2011 UPDATE TO AOC-65 SOIL VAPOR EXTRACTION OPERATIONS AND MAINTENANCE ASSESSMENT REPORT

Prepared for:

Camp Stanley Storage Activity
Boerne, Texas

JANUARY 2011

AOC-65 SOIL VAPOR EXTRACTION OPERATIONS AND MAINTENANCE ASSESSMENT REPORT

Camp Stanley Storage Activity
Boerne, Texas

Contract Number W9126G-07-D-0028
Task Order DO50

JANUARY 2011

EXECUTIVE SUMMARY

Area of Concern (AOC)-65 is located in the Inner Cantonment of Camp Stanley Storage Activity (CSSA). AOC-65 is a known source area for a volatile organic compounds (VOC) groundwater contamination plume that has migrated off-post. To address this on-going source area in the underlying fractured bedrock, a soil vapor extraction (SVE) system was installed in 2002. In 2007, the SVE system was upgraded with new extraction wells, vapor monitoring wells, and blowers. This updated SVE system is comprised of four individual blowers and associated vapor extraction wells (VEWs) independently designated as the Building 90 Subslab, Building 90 Exterior, AOC-65 Deep, and AOC-65 Shallow subsystems.

This operations and maintenance (O&M) assessment report reviews the performance of the system for the approximately 2.5-year period between April 2008 and November 2010. This report presents the data associated with system operation, and presents recommendations to improve system performance and provide more accurate information for mass removal calculations.

Over the two and a half years covered by this O&M period, approximately 128.6 pounds (lb) (9.5 gallons) of tetrachloroethene (PCE) have been removed from the underlying limestone at AOC-65. The annualized mass removal rate (assuming the system could run 24 hours/day, 365 days/year) was estimated to be 134.59 lb/year (approximately 10 gallons/year) for the first year (April 2008 to April 2009) and 13.7 lb/year (approximately 1 gallon/year) for the second year (April 2009 to April 2010), and 12.4 lb/yr (approximately 0.9 gallon/year). All removal rate values are well below the permitted limit of 0.273 lb/hour or 2,395.77 lb/year. The significantly different values between year one and years two and three are due to several factors. The SVE system had been inactive for an extended period prior to 2008. When the system was turned back on in April 2008, it initially removed PCE that had accumulated during the inactive period. Between April 2009 and April 2010, weather conditions affected VOC recovery rates. First a drought resulted in much lower groundwater levels and generally lower VOC concentrations. The drought was followed by very wet conditions which caused the VEWs to become flooded, preventing removal of vapor.

Each subsystem contributed the following to the total mass removed:

- Sub-slab VEWs accounted for the removal of 75.82 lb (5.6 gallons);
- AOC-65 Shallow VEWs accounted for the removal of 30.42 lb (2.25 gallons);
- AOC-65 Deep VEWs accounted for the removal of 17.53 lb (1.3 gallons); and
- Exterior Building 90 VEWs accounted for the removal of 4.83 lb (0.36 gallons).

Recommendations for continuing SVE pilot study activities at AOC-65 include:

- Install in-line flow meters with vortex dampeners for more accurate flow rates;
- Install hours meters for more accurate operational times;
- Increase vacuum pressure on the more productive VEWs to improve overall sub-system removal rates; and
- Develop a Work Plan for a treatability study which would install a steam injection well near Building 90 to potentially enhance volatilization of contaminants. This

plan would also consider installation of dual-phase extraction wells or retrofitting existing VEWs for dual-phase extraction to address the problem of occasional flooding of the VEWs.

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ACRONYMS AND ABBREVIATIONS

AOC	Area of Concern
bgs	below ground surface
CO_2	Carbon Dioxide
CSSA	Camp Stanley Storage Activity
ft	feet
GAC	Granular activated carbon
lb	pounds
lb/hr	pounds per hour
lb/yr	pounds per year
O&M	operation and maintenance
O_2	Oxygen
Parsons	Parsons Infrastructure and Technology, Inc.
PBR	permit by rule
PCE	tetrachloroethylene
PID	photoionization detector
ppbV	parts per billion by volume
SVE	Soil Vapor Extraction
TCEQ	Texas Commission on Environmental Quality
TVH	Total Volatile Hydrocarbon
USEPA	U.S. Environmental Protection Agency
VEW	vapor extraction well
VMP	vapor monitoring point
VOC	volatile organic compounds

CHAPTER 1
INTRODUCTION

This report summarizes operations and results for two and a half years of operation and maintenance (O&M) activities following the expansion of the soil vapor extraction (SVE) system at Area of Concern (AOC)-65. The O&M monitoring period described in this document was initiated on April 17, 2008 and performed through November 9, 2010. The monitoring activities performed were intended to maintain the operational status of the system and to collect data for evaluation of the system performance. Secondary objectives of the O&M period monitoring task included repair of any identified defect(s) in the SVE system(s) following the expansion and determination of vapor extraction well (VEW) connectivity to specific AOC-65 blowers. Recommendations for future SVE applications at the AOC-65 site (e.g., steam-enhanced recovery) were developed based on the results of the SVE vacuum testing and from observations made during the O&M activities described in this report.

1.1 PURPOSE

This document was prepared as an assessment of the AOC-65 SVE operations. The purpose of this assessment is to evaluate and assess 30 months of system monitoring.

Activities performed during the operations and monitoring include:

- Monthly determination of soil vapor/emissions for the Sub-slab and Exterior systems on the eastern side of the site including:
  - Five exterior Building 90 VEWs (VEWs 15, 16, 18, 28A, and 28B), and
  - Both Building 90 blowers.
- Monthly determination of soil vapor emissions for the AOC65 Shallow and AOC65 Deep systems on the western side of the site including:
  - Six shallow VEWs (VEWs 19, 20, 21, 23, 25, and 27),
  - Six deep VEWs (VEWs 13, 14, 17, 22, 24, and 26), and
  - Both deep and shallow blowers.
- Soil gas monitoring and data collection to determine vapor emissions and flow rates at specific VEWs;
- Twice monthly system checks of the equipment and piping network to adjust, repair, and replace components as needed to maintain the systems in good operating condition.
- Semi-annual collection of vapor samples from individual VEWs, blower intakes, and system exhausts.
- Vacuum testing of the sub-slab blower and associated response at individual VEWs, as well as individual blower and vapor monitoring point (VMP) response.

This report is an update to the AOC-65 Soil Vapor Extraction O&M Assessment report completed in July 2010. The July 2010 report covered the period from April 17, 2009 through April 8, 2010. This update adds the period from April 8, 2010 through November 9, 2010.

1.2 BACKGROUND

In 2002, Parsons Infrastructure and Technology Inc. (Parsons) installed seven VEWs on the west side of Building 90 (VEW 13 - 19), 12 VEWs beneath Building 90 (VEW 1 - 12), and two blowers as well as associated piping and equipment for the SVE system as part of an SVE pilot study. Results of this initial study and discussion of system construction and performance are provided in the *AOC-65 SVE Interim Treatability Test Report* (Parsons, 2005a). Following the initial study, a 6-month O&M study was conducted and the results are discussed in the *AOC-65 Soil Vapor Extraction Operations and Maintenance Report* (Parsons, 2005b). Additionally, a groundwater recharge study and a remedial technology evaluation at AOC-65 was conducted and documented in the *Treatment Evaluation Report for AOC-65 SVE* (Parsons, 2005c).

In 2007, Parsons added one deep-nested VEW cluster near the Building 90 west loading dock, four shallow VEWs, and three intermediate-depth VEWs west of the ditch at Building 90. The nested VEW cluster consists of two VEWs installed to depths of 125 and 180 feet (ft) below ground surface (bgs). The expanded SVE system at AOC-65 is organized into two separate sub-systems: the Building 90 (or Eastern) system and the Western system. The Eastern - Building 90 system consists of a sub-slab blower which services VEWs 1, 2, 8, 9, 10, and 12 and an exterior blower which services VEWs 15, 16, 18, 28A, and 28B. The Western system consists of a deep blower, which services VEWs 13, 14, 17, 22, 24, and 26, and a shallow blower which services VEWs 19, 20, 21, 23, 25, and 27. Collectively, the VEWs and blowers are referred to as sub-slab, exterior, deep, or shallow VEWs and blowers. Schematic views and a plan view of the expanded SVE system is shown in Figure 1.1 through Figure 1.3.

This assessment report covers two and a half years of operation (April 2008 through November 2010) following the system expansion. This report is organized into five chapters, including this introduction. Chapter 2 describes methods and protocol employed to perform monitoring and data collection activities. Results and data evaluations from the monitoring activities are detailed in Chapter 3. Chapter 4 summarizes the significant findings, including sustained contaminant removal rates, and provides recommendations for future pilot study at AOC-65. References are included in Chapter 5.

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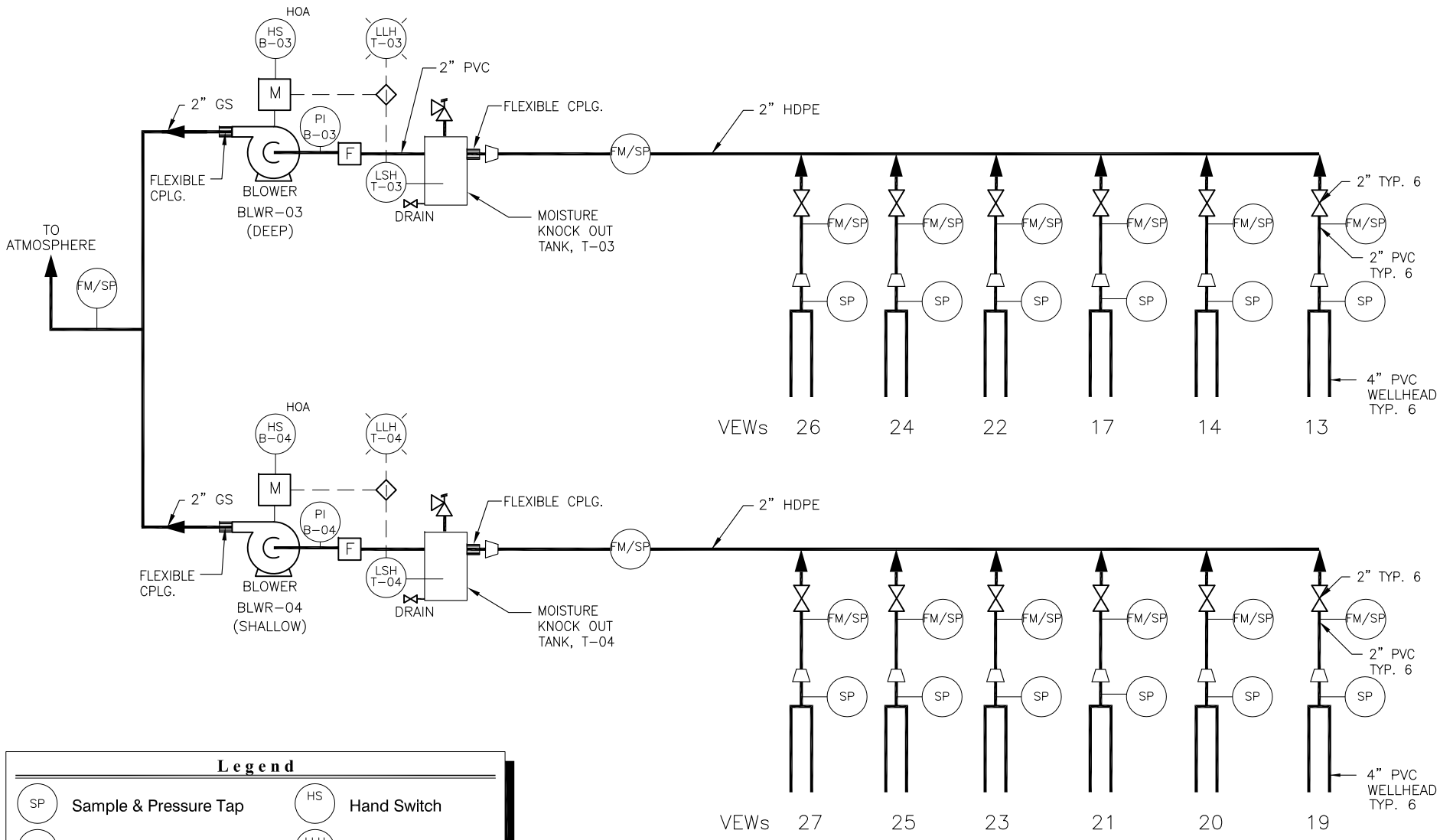

