SSD/SVE SYSTEM
NYSDEC Site Number 1-03-169
Former Chez Valet Dry Cleaners
1-3 Manorhaven Boulevard
Port Washington, NY 11050

Progress Report

Submitted 5/28/2013

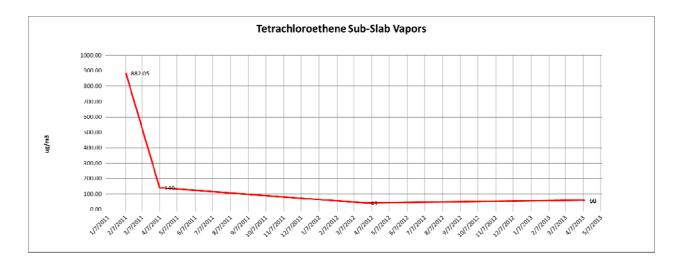
Time Period 12/28/2012 to 4/8/2013

The purpose of this report will be to generally outline work efforts conducted and remedial progress at the above referenced site for the time period indicated.

1. Summary of Highlights - This Reporting Period

- The Sub Slab Depressurization System (SSD)/ Soil Venting and Extraction (SVE) system continues operation and has been operational since 2/7/2011.
- Unexpected downtime occurred on or about 3/28/2013 when Severn Trent Environmental Services (STES) visited the site for a routine inspection and sub slab vapor analysis activities. At the time of the visit, it was discovered that the basement area housing the SVE/SSD had been broken into and the machine had been turned off. Utilizing run time our meter readings, it was calculated that the machine was off for 2.7 days. The remedial system was inspected, restarted, and has been operational without problems from this date. The percent run time for that interval fell to 94.5% while cumulative runtimes from the start of the project remain at 98.9%.
- A pre-carbon PID reading was taken on 4/8/2013 which showed 0.2 ppm TVOC. Although this is slightly higher than the December reading of 0.1 ppm, it is still quite low and we are anticipating that the compound of concern will show continued, reduced results.
- Given the consistent low (PID) TVOC readings, 2 samples were taken of the remedial system's inlet airstream. This airstream would also be representative of present day subs slab vapor conditions. Two Summa canisters were utilized to sample the vapors and analyzed utilizing EPA TO-15 GC/MS Full Scan criteria. The results showed that Tetrachloroethene, the contaminant of concern, remained below the 100 μg/m³ soil vapor Standard Criteria and Guidance Value (SCG). Please refer to Attachment 1.

Carbon Influent Sample	Tetrachloroethene (ug/m³)
#1	60
#2	56



- Severn Trent Environmental Services (STES) has continued long-term operations and maintenance of the system since 5/16/2011.
 - o Continued monitoring has identified that sub slab depressurization system continues to maintain appropriate negative pressures. Monitoring is performed in accordance with STES prepared Standard Operating Procedures for this site. (Attachment A)
 - o STES conducted site visits on 4/8, to verify that sub slab vacuums are sustained and the remedial system is properly balanced and maintained.
 - o AHL conducted site visits on 2/7 and 3/28 (at STES's request) to verify system is operational and to verify and log in system run time.

• Draft Environmental Easement

- o Robert Dooley, Esq., was contacted on 1/23/2013 regarding the status of the Draft Environmental Easement. Mr. Dooley reported that he had been in contact with Ben Conlon of NYSDEC on 1/17/2013 inquiring about review status.
- o NYSDEC reported on that date that they have everything required for a complete review and that the approval of the Draft Environmental Easement is "pending".

2. Work Performed This Reporting Period (STES)

• General operating information. **New tasks executed after the last reporting period are presented in bold.** (Please refer to Attachment C – to see copy of field notes).

Date	Vacuum Point Readings	Vacuum Gauge readings	PID Readings @ Carbon	Blower elapsed time Readings	Comments
4/8/2013	X	X	X	Х	 Outside PID readings 0.0 - 11 ppb, basement 37 - 27 ppb. PID readings conducted twice due to increased level displayed. Collected Carbon influent samples utilizing TO- 15 summa canisters. Removed hose-barbs from two remaining sampling points within salon area and replace them with PVC plugs to avoid breakage. Note first-quarter monitoring performed late due to break-in observed that the end of last month.
3/28/2013	Not conducted due to system being off upon arrival.	Not conducted due to system being off upon arrival.	Not conducted due to system being off upon arrival.	Not conducted due to system being off upon arrival.	 Upon arrival at site STES determines the basement door has been pried open & system turned off. Equipment inspected and no apparent damage found. Power supply and controls inspected with no apparent damage detected. It appears that power switch was not tripped but manually turned to the off position. System was off for a total of 2.7 days. Fuse panel that supplies power to system inspected and no tripped switch is found as well. New owner notified. New owner will have discussion with existing building occupants and will evaluate upgrading security if necessary. NYSDEC case manager notified. System restarted and allowed to rebalance before sub slab vapor samples taken.

Date	Vacuum Point Readings	Vacuum Gauge readings	PID Readings @ Carbon	Blower elapsed time Readings	Comments
12/28/12	X	X	X	X	 Basement light found to be burned out (location of SVE/SSD system). Replaced by STES. Plugs installed in all vapor points other than those inside the salon. (Salon busy & full of clientele.)
9/28/12	X	X	X	X	 Header valve #6 was found opened. [AHL comment – The valves are typically not moved as they are set to a certain position to balance out the vacuums over the areas of concern. These valves are difficult to manipulate and would take a conscious effort to move.] STES noted that before resetting the valves the vacuum reading was 12 inches of H2O. After resetting the valves to the correct position vacuum immediately returned to 20 inches of H2O. VP-2 was again found open. After discussions with AHL, STES instructed to replace all sampling valves and barbs with plugs. Plugs can be removed during monitoring efforts and will prevent valve manipulation or breakage.
8/24/12	X	X	X	X	 The parking lot on the side and in front of the building has been repaved with new asphalt. Town is working on sidewalks and what appears to be some utility work in front of the building. STES is assuming that these two activities have had an impact on the vacuum readings as well as PID readings. 401 ppb is still a very small number but it is significantly higher than previous readings. STES suspects that the high PID readings are from the new asphalt and that these readings will drop in future monitoring events.
7/12/12	X	X	X	X	VP-1 and VP-3 barbs broken. Valve on VP-5 was again found open.
6/9/12	X	X	X	X	Was not able to get reading from VP-6 due to damaged barb on sample port

Date	Vacuum Point Readings	Vacuum Gauge readings	PID Readings @ Carbon	Blower elapsed time Readings	Comments
5/3/12			X		Site revisited to take PID readings due to failed meter on 5/1/12
5/1/12	X	X		X	 Rented PID meter failed have to calibration an attempted infield. Replacement PID being sent, return to site required to take readings. VP- 5 valve was in the open position & hose Barb was damaged again. Damaged hose Barb was removed and upon inspection STES found a "core plywood" in the barb. It appears that a sheet of plywood was dropped on the monitoring point.
3/27/12	X	X	X	X	 Vapor samples collected from SVE/SSD System (Carbon Influent & Carbon System Discharge) STES determines that are more sensitive PID is available that can read to ppb levels whereas existing unit needs to ppm level. Due to continued low concentration levels, was sensitive PID unit will be rented for next monthly monitoring event
2/29/12	X	X	X	X	System Operating Normally
1/25/2012	Х	X	X	X	 Inspected MW-1, MW-2 and MW-3. MW-2 did not have well, temporarily covered with duct tape. Repair to be done during next site visit MW-4 and MW-5 not located due to high activity level of heavy equipment in area
12/28/11	X	X	X	X	 Small crack on discharge pipe of the primary carbon vessel. Temporary repairs were made. PID readings appear to indicate that soil vapor in the capture zone has reached non-detect levels.
11/23/11	X	X	X	X	System Operating Normally
10/31/11	X	X	X		System Operating Normally

3. Summary of Historical Data

This section will review and trend the historical data at the site. Three primary areas will be discussed:

- a. Post Start-Up Sub Slab Vacuums.
- b. Vacuum Gauge Settings & Miscellaneous System Information.
- c. Elapsed Time And Runtime Calculations
- d. Carbon Drum Readings
- a. Post Start-Up Sub Slab Vacuums (please refer to Attachment B)
 - i) Description of Attachments:
 - Page 1 of 4: represents a table that summarizes the field measured sub slab vacuums.
 All vacuum readings less than or equal to -0.024 are shaded green all vacuums >-0.025 are shaded in red. This shading allows us to monitor which vacuums are becoming marginal thus necessitating readjustment of system balancing.
 - Page 2 of 4: location plan for all the vapor points and well locations.
 - Page 3 of 4: graphically shows sub slab vacuums over the period of operations. Note all readings are relatively consistent other than those measured on 7/28/11. After reviewing field data, calibration techniques & barometric pressures for all sampling data and comparing them, we cannot explain the variability of the readings on this day. This data will be kept in the log but will not be utilize an overall trending.
 - Page 4 of 4: similar to page 3 other than the graph is represented by lines versus bars.
 - ii) Observations
 - All vapor points continue to maintain a negative vacuum.
 - VP-7 only point showing less than -0.024 inches of water. All other vapor points are are showing vacuums greater than -0.024 inches of water
- b. Vacuum Gauge Settings & Miscellaneous System Information (please refer to Attachment C)
 - i) Description of Attachments:
 - Page 1 and 2 of 5: summarizes the vacuum gauge readings taken at each lateral off the header (page 1) as well as vacuum readings at the relative vapor points located near that particular lateral (page 2).
 - Page 3 of 5: location plan for all the vapor points and well locations.
 - Page 4 of 5: graphically presents vacuum readings at the header laterals (bars) versus vacuum readings at the associated vapor points (lines). This graphic was prepared in order to determine how the site was balancing at the vapor points and what affect the vacuum at the lateral had on the final vacuum at the vapor points.
 - Page 5 of 5: graphically represents the vacuum in the Knockout Pot (in. Hg) as well as the average vacuum in the distribution header located at the vacuum pump (in. H₂O) and average vacuum at all vapor points (in. H₂O).
- c. Elapsed Time and Runtime Calculations. (Please refer to Attachment D)
 Description of Attachments:

This table summarizes the run time meter readings after 5/24/11, the date and time STES installed the hour meter on the system. Through 4/8/13 system is achieving operating times in excess of 99%.

