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 1/27/2011

Time Period
9/23/2011 to 12/28/2011

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
- 12/28/2011 PID readings of extracted sub slab soil gas showed non-detect on the portable PID prior to the carbon vessels. [Note PID calibrated with 100 ppm isobutylene prior to taking measurements.] This is the first time a non-detect reading has been recorded. STES to repeat measurements during the next maintenance visit scheduled in January 2012 and if results are again zero soil gas samples will be taken for laboratory verification.
- Severn Trent Environmental Services (STES) has continued long-term operations and maintenance of the system since 5/16/2011.
  - 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)
  - STES conducted site visits on October 31, November 23, and December 28, 2011 to verify that sub slab vacuums is sustained and the remedial system is properly balanced and maintained.
- Northeast Equity engaged a surveyor to perform the site survey including information necessary for engineering reports as well as environmental easement preparation tasks.
  - A draft of the survey was completed and submitted during the last week of November 2011.
  - A review of the survey identified missing information, specifically off-site monitoring wells which required the surveyor to return to the site.
  - The surveyor returned to the site on December 2, 2011, located the missing Wells and collected the balance of the required information.
- Robert Dooley, Esq., of The Law Office of Frederick Eisenbud, THE Environmental Law Firm, prepared a Draft Environmental Easement for the referenced site and e-mailed a copy of such to NYSDERC on December 28, 2011.

2. Work Performed This Reporting Period (STES)

- General operating information (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
10/31/11	X	X	X		a. System Operating Normally
11/23/11	X	X	X	X	a. System Operating Normally
12/28/11	X	X	X	X	a. 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.

3. Summary of Historical Data

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

- Post Start-Up Sub Slab Vacuums.
- Vacuum Gauge Settings & Miscellaneous System Information.
- Elapsed Time And Runtime Calculations
- Carbon Drum Readings

- Post Start-Up Sub Slab Vacuums (please refer to Attachment B)
  a. 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.
  b. Page 2 of 4: location plan for all the vapor points and well locations.
  c. 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.
  d. Page 4 of 4: similar to page 3 other than the graph is represented by lines versus bars.

- Vacuum Gauge Settings & Miscellaneous System Information (please refer to Attachment C)
  a. Page 1 of 3: summarizes the vacuum gauge readings taken at each lateral off the header (upper left-hand corner of the table) as well as vacuum readings at the relative vapor points located near that particular lateral (upper right-hand corner of the table).
  b. Page 2 of 3: location plan for all the vapor points and well locations.
  c. Page 3 of 3: 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.

- Elapsed Time and Runtime Calculations. (Please refer to Attachment D)

  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 12/28/11 system is achieving operating times in excess of 99%.

- Carbon Drum Readings (please refer to Attachment E)

  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 vertical bars indicate blower discharge velocity measurements taken at the air phase carbon treatment vessels.

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.

4. Problems Encountered & Proposed Resolutions
   - Minor problems were identified on the table presented in Section 2 of this report
   - No serious problems have been encountered.

5. Expected Work During the Next Progress Period
   - Continued monitoring of site operations on a monthly basis

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
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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.