Figure 1.1

AOC-65 Western SVE System Schematic

Camp Stanley Storage Activity

PARSONS

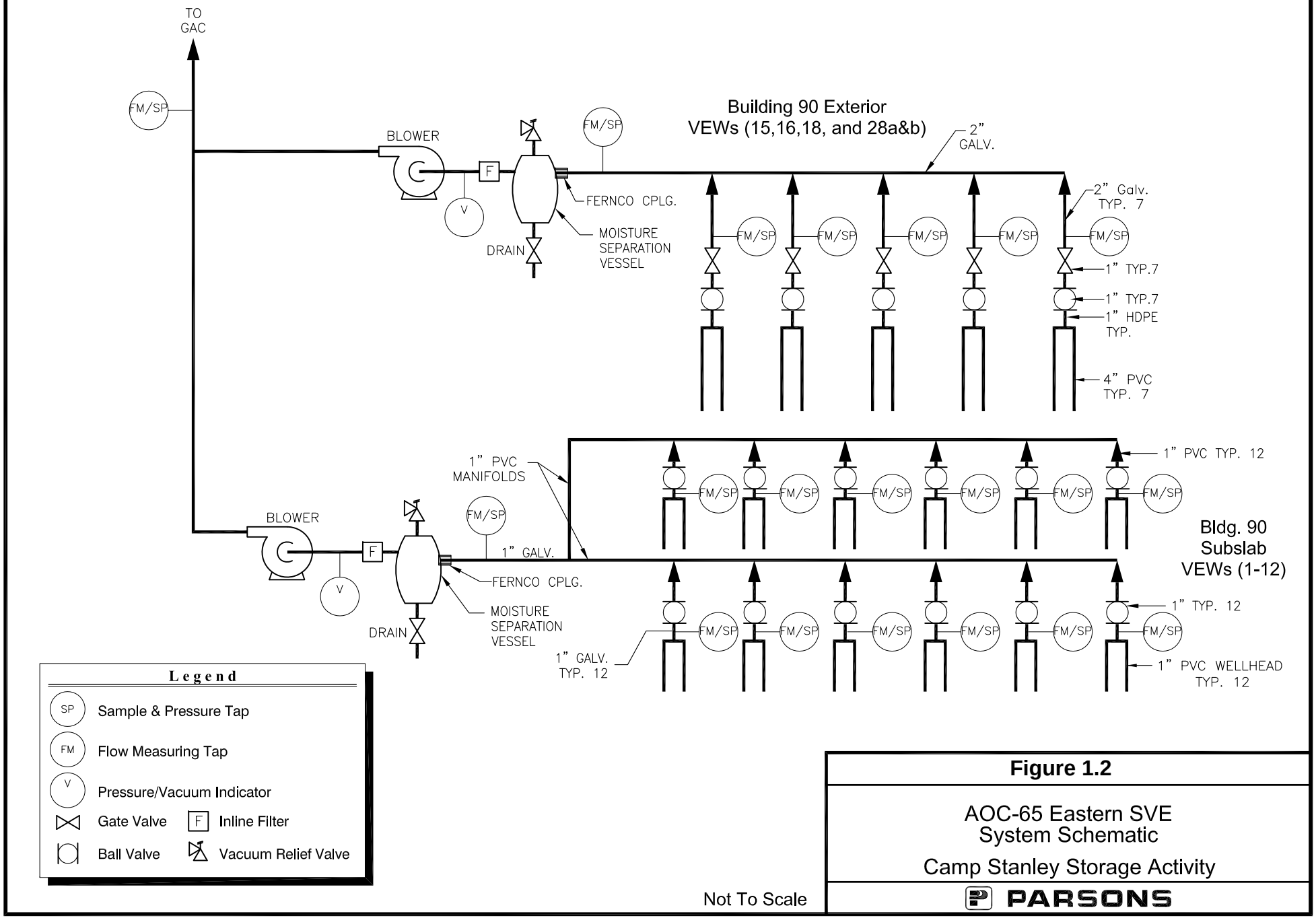

Figure 1.2

AOC-65 Eastern SVE
System Schematic

Camp Stanley Storage Activity

PARSONS

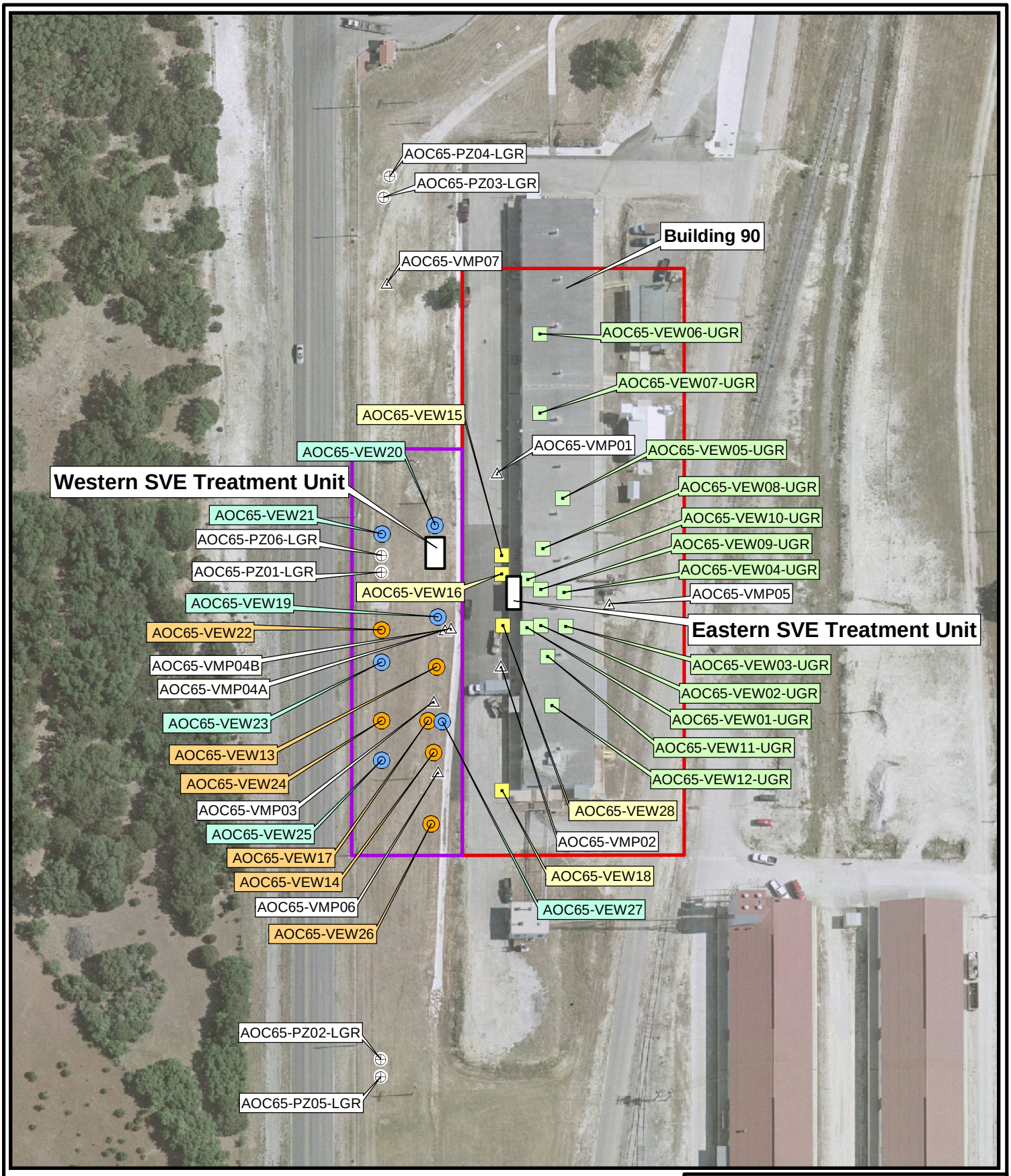

Figure 1.3

AOC-65 SVE System
VEW Location Map

Camp Stanley Storage Activity

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CHAPTER 2
OPERATIONS AND MAINTENANCE TESTING PROTOCOLS

2.1 OVERVIEW

This chapter summarizes the SVE monitoring activities, following the system expansion in 2007. It covers O&M performed during the 31-month period from April 2008 to November 2010 at AOC-65. The primary activities associated with the O&M included bi-weekly and monthly monitoring of system performance, including system checks and flow adjustments as necessary; collection of emission and soil gas samples during periodic sampling events (baseline and semi annual); semi-annual analysis of extracted soil gas; a vacuum connectivity test; and general system maintenance. Monthly monitoring consisted of field screening of flow and pressure readings to determine if there were significant fluctuations in the key operating parameters and making any needed flow adjustments. Results from monitoring events are presented in Chapter 3. SVE condensate was managed through CSSA's Texas Pollutant Discharge Elimination System, permit number WQ0003849000, at Outfall 002 or as authorized by Texas Commission on Environmental Quality (TCEQ) Underground Injection Control permit, authorization number 5X2600431.

2.2 INITIAL SOIL GAS AND FLOW ADJUSTMENTS

Baseline monitoring was performed on April 17, 2008, prior to start up of the expanded SVE system. The system was shut down in March 2007 for the construction of the upgraded system and soil gas sampling was performed to acquire new baseline data at the beginning of the O&M period. Oxygen (O_2), carbon dioxide (CO_2), and VOCs were measured at each of the sample points. Field screening was performed at all VEWs using a GasTechTor Gas alarm (O_2/CO_2), Photovac 2020 Proplus photoionization detector [PID] (total volatile hydrocarbon [TVH]), Dwyer Series 471 Thermo-Anemometer (temperature and flow), and a Dwyer Series 477A Digital Manometer (vacuum). Samples were collected from the new wells outside Building 90 (VEW-28A and VEW-28B), new deep wells (VEWs 22, 24, 26), new shallow wells (VEWs 20, 21, 23, 25 and 27), and blower intakes for Volatile Organic Carbon (VOC) analysis by U.S. Environmental Protection Agency (USEPA) method TO-15. Monitoring data was used to assess operational performance and estimating emission levels from the SVE system to verify compliance with the associated TCEQ permit by rule (PBR) for regulating air emissions from the SVE blowers.

2.3 MONTHLY MONITORING

During the O&M assessment period, monthly system checks were conducted to assure that systems continued to operate and perform as intended. The system checks involved recording blower performance data on a log sheet, measurement of flow rates and vacuum pressures at each on-line and accessible VEW, and general inspection of the condition of the above-ground components of the system. Flow rates and temperatures are collected with a Dwyer series 471

Digital Thermo-Anemometer, and vacuum pressures are collected with a Dwyer series 477A digital Manometer. System inspection and performance monitoring data are included in Appendix A. Accumulated water in the moisture separator was drained from knockout tanks as necessary during each visit and managed as authorized by CSSA's Texas Pollutant Discharge Elimination System Permit and/or Underground Injection Control Permit.

Soil gas monitoring occurred on a regular basis, and was conducted concurrently with the monthly system check. The monthly soil gas monitoring visits included direct measurements of TVH, oxygen, and carbon dioxide in the individual flow streams and emissions from the main blower exhausts using Tedlar bags and field instruments. The schedule of activities completed during the 24-month O&M assessment period is presented in Table 2.1.

Table 2.1 Completed O&M Activities, AOC-65 SVE O&M Assessment

Date	Activity	Samples/Comments
April 17, 2008	Initial, background system check and sample event	Initial field readings and soil vapor sampling of all VEWs and intakes.
July 15, 2008	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
August 5, 2008	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
September 23, 2008	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
October 10, 2008	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
November 11, 2008	Monthly monitoring, semi-annual sampling	Field readings and soil vapor sampling from VEWs 13-28B and all four intakes
December 11, 2008	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
January 9, 2009	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
February 4, 2009	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
March 3, 2009	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
April 7, 2009	Monthly monitoring, semi-annual sampling	Field readings and soil vapor sampling from VEWs 13-28B and all four intakes
April 15, 2009	Connectivity Testing	Pressure-test each VEW, VMP, and blower combination
May 7, 2009	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
June 5, 2009	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
July 9, 2009	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
August 12, 2009	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes

Date	Activity	Samples/Comments
September 11, 2009	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
October 8, 2009	Monthly monitoring, semi-annual sampling	Field readings and soil vapor sampling from VEWs 13-28B and all four intakes
November 3, 2009	Monthly monitoring, System maintenance	Field readings from VEWs 13-28B, and all four intakes; Water levels in VEWs gauged
December 11, 2009	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
January 5, 2010	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
January 12, 2010	Carbon exchange	GAC for the Eastern SVE system recharged
February 9, 2010	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
March 19, 2010	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
April 8, 2010	Monthly monitoring, semi-annual sampling	Field readings and soil vapor sampling from VEWs 13-28B and all four intakes
May 5, 2010	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
June 15, 2010	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
July 6, 2010	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
August 10, 2010	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
September 7, 2010	Monthly monitoring	System shut down for vapor intrusion sampling inside Building 90.
October 5, 2010	Pulse Testing	Pulse testing of VEWs -17 and -27, deep and shallow blowers. Limited system operation.
October, 2010	Monthly monitoring	System shut down for vapor intrusion sampling and pulse testing.
November 9, 2010	Monthly monitoring, semi-annual sampling	Field readings and soil vapor sampling from VEWs 13-28B and all four intakes

Note: Twice Monthly monitoring events are not included in table. Data from twice monthly monitoring events included collection of operational parameters (e.g., system operation status, knock-out tank levels, etc.).

2.4 SEMI – ANNUAL MONITORING

During the O&M period, soil gas samples were collected from the system and submitted for laboratory analysis on a semi-annual basis. These events occurred in November 2008, April 2009, October 2009, April 2010, and November 2010. Samples were collected from the selected sampling points (VEWs 20 through 28B), and all four intakes during each sampling event to allow for direct comparison of results. The baseline-sampling event was performed April 17, 2008. Semi-annual monitoring events were used to assess emissions from the system and to ensure compliance with permitted standards. All emissions and soil gas air samples submitted for analyses were tested for VOCs using USEPA Method TO-15. The CSSA Quality Assurance Project Plan was followed for sample collection and analysis. Field screening was accomplished

using a PID and oxygen/carbon dioxide meter. All sampling was done in accordance with the Sampling and Analysis Plan Addendum (Parsons, 2005d). Results from the emissions testing are discussed in Subchapter 3.3. Laboratory data packages are provided in Appendix B.

2.5 VACUUM CONNECTIVITY TEST

During the O&M period, a series of pressure tests were conducted to determine connectivity between blowers, and individual VEWs and VMPs via subsurface fractures. These pressure tests were conducted by turning on one blower, then systematically measuring the wellhead vacuum pressure at each VEW and VMP zone. All VEWs associated with the operating blower were left on. All VEWs not plumbed directly to the operating blower (with the exception of the VEW being pressure tested) were shut off at the manifold to maximize the vacuum response. Once the vacuum pressures at every VEW for a particular blower were measured individually, that blower was shut down and another was turned on along with its associated VEWs; the wellhead vacuum pressure testing was then repeated for those VEWs. Similarly, VMP pressures were measured for each screened zone for each blower.

For example, to test the connectivity of VEW-20 to the Eastern Sub-slab system, all the VEWs associated with the Western AOC-65 SVE systems (deep and shallow) and the Eastern Building 90 external VEWs were shut off at the manifolds and the blowers for those systems were shut off as well. VEW-20 remained open at the manifold and the Eastern Building 90 sub-slab blower and VEWs were open/on; the VEW-20 wellhead pressure was then measured.

A negative pressure response at a VEW that was not directly plumbed to an operating blower suggests that there may be a connection between that VEW and one of the VEWs directly associated with the operating blower through a fracture, solution-enhanced conduit, or, to a small extent, the matrix porosity. A positive response or a zero pressure differential indicates that the VEW tested is not connected to the operating blower.

2.6 CARBON EXCHANGE

The Eastern SVE system includes two blowers, one for the Building 90 sub-slab, and one for the Building 90 exterior VEWs. The exhaust from these two blowers is plumbed to a granular activated carbon (GAC) filtration unit designed to remove any volatiles prior to release into the atmosphere. Once the carbon becomes saturated, it no longer filters the exhaust efficiently. Vapor samples collected from the post-GAC sample port on October 8, 2009 confirmed that volatiles were detected in post-GAC air samples, and a carbon change-out was required. On January 12, 2010, scheduled maintenance was completed to remove the spent carbon from service. A carbon sample collected from the GAC, prior to change-out, indicated the spent carbon was a non-hazardous waste and was summarily recycled of off-post by Carbonair. At that time, the GAC was replenished with 1,000 pounds of fresh carbon, and returned to service. Subsequent sampling from the post-GAC sample port on April 8, 2010 revealed non-detects for volatiles. The spent media profile sheet and waste characterization analytical data for the spent carbon is located in Appendix C.

2.7 PULSE TESTING

During the latter part of the O&M period, a series of pulse tests were conducted to determine rebound. The SVE system was shut down August 23, 2010 to facilitate a vapor intrusion potential study inside Building 90. As a result of the system shut down, vapor phase contaminant concentrations increased in the subsurface. The pulse testing was conducted to determine how much these contaminant concentrations increased and how long it took to reach peak concentrations after the system is shut down for a prolonged period of time, turned back on and allowed to operate, and then shut down again.

Two VEWs and two blower intakes were included in the pulse testing. VOC concentrations were monitored at VEW-17 with a PID and CO_2 concentrations were continuously collected from two VEWs (VEW-17 and VEW-27) and the deep and shallow blower intakes from the Western AOC-65 SVE system. Each testing point (VEW or blower intake) was tested individually with the CO_2 meter. Pulse testing began with VEW-17 on October, 5, 2010 after the SVE system had been off for six weeks. The CO_2 meter was installed at the VEW-17 manifold, the system was started and allowed to run for 30 minutes and allowed to recover for an hour. After confirming that rebound was occurring at VEW-27 with the PID, the system was restarted and allowed to run overnight. The following morning the system was shut down, and after allowing the concentrations to rebound for almost two hours, the CO_2 meter was removed from VEW-17, the data downloaded, reinstalled in VEW-27, and the system was restarted. The system ran for an hour before it was shut down again followed by 30 minutes of rebound monitoring. The CO_2 meter was then installed at the blower intake for the shallow wells and the system was restarted and allowed to run over night. The following morning the system was shut down followed by three hours of rebound monitoring before the CO_2 meter was removed from the blower intake for shallow wells and installed on the intake for deep wells. The system was then turned on. It was intended that the system continue to run for three hours, however, there were several power outages during the test over a 30 minute period. The resulting data is presented in section 3.5.

CHAPTER 3
SYSTEM OPERATIONAL MEASUREMENTS

This section summarizes results of 2.5 years of monthly monitoring and soil gas sampling during the O&M period following the system expansion (April 17, 2008 through November 9, 2010). Results were evaluated along with other periodic sample results from this O&M task, and from results obtained during the baseline activities of the SVE system to assess system performance. A brief evaluation of the O&M data and test results are included in this section.

3.1 SYSTEM OPERATIONAL MEASUREMENTS

Operation of the SVE system for the O&M assessment period began on April 17, 2008, with the baseline soil gas sampling. Airflow measurements and vacuum pressures were obtained at each functional VEW outside Building 90 to ensure that the settings established during the system adjustment were maintained. During the 30 months following system startup, personnel from Parsons performed system checks on an approximate twice-monthly schedule to ensure that continuous air extraction remained relatively uninterrupted, and that blower operating parameters remained stable. If any of the wells were non-functional due to maintenance or system operational issues, appropriate steps were taken to address the situation. Typical problems that render a VEW non-functional include: leaky well-head valves or high groundwater levels in the VEW covering the screened interval. These issues are addressed by replacing the well-head valve, or pumping groundwater from the VEW and managing the extracted groundwater as per CSSA's Texas Pollutant Discharge Elimination System Permit and/or Underground Injection Control Permit, respectively.

Extraction pressure and airflow velocity measurements at each VEW and blower was collected as specified in the SVE O&M Plan (Parsons, 2008b) and are presented in Table 3.1 and Table 3.2, respectively. Table 3.3 includes the suite of field parameter measurements collected at the four blower intakes and the two system exhausts. The first two months of scheduled operation the system remained shutdown due to electrical and mechanical malfunctions. Also, the blower for the shallow wells in the western AOC-65 system malfunctioned in November 2009, which required the blower to be rebuilt. Thus, the shallow wells on the western AOC-65 system were not in service from November 2009 through March 2010.

The pressures from deep VEWs had a tendency to decrease (increase in vacuum pressure) during the winter months, which may be due to condensation forming in the formation caused by temperature gradients and barometric pressure changes during the winter months. Monthly flow rates for both the Building 90 and AOC-65 systems varied widely throughout the O&M assessment period possibly indicating system instability, or inconsistent readings due to high vapor moisture in the extracted soil gas causing erratic readings of the thermal anemometer.