It should be noted that due to the break-in at the end of March 2013, (previously described) the percent uptime for that reporting period dropped to 94.5%.

d. Carbon Drum Readings (please refer to Attachment E)

i) Description of Attachments:

This table and graph summarize PID readings taken:

- Before the air phase carbon treatment vessels = Pre Carbon.
- Between the primary air phase carbon vessel and the secondary air phase carbon vessel = Mid Carbon.
- After the final air phase carbon treatment system or exhaust = Post Carbon.
- In addition the blower discharge velocity measurements taken at the air phase carbon treatment vessels is represented by the "purple" line graph.

Monthly site monitoring includes taking PID measurements of the exhaust to ensure that the drums will be changed out an ample time should break through occur.

ii) Observations

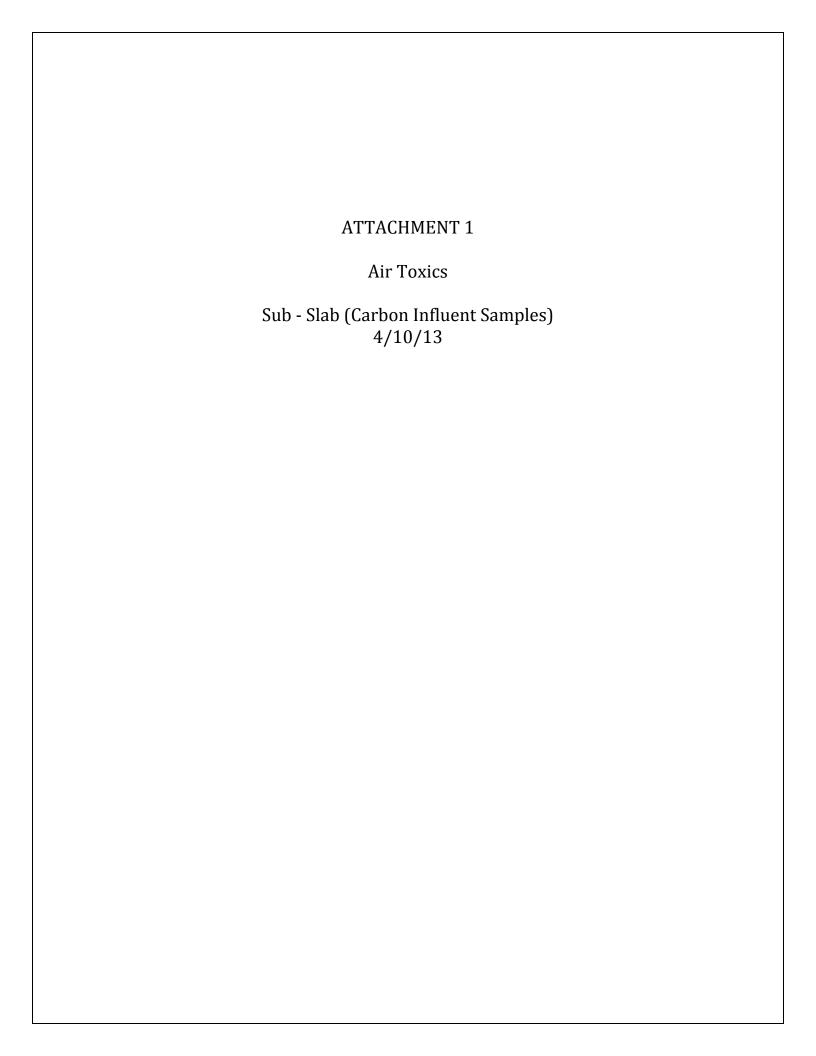
- Note readings beginning 5/3/12 were taking with field meter capable of measuring ppb levels.
- "Pre-Carbon" readings on 8/24/2012 and 9/28/2012 were elevated, but did not exceed the SCG guideline of $100 \, \mu g/m^3$. Although these readings were elevated, STES believes that it was due to new asphalt paving surrounding approximately 50% of the building perimeter.
- TO-15 summa canisters samples showed two pre-carbon readings for Tetrachloroethene at 56 and 60 ug/m³ respectively. Both samples were below the 100 ug/m³ SCG guideline.

4. Problems Encountered & Proposed Resolutions

- No major system operational problems were encountered other than concerns over the security of the SVE/SSD system.
- End of March 2013 break-in previously described.

5. Expected Work During the Next Progress Period

- Continued monitoring of site operations on a quarterly basis.
- Based on continued sub slab vapor concentrations less than 100 ug/m³ we intend to recommend to NYSDEC to shut down the remedial system. Once approved by NYSDEC this will trigger indoor air monitoring events as outlined in the Site Management Plan.





4/23/2013

Mr. Ross Hibler Severn Trent Services 100 Morris Avenue

Glen Cove NY 11542

Project Name: Evergreen

Project #:

Workorder #: 1304239

Dear Mr. Ross Hibler

The following report includes the data for the above referenced project for sample(s) received on 4/10/2013 at Air Toxics Ltd.

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

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

Regards,

Ausha Scott

Project Manager



WORK ORDER #: 1304239

Work Order Summary

CLIENT: Mr. Ross Hibler BILL TO: Mr. Ross Hibler

Severn Trent ServicesSevern Trent Services100 Morris Avenue100 Morris AvenueGlen Cove, NY 11542Glen Cove, NY 11542

PHONE: 516-674-6032 **P.O.** # 011805

FAX: PROJECT # Evergreen

DATE RECEIVED: 04/10/2013 CONTACT: Ausha Scott DATE COMPLETED: 04/23/2013

			RECEIPT	FINAL
FRACTION #	<u>NAME</u>	<u>TEST</u>	VAC./PRES.	PRESSURE
01A	Carbon Influent #1	Modified TO-15	5.7 "Hg	9.2 psi
02A	Carbon Influent #2	Modified TO-15	0.2 "Hg	4.5 psi
03A	Lab Blank	Modified TO-15	NA	NA
04A	CCV	Modified TO-15	NA	NA
05A	LCS	Modified TO-15	NA	NA
05AA	LCSD	Modified TO-15	NA	NA

	The	ide Tayes		
CERTIFIED BY:			DATE: $\frac{04/23/13}{}$	

Technical Director

Certfication numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NY NELAP - 11291, TX NELAP - T104704434-12-5, UT NELAP CA009332012-3, WA NELAP - C935

Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program) Accreditation number: CA300005, Effective date: 10/18/2011, Expiration date: 10/17/2012.

Eurofins Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE EPA Method TO-15 Severn Trent Services Workorder# 1304239

Two 6 Liter Summa Canister samples were received on April 10, 2013. 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

There were no analytical discrepancies.

Definition of Data Qualifying Flags

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

- B Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
 - J Estimated value.
 - E Exceeds instrument calibration range.
 - S Saturated peak.
 - Q Exceeds quality control limits.
- U Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.
 - 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: Carbon Influent #1

Lab ID#: 1304239-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
Ethanol	4.0	230	7.6	430	
Acetone	10	47	24	110	
2-Propanol	4.0	11	9.9	27	
Tetrachloroethene	1.0	8.8	6.8	60	

Client Sample ID: Carbon Influent #2

Lab ID#: 1304239-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethanol	2.6	220	5.0	420
Acetone	6.6	43	16	100
2-Propanol	2.6	11	6.5	27
Tetrachloroethene	0.66	8.3	4.5	56



Client Sample ID: Carbon Influent #1 Lab ID#: 1304239-01A

EPA METHOD TO-15 GC/MS FULL SCAN

•	B (11 1/	A second Bod 15 of
Dil. Factor:	2.01	Date of Analysis: 4/17/13 07:15 PM
File Name:	p041718	Date of Collection: 4/8/13 10:57:00 AM