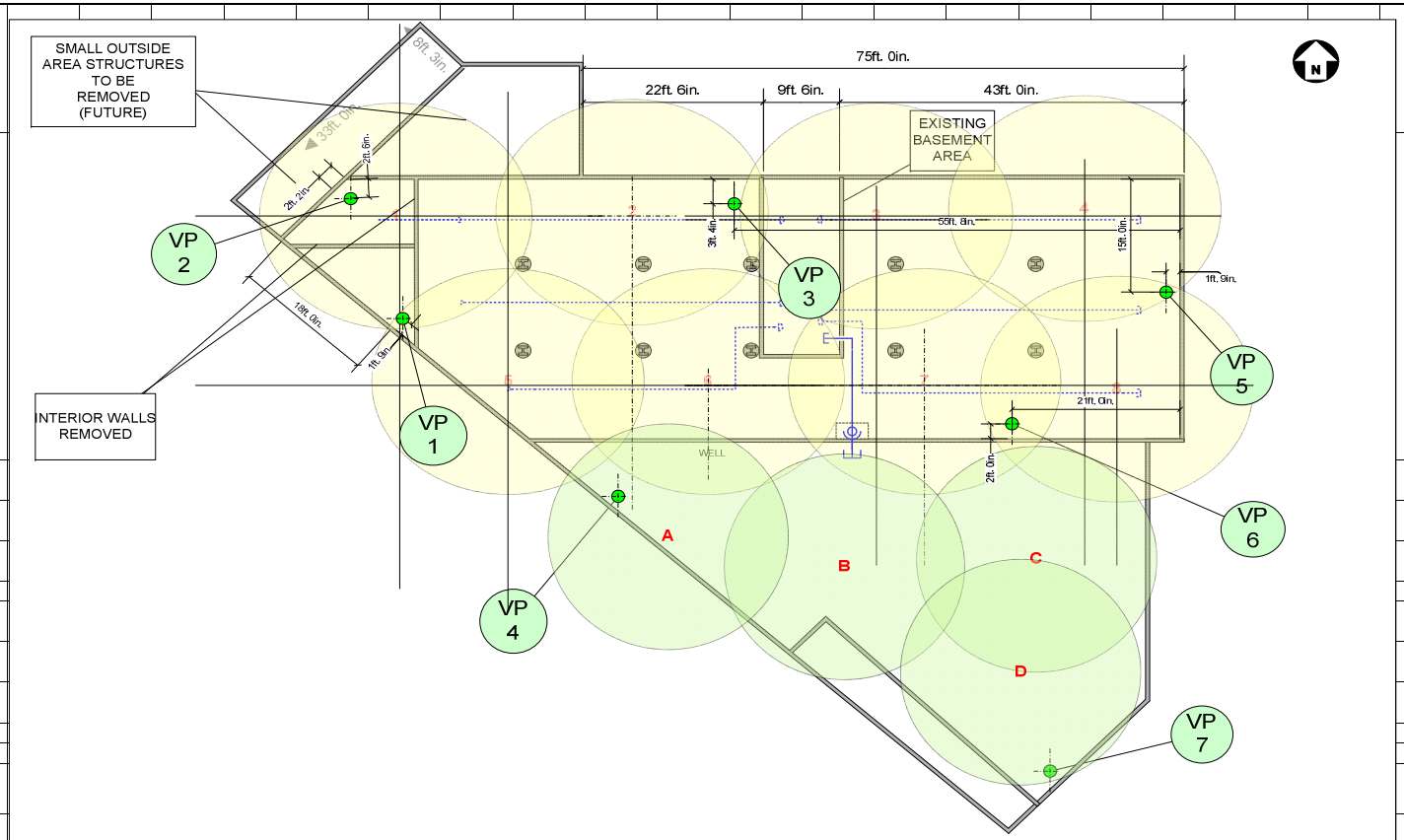
ATTACHMENT B

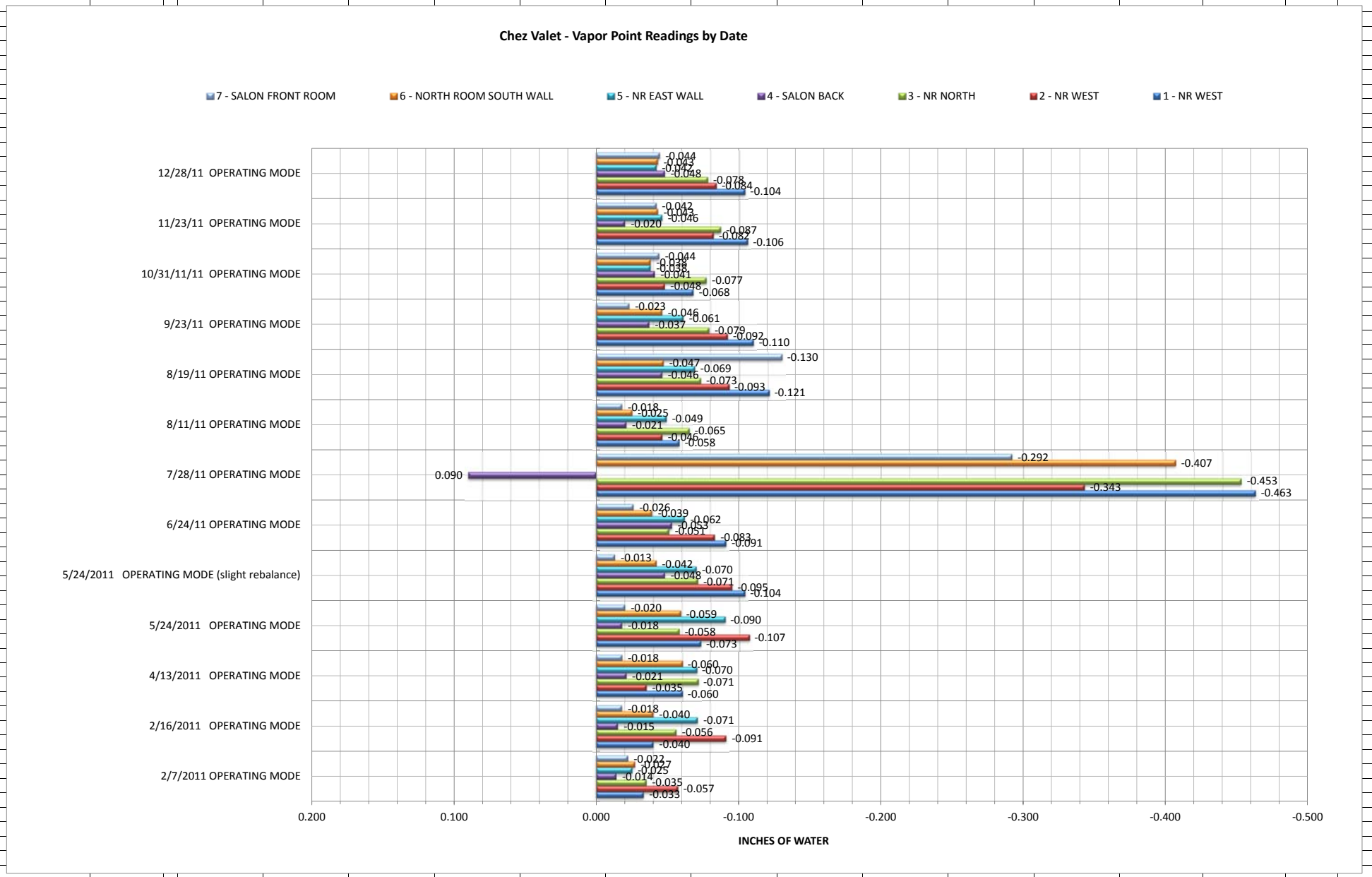
POST START UP VACUUM RESULTS
Chez Valet

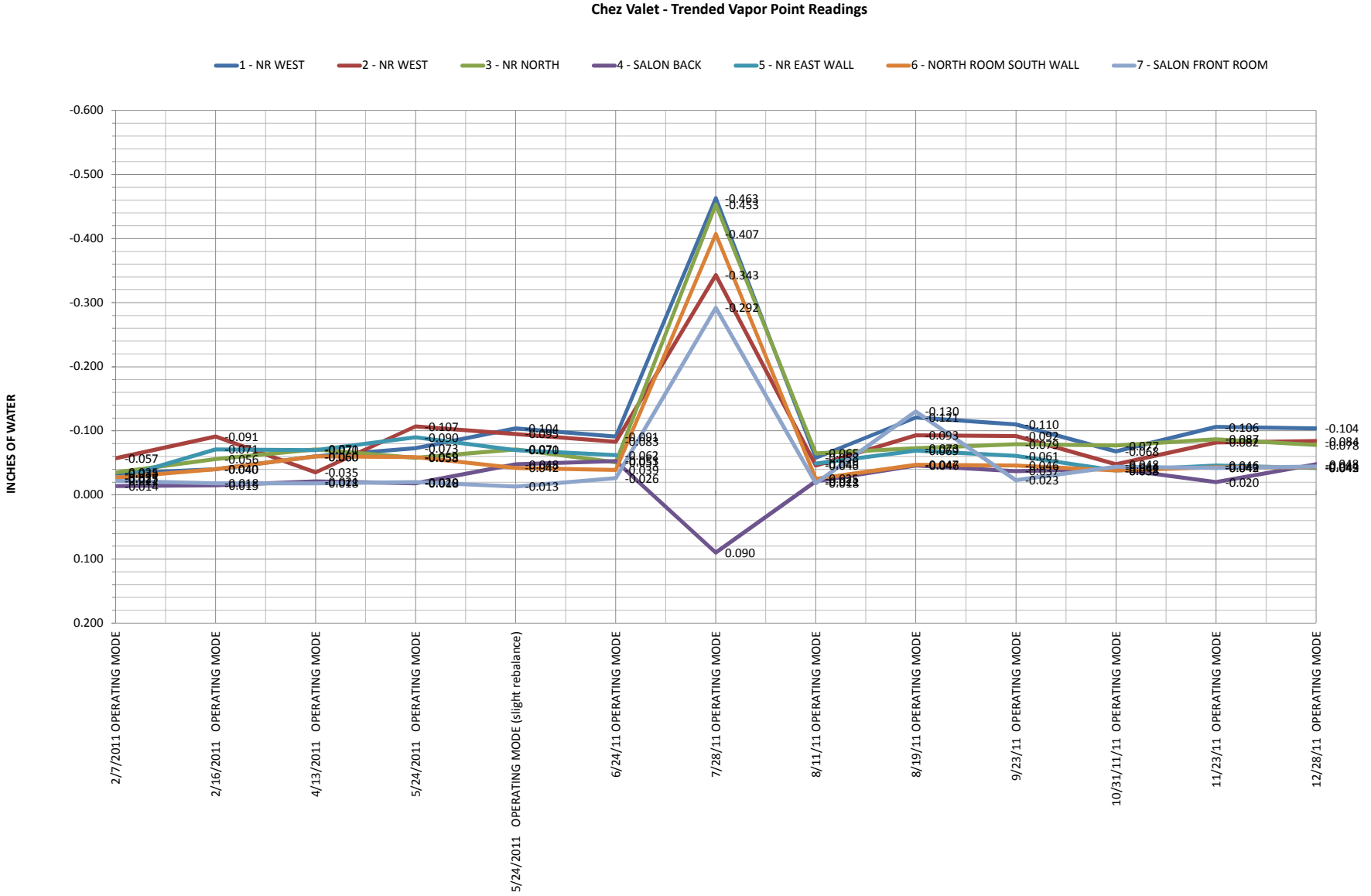
			2/7/2011 OPERATING MODE	2/16/2011 OPERATING MODE	4/13/2011 OPERATING MODE	5/24/2011 OPERATING MODE	5/24/2011 OPERATING MODE (slight rebalance)	6/24/11 OPERATING MODE	7/28/11 OPERATING MODE	8/11/11 OPERATING MODE	8/19/11 OPERATING MODE	9/23/11 OPERATING MODE	10/31/11/11 OPERATING MODE	11/23/11 OPERATING MODE	12/28/11 OPERATING MODE		
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		
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		
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		
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		
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		
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		
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		
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		

-0.025	LESS THAN OR EQUAL TO -0.024
-0.023	GREATER THAN -0.025

NR =	NORTH ROOM
S =	SALON


SMALL OUTSIDE AREA STRUCTURES TO BE REMOVED (FUTURE)
INTERIOR WALLS REMOVED
EXISTING BASEMENT AREA
75ft. 0in.
22ft. 6in.
9ft. 6in.
43ft. 0in.
8ft. 3in.
3.5ft. 0in.
2ft. 6in.
2ft. 2in.
18ft. 0in.
1ft. 9in.
3ft. 4in.
55ft. 8in.
15ft. 0in.
1ft. 9in.
21ft. 0in.
2ft. 0in.
WELL
VP 1
VP 2
VP 3
VP 4
VP 5
VP 6
VP 7
A
B
C
D
N


