Chloroform	ND	0.200						0		30	
1,1,1-Trichloroethane	ND	0.200						0		30	

Work Order: 1703152
CLIENT: ATC Group Services, Inc.
Project: Harbour Point Cleaners

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method TO-15

Sample ID 1703191-005AREP	SampType: REP	Units: ppbv	Prep Date: 3/18/2017	RunNo: 35034							
Client ID: BATCH	Batch ID: R35034		Analysis Date: 3/18/2017	SeqNo: 669304							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Carbon tetrachloride	ND	0.200						0		30	
1,2-Dichloroethane	ND	0.200						0		30	
Trichloroethene (TCE)	ND	0.200						0		30	
1,2-Dichloropropane	ND	0.500						0		30	
Dichlorobromomethane	ND	0.300						0		30	
cis-1,3-dichloropropene	ND	0.500						0		30	
trans-1,3-dichloropropene	ND	0.500						0		30	
1,1,2-Trichloroethane (TCA)	ND	0.500						0		30	
Tetrachloroethene (PCE)	ND	0.300						0		30	
Dibromochloromethane	ND	0.500						0		30	
Chlorobenzene	ND	0.200						0		30	
1,1,2,2-Tetrachloroethane	ND	0.300						0		30	
Benzyl chloride	ND	0.500						0		30	
1,3-Dichlorobenzene	ND	0.300						0		30	
1,4-Dichlorobenzene	ND	0.300						0		30	
1,2-Dichlorobenzene	ND	0.500						0		30	
1,2,4-Trichlorobenzene	ND	0.300						0		30	
Hexachlorobutadiene	ND	1.00						0		30	
CFC-113	ND	0.500						0		30	
Surr: 4-Bromofluorobenzene	7.64		10.00		76.4	70	130		0		

NOTES:

* - Flagged value is not within established control limits.

Sample ID LCS-R35034	SampType: LCS	Units: ppbv	Prep Date: 3/20/2017	RunNo: 35034							
Client ID: LCSW	Batch ID: R35034		Analysis Date: 3/20/2017	SeqNo: 669663							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Methylene chloride	4.08	1.50	5.000	0	81.6	70	130				
Tetrachloroethene (PCE)	5.64	0.300	5.000	0	113	70	130				
Surr: 4-Bromofluorobenzene	8.70		10.00		87.0	70	130				

Client Name: **ATC**
 Logged by: **Erica Silva**

Work Order Number: **1703152**
 Date Received: **3/14/2017 9:37:00 AM**

Chain of Custody

1. Is Chain of Custody complete? Yes No Not Present
 2. How was the sample delivered? Client

Log In

3. Coolers are present? Yes No NA
Air Samples
 4. Shipping container/cooler in good condition? Yes No
 5. Custody Seals present on shipping container/cooler?
 (Refer to comments for Custody Seals not intact) Yes No Not Required
 6. Was an attempt made to cool the samples? Yes No NA
 7. Were all items received at a temperature of >0°C to 10.0°C* Yes No NA
 8. Sample(s) in proper container(s)? Yes No
 9. Sufficient sample volume for indicated test(s)? Yes No
 10. Are samples properly preserved? Yes No
 11. Was preservative added to bottles? Yes No NA
 12. Is there headspace in the VOA vials? Yes No NA
 13. Did all samples containers arrive in good condition(unbroken)? Yes No
 14. Does paperwork match bottle labels? Yes No
 15. Are matrices correctly identified on Chain of Custody? Yes No
 16. Is it clear what analyses were requested? Yes No
 17. Were all holding times able to be met? Yes No

Special Handling (if applicable)

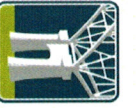
18. Was client notified of all discrepancies with this order? Yes No NA

Person Notified:	<input type="text" value="Simon Payne"/>	Date:	<input type="text" value="3/14/2017"/>
By Whom:	<input type="text" value="Erica Silva"/>	Via:	<input checked="" type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text" value="Low volume for IA-2-031317"/>		
Client Instructions:	<input type="text" value="Proceed"/>		

19. Additional remarks:

Item Information

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C



Fremont
Analytical

3600 Fremont Ave. N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Air Chain of Custody Record & Laboratory Services Agreement

Date: 03/13/17 Page: 1 of: 1

Project Name: Harbour Point Cleaners

Project No: 282 EM 000191

Location: 13632 Hwy 99, Lynnwood, WA

Collected by: S. Payne / C. Bishop

Reports to (PM): Simon Payne

Email (PM): Simon.Payne@atassocciates.com

Laboratory Project No (Internal):

1703152

Special Remarks:

Sample Name	Canister / Flow Reg Serial #	Sample Date & Time	Sample Type (Matrix) *	Container Type **	Sample Volume	Fill Time	Flow Rate	Internal			Analysis Requested	Receipt Date	Final Pressure (THg)
								Initial Evacuation Pressure (mTorr)	Field Initial Sample Pressure ("Hg)	Field Final Sample Pressure ("Hg)			
1 IA-1-031317	12666 FR8-11	03/13/17 09:30	Indoor-air	CAN	6L	8hr	10 mTorr	3/1/17 15:00	29	7	TO-15 CVOCs	3/14	-8
2 IA-2-031317	15901 FR8-15	03/13/17 09:35	Indoor-air	CAN	6L	8hr	10 mTorr	3/1/17 15:00	30	12	TO-15 CVOCs	3/14	-24
3 EAF-031317	17649	03/13/17 13:00	SP air Subslab	CAN	6L	Grab	10 mTorr	3/1/17 15:00	30	7	TO-15 CVOCs	3/14	-6
4													
5													

* Matrix Codes: AA = Ambient Air IA = Indoor Air L = Landfill S = Subslab / Soil Gas
 ** Container Codes: BV = 1 Liter Bottle Vac CAN = Canister CVL = High Pressure Cylinder F = Filter S = Sorbent Tube TB = Tedlar Bag

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished Date/Time: 03/14/17 09:37 Received Date/Time: 3/14/2017 09:37

Turn-Around Time: Standard 3 Day 2 Day Next Day
 Same Day (specify) _____