Dil. Factor:	2.01	Date	of Analysis: 4/17	/13 07:15 PM
	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Freon 12	1.0	Not Detected	5.0	Not Detected
Freon 114	1.0	Not Detected	7.0	Not Detected
Chloromethane	10	Not Detected	21	Not Detected
Vinyl Chloride	1.0	Not Detected	2.6	Not Detected
1,3-Butadiene	1.0	Not Detected	2.2	Not Detected
Bromomethane	10	Not Detected	39	Not Detected
Chloroethane	4.0	Not Detected	11	Not Detected
Freon 11	1.0	Not Detected	5.6	Not Detected
Ethanol	4.0	230	7.6	430
Freon 113	1.0	Not Detected	7.7	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.0	Not Detected
Acetone	10	47	24	110
2-Propanol	4.0	11	9.9	27
Carbon Disulfide	4.0	Not Detected	12	Not Detected
3-Chloropropene	4.0	Not Detected	12	Not Detected
Methylene Chloride	10	Not Detected	35	Not Detected
Methyl tert-butyl ether	1.0	Not Detected	3.6	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.0	Not Detected
Hexane	1.0	Not Detected	3.5	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.1	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.0	Not Detected	12	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.0	Not Detected
Tetrahydrofuran	1.0	Not Detected	3.0	Not Detected
Chloroform	1.0	Not Detected	4.9	Not Detected
1,1,1-Trichloroethane	1.0	Not Detected	5.5	Not Detected
Cyclohexane	1.0	Not Detected	3.4	Not Detected
Carbon Tetrachloride	1.0	Not Detected	6.3	Not Detected
2,2,4-Trimethylpentane	1.0	Not Detected	4.7	Not Detected
Benzene	1.0	Not Detected	3.2	Not Detected
1,2-Dichloroethane	1.0	Not Detected	4.1	Not Detected
Heptane	1.0	Not Detected	4.1	Not Detected
Trichloroethene	1.0	Not Detected	5.4	Not Detected
1,2-Dichloropropane	1.0	Not Detected	4.6	Not Detected
1,4-Dioxane	4.0	Not Detected	14	Not Detected
Bromodichloromethane	1.0	Not Detected	6.7	Not Detected
cis-1,3-Dichloropropene	1.0	Not Detected	4.6	Not Detected
4-Methyl-2-pentanone	1.0	Not Detected	4.1	Not Detected
Toluene	1.0	Not Detected	3.8	Not Detected
trans-1,3-Dichloropropene	1.0	Not Detected	4.6	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.5	Not Detected
Tetrachloroethene	1.0	8.8	6.8	60
2-Hexanone	4.0	Not Detected	16	Not Detected



Client Sample ID: Carbon Influent #1 Lab ID#: 1304239-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p041718	Date of Collection: 4/8/13 10:57:00 AM
Dil. Factor:	2.01	Date of Analysis: 4/17/13 07:15 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.0	Not Detected	8.6	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	7.7	Not Detected
Chlorobenzene	1.0	Not Detected	4.6	Not Detected
Ethyl Benzene	1.0	Not Detected	4.4	Not Detected
m,p-Xylene	1.0	Not Detected	4.4	Not Detected
o-Xylene	1.0	Not Detected	4.4	Not Detected
Styrene	1.0	Not Detected	4.3	Not Detected
Bromoform	1.0	Not Detected	10	Not Detected
Cumene	1.0	Not Detected	4.9	Not Detected
1,1,2,2-Tetrachloroethane	1.0	Not Detected	6.9	Not Detected
Propylbenzene	1.0	Not Detected	4.9	Not Detected
4-Ethyltoluene	1.0	Not Detected	4.9	Not Detected
1,3,5-Trimethylbenzene	1.0	Not Detected	4.9	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	4.9	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.0	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.0	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.2	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.0	Not Detected
1,2,4-Trichlorobenzene	4.0	Not Detected	30	Not Detected
Hexachlorobutadiene	4.0	Not Detected	43	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	94	70-130



Client Sample ID: Carbon Influent #2 Lab ID#: 1304239-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p041719	Date of Collection: 4/8/13 11:08:00 AM
Dil. Factor:	1.32	Date of Analysis: 4/17/13 07:35 PM

Dil. Factor:	1.32	Date of Analysis: 4/17/13 07:35 PM		/13 07:35 PM
	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Freon 12	0.66	Not Detected	3.3	Not Detected
Freon 114	0.66	Not Detected	4.6	Not Detected
Chloromethane	6.6	Not Detected	14	Not Detected
Vinyl Chloride	0.66	Not Detected	1.7	Not Detected
1,3-Butadiene	0.66	Not Detected	1.5	Not Detected
Bromomethane	6.6	Not Detected	26	Not Detected
Chloroethane	2.6	Not Detected	7.0	Not Detected
Freon 11	0.66	Not Detected	3.7	Not Detected
Ethanol	2.6	220	5.0	420
Freon 113	0.66	Not Detected	5.0	Not Detected
1,1-Dichloroethene	0.66	Not Detected	2.6	Not Detected
Acetone	6.6	43	16	100
2-Propanol	2.6	11	6.5	27
Carbon Disulfide	2.6	Not Detected	8.2	Not Detected
3-Chloropropene	2.6	Not Detected	8.3	Not Detected
Methylene Chloride	6.6	Not Detected	23	Not Detected
Methyl tert-butyl ether	0.66	Not Detected	2.4	Not Detected
trans-1,2-Dichloroethene	0.66	Not Detected	2.6	Not Detected
Hexane	0.66	Not Detected	2.3	Not Detected
1,1-Dichloroethane	0.66	Not Detected	2.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.6	Not Detected	7.8	Not Detected
cis-1,2-Dichloroethene	0.66	Not Detected	2.6	Not Detected
Tetrahydrofuran	0.66	Not Detected	1.9	Not Detected
Chloroform	0.66	Not Detected	3.2	Not Detected
1,1,1-Trichloroethane	0.66	Not Detected	3.6	Not Detected
Cyclohexane	0.66	Not Detected	2.3	Not Detected
Carbon Tetrachloride	0.66	Not Detected	4.2	Not Detected
2,2,4-Trimethylpentane	0.66	Not Detected	3.1	Not Detected
Benzene	0.66	Not Detected	2.1	Not Detected
1,2-Dichloroethane	0.66	Not Detected	2.7	Not Detected
Heptane	0.66	Not Detected	2.7	Not Detected
Trichloroethene	0.66	Not Detected	3.5	Not Detected
1,2-Dichloropropane	0.66	Not Detected	3.0	Not Detected
1,4-Dioxane	2.6	Not Detected	9.5	Not Detected
Bromodichloromethane	0.66	Not Detected	4.4	Not Detected
cis-1,3-Dichloropropene	0.66	Not Detected	3.0	Not Detected
4-Methyl-2-pentanone	0.66	Not Detected	2.7	Not Detected
Toluene	0.66	Not Detected	2.5	Not Detected
trans-1,3-Dichloropropene	0.66	Not Detected	3.0	Not Detected
1,1,2-Trichloroethane	0.66	Not Detected	3.6	Not Detected
Tetrachloroethene	0.66	8.3	4.5	56
2-Hexanone	2.6	Not Detected	11	Not Detected



Client Sample ID: Carbon Influent #2 Lab ID#: 1304239-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p041719	Date of Collection: 4/8/13 11:08:00 AM
Dil. Factor:	1.32	Date of Analysis: 4/17/13 07:35 PM

Dili. I dotor.	1.52	Date of Analysis. 4/17/15 07:55 1 W		113 07.33 1 141
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.66	Not Detected	5.6	Not Detected
1,2-Dibromoethane (EDB)	0.66	Not Detected	5.1	Not Detected
Chlorobenzene	0.66	Not Detected	3.0	Not Detected
Ethyl Benzene	0.66	Not Detected	2.9	Not Detected
m,p-Xylene	0.66	Not Detected	2.9	Not Detected
o-Xylene	0.66	Not Detected	2.9	Not Detected
Styrene	0.66	Not Detected	2.8	Not Detected
Bromoform	0.66	Not Detected	6.8	Not Detected
Cumene	0.66	Not Detected	3.2	Not Detected
1,1,2,2-Tetrachloroethane	0.66	Not Detected	4.5	Not Detected
Propylbenzene	0.66	Not Detected	3.2	Not Detected
4-Ethyltoluene	0.66	Not Detected	3.2	Not Detected
1,3,5-Trimethylbenzene	0.66	Not Detected	3.2	Not Detected
1,2,4-Trimethylbenzene	0.66	Not Detected	3.2	Not Detected
1,3-Dichlorobenzene	0.66	Not Detected	4.0	Not Detected
1,4-Dichlorobenzene	0.66	Not Detected	4.0	Not Detected
alpha-Chlorotoluene	0.66	Not Detected	3.4	Not Detected
1,2-Dichlorobenzene	0.66	Not Detected	4.0	Not Detected
1,2,4-Trichlorobenzene	2.6	Not Detected	20	Not Detected
Hexachlorobutadiene	2.6	Not Detected	28	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	95	70-130



Client Sample ID: Lab Blank Lab ID#: 1304239-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	p041707 1.00		of Collection: NA of Analysis: 4/17/	/13 01:22 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	5.0	Not Detected	10	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
rans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
retrachioroethene 2-Hexanone	2.0	Not Detected	8.2	Not Detected



Client Sample ID: Lab Blank Lab ID#: 1304239-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p041707	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/17/13 01:22 PM

Dii. i actor.	1.00	Date of Analysis. 4/17/13 01:22 FW		13 01.22 FW
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	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
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected

Container Type: NA - Not Applicable

		Method
Surrogates	%Recovery	Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	88	70-130
4-Bromofluorobenzene	94	70-130



Client Sample ID: CCV Lab ID#: 1304239-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: p041702 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 4/17/13 09:30 AM

Compound	%Recovery
Freon 12	88
Freon 114	91
Chloromethane	91
Vinyl Chloride	89
1,3-Butadiene	94
Bromomethane	94
Chloroethane	101
Freon 11	88
Ethanol	106
Freon 113	91
1,1-Dichloroethene	99
Acetone	94
2-Propanol	95
Carbon Disulfide	89
3-Chloropropene	96
Methylene Chloride	96
Methyl tert-butyl ether	84
trans-1,2-Dichloroethene	93
Hexane	97
1,1-Dichloroethane	94
2-Butanone (Methyl Ethyl Ketone)	97
cis-1,2-Dichloroethene	96
Tetrahydrofuran	100
Chloroform	93
1,1,1-Trichloroethane	89
Cyclohexane	93
Carbon Tetrachloride	90
2,2,4-Trimethylpentane	101
Benzene	95
1,2-Dichloroethane	89
Heptane	98
Trichloroethene	90
1,2-Dichloropropane	100
1,4-Dioxane	101
Bromodichloromethane	94
cis-1,3-Dichloropropene	98
4-Methyl-2-pentanone	109
Toluene	98
trans-1,3-Dichloropropene	97
1,1,2-Trichloroethane	98
Tetrachloroethene	90
2-Hexanone	108



Client Sample ID: CCV Lab ID#: 1304239-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: p041702 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 4/17/13 09:30 AM

Compound	%Recovery
Dibromochloromethane	97
1,2-Dibromoethane (EDB)	98
Chlorobenzene	98
Ethyl Benzene	102
m,p-Xylene	101
o-Xylene	101
Styrene	107
Bromoform	100
Cumene	99
1,1,2,2-Tetrachloroethane	102
Propylbenzene	102
4-Ethyltoluene	104
1,3,5-Trimethylbenzene	107
1,2,4-Trimethylbenzene	105
1,3-Dichlorobenzene	100
1,4-Dichlorobenzene	96
alpha-Chlorotoluene	103
1,2-Dichlorobenzene	101
1,2,4-Trichlorobenzene	100
Hexachlorobutadiene	100

Container Type: NA - Not Applicable

		Method
Surrogates	%Recovery	Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	96	70-130



Client Sample ID: LCS Lab ID#: 1304239-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: p041703 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 4/17/13 10:01 AM

Compound	%Recovery
Freon 12	85
Freon 114	87
Chloromethane	89
Vinyl Chloride	91
1,3-Butadiene	92
Bromomethane	88
Chloroethane	98
Freon 11	84
Ethanol	78
Freon 113	88
1,1-Dichloroethene	98
Acetone	91
2-Propanol	93
Carbon Disulfide	106
3-Chloropropene	105
Methylene Chloride	94
Methyl tert-butyl ether	81
trans-1,2-Dichloroethene	102
Hexane	92
1,1-Dichloroethane	89
2-Butanone (Methyl Ethyl Ketone)	96
cis-1,2-Dichloroethene	91
Tetrahydrofuran	92
Chloroform	92
1,1,1-Trichloroethane	84
Cyclohexane	92
Carbon Tetrachloride	85
2,2,4-Trimethylpentane	95
Benzene	93
1,2-Dichloroethane	86
Heptane	99
Trichloroethene	90
1,2-Dichloropropane	98
1,4-Dioxane	95
Bromodichloromethane	91
cis-1,3-Dichloropropene	94
4-Methyl-2-pentanone	101
Toluene	96
trans-1,3-Dichloropropene	94
1,1,2-Trichloroethane	95
Tetrachloroethene	86
2-Hexanone	104



Client Sample ID: LCS Lab ID#: 1304239-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: p041703 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 4/17/13 10:01 AM

Compound	%Recovery
Dibromochloromethane	93
1,2-Dibromoethane (EDB)	97
Chlorobenzene	97
Ethyl Benzene	97
m,p-Xylene	100
o-Xylene	100
Styrene	102
Bromoform	94
Cumene	97
1,1,2,2-Tetrachloroethane	100
Propylbenzene	99
4-Ethyltoluene	98
1,3,5-Trimethylbenzene	102
1,2,4-Trimethylbenzene	97
1,3-Dichlorobenzene	97
1,4-Dichlorobenzene	92
alpha-Chlorotoluene	97
1,2-Dichlorobenzene	97
1,2,4-Trichlorobenzene	98
Hexachlorobutadiene	95

Container Type: NA - Not Applicable

		Method
Surrogates	%Recovery	Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	97	70-130



Client Sample ID: LCSD Lab ID#: 1304239-05AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: p041704 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 4/17/13 10:35 AM

Compound	%Recovery
Freon 12	84
Freon 114	86
Chloromethane	88
Vinyl Chloride	88
1,3-Butadiene	90
Bromomethane	89
Chloroethane	96
Freon 11	80
Ethanol	76
Freon 113	86
1,1-Dichloroethene	98
Acetone	88
2-Propanol	91
Carbon Disulfide	105
3-Chloropropene	105
Methylene Chloride	87
Methyl tert-butyl ether	79
trans-1,2-Dichloroethene	99
Hexane	91
1,1-Dichloroethane	89
2-Butanone (Methyl Ethyl Ketone)	98
cis-1,2-Dichloroethene	90
Tetrahydrofuran	91
Chloroform	88
1,1,1-Trichloroethane	83
Cyclohexane	91
Carbon Tetrachloride	82
2,2,4-Trimethylpentane	95
Benzene	93
1,2-Dichloroethane	81
Heptane	95
Trichloroethene	85
1,2-Dichloropropane	94
1,4-Dioxane	94
Bromodichloromethane	88
cis-1,3-Dichloropropene	93
4-Methyl-2-pentanone	98
Toluene	92
trans-1,3-Dichloropropene	92
1,1,2-Trichloroethane	93
Tetrachloroethene	85
2-Hexanone	103



Client Sample ID: LCSD Lab ID#: 1304239-05AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: p041704 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 4/17/13 10:35 AM

Compound	%Recovery
Dibromochloromethane	91
1,2-Dibromoethane (EDB)	94
Chlorobenzene	96
Ethyl Benzene	96
m,p-Xylene	100
o-Xylene	99
Styrene	101
Bromoform	92
Cumene	95
1,1,2,2-Tetrachloroethane	100
Propylbenzene	98
4-Ethyltoluene	96
1,3,5-Trimethylbenzene	102
1,2,4-Trimethylbenzene	97
1,3-Dichlorobenzene	96
1,4-Dichlorobenzene	92
alpha-Chlorotoluene	96
1,2-Dichlorobenzene	96
1,2,4-Trichlorobenzene	98
Hexachlorobutadiene	93

Container Type: NA - Not Applicable

		Method
Surrogates	%Recovery	Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	98	70-130

ATTACHMENT A **STES Standard Operating Procedures** for NYSDEC Site Number 1-03-169 Former Chez Valet Dry Cleaners 1-3 Manorhaven Boulevard Port Washington, NY 11050

STES

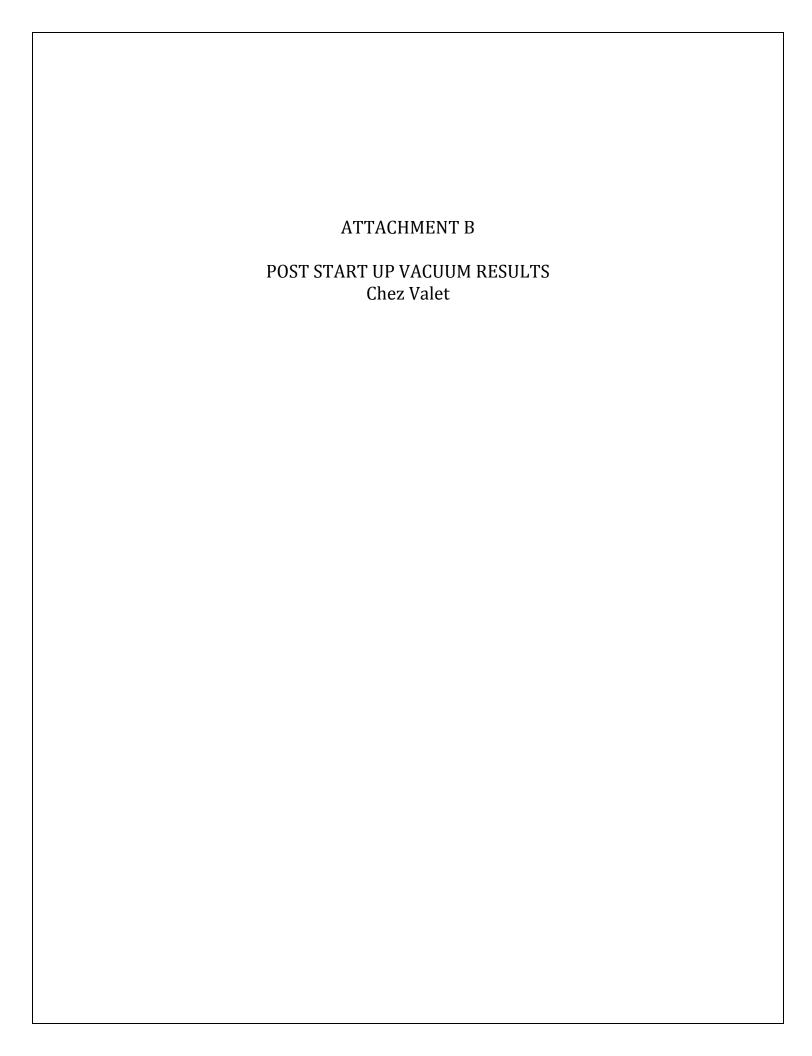
Standard Operating Procedures for NYSDEC Site Number 1-03-169 Former Chez Valet Dry Cleaners 1-3 Manorhaven Boulevard Port Washington, NY 11050