Table 3.1 Extraction Pressure Results from Monthly System Checks at Building 90 and Western AOC-65 SVE Systems (in. H_2O)

Building 90	Baseline	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
exterior	4/17/2008	May-08	June-08	7/15/2008	8/5/2008	9/23/2009	10/7/2008	11/11/2008	12/11/2008	1/9/2009	2/4/2009	3/3/2009	4/7/2009
Building 90 Intake-EX	-18.4			-35.7	-33.4	-32.4	-35.7	-35.1	-35.6	-37.1	-33.7	-37.4	-36.7
VEW 15	NA			-32.7	-30.0	-26.7	-32.7	-31.9	-32.2	-32.9	-33.3	-34.2	-33.7
VEW 16	NA			-32.4	-29.4	-27.7	-32.3	-31.8	-31.6	-33.0	-32.2	-33.9	-33.7
VEW 18	-17.8			32.2	-28.8	-28.3	-32.4	-31.5	-33.0	-33.3	-32.5	-34.0	-33.2
VEW 28A	NA			-31.5	-27.1	-28.1	-31.8	-31.1	-28.5	-32.5	-31.1	-33.7	-33.1
VEW 28B	-17.5			-30.5	-25.8	-28.5	-31.8	-30.3	-31.2	-32.4	-30.2	-34.1	-33.2
interior													
Building 90 Intake-SS	-36.0			-36.5	-37.8	-32.8	-38.0	-43.9	-44.0	-44.3	-44.1	-44.1	-44.3
AOC-65	Baseline	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
shallow wells	4/17/2008	May-08	June-08	7/15/2008	8/5/2008	9/23/2009	10/7/2008	11/11/2008	12/11/2008	1/9/2009	2/4/2009	3/3/2009	4/7/2009
AOC-65-Intake-SW	-34/-19.5*			-32.2	-32.9	-10.0	-37.2	-30.2	-32.7	-24.3	-24.2	-22.9	-24.3
VEW 19	-34/-17			-32.2	-32.7	-9.8	-35.3	-34.6	-31.9	-24.6	-23.3	-21.8	-23.3
VEW 20	-34.0			-32.2	-32.6	-9.8	-34.8	-30.7	-31.6	-24.8	-22.7	-21.6	-23.7
VEW 21	-34.0			-32.2	-32.6	-10.1	-34.8	-29.4	-31.5	-24.5	-23.1	-21.6	-23.1
VEW 23	-34.0			-32.2	-32.6	-10.0	-34.4	-30.3	-31.6	-23.4	-22.6	-21.5	-23.5
VEW 25	-34.0			-32.2	-32.6	-10.1	-33.8	-30.1	-31.3	-23.8	-22.3	-21.4	-23.7
VEW 27	-34.0			-32.2	-32.6	-10.0	-34.0	-30.3	-31.1	-23.5	-22.6	-21.5	-22.9
deep wells													
AOC-65-Intake-DW	-23.0			-30.6	-30.3	-29.2	-31.9	-32.9	-38.7	-39.1	-36.4	-37.8	-36.8
VEW 13	-23.0			-26.3	-26.2	-25.7	-27.6	-28.5	-34.1	-33.6	-33.1	-33.7	-32.8
VEW 14	-23.0			-26.1	-26.1	-25.7	-27.5	-28.3	-34.4	-32.2	-33.2	-33.4	-31.5
VEW 17	-23.0			-25.3	-25.3	-24.9	-27.0	-27.7	-33.1	-31.8	-33.2	-33.3	-32.2
VEW 22	-23.0			-25.0	-25.3	-24.7	-26.8	-27.3	-32.9	-32.8	-31.9	-33.4	-31.5
VEW 24	-23.0			-24.9	-25.3	-24.8	-26.6	-24.1	-32.2	-31.8	-30.9	-32.9	-32.4
VEW 26	-23.0			-25.3	-25.0	-24.6	-26.4	-26.8	-31.5	-34.2	-31.0	-33.0	-32.6

Notes: - The system was non-operational during November, 2009 due to abnormally high groundwater levels
- Following the completion of VEW purging efforts, the AOC-65 shallow blower malfunctioned, requiring a rebuild of the blower

Table 3.1 (cont.) Extraction Pressure Results from Monthly System Checks at Building 90 and Western AOC-65 SVE Systems (in. H_2O)

Building 90	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24
exterior	5/7/2009	6/4/2009	7/2/2009	8/12/2009	9/11/2009	10/8/2009	Nov., 2009	12/11/2009	1/5/2010	2/9/2010	3/19/2010	4/8/2010
Building 90 Intake-EX	-35.6	-35.6	-33.4	-30.6	-32.9	-33.1	---	-33.7	-39.1	-44.3	-44.1	-43.6
VEW 15	-32.2	-32.2	-30.0	-26.4	-29.1	-28.8	---	-33.8	-35.6	-44.1	-44.1	-44.3
VEW 16	-32.2	-32.4	-28.6	-26.3	-28.7	-28.7	---	-33.3	-34.1	-44.1	-44.1	-44.1
VEW 18	-32.2	-32.0	-30.2	-25.4	-28.1	-28.3	---	-33.5	-34.6	-44.1	-44.1	-44.3
VEW 28A	-31.6	-31.4	-28.9	-24.2	-26.4	-26.8	---	-32.0	-33.3	-43.0	-44.1	-44.1
VEW 28B	-32.0	-31.8	-28.7	-24.4	-25.9	-26.1	---	-32.7	-33.4	-41.9	-44.1	-44.3
interior												
Building 90 Intake-SS	-44.1	-44.1	-44.1	-44.1	-44.1	-44.1	---	---	-44.4	-44.3	-42.3	-37.2
AOC-65	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24
shallow wells	5/7/2009	6/4/2009	7/2/2009	8/12/2009	9/11/2009	10/8/2009	Nov., 2009	12/11/2009	1/5/2010	2/9/2010	3/19/2010	4/8/2010
AOC-65-Intake-SW	-24.8	-32.1	-16.9	-24.1	-33.3	-34.5	---	---	---	---	---	-34.5
VEW 19	-24.2	-31.5	-16.5	-23.6	-32.2	-34.2	---	---	---	---	---	-34.9
VEW 20	-24.1	-29.5	-16.5	-23.4	-32.2	-32.5	---	---	---	---	---	-35.9
VEW 21	-24.1	-30.0	-16.5	-23.4	-32.2	-33.8	---	---	---	---	---	-35.4
VEW 23	-23.9	-29.8	-16.5	-23.4	-32.3	-33.5	---	---	---	---	---	-36.1
VEW 25	-23.8	-29.6	-16.4	-23.3	-32.1	-33.9	---	---	---	---	---	-35.6
VEW 27	-23.9	-29.5	-16.3	-23.3	-32.9	-33.7	---	---	---	---	---	-35.4
deep wells												
AOC-65-Intake-DW	-33.8	-33.7	-32.3	-33.2	-35.2	-35.6	---	-44.1	-42.8	-43.9	-39.5	-38.3
VEW 13	-29.6	-29.5	-28.3	-29.1	-31.1	-31.8	---	-39.8	-38.7	-38.6	-34.9	-34.3
VEW 14	-29.4	-29.4	-28.3	-29.0	-31.0	-31.4	---	-39.1	-38.9	-40.3	-34.6	-34.6
VEW 17	-28.9	-28.7	-27.5	-28.5	-30.3	-30.6	---	-38.4	-38.0	-37.1	-33.4	-32.2
VEW 22	-28.7	-28.7	-27.5	-28.3	-30.3	-30.6	---	-38.4	-36.3	-37.6	-34.1	-34.3
VEW 24	-28.5	-28.7	-27.5	-27.9	-30.0	-30.6	---	-39.7	-36.3	-37.5	-34.6	-33.7
VEW 26	-28.4	-28.5	-27.5	-28.1	-30.2	-30.5	---	-38.3	-37.6	-37.8	-32.6	-32.6

Notes: - The system was non-operational during November, 2009 due to abnormally high groundwater levels
- Following the completion of VEW purging efforts, the AOC-65 shallow blower malfunctioned, requiring a rebuild of the blower

Table 3.1 (cont.) Extraction Pressure Results from Monthly System Checks at Building 90 and Western AOC-65 SVE Systems (in. H_2O)

Building 90	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31
exterior	5/11/2010	6/15/2010	7/6/2010	8/10/2010	9/7/2010	10/4/2010	11/9/2010
Building 90 Intake-EX	-44.1	-41.3	-41.6	-38.4	---	---	-44.1
VEW 15	-44.1	-40.6	-41.1	-38.2	---	---	-41.6
VEW 16	-44.1	-40.5	-40.7	-37.9	---	---	-43.3
VEW 18	-44.1	-40.9	-41.1	-38.2	---	---	-44.1
VEW 28A	-44.1	-40.9	-41.3	-37.6	---	---	-44.1
VEW 28B	-44.1	-40.7	-41.2	-37.6	---	---	-44.1
interior							
Building 90 Intake-SS	-35.4	-34.4	-31.5	-42.1	---	---	-38.6
AOC-65	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31
shallow wells	5/11/2010	6/15/2010	7/6/2010	8/10/2010	9/7/2010	10/4/2010	11/9/2010
AOC-65-Intake-SW	-35.1	-34.6	-33.1	-32.9	---	---	-37.1
VEW 19	-35.2	-35.3	-33.2	-32.8	---	---	-36.1
VEW 20	-35.3	-35.6	-33.1	-32.8	---	---	-35.7
VEW 21	-35.2	-35.2	-33.2	-32.9	---	---	-35.4
VEW 23	-35.3	-34.6	-33.3	-32.8	---	---	-35.7
VEW 25	-35.0	-34.5	-33.2	-32.9	---	---	-35.6
VEW 27	-35.2	-34.4	-33.3	-33.0	---	---	-35.9
deep wells							
AOC-65-Intake-DW	-34.8	-31.8	-33.1	-32.2	---	---	-35.9
VEW 13	-30.5	-28.3	-28.7	-28.3	---	---	-32.1
VEW 14	-30.3	-27.9	-28.4	-28.1	---	---	-31.8
VEW 17	-29.8	-27.5	-27.5	-27.2	---	---	-31.5
VEW 22	-29.5	-26.8	-27.1	-27.0	---	---	-31.1
VEW 24	-29.5	-26.8	-27.1	-27.1	---	---	-30.6
VEW 26	-29.4	-27.2	-26.9	-26.9	---	---	-30.6

Notes: - The system was turned off for vapor intrusion and pulse testing from August 23 through October 15, 2010

Table 3.2 SVE System Air Flow Rates (fpm)

Building 90	Baseline	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
exterior	4/17/2008	May-08	June-08	7/15/2008	8/5/2008	9/23/2009	10/7/2008	11/11/2008	12/11/2008	1/9/2009	2/4/2009	3/3/2009	4/7/2009
Building 90 Intake-EX	1700			4850	5900	3375	3853	6662	5049	3337	2314	3675	5182
VEW 15	250			610	460	580	606	590	540	985	482	488	466
VEW 16	8250			1780	2200	3222	1242	3128	5589	2022	2272	963	1466
VEW 18	575			1112	900	1388	878	1046	2089	2837	602	329	2516
VEW 28A	825			2120	3900	4080	1520	3408	4398	1987	2203	1378	3335
VEW 28B	235			625	470	701	550	522	471	637	619	682	546
interior													
Building 90 Intake-SS	2200			10260	>15,000	13938	8612	6080	3531	6763	7904	13128	7581
AOC-65	Baseline	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
shallow wells	4/17/2008	May-08	June-08	7/15/2008	8/5/2008	9/23/2009	10/7/2008	11/11/2008	12/11/2008	1/9/2009	2/4/2009	3/3/2009	4/7/2009
AOC-65-Intake-SW	1035			720	600	140	1098	1013	2532	4130	2452	3290	1980
VEW 19	505			634	575	280	942	10181	4411	614	1035	1254	1138
VEW 20	725			533	575	90	776	550	1587	375	404	365	449
VEW 21	665			480	530	130	738	510	574	425	316	454	534
VEW 23	670			543	600	111	736	963	743	1119	1149	865	649
VEW 25	725			534	560	160	598	588	2364	2308	942	1528	1501
VEW 27	695			526	590	130	971	638	787	519	384	510	449
deep wells													
AOC-65-Intake-DW	5250			7050	9500	4696	5730	5390	4884	8954	4730	5842	5360
VEW 13	2100			3350	4100	3780	2677	2188	8867	14793	7453	4468	1819
VEW 14	490			400	405	678	479	530	697	1010	594	587	632
VEW 17	1470			2290	2500	2088	1345	1362	4896	1902	1322	1404	1368
VEW 22	1360			1935	2250	1624	1208	1240	4374	2373	1036	1114	1428
VEW 24	465			395	410	568	644	468	709	606	621	585	694
VEW 26	1225			1420	1700	1488	1057	998	5101	10329	6619	7474	5976

Notes: - The system was non-operational during November, 2009 due to abnormally high groundwater levels
- Following the completion of VEW purging efforts, the AOC-65 shallow blower malfunctioned, requiring a rebuild of the blower

Table 3.2 (cont.) SVE System Air Flow Rates (fpm)

Building 90	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24
exterior	5/7/2009	6/4/2009	7/9/2009	8/12/2009	9/11/2009	10/8/2009	Nov., 2009	12/11/2009	1/5/2010	2/9/2010	3/19/2010	4/8/2010
Building 90 Intake-EX	5618	3625	4984	5453	5554	6074	---	2879	1041	1108	1510	1507
VEW 15	2048	554	514	392	456	443	---	514	4276	710	585	775
VEW 16	2028	1168	1624	1246	1378	1856	---	1093	2214	925	1389	1404
VEW 18	971	556	800	1062	861	824	---	1011	1083	610	617	710
VEW 28A	2472	1708	2336	3069	2590	3218	---	2411	1498	637	690	744
VEW 28B	673	501	6042	1102	423	517	---	643	593	2021	663	1507
interior												
Building 90 Intake-SS	12176	9968	>15,000	>15,000	12603	3611	---	---	3195	2501	9544	3441
AOC-65	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24
shallow wells	5/7/2009	6/4/2009	7/9/2009	8/12/2009	9/11/2009	10/8/2009	Nov., 2009	12/11/2009	1/5/2010	2/9/2010	3/19/2010	4/8/2010
AOC-65-Intake-SW	2543	2317	2224	2504	726	479	---	---	---	---	---	555
VEW 19	681	881	605	1062	596	556	---	---	---	---	---	780
VEW 20	511	486	521	430	504	513	---	---	---	---	---	807
VEW 21	384	582	470	504	535	306	---	---	---	---	---	453
VEW 23	456	568	536	466	461	641	---	---	---	---	---	436
VEW 25	1347	2269	2719	1974	498	310	---	---	---	---	---	482
VEW 27	490	603	538	478	450	283	---	---	---	---	---	473
deep wells												
AOC-65-Intake-DW	6731	8159	6806	7324	5140	6440	---	2234	4682	2284	4041	4347
VEW 13	2880	4267	3167	3543	1963	2860	---	9073	4981	5231	4824	5618
VEW 14	534	431	654	620	486	476	---	2053	698	1403	10540	364
VEW 17	1839	2386	2465	2353	1201	1842	---	3199	4852	1821	1158	1206
VEW 22	1281	1508	1687	1410	822	1272	---	3062	462	1312	8808	4140
VEW 24	536	848	623	513	509	429	---	1424	2988	636	628	335
VEW 26	1136	1849	928	996	627	1356	---	905	645	754	4570	4347

Notes: - The system was non-operational during November, 2009 due to abnormally high groundwater levels
- Following the completion of VEW purging efforts, the AOC-65 shallow blower malfunctioned, requiring a rebuild of the blower

Table 3.2 (cont.) SVE System Air Flow Rates (fpm)

Building 90	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31
exterior	5/11/2010	6/15/2010	7/6/2010	8/10/2010	9/7/2010	10/4/2010	11/9/2010
Building 90 Intake-EX	2,215	2,278	3,556	2,030	---	---	4,480
VEW 15	615	886	733	530	---	---	614
VEW 16	2,314	2,555	3,830	2,069	---	---	2,806
VEW 18	771	888	1,547	1,404	---	---	751
VEW 28A	664	741	590	556	---	---	556
VEW 28B	754	723	631	1,206	---	---	2,032
interior							
Building 90 Intake-SS	12,904	10,426	14,864	>15,000	---	---	7,540
AOC-65	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31
shallow wells	5/11/2010	6/15/2010	7/6/2010	8/10/2010	9/7/2010	10/4/2010	11/9/2010
AOC-65-Intake-SW	618	772	1,321	1,438	---	---	623
VEW 19	580	815	614	590	---	---	863
VEW 20	884	717	545	543	---	---	1,312
VEW 21	544	691	460	1,714	---	---	1,860
VEW 23	1,910	641	909	446	---	---	836
VEW 25	573	699	629	451	---	---	2,391
VEW 27	600	711	632	1,549	---	---	533
deep wells							
AOC-65-Intake-DW	6,736	7,527	8,943	7,051	---	---	5,234
VEW 13	2,491	4,310	4,289	3,704	---	---	2,789
VEW 14	541	466	401	370	---	---	637
VEW 17	1,703	2,389	2,775	2,195	---	---	1,385
VEW 22	1,022	1,818	1,803	1,398	---	---	1,161
VEW 24	440	455	332	365	---	---	582
VEW 26	1,006	1,571	1,276	1,065	---	---	1,941

Note: - The system was turned off for vapor intrusion and pulse testing from August 23 through October 15, 2010