Chez Valet - Vapor Point Readings by Date
7 - SALON FRONT ROOM
6 - NORTH ROOM SOUTH WALL
5 - NR EAST WALL
4 - SALON BACK
3 - NR NORTH
2 - NR WEST
1 - NR WEST
12/28/11 OPERATING MODE
11/23/11 OPERATING MODE
10/31/11/11 OPERATING MODE
9/23/11 OPERATING MODE
8/19/11 OPERATING MODE
8/11/11 OPERATING MODE
7/28/11 OPERATING MODE
6/24/11 OPERATING MODE
5/24/2011 OPERATING MODE (slight rebalance)
5/24/2011 OPERATING MODE
4/13/2011 OPERATING MODE
2/16/2011 OPERATING MODE
2/7/2011 OPERATING MODE
0.200
0.100
0.000
-0.100
-0.200
-0.300
-0.400
-0.500
INCHES OF WATER


Chez Valet - Trended Vapor Point Readings
1 - NR WEST
2 - NR WEST
3 - NR NORTH
4 - SALON BACK
5 - NR EAST WALL
6 - NORTH ROOM SOUTH WALL
7 - SALON FRONT ROOM
INCHES OF WATER
-0.600
-0.500
-0.400
-0.300
-0.200
-0.100
0.000
0.100
0.200
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