Required Equipment

- 1. Photoionization Detector (PID) with Calibration Kit
- 2. Three Tedlar Bags
- 3. Anemometer to measure Carbon System Discharge Flow Rate
- 4. Dywer Digitial Monometer 0.0000 to -4.0000 inches Water range
- 5. Chez Valet SSDS/SVE System Monitoring Sheet

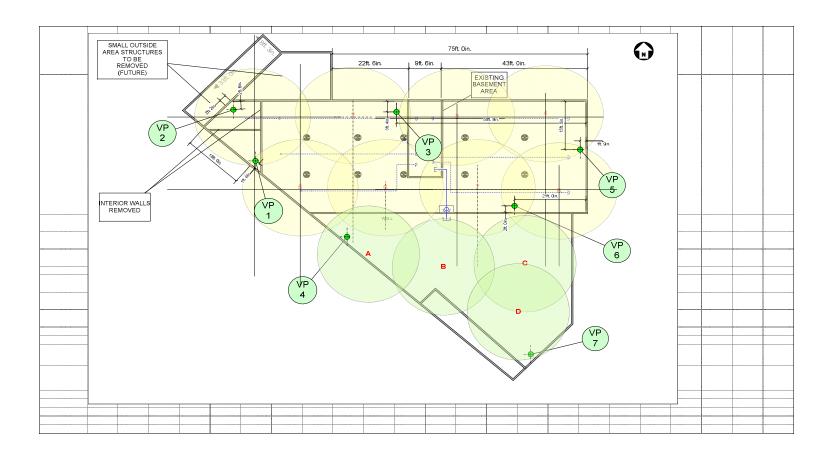
Procedure - Monthly Site Visit

- 1. Notify engineer prior to scheduling Site visit
- 2. Notify Evergreen Salon at least 48 hours before site visit
- 3. Upon arrival locate the Onsite Logbook (located on girder above primary Vapor Phase Carbon Vessel).
- 4. Log in the date, time, Weather and operator initials note any other individuals onsite
- 5. Calibrate PID
- 6. Collect readings from; Influent to Primary Carbon Vessel, Influent to Secondary Carbon Vessel, and Carbon System Effluent.
- 7. Log the readings in Logbook and LogSheet
- 8. Collect blower elapsed time readings log in both logbook and logsheet note elapsed time reading AND time of Day reading taken.
- 9. Collect Vacuum Gauge readings from Header and Knock-Out Pot.
- 10. Collect background PID Readings from Basement and Parking Lot outside basement entrance
- 11. Collect Vacuum readings from Vacuum points.
- 12. Review data.
 - a. Contact Engineer if there are anomalies, or if any part of the system is damaged or requires repair
- 13. In the event that any SSD/SVE system adjustments are made, recollect Vacuum Point and Vacuum Gauge readings
- 14. Transfer all Readings and Notes to Chez Valet SSDS/SVE sheet
- 15. Sign out and put Onsite logbook back in its place
- 16. Tell Evergreen that STES is leaving Site
- 17. Take Equipment (PID, Velocity Meter and Monometer) and leave site.
- 18. Upon arrival at office enter data into electronic spreadsheet and electronically transmit data/report to Engineer.

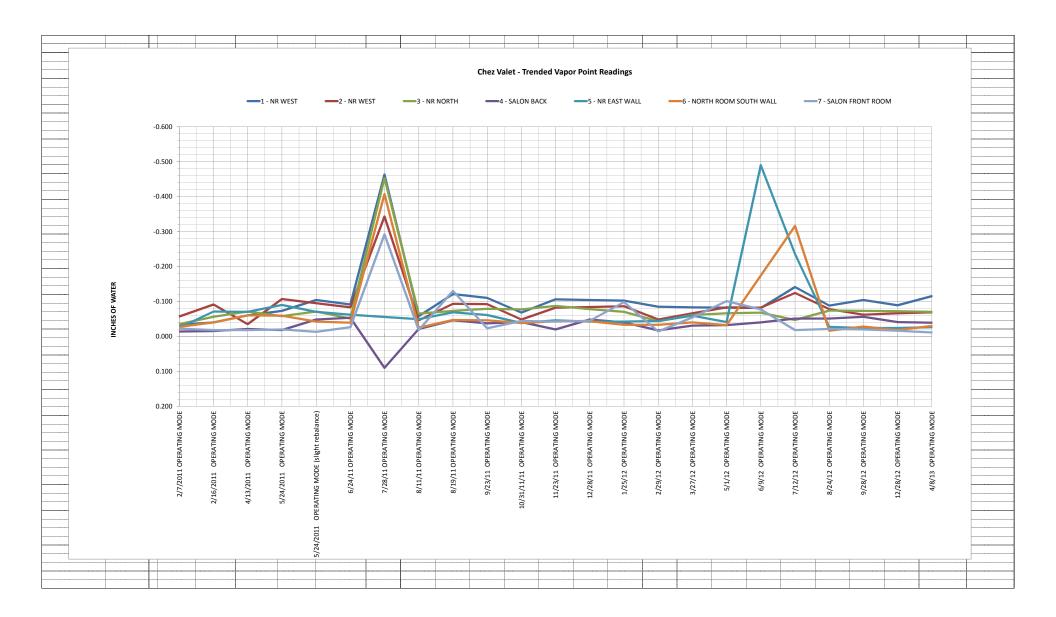


1 OF 4

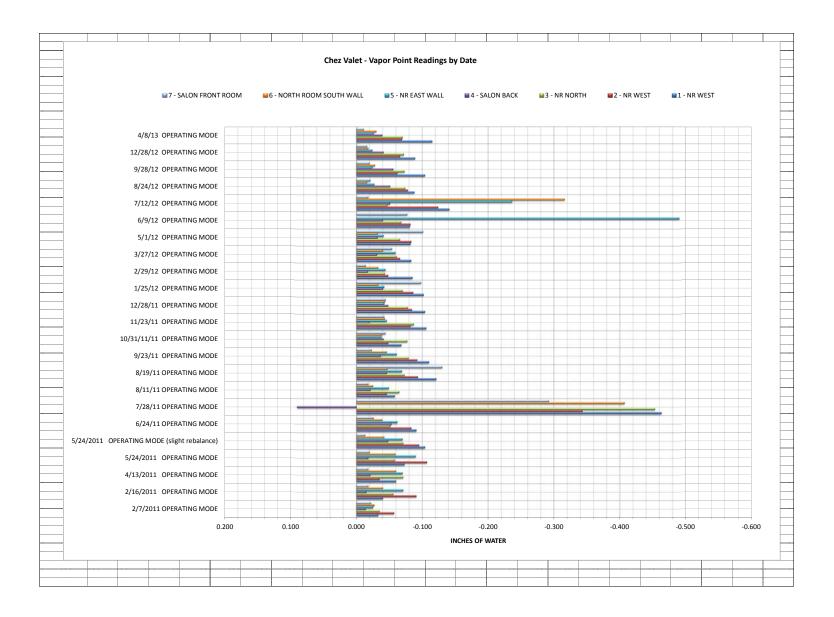
		2/7/2011 OPERATING MODE	2/16/2011 OPERATING MODE	4/13/2011 OPERATING MODE	5/24/2011 OPERATING MODE	5/24/2011 OPERATING MODE (slight rebalance)	6/24/11 OPERATING MODE	7/28/11 OPERATING MODE	8/11/11 OPERATING MODE	8/19/11 OPERATING MODE	9/23/11 OPERATING MODE	10/31/11/11 OPERATING MODE	11/23/11 OPERATING MODE	12/28/11 OPERATING MODE	1/25/12 OPERATING MODE	2/29/12 OPERATING MODE	3/27/12 OPERATING MODE	5/1/12 OPERATING MODE	6/9/12 OPERATING MODE	7/12/12 OPERATING MODE	8/24/12 OPERATING MODE	9/28/12 OPERATING MODE	12/28/12 OPERATING MODE	4/8/13 OPERATING MODE
Vapor Point Designation	Location	C (vert well) closed all other Salon wells open wide. North room all valves open very small amount.	ALL WELLS ONLINE	ALL WELLS ONLINE	ALL WELLS ONLINE	ALL WELLS ONLINE	ALL WELLS ONLINE	ALL WELLS ONLINE	ALL WELLS ONLINE	ALL WELLS ONLINE	ALL WELLS ONLINE	ALL WELLS ONLINE	ALL WELLS ONLINE	ALL WELLS ONLINE	ALL WELLS ONLINE	ALL WELLS ONLINE	ALL WELLS ONLINE	ALL WELLS ONLINE	ALL WELLS ONLINE	ALL WELLS ONLINE	ALL WELLS ONLINE	ALL WELLS ONLINE	ALL WELLS ONLINE	ALL WELLS ONLINE
1 - NR WEST	NORTH ROOM	-0.033	-0.040	-0.060	-0.073	-0.104	-0.091	-0.463	-0.058	-0.121	-0.110	-0.068	-0.106	-0.104	-0.102	-0.085	-0.083	-0.082	-0.081	-0.141	-0.088	-0.104	-0.089	-0.115
2 - NR WEST	NORTH ROOM	-0.057	-0.091	-0.035	-0.107	-0.095	-0.083	-0.343	-0.046	-0.093	-0.092	-0.048	-0.082	-0.084	-0.086	-0.048	-0.066	-0.083	-0.082	-0.124	-0.078	-0.062	-0.066	-0.069
3 - NR NORTH	NORTH ROOM	-0.035	-0.056	-0.071	-0.058	-0.071	-0.051	-0.453	-0.065	-0.073	-0.079	-0.077	-0.087	-0.078	-0.070	-0.043	-0.061	-0.066	-0.068	-0.047	-0.074	-0.073	-0.072	-0.070
4 - SALON BACK	S - BACK	-0.014	-0.015	-0.021	-0.018	-0.048	-0.053	0.090	-0.021	-0.046	-0.037	-0.041	-0.020	-0.048	-0.040	-0.017	-0.031	-0.032	-0.040	-0.051	-0.051	-0.056	-0.041	-0.039
5 - NR EAST WALL	NORTH ROOM	-0.025	-0.071	-0.070	-0.090	-0.070	-0.062		-0.049	-0.069	-0.061	-0.038	-0.046	-0.042	-0.042	-0.044	-0.059	-0.041	-0.490	-0.236	-0.027	-0.024	-0.024	-0.026
6 - NORTH ROOM SOUTH WALL	NORTH ROOM	-0.027	-0.040	-0.060	-0.059	-0.042	-0.039	-0.407	-0.025	-0.047	-0.046	-0.038	-0.043	-0.043	-0.033	-0.033	-0.040	-0.032		-0.316	-0.016	-0.028	-0.018	-0.030
7 - SALON FRONT ROOM	S -FRONT	-0.022	-0.018	-0.018	-0.020	-0.013	-0.026	-0.292	-0.018	-0.130	-0.023	-0.044	-0.042	-0.044	-0.098	-0.014	-0.054	-0.101	-0.077	-0.018	-0.021	-0.020	-0.016	-0.011
		SS THAN OR EQ																						