Table 3.3 System Intake and Exhaust Field Parameter Summary

	WESTERN AOC-65 SVE SYSTEM																			
	AOC65-INTAKE-SW							AOC65-INTAKE-DW							AOC65-EXHAUST					
Date	Vacuum Pump Inlet (in. H2O)	Vac. @ Manifold (in.H_2O)	Flow (fpm)	Temp. (deg. F)	TVH (ppm)	O2 (%)	C02 (%)	Vacuum Pump Inlet (in. H2O)	Vac. @ Manifold (in.H_2O)	Flow (fpm)	Temp. (deg. F)	TVH (ppm)	O2 (%)	C02 (%)	Vac. @ Manifold (in.H_2O)	Flow (fpm)	Temp. (deg. F)	TVH (ppm)	O2 (%)	C02 (%)
4/17/2008	33	-34/-19.5*	1,035	71.4	50.0	18.5	2.0	40	-23.0	5,250	68.3	5.4	15.5	3.5	---	---	---	---	---	---
7/15/2008	33	-32.2	720	85.8	0.0	20.0	0.8	40	-30.6	7,050	86.1	0.0	16.5	3.75	2.5	12,000	152.9	0.0	17.0	3.75
8/5/2008	34	-32.9	600	89.5	0.0	19.5	0.8	40	-30.3	9,500	92.2	0.0	20.0	3.5	2.4	13,800	161.2	0.0	17.0	3.5
9/23/2009	10	-10.0	140	87.9	2.8	20.75	0.8	42	-29.2	4,696	86.8	0.0	18.0	3.0	---	>15000	141.2	0.0	20.0	2.5
10/7/2008	40	-37.2	1,098	74.1	0.0	20.5	0.9	42	-31.9	5,730	80.0	0.0	18.0	3.5	2.3	7,802	139.4	0.0	18.0	3.5
11/11/2008	30	-30.2	1,013	71.5	0.0	21.0	0.3	42	-32.9	5,390	71.7	0.0	18.9	3.25	3.5	11,161	135.3	0.0	19.0	3.0
12/11/2008	35	-32.7	2,532	60.2	0.0	21.0	0.25	50	-38.7	4,884	61.5	0.0	19.0	2.0	3.1	5,231	121.8	0.0	20.0	2.0
1/9/2009	32	-24.3	4,130	69.4	0.0	21.0	0.00	49	-39.1	8,954	69.2	0.0	18.0	2.5	3.5	10,227	135.1	0.0	18.5	2.25
2/4/2009	32	-24.2	2,452	62.5	1.9	21.0	0.00	46	-36.4	4,730	63.1	3.8	20.5	2.5	4.2	10,850	128.2	4.0	20.0	2.0
3/3/2009	24	-22.9	3,290	71.7	2.9	21.0	0.00	24	-37.8	5,842	68.5	3.2	19.25	2.5	3.5	10,571	127.9	3.0	19.9	1.8
4/7/2009	26	-24.3	1,980	70.3	3.1	21.0	0.25	48	-36.8	5,360	69.0	4.3	19.50	2.5	3.9	12,102	138.0	6.7	19.8	2.0
5/7/2009	26	-24.8	2,543	76.6	0.3	20.5	0.25	42	-33.8	6,731	77.5	0.0	19.50	2.5	3.5	11,937	136.5	0.0	19.0	2.0
6/4/2009	32	-32.1	2,317	80.4	0.0	20.0	0.25	44	-33.7	8,519	85.2	0.0	18.00	2.5	3.7	12,700	146.2	2.4	18.5	2.0
7/9/2009	0	-16.9	2,224	82.2	---	20.4	0.10	85	-32.2	6,806	87.6	---	18.20	2.5	4.0	12,106	143.2	---	18.8	2.1
8/12/2009	25	-24.1	2,504	91.3	---	---	---	44	-33.2	7,324	90.6	---	---	---	3.6	11,692	155.4	---	---	---
9/11/2009	34	-33.3	726	75.3	0.0	---	---	45	-35.2	5,140	76.4	0.0	---	---	2.6	8,019	136.9	0.0	---	---
10/8/2009	35	-34.5	479	79.5	539.0	---	---	45	-35.6	6,440	79.3	0.0	---	---	2.7	9,150	131.8	0.0	---	---
Nov., 2009	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
12/11/2009	---	---	---	---	---	---	---	55	-44.1	9,073	46.2	---	---	---	86.0	1,788	86.1	---	---	---
1/5/2010	---	---	---	---	---	---	---	57	-42.8	4,682	50.8	16.2	---	---	1.9	5,833	102.9	13.9	---	---
2/9/2010	---	---	---	---	---	---	---	65	-43.9	2,284	44.0	28.2	---	---	1.5	2,078	88.3	36.6	---	---
3/19/2010	---	---	---	---	---	---	---	50	-39.5	4,041	59.7	2.8	---	---	1.9	2,702	99.4	1.4	---	---
4/8/2010	45	-34.5	555	67.8	6.6	---	---	50	-38.3	4,347	66.5	0.0	---	---	2.4	1,044	121.2	0.0	---	---
5/11/2010	38	-35.1	618	79.5	7.2	---	---	44	-34.8	6,736	75.3	0.2	---	---	2.2	5,149	121.2	0.0	---	---
6/15/2010	36	-34.6	772	89.5	14.8	---	---	40	-31.8	7,527	83.8	0.0	---	---	2.0	10,800	144.4	0.0	---	---
7/6/2010	33	-33.1	1321	94.2	26.6	---	---	42	-33.1	8,943	87.9	2.7	---	---	2.4	7,942	145.2	3.1	---	---
8/10/2010	34	-32.9	1438	99.3	0.0	---	---	43	-32.2	7,051	89.4	0.0	---	---	2.4	8,188	154.9	0.0	---	---
9/7/2010	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
10/4/2010	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
11/9/2010	38	-37.1	623	68.5	6.7	---	---	45	-35.9	5,234	71.2	2.5	---	---	2.0	6,327	126.1	2.7	---	---

Table 3.3 (cont.) System Intake and Exhaust Field Parameter Summary

	EASTERN AOC-65 SVE SYSTEM																		
	B90-INTAKE-EX							B90-INTAKE-SS							B90-EXHAUST					
Date	Vacuum Pump Inlet (in. H2O)	Vac. @ Manifold (in.H_2O)	Flow (fpm)	Temp. (deg. F)	TVH (ppm)	O2 (%)	C02 (%)	Vacuum Pump Inlet (in. H2O)	Vac. @ Manifold (in.H_2O)	Flow (fpm)	Temp. (deg. F)	TVH (ppm)	O2 (%)	C02 (%)	Vac. @ Manifold (in.H_2O)	Flow (fpm)	Temp. (deg. F)	TVH (ppm)	O2 (%)	C02 (%)
4/17/2008	27	-18.4	1,700	66.5	3.1	14.0	2.5	55	-36.0	2,200	66.1	22.3	19.5	0.0	---	---	---	---	---	---
7/15/2008	40	-35.7	4,850	85.8	0.0	19.0	2.5	60	-36.5	10,260	84.3	0.0	20.5	0.0	12.6	>15000	149.5	0.0	20.0	1.5
8/5/2008	40	-33.4	5,900	90.8	0.0	18.5	2.5	60	-37.8	>15,000	95.1	0.0	20.0	0.0	12.0	>15000	156.4	0.0	20.0	1.5
9/23/2009	40	-32.4	3,375	89.0	0.0	19.0	2.5	55	-32.8	13,938	86.8	0.0	21.0	0.25	---	>15000	150.7	0.0	20.0	1.3
10/7/2008	44	-35.7	3,853	76.4	0.0	18.8	2.5	60	-38.0	8,612	76.2	0.0	21.0	0.25	13.0	>15000	129.9	0.0	21.0	1.8
11/11/2008	44	-35.1	6,662	81.4	0.0	18.25	2.5	68	-43.9	6,080	84.9	0.0	20.0	0.25	0.1	9,592	108.8	0.0	19.0	1.5
12/11/2008	46	-35.6	5,049	64.0	0.0	19.25	2.0	74	-44.0	3,531	65.6	0.0	20.75	0.25	0.0	5,576	78.2	0.0	19.0	1.25
1/9/2009	40	-37.1	3,337	66.5	0.0	19.00	2.25	70	-44.3	6,763	72.4	0.0	21.00	0.00	11.3	2,322	109.3	0.0	20.0	1.25
2/4/2009	46	-33.7	2,314	53.4	4.0	20.50	1.25	78	-44.1	7,904	65.4	5.1	20.50	0.05	11.8	8,236	126.6	3.9	21.0	0.75
3/3/2009	44	-37.4	3,675	63.4	3.9	19.75	2.00	78	-44.1	13,128	64.3	6.2	21.00	0.25	10.8	14,454	133.8	5.1	20.0	1.5
4/7/2009	46	-36.7	5,182	70.6	5.3	19.50	2.1	72	-44.3	7,581	65.6	4.3	21.0	0.25	10.9	13,753	140.1	0.6	19.75	1.25
5/7/2009	44	-35.6	5,618	80.2	1.2	18.50	2.0	78	-44.1	12,176	81.1	0.7	19.0	0.10	0.1	4,093	111.9	4.0	19.0	2.0
6/4/2009	44	-35.6	3,625	76.9	2.6	19.00	2.0	76	-44.1	9,968	79.3	5.9	20.0	0.25	0.0	7,571	108.1	5.2	19.50	1.5
7/9/2009	39	-33.4	4,984	83.6	---	18.60	2.1	72	-44.1	>15,000	92.2	---	20.6	0.00	10.9	>15,000	141.3	---	19.30	2.1
8/12/2009	38	-30.6	5,453	87.6	---	---	---	72	-44.1	>15,000	90.8	---	---	---	12.3	14,138	146.4	---	---	---
9/11/2009	38	-32.9	5,554	77.1	0.0	---	---	80	-44.1	>15,000	84.0	0.0	---	---	10.7	12,603	140.1	0.0	---	---
10/8/2009	38	-33.1	6,074	81.3	0.0	---	---	78	-44.1	3,611	81.1	0.0	---	---	10.7	10,685	147.3	0.0	---	---
Nov., 2009	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
12/11/2009	44	-33.7	2,879	48.7	---	---	---	78	---	---	---	---	---	---	10.6	6,334	112.4	---	---	---
1/5/2010	47	-39.1	1,041	50.1	5.3	---	---	80	-44.4	3,195	51.4	8.7	---	---	10.2	8,917	118.2	7.0	---	---
2/9/2010	50	-44.3	1,108	44.7	6.4	---	---	80	-44.3	2,501	47.8	5.4	---	---	8.2	9,085	116.7	6.6	---	---
3/19/2010	52	44.1	1,510	61.3	0.0	---	---	65	-42.3	9,544	67.8	0.0	---	---	10.2	10,913	126.1	0.0	---	---
4/8/2010	58	-43.6	1,507	60.9	0.0	---	---	60	-37.2	3,441	60.2	0.0	---	---	10.2	8,851	117.8	0.0	---	---
5/11/2010	60	-44.1	2,215	78.2	0.0	---	---	56	-35.4	12,904	80.7	0.0	---	---	9.6	1,446	131.8	0.0	---	---
6/15/2010	46	-41.3	2,278	83.1	0.0	---	---	52	-34.4	10,426	83.6	0.0	---	---	1.4	>15,000	148.2	0.0	---	---
7/6/2010	50	-41.6	3,556	92.4	0.0	---	---	58	-31.5	14,864	90.3	1.3	---	---	10.0	14,946	154.2	0.0	---	---
8/10/2010	50	-38.4	2,030	89.7	0.0	---	---	60	-42.1	>15,000	90.3	0.0	---	---	7.0	9,433	104.1	0.0	---	---
9/7/2010	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
10/4/2010	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
11/9/2010	50	-44.1	4,480	69.4	1.9	---	---	60	-38.6	7,540	68.9	1.1	---	---	8.9	5,478	135.6	1.3	---	---

* first reading taken when deep wells had tripped off, 2nd reading taken when deep wells were turned back on

Notes: - The system was non-operational in November 2009 due to abnormally high groundwater levels

- Following the completion of VEW purging efforts, the AOC-65 shallow blower failed, requiring a rebuild of the blower.
- The system was shut down between August 23, and October 18, 2010 for vapor intrusion sampling and pulse testing.

3.2 SOIL GAS SCREENING RESULTS

Soil gas concentrations in each of the VEW monitoring points were measured using field instruments during the baseline and monthly monitoring events. Soil gas points were screened for oxygen, carbon dioxide, and TVH using field instruments. The PID used for TVH detection is calibrated using isobutylene, therefore PCE and TCE reading from the PID instrument may provide biased high results. However, because TCE makes up such a small fraction of the VOC content, it's unlikely that TCE contributes much to the PID derived values.

The TVH field screening results indicate a slight reduction in VOC concentrations in Western AOC-65 (deep and shallow) VEWs and blower intakes and a moderate reduction in VOC concentrations in the Building 90 sub-slab intake. TVH screening results at Building 90 exterior VEWs and blower intake did not indicate a significant change in concentrations through the O&M period. During the O&M period, the PID appeared to have technical difficulties resulting in non-detect TVH concentrations. Mineralization on the lamp window from moisture in soil vapors is one possible explanation for PID malfunction. TVH readings are screening data collected to assess the operational performance of each individual extraction well.

O_2 and CO_2 levels were obtained as part of the monthly monitoring activities at both Eastern and Western AOC-65 systems. These data are used to assess the potential degradation conditions that may exist within the underlying formation. Oxygen levels remained relatively constant for most VEWs in both systems throughout the O&M period with only minor deviations from atmospheric O_2 (20-21%). Average percent O_2 measured during the O&M period were 20.57, 19.09, 20.32, and 18.37% for the Building 90 sub-slab, Building 90 exterior (Eastern System), Western shallow wells, and Western deep wells, respectively. Carbon dioxide levels were generally low, averaging 1.91, 0.15, 0.56, and 2.88% during the O&M period for the Building 90 sub-slab, Building 90 exterior, Western shallow wells, and Western deep wells, respectively.

Monitoring for O_2 and CO_2 was dropped after no insight to the potential degradation conditions within the underlying formation could be reasonably deduced from the data collected for these parameters. Oxygen and CO_2 field screening results are presented in Table 3.4 and Table 3.5, respectively.

Table 3.4 O_2 Field Screening Summary (% vol.)

Building 90	Baseline	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15
exterior	4/17/2008	May-08	June-08	7/15/2008	8/5/2008	9/23/2009	10/7/2008	11/11/2008	12/11/2008	1/9/2009	2/4/2009	3/3/2009	4/7/2009	5/7/2009	6/4/2009	7/9/2009
Building 90 Intake-EX	14.0	---	---	19.0	18.5	19.0	18.8	18.25	19.25	19.0	20.50	19.75	19.5	18.5	19.0	18.6
VEW 15	13.5	---	---	20.0	20.5	20.5	19.5	19.5	20.5	21.0	21.0	21.0	20.75	19.0	20.0	20.3
VEW 16	12.5	---	---	19.0	19.0	19.5	19.5	19.5	20.5	19.5	21.0	20.75	20.75	19.25	19.0	19.4
VEW 18	18.0	---	---	17.0	17.5	18.0	18.5	18.5	*	20.5	20.5	*	20.0	18.8	19.0	18.4
VEW 28A	19.5	---	---	18.5	19.0	19.0	18.25	18.0	*	19.0	21.0	19.75	19.0	18.0	18.0	17.9
VEW 28B	12.5	---	---	20.0	20.0	20.0	19.0	19.0	*	18.5	21.0	19.75	20.0	18.5	18.8	18.9
interior																
Building 90 Intake-SS	19.5	---	---	20.5	20.0	21.0	21.0	20.0	20.75	21.0	20.5	21.0	21.0	19.0	20.0	20.6
AOC-65	Baseline	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 12	Month 12	Month 12
shallow wells	4/17/2008	May-08	June-08	7/15/2008	8/5/2008	9/23/2009	10/7/2008	11/11/2008	12/11/2008	1/9/2009	2/4/2009	3/3/2009	4/7/2009	5/7/2009	6/4/2009	7/9/2009
AOC-65-Intake-SW	18.5	---	---	20.0	19.5	20.75	20.5	21.0	21.0	21.0	21.0	21.0	21.0	20.0	20.0	20.4
VEW 19	18.0	---	---	20.5	19.5	20.75	21.0	21.0	20.0	20.5	21.0	20.7	19.75	20.0	20.0	20.2
VEW 20	20.0	---	---	20.5	20.0	21.0	21.0	21.0	21.0	21.0	21.0	20.7	21.0	20.0	20.0	20.4
VEW 21	20.0	---	---	20.0	20.0	20.75	20.5	21.0	20.0	20.0	21.0	20.5	21.0	20.0	20.0	20.2
VEW 23	20.0	---	---	20.5	20.0	21.0	21.0	21.0	20.5	20.0	21.0	20.6	20.75	19.75	19.75	20.10
VEW 25	18.5	---	---	20.0	20.0	21.0	21.0	21.0	20.5	21.0	21.0	20.2	20.9	20.0	20.0	20.5
VEW 27	15.5	---	---	18.5	18.5	20.0	19.5	21.0	19.8	19.5	20.5	20.1	20.0	19.0	19.0	18.6
deep wells																
AOC-65-Intake-DW	15.5	---	---	16.5	20.0	18.0	18.0	18.9	19.0	18.0	20.5	19.25	19.5	18.0	18.0	18.2
VEW 13	16.0	---	---	17.0	17.5	19.0	17.0	18.5	19.5	18.0	20.0	20.1	19.5	18.0	18.0	18.1
VEW 14	18.5	---	---	19.0	19.0	20.0	18.5	19.0	19.0	19.0	21.0	19.5	19.75	19.0	19.0	19.1
VEW 17	15.5	---	---	17.5	17.5	20.0	18.5	19.3	19.0	18.0	20.0	20.2	19.75	18.25	18.25	18.50
VEW 22	15.5	---	---	16.5	17.0	18.5	17.5	18.4	19.3	17.5	20.5	19.5	19.25	18.0	18.0	17.8
VEW 24	15.5	---	---	16.5	16.5	17.5	17.0	18.0	18.0	18.0	19.5	20.0	19.75	18.50	18.50	18.40
VEW 26	16.0	---	---	16.0	16.0	18.0	17.5	18.0	19.0	17.0	19.5	20.0	19.25	18.0	18.0	17.8

Note: * indicates unable to sample due to condensation in the line
Note: The system was non-operational from May 22 through July 15, 2008

Table 3.5 CO_2 Field Screening Summary (% vol.)