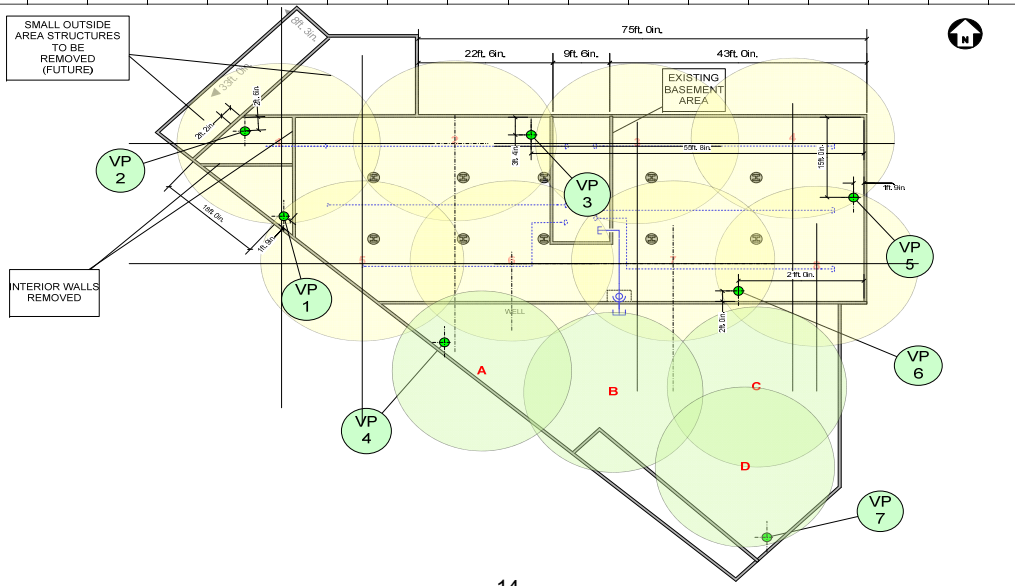
ATTACHMENT C

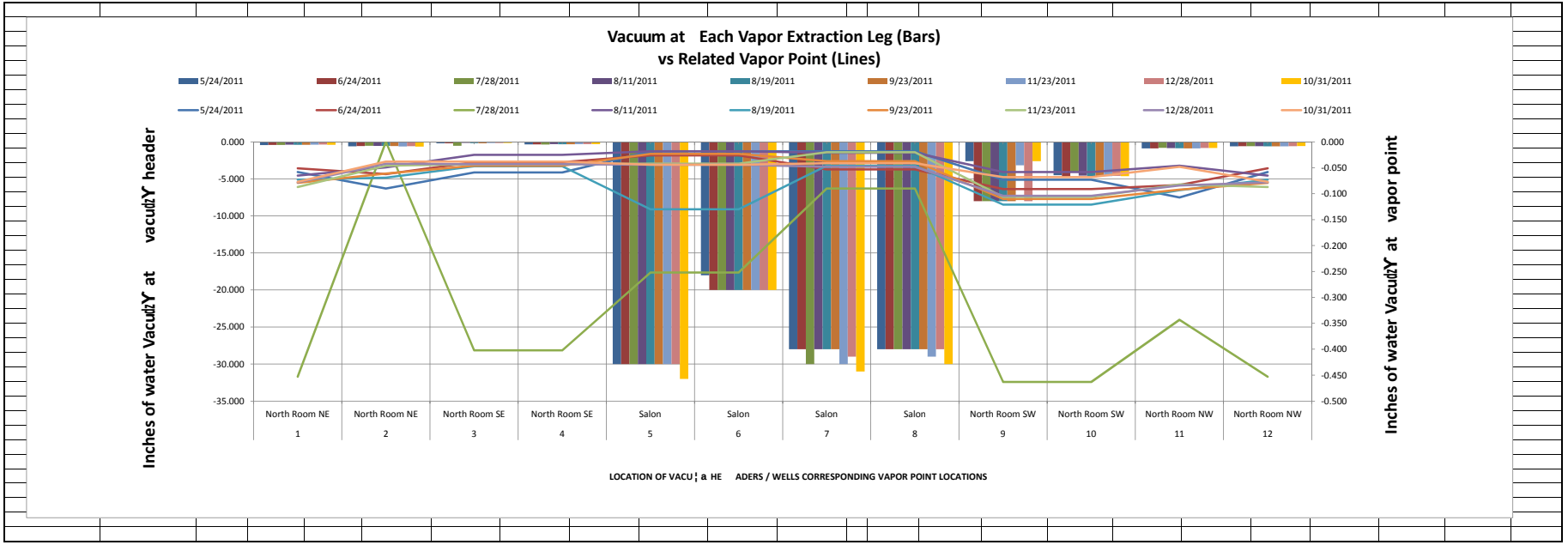
VACUUM GAUGE SETTINGS
&
MISCELLANEOUS SYSTEM INFORMATION
Chez Valet

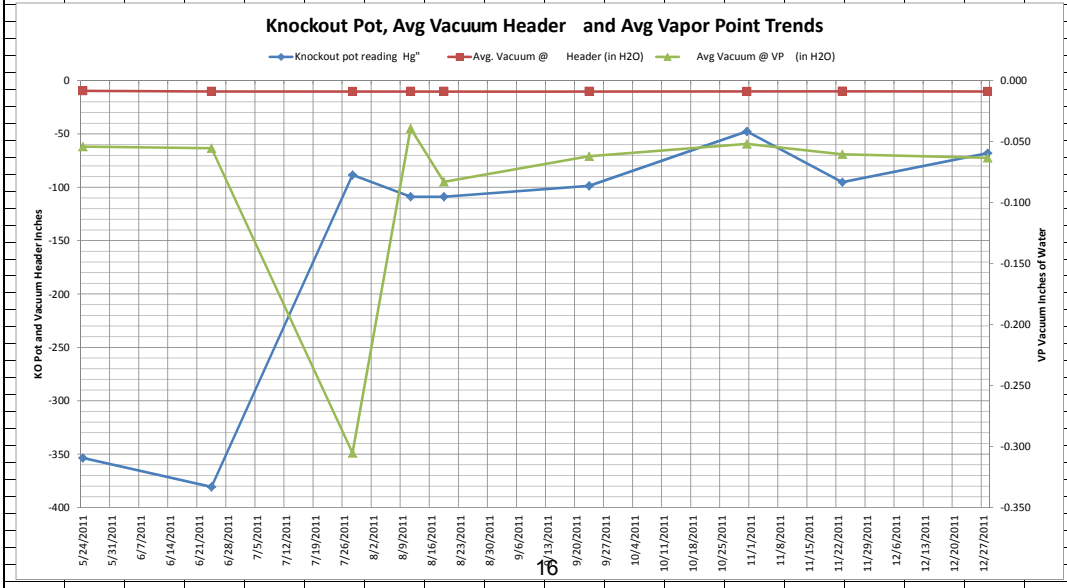
Comparison of Vacuums Measured at Distribution Header Versus Relative Vapor Point Measurements.