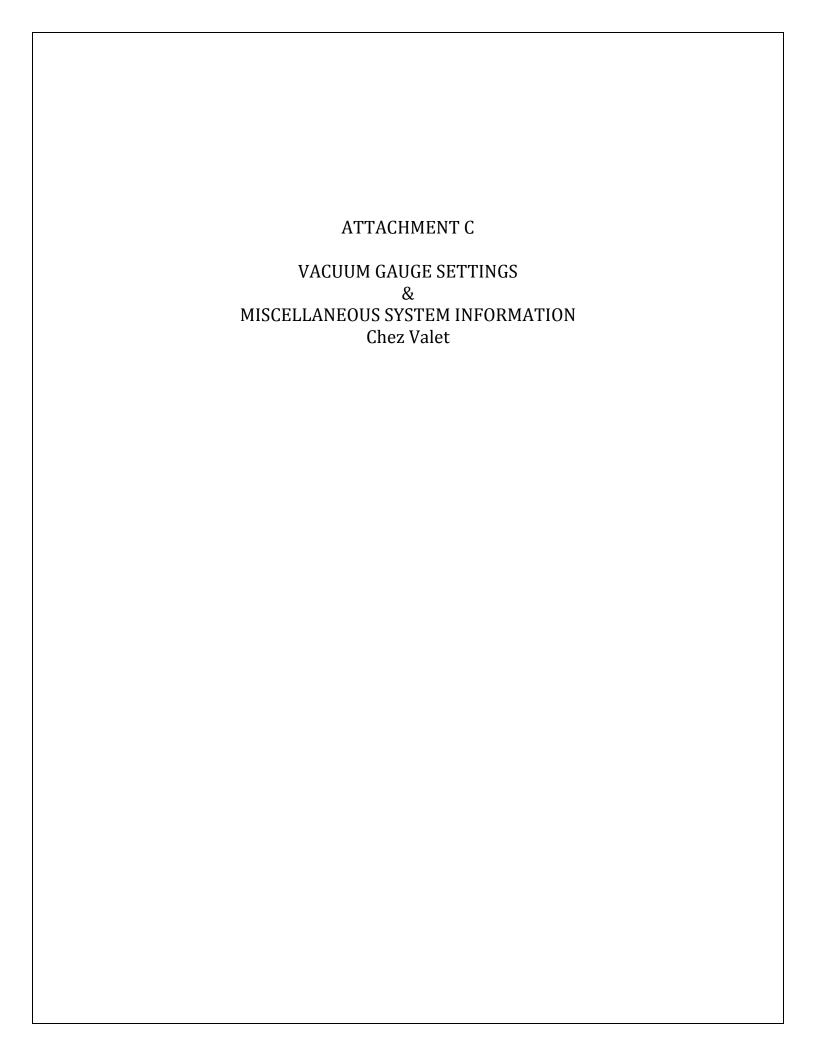


2 OF 4



3 OF 4

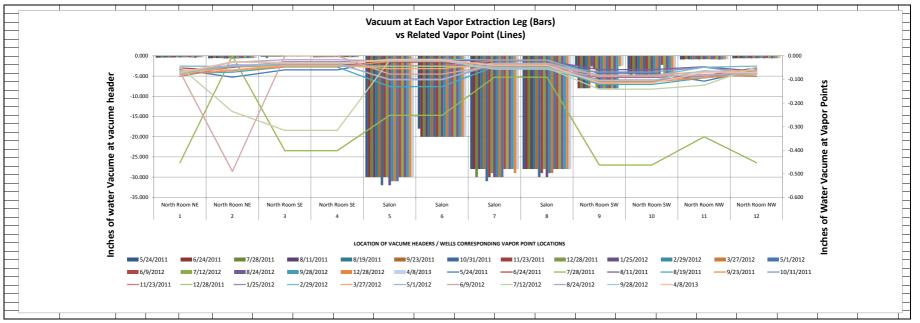


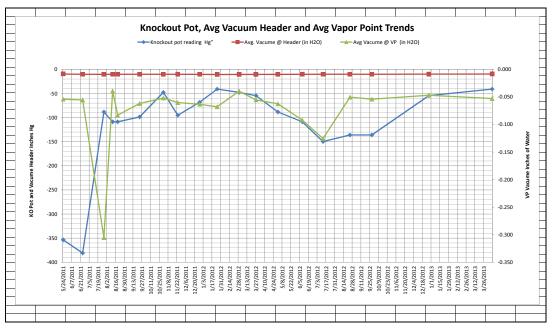


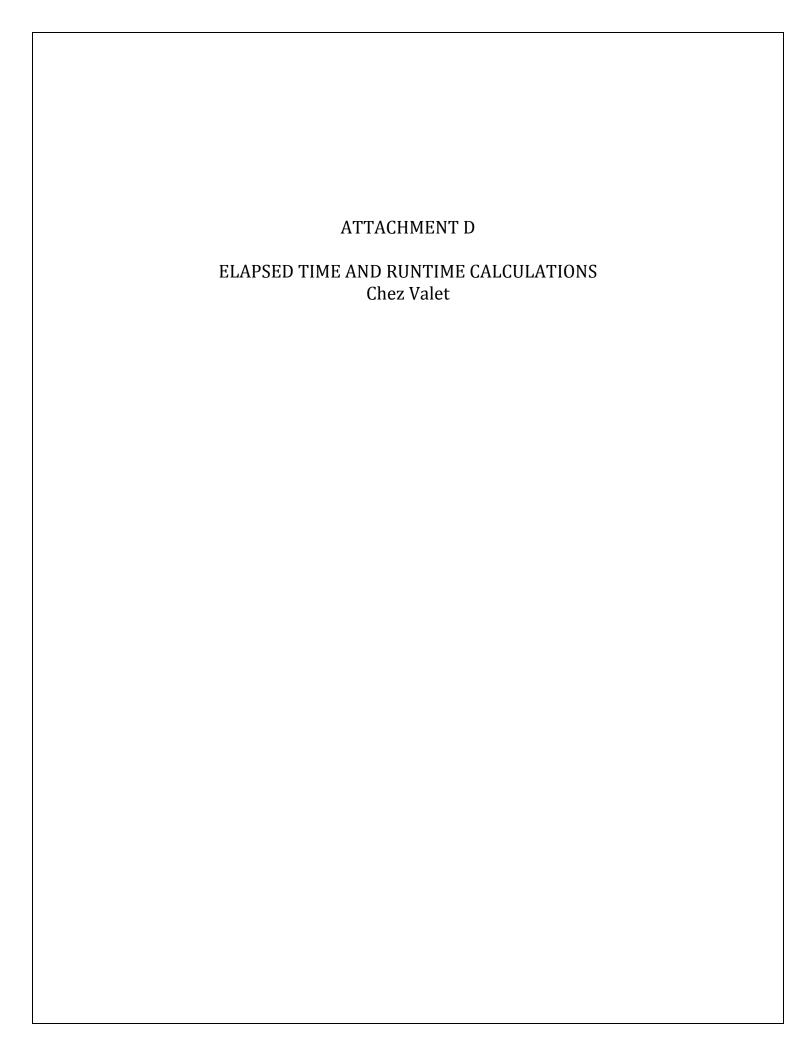
						Compar	ison of Vac	uums Mea	sured at D	istribution	Header Ve	rsus Relati	ve Vapor P	oint Measu	rements.							7
																						1
	DATE		5/24/2011	6/24/2011	7/28/2011	8/11/2011	8/19/2011	9/23/2011	10/31/2011	11/23/2011	12/28/2011	1/25/2012	2/29/2012	3/27/2012	5/1/2012	6/9/2012	7/12/2012	8/24/2012	9/28/2012	12/28/2012	4/8/2013	1
Valve Number	Location								Vi	acuum reading	at distribution h	neader specific t	to lateral being	controlled.								
1	North Room NE	-0.395	-0.430	-0.410	-0.407	-0.371	-0.399	-0.395	-0.394	-0.366	-0.355	-0.372	-0.363	-0.371	-0.310	-0.373	-0.416	-0.463	-0.311	-0.340	-0.356	1
2	North Room NE	-0.557			-0.511	-0.533	-0.542	-0.557	-0.626	-0.609	-0.571	-0.653	-0.635	-0.615	-0.579	-0.582	-0.567	-0.535	-0.525	-0.532	-0.512	l
3	North Room SE	-0.195	-0.180		-0.527	-0.136	-0.163	-0.195	-0.150	-0.155	-0.152	-0.153	-0.139	-0.145	-0.155	-0.143	-0.179	-0.161	-0.131	-0.126	-0.134	Ĩ
4	North Room SE	-0.308			-0.360	-0.290	-0.309	-0.308	-0.289	-0.301	-0.294	-0.293	-0.301	-0.311	-0.297	-0.299	-0.344	-0.313	-0.297	-0.272	-0.064	
5	Salon	-30.000		-30.000	-30.000	-30.000	-30.000	-30.000	-32.000	-30.000	-30.000	-32.000	-31.000	-31.000	-31.000	-30.000	-30.000	-30.000	-30.000	-30.000	-30.000	
6	Salon	-20.000			-20.000	-20.000	-20.000	-20.000	-20.000	-20.000	-20.000	-20.000	-20.000	-20.000	-20.000	-20.000	-20.000	-20.000	-20.000	-20.000	-20.000	
7	Salon	-28.000			-30.000	-28.000	-28.000	-28.000	-31.000	-30.000	-29.000	-30.000	-30.000	-30.000	-30.000	-28.000	-28.000	-28.000	-28.000	-29.000	-28.000	4
8	Salon	-28.000			-28.000	-28.000	-28.000	-28.000	-30.000	-29.000	-28.000	-30.000	-29.000	-29.000	-28.000	-28.000	-28.000	-28.000	-28.000	-28.000	-28.000	_
9	North Room SW	-8.000			-8.000	-8.000	-8.000	-8.000	-2.602	-3.157	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000	-2.566	-2.430	4
10	North Room SW	-4.631			-4.000	-4.550	-4.621	-4.631	-4.617	-4.618	-4.577	-4.605	-4.529	-4.647	-4.600	-2.210	-4.650	-4.506	-4.503	-4.691	-4.371	4