Building 90	Baseline	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15
exterior	4/17/2008	May-08	June-08	7/15/2008	8/5/2008	9/23/2009	10/7/2008	11/11/2008	12/11/2008	1/9/2009	2/4/2009	3/3/2009	4/7/2009	5/7/2009	6/4/2009	7/9/2009
Building 90 Intake-EX	2.5	---	---	2.5	2.5	2.5	2.5	2.5	2.0	2.25	1.25	2.0	2.1	2.0	2.0	2.0
VEW 15	1.25	---	---	1.5	0.8	0.75	2.0	1.5	1.2	1.5	1.0	1.2	0.8	1.50	1.25	1.25
VEW 16	3.25	---	---	2.5	2.25	2.0	2.5	2.0	2.0	2.0	1.25	1.5	1.3	1.50	1.25	1.25
VEW 18	2.0	---	---	3.8	3.75	3.25	3.25	3.0	*	2.5	2.5	*	2.1	2.0	2.0	2.0
VEW 28A	0.8	---	---	2.25	2.0	2.0	2.25	2.5	*	2.0	1.0	2.5	2.5	2.5	2.0	2.0
VEW 28B	0.0	---	---	1.0	1.0	1.0	1.5	1.25	*	1.50	0.75	1.75	1.8	2.0	1.5	1.5
interior																
Building 90 Intake-SS	0.0	---	---	0.0	0.0	0.25	0.25	0.25	0.25	0.0	0.05	0.25	0.25	0.10	0.25	0.25
AOC-65	Baseline	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15
shallow wells	4/17/2008	May-08	June-08	7/15/2008	8/5/2008	9/23/2009	10/7/2008	11/11/2008	12/11/2008	1/9/2009	2/4/2009	3/3/2009	4/7/2009	5/7/2009	6/4/2009	7/9/2009
AOC-65-Intake-SW	2.0	---	---	0.8	0.8	0.8	0.9	0.3	0.25	0.0	0.00	0.0	0.25	0.25	0.25	0.1
VEW 19	2.0	---	---	0.8	0.8	0.8	0.8	0.6	0.5	0.25	0.2	0.1	0.25	0.25	0.5	0.5
VEW 20	0.0	---	---	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.25	0.25	0.0
VEW 21	0.5	---	---	0.5	0.5	0.5	0.8	0.25	0.25	0.25	0.40	0.25	0.3	0.5	0.5	0.3
VEW 23	0.0	---	---	0.0	0.0	0.2	0.25	0.2	0.15	0.00	0.0	0.2	0.25	0.25	0.25	0.3
VEW 25	1.25	---	---	0.0	0.0	0.2	0.9	0.25	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0
VEW 27	4.0	---	---	3.5	2.5	2.0	2.1	1.75	1.0	1.0	1.0	0.9	1.1	1.25	1.5	2.1
deep wells																
AOC-65-Intake-DW	3.5	---	---	3.75	3.5	3.0	3.5	3.25	2.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5
VEW 13	3.5	---	---	3.75	3.25	3.0	3.5	3.5	1.75	2.5	2.25	2.2	2.5	2.5	2.5	2.7
VEW 14	0.75	---	---	0.75	1.5	1.0	2.25	2.2	2.0	1.5	2.5	1.7	2.0	2.0	2.0	1.7
VEW 17	3.5	---	---	3.5	3.25	3.0	3.25	3.0	2.5	2.5	2.5	2.0	2.1	2.25	2.0	2.4
VEW 22	4.0	---	---	3.75	3.5	3.25	3.8	3.5	2.25	3.0	2.5	2.3	2.5	2.5	2.5	2.7
VEW 24	3.0	---	---	3.75	3.75	4.0	4.0	3.75	3.5	3.0	2.5	1.9	2.0	2.5	2.1	2.6
VEW 26	3.25	---	---	4.0	4.25	3.5	4.0	3.75	3.0	3.5	3.5	3.0	3.25	3.0	3.0	3.1

Note: * indicates unable to sample due to condensation in the line
Note: The system was non-operational from May 22 through July 15, 2008

3.3 SOIL GAS ANALYTICAL RESULTS

3.3.1 Soil Vapor Summary

Soil vapor samples were collected for analytical testing during the twelve months of O&M at AOC-65. Samples were collected on April 17, 2008, November 11, 2008 and April 7, 2009. Emission samples results are included in Table 3.6. Soil vapor samples were collected in-line from AOC-65 VEWs, and emission samples were collected from the blower intake at each of the four vacuum blower systems. Results of SVE samples collected during the monitoring period indicated that tetrachloroethylene (PCE) emissions constituted over 98% of the total VOC emitted from the AOC-65 SVE system. Therefore, discussions regarding contaminant removal rates are associated with PCE concentrations, however, trichloroethene and *cis*-1,2-dichloroethene results are also included in Table 3.7.

Initial sample results (i.e., baseline) showed higher concentrations of VOC removed from the bedrock due to contaminant rebound during the SVE expansion efforts. During the SVE expansion efforts, the SVE system was not in operation for approximately 1 year (2007) which resulted in VOC accumulation in the underlying bedrock formation. PCE concentrations from subsequent semi-annual sampling events indicate decreasing concentrations at all VEWs and exhausts (blower intakes) after the first year of operation followed by a period of rebound at month 18, reduction at month 24, and rebound again at month 31. AOC-65 shallow VEWs showed the greatest fluctuations in PCE concentrations, most notably VEW-25, which had an initial concentration of 33,000 ppbv, only 47 ppbv after a year of system operation, followed by the greatest amount of rebound after the month 31 sampling event (6,200 ppbv). These fluctuations in concentrations are related to the system operations, specifically, how much time the system has been shut down throughout the year and/or how soon the sampling occurred after a prolonged system outage.

3.3.2 PCE Removal Rates and Quantities

PCE removal rates are calculated using flow data, vacuum pressures, data acquired from soil gas analyses, and system operational run-times. Included in Table 3.7 are the estimated removal rates, in pounds per year (lb/yr), calculated for each blower intake using the measured flow rate and vacuum pressure, and PCE concentrations from the semi-annual sampling events. All removal rates calculated are below the allowable levels specified by TCEQ PBR Number 71208 (Parsons, 2008a). Based on data collected from the emissions samples, the AOC-65 SVE system contaminant emissions were below PBR emission standards.

The sustainable removal rates for the AOC-65 systems estimated in Table 3.7 are low. These low removal rates may come from a variety of sources, including: long term operational down times, less available exposed screen intervals (due to high groundwater levels in the vadose zone), flow/vacuum data collection errors, uncertainty in system operational run-times, and slow volatilization rates within the bedrock formation. Western system PCE removal rates in shallow wells are estimated at 32.83 lb/yr during the first year and 2.34 lb/yr during the second year, and 3.75 lb/yr in the first six months of the third year of operations indicating diminishing returns. During the second year of operation, the Western system shallow well

blower was taken out of service for approximately five months for refurbishment, which detrimentally affects the overall efficiency of the system. Decreases in annualized removal rates are seen in each of the other systems as well. Lower removal rates may also be attributed to higher than normal groundwater elevations, most notably for systems with shallow VEWs. As water levels rise, VEW screens become submerged, thus reducing the available surface area from which soil vapors may be extracted.

Table 3.6 VOC Concentrations at AOC-65 VEWs and Exhaust

		Tetrachloroethene						Trichloroethene						*cis* -1,2-Dichloroethene					
Eastern AOC-65 SVE System	**Building 90**	Baseline	Month 7	Month 12	Month 18	Month 24	Month 31	Baseline	Month 7	Month 12	Month 18	Month 24	Month 31	Baseline	Month 7	Month 12	Month 18	Month 24	Month 31
	exterior	4/17/08	11/11/08	4/7/09	10/8/09	4/8/10	11/9/10	4/17/08	11/11/08	4/7/09	10/8/09	4/8/10	11/9/10	4/17/08	11/11/08	4/7/09	10/8/09	4/8/10	11/9/10
	Building 90 Intake-EX	690	100	48	53	8.9 B	31 B	44	36	18	17	1.1	8.3 B	ND	ND	ND	ND	ND	ND
	VEW 28A	380	200	89	68	5.7 B	170 B	62	69	28	15	1	2.5 B	ND	ND	ND	ND	ND	0.96 F
	VEW 28B	400	82	39	50	61 B	9.6 B	26	30	12	ND	10	51 B	ND	ND	ND	ND	ND	ND
	interior																		
	Building 90 Intake-SS	11,000	ND	320	96	120 B	210 B	47	ND	ND	ND	ND	1.1 B	37	ND	ND	ND	ND	0.73 F
Western AOC-65 SVE System	**AOC-65**	Baseline	Month 7	Month 12	Month 18	Month 24	Month 31	Baseline	Month 7	Month 12	Month 18	Month 24	Month 31	Baseline	Month 7	Month 12	Month 18	Month 24	Month 31
	shallow wells	4/17/08	11/11/08	4/7/09	10/8/09	4/8/10	11/9/10	4/17/08	11/11/08	4/7/09	10/8/09	4/8/10	11/9/10	4/17/08	11/11/08	4/7/09	10/8/09	4/8/10	11/9/10
	AOC-65-Intake-SW	15,000	600	190	1,700	96	1,900	270	16	ND	37	15	56	280	14	ND	52	44	60
	VEW 19	NS	NS	NS	NS	NS	1,800	NS	NS	NS	NS	NS	80	NS	NS	NS	NS	NS	100
	VEW 20	180	ND	24	100	15 B	210	10	23	31	20	78 B	28	ND	ND	16	16	50	19
	VEW 21	420	68	22	240	6.7 B	12	18	ND	ND	ND	6.9 B	5	ND	ND	ND	ND	0.85	0.87 F
	VEW 23	1,200	18	22	170	77 B	73	ND	ND	ND	ND	11	9.4	ND	ND	ND	ND	4.6	3
	VEW 25	33,000	500	47	550	1,500 B	6,200	330	11	ND	11	37	150	110	ND	ND	ND	21	100
	VEW 27	35,000	3,100	1,800	4,200	5,700 B	2,400	140	19	14	28	42	20	ND	12	ND	27	28	11
	deep wells																		
	AOC-65-Intake-DW	1,500	60	58	170	51 B	69 B	60	ND	ND	ND	9.1 B	11 B	ND	ND	ND	ND	1.1	0.45 F
	VEW 17	NS	NS	NS	NS	NS	78 B	NS	NS	NS	NS	NS	13 B	NS	NS	NS	NS	NS	0.50 F
	VEW 22	620	36	29	48	15 B	28 B	18	ND	ND	ND	3.1 B	4.0 B	ND	ND	ND	ND	ND	ND
	VEW 24	3,000	84	18	66	NS	NS	150	14	ND	16	NS	NS	14	ND	ND	ND	NS	NS
	VEW 26	1,900	74	80	130	82 B	100 B	180	24	31	29	36 B	31 B	15	ND	ND	ND	3.4	2.5

* all concentrations are reported in ppbv
ND = concentrations were not detected between the MDL and RL
NS = VEW was not sampled during the semi-annual event
B = denotes contaminants identified in the laboratory blank
F = concentrations were detected above the MDL but below the RL

Table 3.7 Estimated PCE Removal Rates and Mass for VEWs and Blowers

		Calculated Annualized Removal Rates per semi-annual event (lb/yr)					Average Annualized Removal Rate (lb/yr)			Mass Removed (lbs)*		
	exterior	11/11/08	04/07/09	10/08/09	04/08/10	11/09/10	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3**
Eastern AOC-65 System	Building 90 Intake-EX	5.48	2.83	1.71	1.36	0.83	4.16	1.41	0.83	3.47	1.08	0.27
	interior											
	Building 90 Intake-SS	146.22	14.93	8.53	2.32	6.06	80.58	6.52	6.06	67.28	6.52	2.02
Western AOC-65 System	*shallow wells*											
	AOC-65-Intake-SW	48.15	2.96	3.56	2.61	3.75	32.83	2.48	3.75	27.42	1.75	1.25
	deep wells											
	AOC-65-Intake-DW	24.60	1.91	4.25	3.98	1.77	17.02	3.28	1.77	14.21	2.72	0.59
	Total lbs removed									112.38	12.07	4.13
	Total gal removed									8.30	0.89	0.30

* Mass removed is calculated from average yearly removal rate and system operational time.

**Year 3 mass removed is based on the calculated removal rate from the 11-9-10 semi-annual event.

Activities prior to baseline event removed approximately 200 lb (14.77 gal) PCE

3.3.3 Air Emissions Summary

The total mass of contaminants removed by the SVE system during the O&M period was estimated using the average removal rates from the intakes at each blower (see Table 3.7). The annualized mass removal rate by the AOC-65 SVE system during the O&M period is estimated to be 134.59 lb/year (~10 gallon/yr) for the first year and 13.69 lb/yr (~1 gallon/yr) for the second year, and 12.40 lb/yr (0.9 gallon/yr) during the first half of the third year, which are well below the permitted limit of 0.268 lb/hr or 2,347.68 lb/year.

3.4 VACUUM CONNECTIVITY TEST RESULTS

Results of the vacuum connectivity test for the Building 90 sub-slab blower were entered into a 3-D modeling software package, RockWorks-version 2006, to generate a subsurface model of connectivity and thus establish areas (both lateral and vertical extent) within the bedrock that show a connection to the Sub-slab system. Figure 3.1 shows the lateral extent of modeled connectivity at AOC-65. Figure 3.2 shows modeled vacuum pressures in the subsurface. The model indicates a large, well-connected area near VMP-02 and VEW-28A approximately 80 to 120 feet bgs. Although no data were collected from the VEWs inside Building 90, this area should indicate negative pressures because the VEWs in Building 90 are directly connected to the sub-slab blower. VEWs that show a connection to the Sub-slab system indicate potential contaminant transfer pathways.

3.5 PULSE TESTING RESULTS

Results of the pulse Initial PID readings collected at the sample port on the VEW-17 manifold indicated VOC concentrations of approximately 85 ppm. During the six-month period following the semi-annual sampling event in April, 2010, the VOC concentrations at VEW-27 ranged between 2.0 and 27.3 ppm, indicating a substantial increase. The AOC-65 shallow blower was turned on, and VOC concentrations dropped precipitously to 0.0 ppm. The blower was allowed to run for thirty minutes and was again shut off. Following the shutdown, VOC concentration began to rebound within a minute, and was nearly back to the original concentration an hour later.

CO_2 concentrations may be considered an analog for VOC concentrations in that they also exhibit rebound and the CO_2 meter has the ability to continuously log data from a sample point. CO_2 concentrations were logged at the two VEWs and blower intakes. The CO_2 meter was initially installed at VEW-17 (which connected to the AOC-65 Deep Well blower) to log CO_2 concentrations while the system was turned on and off over a 21-hour period (figure3.3). Then, the CO_2 meter was installed at VEW-27 (which is connected to the AOC-65 Shallow Well blower), and allowed to run for approximately two hours (figure 3.4). Similarly, the CO_2 meter was installed on the blower intakes for the deep and shallow AOC-65 SVE systems (figures 3.5, and 3.6, respectively).