	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		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
Valve Number	Location	Vacuum reading at distribution header specific to lateral being controlled.										relative Vapor Point	vacuum points influenced by specific lateral and their comparative readings								
1	North Room NE	-0.395	-0.430	-0.410	-0.407	-0.371	-0.399	-0.395	-0.394	-0.366	-0.355	3	-0.058	-0.051	-0.453	-0.065	-0.073	-0.079	-0.077	-0.087	-0.078
2	North Room NE	-0.557	-0.600	-0.550	-0.511	-0.533	-0.542	-0.557	-0.626	-0.609	-0.571	5	-0.090	-0.062	0.000	-0.049	-0.069	-0.061	-0.038	-0.046	-0.042
3	North Room SE	-0.195	-0.180	-0.180	-0.527	-0.136	-0.163	-0.195	-0.150	-0.155	-0.152	6	-0.059	-0.039	-0.402	-0.025	-0.047	-0.046	-0.038	-0.043	-0.043
4	North Room SE	-0.308	-0.330	-0.330	-0.360	-0.290	-0.309	-0.308	-0.289	-0.301	-0.294	6	-0.059	-0.039	-0.402	-0.025	-0.047	-0.046	-0.038	-0.043	-0.043
5	Salon	-30.000	-30.000	-30.000	-30.000	-30.000	-30.000	-30.000	-32.000	-30.000	-30.000	7	-0.018	-0.026	-0.252	-0.018	-0.130	-0.023	-0.044	-0.042	-0.044
6	Salon	-20.000	-18.000	-20.000	-20.000	-20.000	-20.000	-20.000	-20.000	-20.000	-20.000	7	-0.018	-0.026	-0.252	-0.018	-0.130	-0.023	-0.044	-0.042	-0.044
7	Salon	-28.000	-28.000	-28.000	-30.000	-28.000	-28.000	-28.000	-31.000	-30.000	-29.000	4	-0.018	-0.053	-0.090	-0.021	-0.046	-0.037	-0.041	-0.020	-0.048
8	Salon	-28.000	-28.000	-28.000	-28.000	-28.000	-28.000	-28.000	-30.000	-29.000	-28.000	4	-0.018	-0.053	-0.090	-0.021	-0.046	-0.037	-0.041	-0.020	-0.048
9	North Room SW	-8.000	-2.600	-8.000	-8.000	-8.000	-8.000	-8.000	-2.602	-3.157	-8.000	1	-0.073	-0.091	-0.463	-0.058	-0.121	-0.110	-0.068	-0.106	-0.104
10	North Room SW	-4.631	-4.500	-4.670	-4.000	-4.550	-4.621	-4.631	-4.617	-4.618	-4.577	1	-0.073	-0.091	-0.463	-0.058	-0.121	-0.110	-0.068	-0.106	-0.104
11	North Room NW	-0.871	-0.880	-0.880	-0.801	-0.838	-0.845	-0.871	-0.812	-0.865	-0.813	2	-0.107	-0.083	-0.343	-0.046	-0.093	-0.092	-0.048	-0.082	-0.084
12	North Room NW	-0.591	-0.600	-0.570	-0.571	-0.579	-0.592	-0.591	-0.560	-0.595	-0.577	3	-0.058	-0.051	-0.453	-0.065	-0.073	-0.079	-0.077	-0.087	-0.078
	Avg. Vacuum @ Header (in H_2O)		-9.510	-10.133	-10.265	-10.108	-10.123	-10.129	-10.254	-9.972	-10.195	Avg Vacuum @ VP (in H_2O)	-0.054	-0.055	-0.305	-0.039	-0.083	-0.062	-0.052	-0.060	-0.063
Knockout pot reading	Hg"		-26	-28	-6.5	-8	-8	-7.25	-3.5	-7	-5										
	H_2O"		-353.496	-380.688	-88.374	-108.768	-108.768	-98.571	-47.586	-95.172	-67.98										

		VP	VP	VP	VP	VP	VP	VP	VP	VP	VP
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			-0.073	-0.091	-0.463	-0.058	-0.121	-0.110	-0.068	-0.106	-0.104
2			-0.107	-0.083	-0.343	-0.046	-0.093	-0.092	-0.048	-0.082	-0.084
3			-0.058	-0.051	-0.453	-0.065	-0.073	-0.079	-0.077	-0.087	-0.078
4			-0.018	-0.053	-0.090	-0.021	-0.046	-0.037	-0.041	-0.020	-0.048
5			-0.090	-0.062		-0.049	-0.069	-0.061	-0.038	-0.046	-0.042
6			-0.059	-0.039	-0.402	-0.025	-0.047	-0.046	-0.038	-0.043	-0.043
7			-0.018	-0.026	-0.252	-0.018	-0.130	-0.023	-0.044	-0.042	-0.044