11	North Room NW	-0.871	-0.880		-0.801	-0.838	-0.845	-0.871	-0.812	-0.865	-0.813	-0.814	-0.805	-0.804	-0.871	-0.810	-0.874	-0.905	-0.872	-0.840	-0.821	4
12	North Room NW	-0.591	-0.600	-0.570	-0.571	-0.579	-0.592	-0.591	-0.560	-0.595	-0.577	-0.583	-0.554	-0.554	-0.591	-0.533	-0.595	-0.594	-0.582	-0.569	-0.549	_
	Avg. Vacume @ Header (in H ₂ O)		-9.510	-10.133	-10.265	-10.108	-10.123	-10.129	-10.254	-9.972	-10.195	-10.623	-10.444	-10.454	-10.367	-9.913	-10.135	-10.123	-10.102	-9.745	-9.603	
Knockout pot reading	Hg"		-26	-28	-6.5	-8	-8	-7.25	-3.5	-7	-5	-3	-3.5	-4	-6.5	-8	-11	-10	-10	-4	-3	1
	H ₂ O"		-353.496	-380.688	-88.374	-108.768	-108.768	-98.571	-47.586	-95.172	-67.98	-40.788	-47.586	-54.384	-88.374	-108.768	-149.556	-135.96	-135.96	-54.384	-40.788	1
																						1
		VP	VP	VP	VP	VP	VP	VP	VP	VP	VP	VP	VP	VP	VP	VP	VP	VP	VP	VP	VP	1
Vapor Point Number			5/24/2011	6/24/2011	7/28/2011	8/11/2011	8/19/2011	9/23/2011	10/31/2011	11/23/2011	12/28/2011	1/25/2012	2/29/2012	3/27/2012	5/1/2012	6/9/2012	7/12/2012	8/24/2012	9/28/2012	12/28/2012	4/8/2013	
1			-0.073	-0.091	-0.463	-0.058	-0.121	-0.110	-0.068	-0.106	-0.104	-0.102	-0.085	-0.083	-0.082	-0.081	-0.141	-0.088	-0.104	-0.089	-0.115	1
2			-0.107	-0.083	-0.343	-0.046	-0.093	-0.092	-0.048	-0.082	-0.084	-0.086	-0.048	-0.066	-0.083	-0.082	-0.124	-0.078	-0.062	-0.066	-0.069	1
3			-0.058	-0.051	-0.453	-0.065	-0.073	-0.079	-0.077	-0.087	-0.078	-0.070	-0.043	-0.061	-0.066	-0.068	-0.047	-0.074		-0.072	-0.070	1
4			-0.018	-0.053	-0.090	-0.021	-0.046	-0.037	-0.041	-0.020	-0.048	-0.040	-0.017	-0.031	-0.032	-0.040	-0.051	-0.051		-0.041	-0.039	1
5			-0.090	-0.062		-0.049	-0.069	-0.061	-0.038	-0.046	-0.042	-0.042		-0.059	-0.041	-0.490	-0.236			-0.024	-0.026	1
6			-0.059	-0.039	-0.402	-0.025	-0.047	-0.046	-0.038	-0.043	-0.043	-0.033	-0.033	-0.040	-0.032		-0.316	-0.016	-0.028	-0.018	-0.030	1
7			-0.018	-0.026	-0.252	-0.018	-0.130	-0.023	-0.044	-0.042	-0.044	-0.098	-0.014	-0.054	-0.101	-0.077	-0.018	-0.021	-0.020	-0.016	-0.016	1
/			-0.018	-0.026	-0.252	-0.018	-0.130	-0.023	-0.044	-0.042	-0.044	-0.098	-0.014	-0.054	-0.101	-0.077	-0.018	-0.021	-0.020	-0.016	-0.016	_