Figure 3.1 AOC-65 Lateral Connectivity Map

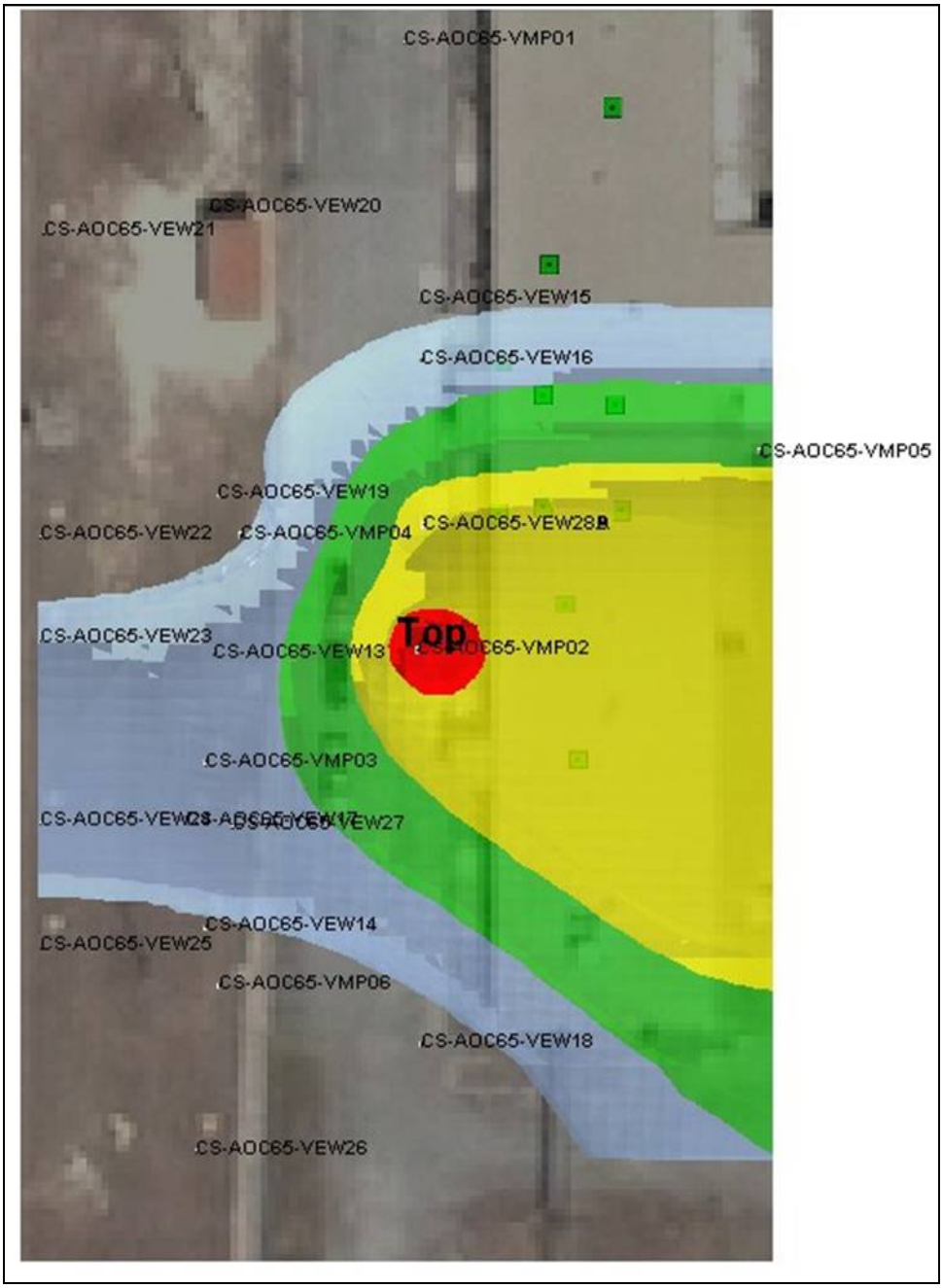


Figure 3.2 AOC-65 Connectivity Model

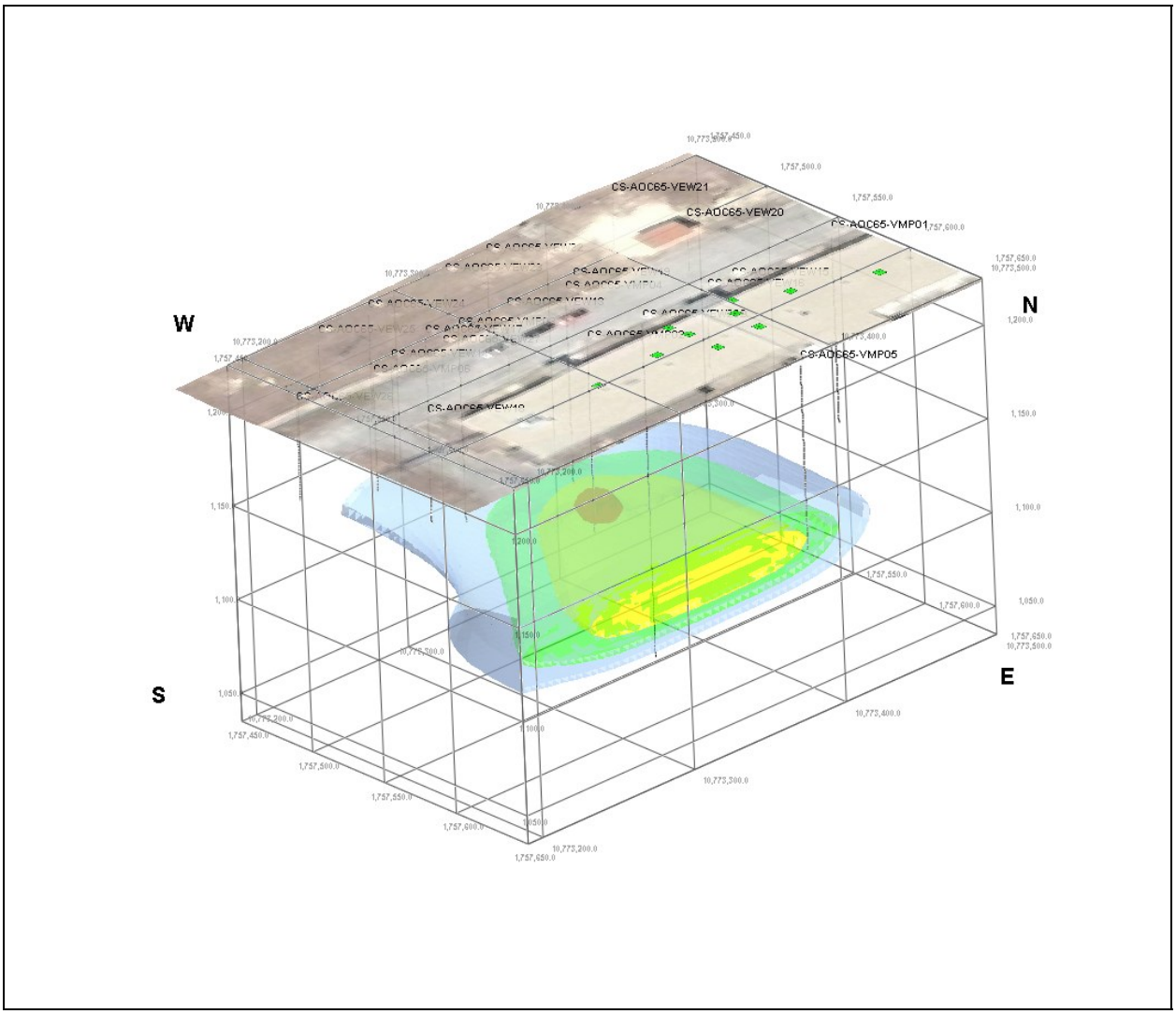


Figure 3.3 VEW-17 Pulse Testing

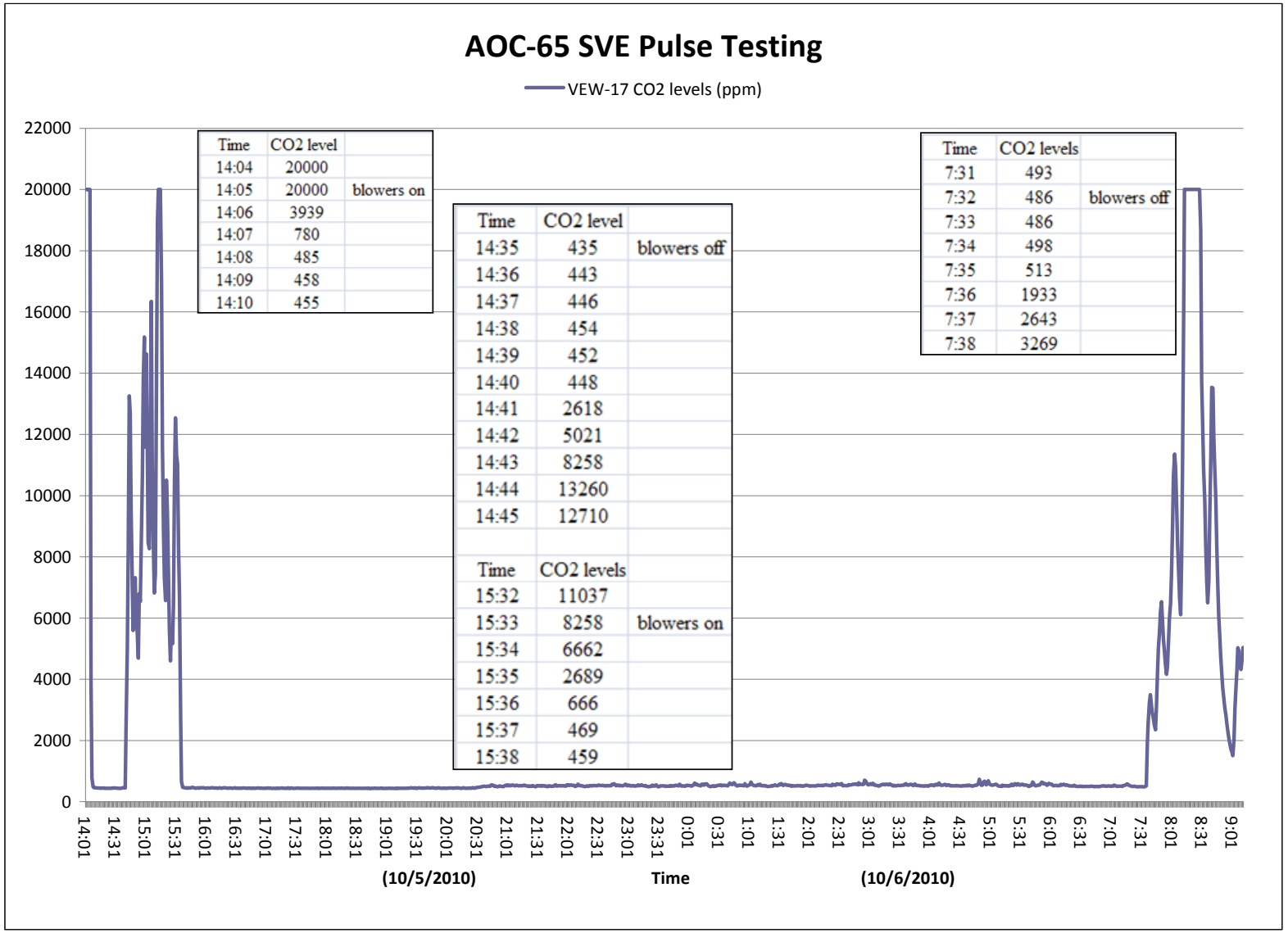


Figure 3.4 VEW-27 Pulse Testing

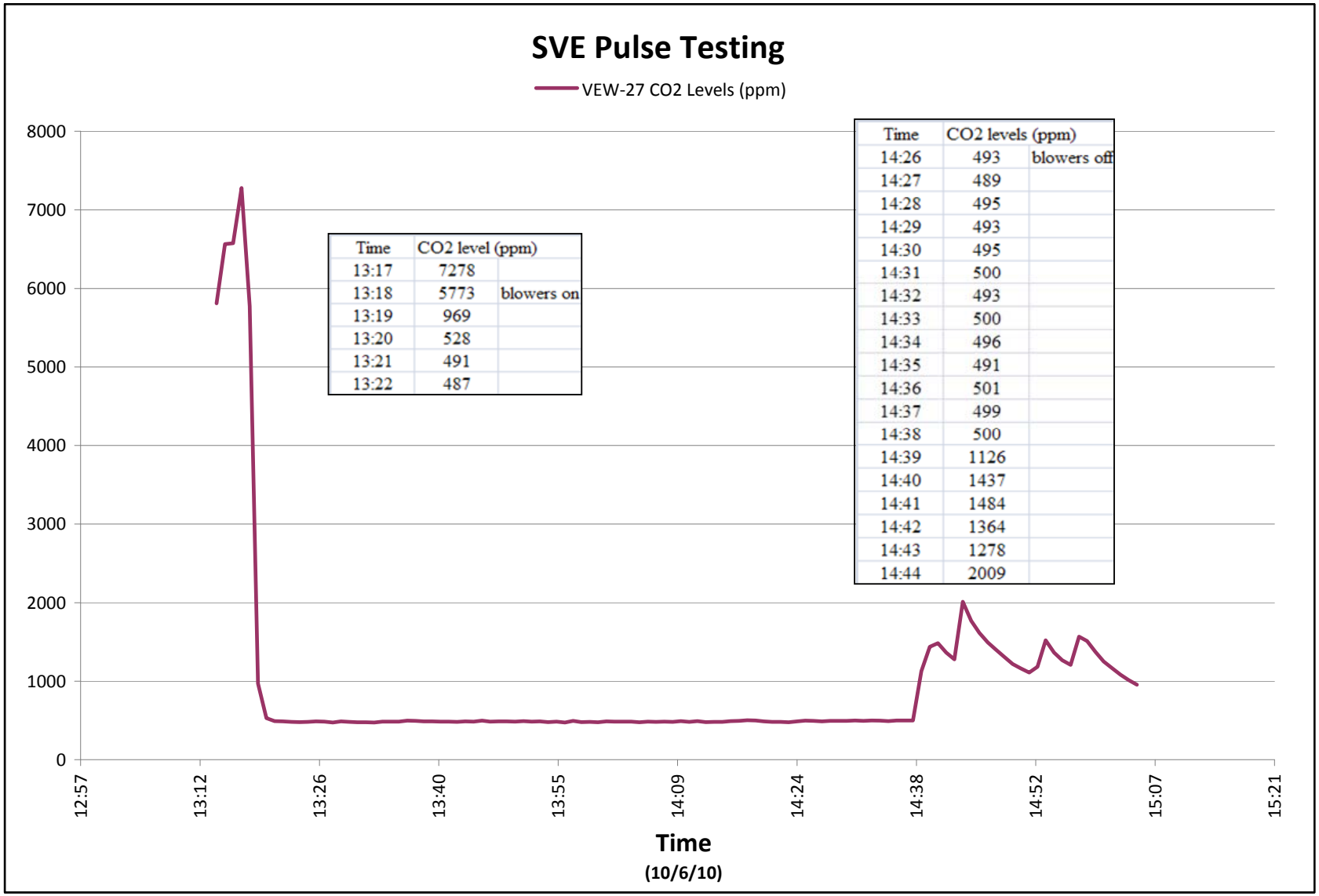


Figure 3.5 AOC-65 Deep Well Blower Intake Pulse Testing

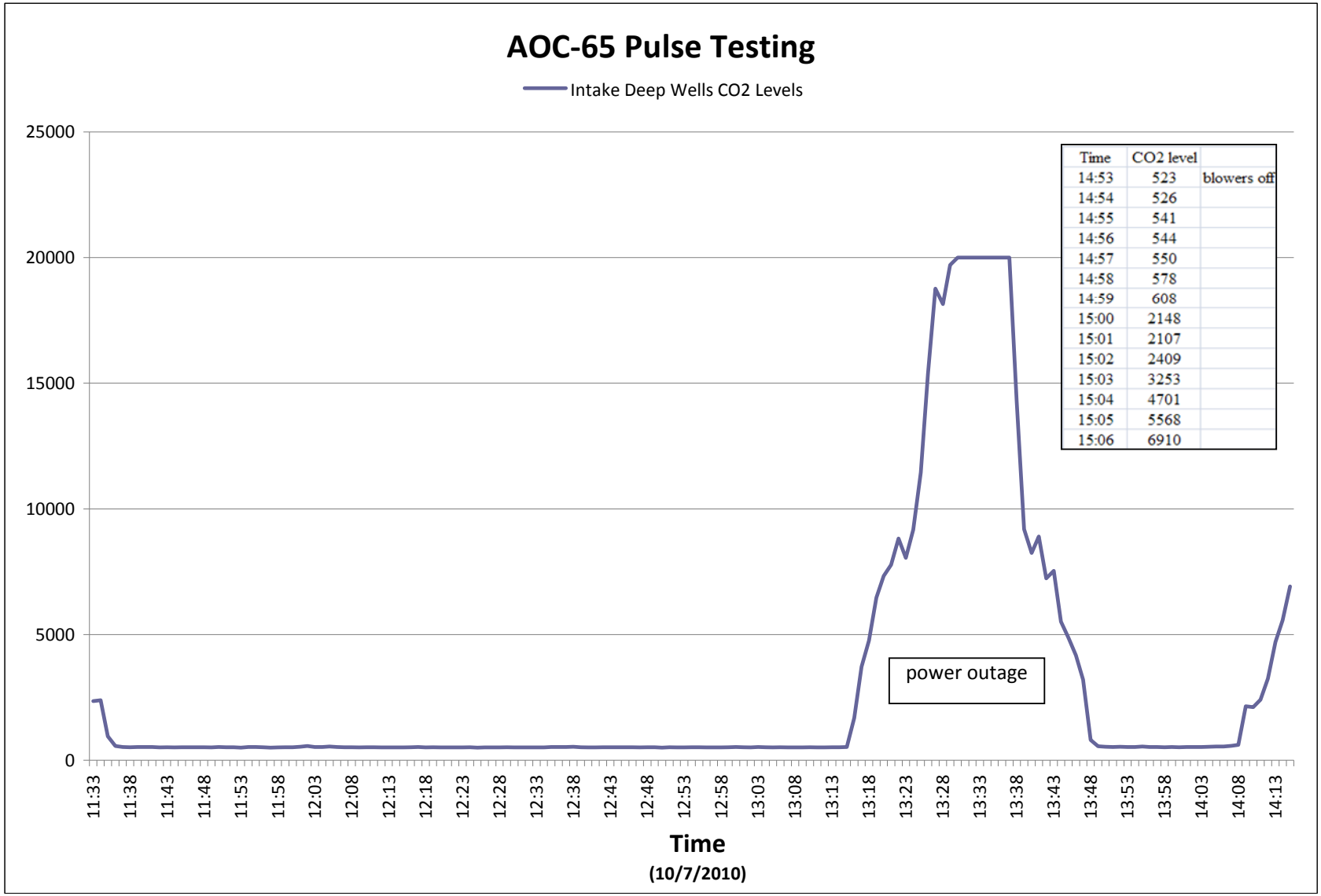
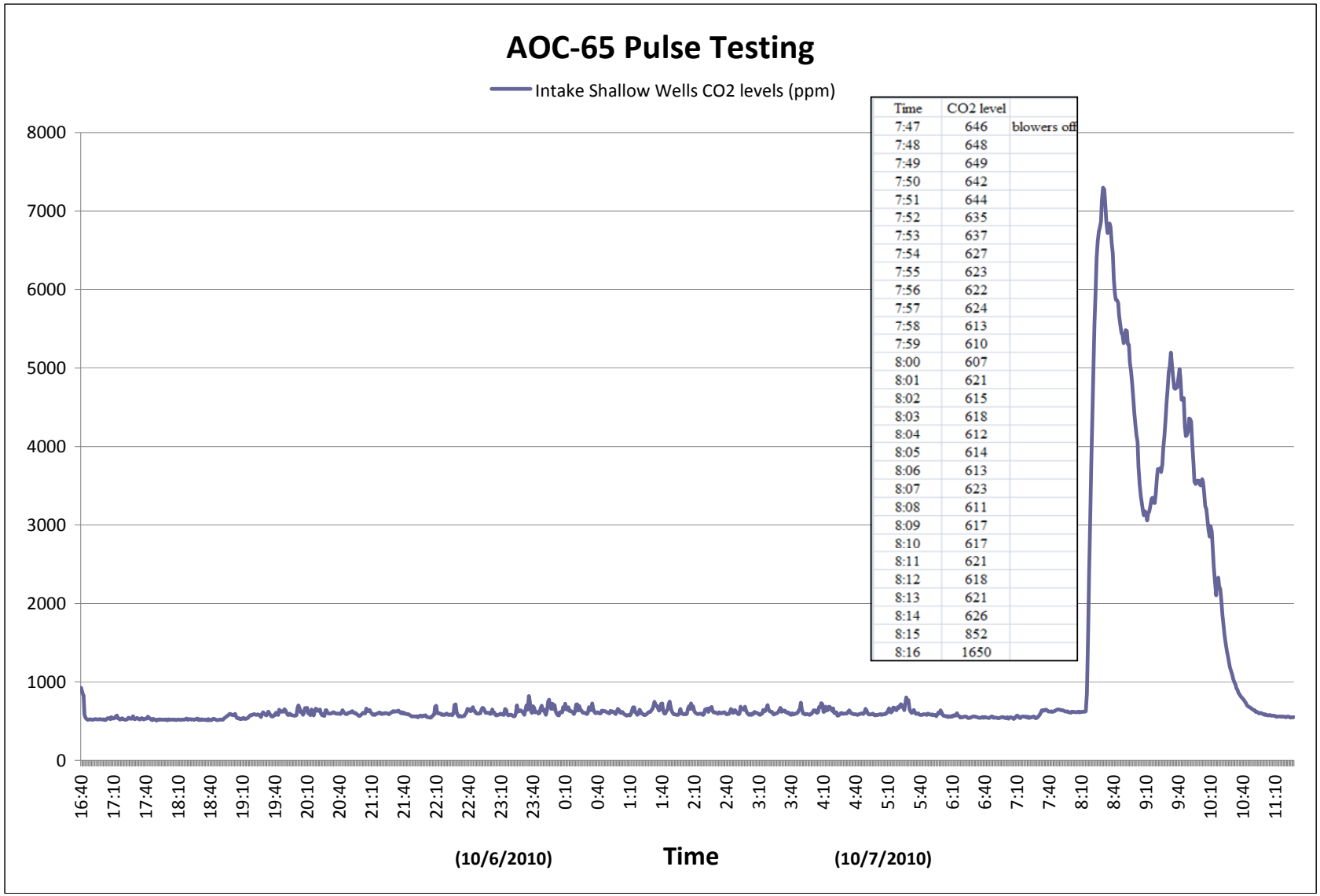