SMALL OUTSIDE AREA STRUCTURES TO BE REMOVED (FUTURE)
INTERIOR WALLS REMOVED
75ft. 0in.
22ft. 6in.
9ft. 6in.
43ft. 0in.
EXISTING BASEMENT AREA
55ft. 8in.
WELL
VP 1
VP 2
VP 3
VP 4
VP 5
VP 6
VP 7
A
B
C
D


Vacuum at Each Vapor Extraction Leg (Bars)
vs Related Vapor Point (Lines)
5/24/2011
6/24/2011
7/28/2011
8/11/2011
8/19/2011
9/23/2011
11/23/2011
12/28/2011
10/31/2011
Inches of water Vacuum at vacuum header
Inches of water Vacuum at vapor point
0.000
-5.000
-10.000
-15.000
-20.000
-25.000
-30.000
-35.000
0.000
-0.050
-0.100
-0.150
-0.200
-0.250
-0.300
-0.350
-0.400
-0.450
-0.500
North Room NE 1
North Room NE 2
North Room SE 3
North Room SE 4
Salon 5
Salon 6
Salon 7
Salon 8
North Room SW 9
North Room SW 10
North Room NW 11
North Room NW 12
LOCATION OF VACUUM HEADERS / WELLS CORRESPONDING VAPOR POINT LOCATIONS


Knockout Pot, Avg Vacuum Header and Avg Vapor Point Trends
Knockout pot reading Hg"
Avg. Vacuum @ Header (in H2O)
Avg Vacuum @ VP (in H2O)
KO Pot and Vacuum Header Inches
VP Vacuum Inches of Water
0
-50
-100
-150
-200
-250
-300
-350
-400
0.000
-0.050
-0.100
-0.150
-0.200
-0.250
-0.300
-0.350
5/24/2011
5/31/2011
6/7/2011
6/14/2011
6/21/2011
6/28/2011
7/5/2011
7/12/2011
7/19/2011
7/26/2011
8/2/2011
8/9/2011
8/16/2011
8/23/2011
8/30/2011
9/6/2011
9/13/2011
9/20/2011
9/27/2011
10/4/2011
10/11/2011
10/18/2011
10/25/2011
11/1/2011
11/8/2011
11/15/2011
11/22/2011
11/29/2011
12/6/2011
12/13/2011
12/20/2011
12/27/2011

ATTACHMENT D

ELAPSED TIME AND RUNTIME CALCULATIONS
Chez Valet

Elapsed Time and Run time calculations

Date @ Time	Meter reading (hours)	Actual Elapsed Time (hours)	Interval between readings	Interval % runtime	Cumulative % runtime
5/24/11 9:00	0				
6/24/2011 8:35	743.6	743.58	743.58	100.00%	100.00%
7/28/2011 7:15	1555.5	1558.25	814.67	99.66%	99.82%
8/11/2011 7:10	1890.7	1894.17	335.92	99.79%	99.82%
8/19/11 7:00	2082	2086.00	191.83	99.72%	99.81%
9/23/11 8:20	2921	2927.33	841.33	99.72%	99.78%
11/23/11 7:45	4379.5	4390.75	1463.42	99.66%	99.74%
12/28/11 8:00	5217.5	5231.00	840.25	99.73%	99.74%

ATTACHMENT E

CARBON DRUM READINGS
Chez Valet

EXHAUST GAS
CARBON DRUM READINGS

Date	7/28/11	8/11/11	8/19/11	9/23/11	11/23/2011	12/28/2011
Blower discharge Velocity (fps)	98.7		138.72	135	152	156
PID (PPM)						
Pre Carbon	0.5		0.4	0.6	0.6	0.0
Mid Carbon	0.1		0.1	0.2	0.3	0.0
Post Carbon	0.0		0.0	0.0	0.0	0.0