	Comparison of Vacuums Measured at Distribution Header Versus Relative Vapor Point Measurements.																			
	- 4- 4-				- 4 - 4 -									- 1- 1						
	5/24/2011	6/24/2011	7/28/2011	8/11/2011	8/19/2011	9/23/2011	10/31/2011	11/23/2011	12/28/2011	1/25/2012	2/29/2012	3/27/2012	5/1/2012	6/9/2012	7/12/2012	8/24/2012	9/28/2012	12/28/2012	4/8/2013	
relative Vapor							2.	neuum nointe	influenced by	specific lateral a	and their comp	arativo roadin	ac							
Point							a v	acuum pomis	illidenced by s	specific later at t	ina their comp	arative readin	53							
3	-0.058	-0.051	-0.453	-0.065	-0.073	-0.079	-0.077	-0.087	-0.078	-0.070	-0.043	-0.061	-0.066	-0.068	-0.047	-0.074	-0.073	-0.072	-0.070	
5	-0.090	-0.062	0.000	-0.049	-0.069	-0.061	-0.038	-0.046	-0.042	-0.042	-0.044	-0.059	-0.041	-0.490	-0.236	-0.027	-0.024	-0.024	-0.026	
6	-0.059	-0.039	-0.402	-0.025	-0.047	-0.046	-0.038	-0.043	-0.043	-0.033	-0.033	-0.040	-0.032	0.000	-0.316	-0.016	-0.028	-0.018	-0.030	
6	-0.059	-0.039	-0.402	-0.025	-0.047	-0.046	-0.038	-0.043	-0.043	-0.033	-0.033	-0.040	-0.032	0.000	-0.316	-0.016	-0.028	-0.018	-0.030	
7	-0.018	-0.026	-0.252	-0.018	-0.130	-0.023	-0.044	-0.042	-0.044	-0.098	-0.014	-0.054	-0.101	-0.077	-0.018	-0.021	-0.020	-0.016	-0.016	
7	-0.018	-0.026	-0.252	-0.018	-0.130	-0.023	-0.044	-0.042	-0.044	-0.098	-0.014	-0.054	-0.101	-0.077	-0.018	-0.021	-0.020	-0.016	-0.016	
4	-0.018	-0.053	-0.090	-0.021	-0.046	-0.037	-0.041	-0.020	-0.048	-0.040	-0.017	-0.031	-0.032	-0.040	-0.051	-0.051	-0.056	-0.041	-0.039	
4	-0.018	-0.053	-0.090	-0.021	-0.046	-0.037	-0.041	-0.020	-0.048	-0.040	-0.017	-0.031	-0.032	-0.040	-0.051	-0.051	-0.056	-0.041	-0.039	
1	-0.073	-0.091	-0.463	-0.058	-0.121	-0.110	-0.068	-0.106	-0.104	-0.102	-0.085	-0.083	-0.082	-0.081	-0.141	-0.088	-0.104	-0.089	-0.115	
1	-0.073	-0.091	-0.463	-0.058	-0.121	-0.110	-0.068	-0.106	-0.104	-0.102	-0.085	-0.083	-0.082	-0.081	-0.141	-0.088	-0.104	-0.089	-0.115	
2	-0.107	-0.083	-0.343	-0.046	-0.093	-0.092	-0.048	-0.082	-0.084	-0.086	-0.048	-0.066	-0.083	-0.082	-0.124	-0.078	-0.062	-0.066	-0.069	
3	-0.058	-0.051	-0.453	-0.065	-0.073	-0.079	-0.077	-0.087	-0.078	-0.070	-0.043	-0.061	-0.066	-0.068	-0.047	-0.074	-0.073	-0.072	-0.070	
Avg Vacume @ VP (in H ₂ O)	-0.054	-0.055	-0.305	-0.039	-0.083	-0.062	-0.052	-0.060	-0.063	-0.068	-0.040	-0.055	-0.063	-0.092	-0.126	-0.050	-0.054	-0.047	-0.053	



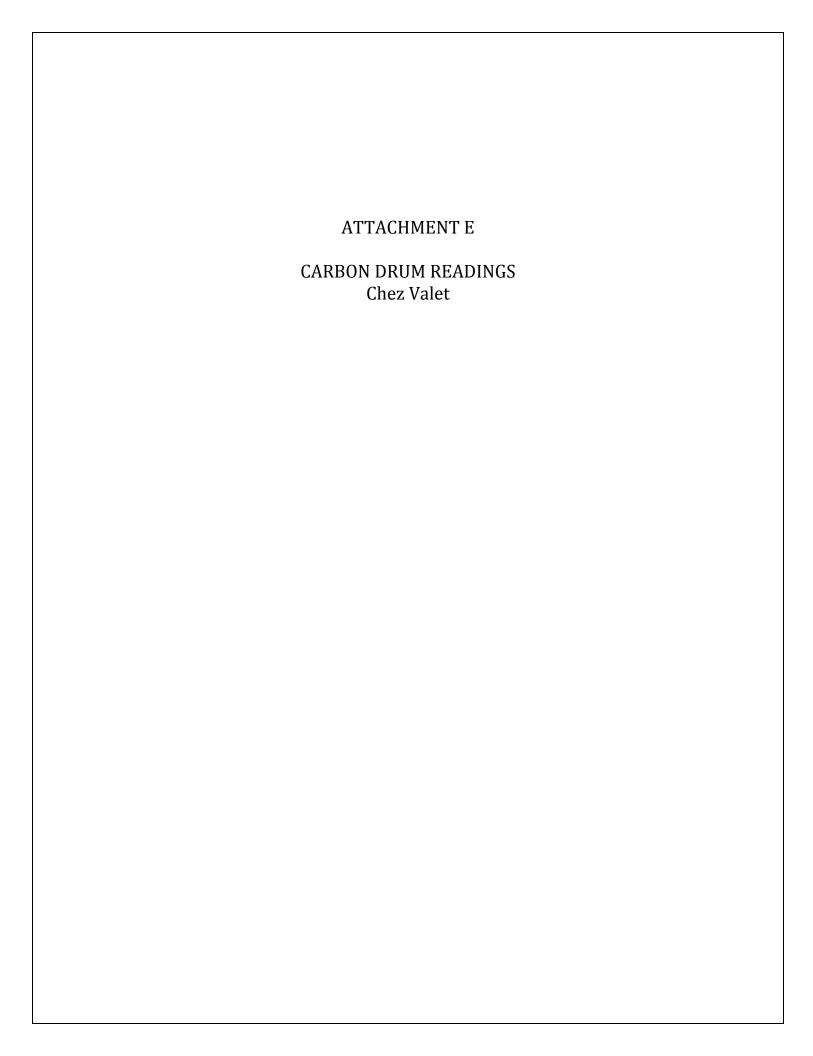






Elapsed Time and Run time calculations

Date @ Time	Meter reading	Meter Read By	Actual Elapsed Time	Interval between readings		Cumulative % runtime	Days not operating	Comments
	(hours)		(hours)		% runtime			
5/24/11 9:00	-							
6/24/2011 8:35	743.6	RH	743.6	743.6	100.0%	100.0%		
7/28/2011 7:15	1,555.5	RH	1,558.3	814.7	99.7%	99.8%	0.12	
8/11/2011 7:10	1,890.7	RH	1,894.2	335.9	99.8%	99.8%	0.03	
8/19/11 7:00	2,082.0	RH	2,086.0	191.8	99.7%	99.8%	0.02	
9/23/11 8:20	2,921.0	RH	2,927.3	841.3	99.7%	99.8%	0.10	
11/23/11 7:45	4,379.5	RH	4,390.7	1,463.4	99.7%	99.7%	0.20	
12/28/11 8:00	5,217.5	RH	5,231.0	840.3	99.7%	99.7%	0.09	
1/25/12 7:54	5,887.5	RH	5,902.9	671.9	99.7%	99.7%	0.08	
2/29/12 7:47	6,725.2	RH	6,742.8	839.9	99.7%	99.7%	0.09	
3/27/12 8:00	7,370.7	RH	7,391.0	648.2	99.6%	99.7%	0.11	
5/1/12 10:23	8,210.8	RH	8,233.4	842.4	99.7%	99.7%	0.10	
5/3/12 8:03	8,256.3	RH	8,279.1	45.7	99.6%	99.7%	0.01	
6/9/2012 7:36	9,117.1	RH	9,166.6	933.2	97.1%	99.5%	1.12	Summer thunder Storm
7/12/2012 9:10	9,932.4	RH	9,960.2	793.6	102.7%	99.7%	-0.91	
8/24/2012 8:15	10,960.7	RH	10,991.3	1,031.1	99.7%	99.7%	0.12	
9/27/2012 12:25	11,778.7	AHL	11,811.4	820.2	99.7%	99.7%	0.09	
9/28/2012 9:00	11,799.2	RH	11,832.0	20.6	99.6%	99.7%	0.00	
11/14/2012 10:30	12,856.3	AHL	12,961.5	1,129.5	95.4%	99.2%	2.16	Hurricane Sandy
12/28/2012 9:07	13,908.1	RH	14,016.1	1,054.6	99.7%	99.2%	0.12	·
2/7/2013 8:49	14,888.2	AHL	14,999.8	983.7	99.6%	99.3%	0.15	
3/28/2013 11:00	16,001.9	AHL	16,178.0	1,178.2	94.5%	98.9%	2.69	Break In
4/8/2013 11:32	16,265.7	RH	16,442.5	264.5	99.7%	98.9%	0.03	
				Ave	rgae uptime	99.7%	6.52	
			_				1.12%	



Date	7/28/11	8/11/11	8/19/11	9/23/11	11/23/2011	12/28/2011	1/25/2012	2/29/2012	3/27/2012	5/3/2012	6/9/2012	7/12/2012	8/24/2012	9/28/2012	12/28/2012	4/8/2013
Blower discharge Velocity (CFM)	99		139	135	152	156	166	178	155	164	167	153	145	164	156	155
PID (PPM)	PID (PPM)	PID (PPM)	PID (PPM)	PID (PPM)	PID (PPM)	PID (PPM)	PID (PPM)	PID (PPM)	PID (PPM)	PID (PPM)	PID (PPM)	PID (PPM)	PID (PPM)	PID (PPM)	PID (PPM)	PID (PPM)
Pre Carbon	0.5		0.4	0.6	0.6	0.0	0.0	0.0	0.0	0.0910	0.0870	0.0730	0.4010	0.1430	0.0980	0.1945
Mid Carbon	0.1		0.1	0.2	0.3	0.0	0.0	0.0	0.0	0.0230	0.0210	0.0260	0.1500	0.0370	0.0380	0.1745
Post Carbon	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0400	0.0430	0.0410	0.0560	0.0550	0.0600	0.1460
Parking Lot (Outside)							0.0	0.0	0.0	0.0030	0.0030	0.0020	0.0000	0.0000	0.0000	0.0055
Basement							0.0	0.0	0.0	0.0090	0.0050	0.0090	0.0000	0.0110	0.0000	0.0295