Figure 3.6 AOC-65 Shallow Well Blower Intake Pulse Testing



Time	CO2 level	
7:47	646	blowers off
7:48	648	
7:49	649	
7:50	642	
7:51	644	
7:52	635	
7:53	637	
7:54	627	
7:55	623	
7:56	622	
7:57	624	
7:58	613	
7:59	610	
8:00	607	
8:01	621	
8:02	615	
8:03	618	
8:04	612	
8:05	614	
8:06	613	
8:07	623	
8:08	611	
8:09	617	
8:10	617	
8:11	621	
8:12	618	
8:13	621	
8:14	626	
8:15	852	
8:16	1650	

CHAPTER 4
CONCLUSIONS AND RECOMMENDATIONS

There are several conclusions that can be drawn from the O&M activities performed at the AOC-65 SVE system. The testing activities demonstrated that SVE is an effective mechanism for removal of VOC contamination present in the area, although there appears to be room for improvement. The findings re-emphasize the importance of maintaining continuous extraction to maximize removal of VOCs. There were some initial difficulties with the SVE system and moisture content control. Once the moisture issues were recognized, the reliability of PID field measurements improved. System flow rates were somewhat variable, especially at the sub-slab intake, even though the vacuum on the system remained relatively constant.

During the 31 months of O&M operation of the SVE system at AOC-65, the removal of approximately 128.6 pounds (~ 9.5 gallons) of PCE, based on the yearly average removal rates and operational times for the individual blowers, was achieved. The following recommendations are provided for continuing pilot study activities at AOC-65:

- To estimate more accurate exhaust flow rates, new in-line flow meters with vortex dampeners are recommended.
- To improve removal rates, it is recommended that increased vacuum pressure be applied to the most productive VEWs.
- To enhance volatilization of contaminants and increase contaminant mass removal, it is recommended that steam injection be evaluated for areas of high contaminant concentrations, in particular; the area along the drainage ditch west of Building 90. Evaluation of steam injection should begin with preparation of a work plan which describes location and diameter of an injection well, details of how steam would be applied, points that would be monitored, dual-phase extraction wells (new or retro-fitted), and other aspects of the steam injection study.

The overall conclusions for the AOC-65 SVE assessment period include:

- Approximately 128.6 lb (9.5 gallons) of PCE was removed from underlying limestone at AOC-65;
  - Sub-slab VEWs accounted for 75.82 lb (5.6 gallons) of removed mass;
  - AOC-65 shallow VEWs accounted for 30.42 lb (2.25 gallons) of removed mass;
  - AOC-65 deep VEWs accounted for 17.52 lb (1.29 gallons) of removed mass;
  - Exterior Building 90 VEWs accounted for 4.82 lb (0.36 gallons) of removed mass.
- The Building 90 Sub-slab system was more effective at removing PCE than the associated exterior extraction wells; and
- The Western shallow system was more effective at removing PCE than the Western deep system when groundwater levels were not affecting screen intervals.

CHAPTER 5
REFERENCES

Parsons, 2005a. Final AOC-65 Soil Vapor Extraction Interim Treatability Test Report. April 2005.

Parsons, 2005b. AOC-65 SVE Operations and Maintenance Assessment Report. March 2005.

Parsons, 2005c. Treatment Evaluation Report for AOC-65 SVE. April 2005.

Parsons, 2005d. Final Sampling and Analysis Plan Addendum. December 2005.

Parsons, 2008a. Permit By Rule Application for AOC-65 SVE Pilot Study Expansion. January 2008.

Parsons, 2008b. AOC-65 SVE Operations and Maintenance Plan Update. June 2008.

APPENDIX A

MONITORING AND PERFORMANCE FIELD DATA SHEETS

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 4.17.08/1000 **Operator:** S.Elliott / K. Rice **Ambient T (°F)** _____

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / (Other) baseline

Monitoring Point	Manifold Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	*-34/-17	505	71.5	57.2	18.0	2.6	/	/	-25	* 1st reading was taken when the deep system tripped off, 2nd reading is with deep wells on
AOC65-VEW20	-34	725	71.7	1.5	20.0	0	1405	12379	-31.0	
AOC65-VEW21	-34	665	71.9	0.9	20.0	0.5	1400	35596	-31.8	can hear leaking at wellhead
AOC65-VEW23	-34	670	71.7	5.5	20.0	0	1357	34598	-31.5	
AOC65-VEW25	-34	725	71.7	89.4	18.5	1.25	1355	31781	-32	
AOC65-VEW27	-34	695	72.3	102	15.5	4.0	1347	31785	-32	
AOC65-INTAKE-SW	-34/-195	1035	71.4	50	18.5	2.0	1410	11830		intake flow meter = 0 scfm
Deep Wells										
AOC65-VEW13	-	2100	68.5	5.8	16.0	3.5	/	/	-1.1	
AOC65-VEW14	-	490	72.1	5.3	18.5	0.75	/	/	-27.5	
AOC65-VEW17	-	1470	70.5	11.1	15.5	3.5	/	/	-13.9	
AOC65-VEW22	-	1360	70.5	3.1	15.5	4.0	1422	34104	-25.1	
AOC65-VEW24	-23	465	70.6	8.2	15.5	3.0	1418	11847	-26.8	
AOC65-VEW26	-23	1225	70.5	6.2	16.0	3.25	1415	34130	-24.4	
AOC65-INTAKE-DW	-	5250	68.3	5.4	15.5	3.5	1430	25290		intake flow meter = 90 SCFM
B90-EXHAUST	+									

Blower Information: System	Blower On	Pre Adjustment Intake Pressure Gauge	Adjusted Pressure	Building 90 VRV: Check	Building 90 VRV: Lube	Hours Meter
Shallow	(Y) / N	33	/	(Y) / N	Y / (N)	
Deep	(Y) / N	40	/	(Y) / N	Y / (N)	

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	Y / (N)	/
Deep	(Y) / N	Y / (N)	/

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 4.17.08 / 1000 Operator: S.Elliott / K.Rice Ambient T (°F) _____

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / (Other) Baseline

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	- 36	2200	66.1	22.3	19.5	0	1455	34624	
Exterior Wells									

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
AOC65-VEW15	-	250	65.6	2.2	13.5	1.25	/	/	- 0	wellhead sample port broke
AOC65-VEW16	-	8250	66.5	3.3	12.5	3.25	/	/	- 2.0	
AOC65-VEW18	- 17.8	575	68.8	2.3	18.0	2.0	/	/	- 5.2	
AOC65-VEW28A	-	825	68.5	2.2	14.5	0.8	1440	31766	- 28.8	
AOC65-VEW28B	- 17.5	235	67.8	4.5	12.5	0	1436	12383	- 30	
B90-INTAKE-EX	- 18.4	1700	66.5	3.1	14.0	2.5	1450	34106		
B90-EXHAUST	+									

Blower Information

System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Building 90 VRV: Check	Lube	Hours Meter
Subslab	(Y) / N	55	40	(Y) / N	Y / (N)	63739
Exterior	(Y) / N	27	no	(Y) / N	Y / (N)	41331

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Subslab	(Y) / N	Y / (N)	NA
Exterior	(Y) / N	Y / (N)	NA

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 5-5-08/0900 Operator: S. Elliott Ambient T (°F) _____

Monitoring Event (circle one): (Biweekly) / Monthly / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	-								

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
Exterior Wells										
AOC65-VEW15	-								-	
AOC65-VEW16	-								-	
AOC65-VEW18	-								-	
AOC65-VEW28A	-								-	
AOC65-VEW28B	-								-	
B90-INTAKE-EX	-									
B90-EXHAUST	+									

Blower Information	System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	~~Building 90 VRV~~: Check	Lube	Hours Meter
	Subslab	(Y) / N	59	~~0~~	Y / N	Y / N	63739
	Exterior	(Y) / N	40	~~0~~	(Y) / N	Y / (N)	41332

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)
	Subslab	(Y) / N	Y / (N)	~~0~~
	Exterior	(Y) / N	Y / (N)	~~0~~

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 5/5/08 - 0900 Operator: S. Elliott Ambient T (°F) _____

Monitoring Event (circle one): (Biweekly) / Monthly / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead: Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-								-	
AOC65-VEW20	-								-	
AOC65-VEW21	-								-	
AOC65-VEW23	-								-	
AOC65-VEW25	-								-	
AOC65-VEW27	-								-	
AOC65-INTAKE-SW	-									intake flow meter (SCFM)= 0
Deep Wells										
AOC65-VEW13	-								-	
AOC65-VEW14	-								-	
AOC65-VEW17	-								-	
AOC65-VEW22	-								-	
AOC65-VEW24	-								-	
AOC65-VEW26	-								-	
AOC65-INTAKE-DW	-									intake flow meter (SCFM)= 90
B90-EXHAUST	+									

Blower Information

System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	~~Building 90~~ VRV: Check	Lube	Hours Meter
Shallow	(Y) / N	33	0	(Y) / N	Y / (N)	—
Deep	(Y) / N	43	0	(Y) / N	Y / (N)	—

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	Y / (N)	—
Deep	(Y) / N	Y / (N)	—

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 5.22.08/1300 Operator: S. Elliott Ambient T (°F) _____

Monitoring Event (circle one): (Biweekly) / Monthly / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead: Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-								-	
AOC65-VEW20	-								-	
AOC65-VEW21	-								-	
AOC65-VEW23	-								-	
AOC65-VEW25	-								-	
AOC65-VEW27	-								-	
AOC65-INTAKE-SW	-									intake flow meter (SCFM)=
Deep Wells										
AOC65-VEW13	-								-	
AOC65-VEW14	-								-	
AOC65-VEW17	-								-	
AOC65-VEW22	-								-	
AOC65-VEW24	-								-	
AOC65-VEW26	-								-	
AOC65-INTAKE-DW	-									intake flow meter (SCFM)=
~~B90~~-EXHAUST	+									

AOC-65 (SW)

Blower Information: System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Shallow	Y / N			Y / N	Y / N	
Deep	Y / N			Y / N	Y / N	

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Shallow	Y / N	Y / N	
Deep	Y / N	Y / N	

Observations/Notes: *System off upon arrival, both side deep & shallow

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

* could not get blowers to turn on, will have to schedule an electrician to look at it

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 5.22.08 / 1300 Operator: S. Elliott Ambient T (°F) _____

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	-								
Exterior Wells									
	Manifold Readings								**Wellhead**
Monitoring Point	**Vac (in. H_2O)**	**Flow fpm**	**Temp °F**	**VOC ppm**	**O_2 vol %**	**CO_2 vol %**	**Analytical Sample Collected: Time**	**Analytical Sample Collected: Summa Canister #**	**Vac (in. H_2O)** / **Comments**
AOC65-VEW15	-								-
AOC65-VEW16	-								-
AOC65-VEW18	-								-
AOC65-VEW28A	-								-
AOC65-VEW28B	-								-
B90-INTAKE-EX	-								
B90-EXHAUST	+								

Blower Information	System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
	Subslab	(Y) / N	55	—	(Y) / N	Y (N)	63739
	Exterior	(Y) / N	35	—	(Y) / N	Y (N)	42969

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)
	Subslab	(Y) / N	(Y) / N	0
	Exterior	(Y) / N	(Y) / N	0

Observations/Notes: ~~Subslab~~ ~~exterior~~ blower off upon arrival
subslab (SW)

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 7/15/08/1015 Operator: S. Ellott Ambient T (°F) _____

Monitoring Event (circle one): Biweekly / (Monthly) / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	- 36.5	10,260	84.3	0	20.5	0	/	/	
Exterior Wells									

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
AOC65-VEW15	- 32.7	610	84.9	0	20.0	1.5	/	/	- 0.1	
AOC65-VEW16	- 32.4	1780	85.0	0	19.0	2.5	/	/	- 2.3	
AOC65-VEW18	- 32.2	1112	85.8	0	17.0	3.8	/	/	- 7.4	
AOC65-VEW28A	- 31.5	2120	85.2	0	18.5	2.25	/	/	- 31.7	
AOC65-VEW28B	- 30.5	625	86.7	0	20.0	1.0	/	/	- 33.1	
B90-INTAKE-EX	- 35.7	4850	85.8	0	19.0	2.5	/	/		
B90-EXHAUST	+ 12.6	>15,000	149.5	0	20.0	1.5				

Blower Information: System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Subslab	(Y) / N	60	NO	(Y) / N	Y / (N)	69630
Exterior	Y / (N) turned on	40	NO	(Y) / N	Y / (N)	458465

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Subslab	(Y) / N	Y / (N)	empty
Exterior	(Y) / N	Y / (N)	empty

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 7/15/08 / 0830 Operator: S. Elliott Ambient T (°F) _____

Monitoring Event (circle one): Biweekly / (Monthly) / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead: Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-32.2	634	91.3	0	20.5	0.8	/	/	-31.4	
AOC65-VEW20	-32.2	533	92.2	0	20.5	0	/	/	-31.3	→ can hear wellhead leaking
AOC65-VEW21	-32.2	480	96.0	0	20	0.5	/	/	-31.9	
AOC65-VEW23	-32.2	543	96.9	0	20.5	0	/	/	-32.1	→ wellhead leaking
AOC65-VEW25	-32.2	534	92.1	0	20	0	/	/	-31.9	→ wellhead leaking
AOC65-VEW27	-32.2	526	95.8	0	18.5	3.5	/	/	-32.1	
AOC65-INTAKE-SW	-32.2	720	85.8	0	20	0.8	/	/		intake flow meter (SCFM)= 0
Deep Wells										
AOC65-VEW13	-26.3	3350	86.8	0	17.0	3.75	/	/	-1.3	→ wellhead leaking
AOC65-VEW14	-26.1	400	90.1	0	19.0	0.75	/	/	-26.1	
AOC65-VEW17	-25.3	2290	89.7	0	17.5	3.5	/	/	-13.6	
AOC65-VEW22	-25.0	1935	89.9	0	16.5	3.75	/	/	-23.5	can hear wellhead leaking
AOC65-VEW24	-24.9	395	93.5	0	14.5	3.75	/	/	-25.1	
AOC65-VEW26	-25.3	1420	90.8	0	16.0	4.0	/	/	-22.6	
AOC65-INTAKE-DW	-30.6	7050	86.1	0	16.5	3.75	/	/		intake flow meter (SCFM)= 90
B90-EXHAUST	+2.5	12,000	152.9	0	17.0	3.75	/	/		

Blower Information

System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Shallow	(Y) / N	33	no	(Y) / N	Y / (N)	NA
Deep	(Y) / N	40	no	(Y) / N	Y / (N)	NA

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	Y / (N)	
Deep	(Y) / N	Y / (N)	

Observations/Notes:

$in.H_2O$: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 8/5/08/1050 Operator: S. Elliott Ambient T (°F) 75-95°

Monitoring Event (circle one): Biweekly (Monthly) Quarterly / Other

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	- 37.8	>15,000	95.1	0	20.0	0			
Exterior Wells									
	Manifold Readings								**Wellhead**
Monitoring Point	**Vac (in. H_2O)**	**Flow fpm**	**Temp °F**	**VOC ppm**	**O_2 vol %**	**CO_2 vol %**	**Analytical Sample Collected: Time**	**Summa Canister #**	**Vac (in. H_2O)** / **Comments**
AOC65-VEW15	- 30.0	460	92.2	0	20.5	0.8			- 0.1
AOC65-VEW16	- 29.4	2200	91.2	0	19.0	2.25			- 2.0
AOC65-VEW18	- 28.8	900	92.1	0	17.5	3.75			- 6.9
AOC65-VEW28A	- 27.1	3900	90.4	0	19.0	2.0			- 28.1
AOC65-VEW28B	- 25.8	470	97.5	0	20.0	1.0			- 30.0
B90-INTAKE-EX	- 33.4	5900	90.8	0	18.5	2.5			
B90-EXHAUST	+ ~~215,000~~ 13.0	>15,000	156.4	0	20.5	1.5			

Blower Information	System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
	Subslab	(Y) / N	60		Y / N	Y / N	69630
	Exterior	Y / N	40	NO	(Y) / N	Y (N)	46704

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)
	Subslab	(Y) / N	(Y) / N	0
	Exterior	(Y) / N	(Y) / N	0

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 8/5/08 / 0430 Operator: S. Elliott Ambient T (°F) 75-95°

Monitoring Event (circle one): Biweekly (Monthly) / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-32.7	575	97.5	0	19.5	0.8			-31.5	
AOC65-VEW20	-32.6	575	100.2	0	20	0			-31.4	
AOC65-VEW21	-32.6	530	101.2	0	20	0.5			-31.8	
AOC65-VEW23	-32.6	600	101.1	0	20	0			~~-23.6~~ 31.8	
AOC65-VEW25	-32.6	560	97.5	0	20	0			-31.8	
AOC65-VEW27	-32.6	590	98.4	0	18.5	2.5			-31.9	
AOC65-INTAKE-SW	~~-600~~ 32.9	600	89.5	0	19.5	0.8				intake flow meter (SCFM)= 0
Deep Wells										
AOC65-VEW13	-26.2	4100	91.3	0	17.5	3.25			-1.1	
AOC65-VEW14	-26.1	405	96.5	0	19.0	1.5			-26.1	
AOC65-VEW17	-25.3	2500	93.1	0	17.5	3.25			-13.6	
AOC65-VEW22	-25.3	2250	93.9	0	17.0	3.5			-23.6	
AOC65-VEW24	-25.3	410	96.7	0	16.5	3.75			-25.1	
AOC65-VEW26	-25.0	1700	94.6	0	16.0	4.25			-22.7	
AOC65-INTAKE-DW	-30.3	9500	92.2	0	20	3.5				intake flow meter (SCFM)= 90
B90-EXHAUST	+2.4	~~4500~~ 13,800	~~92.2~~ 161.2	0	17.0	3.5				

Blower Information

System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Shallow	(Y) / N	34	no	(Y) / N	Y / (N)	NA
Deep	(Y) / N	40	no	(Y) / N	Y / (N)	NA

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	(Y) / N	~~0~~
Deep	(Y) / N	(Y) / N	~~0~~

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 9-23-08/1330 **Operator:** S.Elliott / A.Lindley / J. Bosch **Ambient T (°F)** _____

Monitoring Event (circle one): Biweekly / (Monthly) / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	- 9.8	280	87.0	0	20.75	0.8	/	/	- 10.0	
AOC65-VEW20	- 9.8	90	87.9	0	21	0.2	/	/	- 9.7	
AOC65-VEW21	- 10.1	130	87.4	0	20.75	0.5	/	/	- 10.0	
AOC65-VEW23	- 10.0	111	87.4	0	21	0.2	/	/	- 10.2	
AOC65-VEW25	- 10.1	160	88.1	0	21	0.2	/	/	- 10.1	
AOC65-VEW27	- 10.0	130	86.8	0	20	2.0	/	/	- 10.0	
AOC65-INTAKE-SW	- 10	140	87.9	~~20~~ 2.8	20.75	0.8	/	/		intake flow meter (SCFM)= 0
Deep Wells										
AOC65-VEW13	- 25.7	3780	84.3	0	19.6	3.0	/	/	- 1.2	
AOC65-VEW14	- 25.7	678	86.7	0	20.0	1.0	/	/	- 25.7	
AOC65-VEW17	- 24.9	2088	85.6	0	20.0	3.0	/	/	- 13.6	
AOC65-VEW22	- 24.7	1624	85.6	0	18.5	3.25	/	/	- 23.4	
AOC65-VEW24	- 24.8	568	86.5	0	17.5	4.0	/	/	- 24.8	
AOC65-VEW26	- 24.6	1488	86.1	0	18.0	3.5	/	/	- 22.7	
AOC65-INTAKE-DW	- 29.2	4696	86.8	0	18.0	3.0	/	/		intake flow meter (SCFM)= 90
B90-EXHAUST	+	>15,000	141.2	0	20.0	2.5	/	/		

Blower Information: System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Shallow	(Y) / N	10	* can't	(Y) / N	(Y) / N	NA
Deep	(Y) / N	42	no	(Y) / N	Y / (N)	NA

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	Y / (N)	0 - empty
Deep	(Y) / N	Y / (N)	0 - empty

Observations/Notes:
* VRV on shallow side is stuck open

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 9.23.08 / 1509 *Operator:* S. Elliot / A. Lindley / J. Bonch *Ambient T (°F)* ______

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other ______

Monitoring Point	Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells (Wellhead Readings)									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	-32.8	13938	86.8	0.0	21.0	0.25			

Exterior Wells

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
AOC65-VEW15	-26.7	580	94.3	0.0	20.5	0.75			-	* Broken nozzle
AOC65-VEW16	-27.7	3222	95.1	0.0	19.5	2.0			-2.1	
AOC65-VEW18	-28.3	1388	94.4	0.0	18.0	3.25			-6.3	
AOC65-VEW28A	-28.1	4080	90.3	0.0	19.0	2.0			-26.4	
AOC65-VEW28B	-28.5	701	91.5	0.0	20.0	1.0			-29.8	
B90-INTAKE-EX	-32.4	3375	89.0	0.0	19.0	2.5				
B90-EXHAUST	+	>15,000	150.7	0.0	20.0	1.25				

Blower Information	System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
	Subslab	(Y) / N	~~N~~ ~~12.0~~ 55	N ~~Y~~	(Y) / N	Y / (N)	6963
	Exterior	(Y) / N	40	N	(Y) / N	Y / (N)	5134

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)
	Subslab	(Y) / N	Y / (N)	Ø
	Exterior	(Y) / N	Y / (N)	Ø

Observations/Notes:

in. H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 10.7.08 / 0845 Operator: S. Elliott, J. Bouch Ambient T (°F) 65-85°

Monitoring Event (circle one): Biweekly (Monthly) Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-35.3	942	76.2	0	21.0	0.8	0925	/	-32.6	
AOC65-VEW20	-34.8	776	78.6	0	21.0	0	0928	/	-32.4	
AOC65-VEW21	-34.8	738	79.8	0	20.5	0.8	0932	/	-32.6	
AOC65-VEW23	-34.4	736	79.8	0	21.0	0.25	0936	/	-33.1	
AOC65-VEW25	-33.8	598	81.6	0	21.0	0.9	0939	/	-33.1	
AOC65-VEW27	-34.0	971	78.9	0	19.5	2.1	0943	/	-33.7	
AOC65-INTAKE-SW	-37.2	1098	74.1	0.0	20.5	0.9	0917	/		intake flow meter (SCFM)= 0
Deep Wells										
AOC65-VEW13	-27.6	2677	80.5	0	18.0	3.5	0952	/	-1.3	
AOC65-VEW14	-27.5	479	81.3	0	18.5	2.25	0956	/	-27.7	
AOC65-VEW17	-27.0	1345	79.6	0	18.5	3.25	1000	/	-14.6	
AOC65-VEW22	-26.8	1208	80.2	0	17.5	3.8	1003	/	-25.3	
AOC65-VEW24	-26.6	644	80.0	0	17.0	4.0	1006	/	-26.6	
AOC65-VEW26	-26.4	1057	79.3	0	17.5	4.0	1011	/	-24.5	
AOC65-INTAKE-DW	-31.9	5730	80.0	0	18.0	3.5	0949	/		intake flow meter (SCFM)= 90
B90-EXHAUST	+2.3	7802	139.4	0	18.0	3.5	1014			

Blower Information

System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Shallow	(Y) / N	40 #	Yes	(Y) / N	(Y) / N	N/A
Deep	(Y) / N	42	NO	(Y) / N	Y / (N)	N/A

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	(Y) / N	0
Deep	(Y) / N	(Y) / N	0

Observations/Notes:
* fixed vacuum relief valve. It was stuck & rusted — adjusted pressure

in. H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 10.7.08 / 0845 Operator: S. Elliott, J. Bouch Ambient T (°F) 65-85°

Monitoring Event (circle one): Biweekly (Monthly) Quarterly / Other

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	- 38.0	8612	76.2	0	21.0	0.25	1043	/	

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac (in. H_2O)	Comments
Exterior Wells										
AOC65-VEW15	- 32.7	606	74.2	0	19.5	2.0	1032	/	- 0.1	
AOC65-VEW16	- 32.3	1242	75.3	0	19.5	2.5	1030	/	- 2.5	
AOC65-VEW18	- 32.4	876	75.5	0	18.5	3.25	1027	/	- 6.9	
AOC65-VEW28A	- 31.8	1520	75.3	0	18.25	2.25	1024	/	- 28.7	
AOC65-VEW28B	- 31.8	550	75.7	0	19.0	1.5	1019	/	- 32.5	
B90-INTAKE-EX	- 35.7	3853	76.4	0	18.75	2.5	1036	/		
B90-EXHAUST	+ 13	>15,000	129.9	0	21.0	1.75	1038	/		

Blower Information	System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
	Subslab	(Y) / N	60	N	(Y) / N	Y / (N)	69630
	Exterior	(Y) / N	44	N	(Y) / N	Y / (N)	52457

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)
	Subslab	(Y) / N	(Y) / N	0
	Exterior	(Y) / N	(Y) / N	0

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 11/11/08 1245 Operator: ~~S. Bouch~~, A. Lindley Ambient T (°F) 75

Monitoring Event (circle one): Biweekly ~~Monthly~~ Quarterly / Other _____

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
✓ B90-INTAKE-SS	-43.9	6080	84.9	0.0	~~0.25~~ 20.0 (AL)	0.25	1333	182	No Summa Pressure.
Exterior Wells									

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac (in. H_2O)	Comments
AOC65-VEW15	-31.9	590	83.6	0.0	19.5	1.5	—	—	-0.1	
AOC65-VEW16	-31.8	3128	83.6	0.0	19.5	2.0	—	—	-2.4	
AOC65-VEW18	-31.5	1046	84.1	0.0	18.5	3.0	—	—	-7.2	
✓ AOC65-VEW28A	-31.1	3408	79.5	0.0	18.0	2.5	1305	3280	-29.4	
✓ AOC65-VEW28B	-30.3	522	83.2	0.0	19.0	1.25	1258	2091	-31.3	
✓ B90-INTAKE-EX	-35.1	6662	81.4	0.0	18.25	2.5	1322	3397		
B90-EXHAUST	+0.1	9592	108.8	0.0	19.0	1.5	—	—		

Blower Information: System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Subslab	(Y) / N	60	N / A	(Y) / N	Y / (N)	7012.7
Exterior	(Y) / N	44	N / A	(Y) / N	Y / (N)	5747.8

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Subslab	(Y) / N	(Y) / N	0
Exterior	(Y) / N	(Y) / N	0

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

~~B90 INTAKE PRE~~
B90 - INTAKE - POST (Not sampling)

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 11.11.08 0915 **Operator:** J.Bonch; A.Lindley; S.Elliott **Ambient T (°F)** 75°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

	Manifold Readings								Wellhead	
Monitoring Point	**Vac in.H_2O**	**Flow fpm**	**Temp °F**	**VOC ppm**	**O_2 vol %**	**CO_2 vol %**	**Analytical Sample Collected Time**	**Summa Canister #**	**Vac in. H_2O**	**Comments**
Shallow Wells										
AOC65-VEW19	-34.6	10181	67.6	0.0	21.0	0.6	—	—	-14.3	
✓ AOC65-VEW20	-30.7	550	68.5	0.0	21.0	0.1	0937	31792	-28.7	
✓ AOC65-VEW21	-29.4	510	69.9	0.0	21.0	.25	0945	34591 (VOC)	-29.4	
✓ AOC65-VEW23	-30.3	963	70.1	0.0	21.0	.20	0950	~~24388~~ (VOC)	-28.5	No pressure in Summa New summa # 1490
✓ AOC65-VEW25	-30.1	588	71.2	0.0	21.0	.25	1000	1444	-28.8	
✓ AOC65-VEW27	-30.3	638	71.7	0.0	21.0	1.75	1005	1357	-28.3	
✓ AOC65-INTAKE-SW	-30.2	1013	71.5	0.0	21.0	0.3	0922	31768		intake flow meter (SCFM)= Ø
Deep Wells										
AOC65-VEW13	-28.5	2188	71.7	0.0	18.5	3.5	—	—	-1.2	
AOC65-VEW14	-28.3	530	72.4	0.0	19.0	2.2	—	—	-28.3	
AOC65-VEW17	-27.7	1362	72.3	0.0	19.25	3.0	—	—	-14.4	
✓ AOC65-VEW22	-27.3	1240	72.4	0.0	18.4	3.5	1041	1355	-25.3	
✓ AOC65-VEW24	-24.1	468	73.3	0.0	18.0	3.75	1050	2121	-27.2	
✓ AOC65-VEW26	-26.8	998	73.2	0.0	18.0	3.75	1056	2077	-24.7	
✓ AOC65-INTAKE-DW	-32.9	5390	71.7	0.0	18.9	3.25	1020	12031		intake flow meter (SCFM)= 42
AOC65-EXHAUST	+3.5	11161	135.3	0.0	19.0	3.0	—	—		

Blower Information	**System**	**Pre Adjustment Blower On**	**Intake Pressure Gauge**	**Adjusted Pressure**	**Vacuum Relief Valve Check**	**Lube**	**Hours Meter**
	Shallow	(Y) / N	(VOC) Ø 30	N/A	(Y) / N	Y / (N)	N/A
	Deep	(Y) / N	(VOC) 4 42	N/A	(Y) / N	Y / (N)	N/A

Moisture Separator Information	**System**	**Inspected**	**Emptied**	**Amount Xfered (gals)**	**Observations/Notes:**
	Shallow	(Y) / N	(Y) / N	Ø	
	Deep	(Y) / N	(Y) / N	1 gallon	

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 11.24.08 / 1320 *Operator:* JBouch *Ambient T (°F)* 73°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

	Manifold Readings								Wellhead	
Monitoring Point	*Vac in.H_2O*	*Flow fpm*	*Temp °F*	*VOC ppm*	*O_2 vol %*	*CO_2 vol %*	Analytical Sample Collected *Time*	*Summa Canister #*	*Vac in. H_2O*	*Comments*
Shallow Wells										
AOC65-VEW19	-								-	
AOC65-VEW20	-								-	
AOC65-VEW21	-								-	
AOC65-VEW23	-								-	
AOC65-VEW25	-								-	
AOC65-VEW27	-								-	
AOC65-INTAKE-SW	-									intake flow meter (SCFM)= —
Deep Wells										
AOC65-VEW13	-								-	
AOC65-VEW14	-								-	
AOC65-VEW17	-								-	
AOC65-VEW22	-								-	
AOC65-VEW24	-								-	
AOC65-VEW26	-								-	
AOC65-INTAKE-DW	-									intake flow meter (SCFM)= 30
AOC65-EXHAUST	+									

Blower Information	*System*	Pre Adjustment Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve Check	Lube	Hours Meter
	Shallow	(Y) / N	28	N/A	(Y) / N	Y / (N)	—
	Deep	(Y) / N	34	N/A	(Y) / N	Y / (N)	—

Moisture Separator Information	*System*	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:
	Shallow	(Y) / N	(Y) / N	less than 0.10	
	Deep	(Y) / N	(Y) / N	1/2 gal	

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 11.24.08 / 1300 **Operator:** J Bauch **Ambient T (°F)** 73°

Monitoring Event (circle one): (Biweekly) / Monthly / Quarterly / Other ______

Monitoring Point	Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
	Wellhead Readings								
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	-								

Exterior Wells

Monitoring Point	Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
	Manifold Readings								Wellhead	
AOC65-VEW15	-								-	
AOC65-VEW16	-								-	
AOC65-VEW18	-								-	
AOC65-VEW28A	-								-	
AOC65-VEW28B	-								-	
B90-INTAKE-EX	-								//////	
B90-EXHAUST	+									

Blower Information: System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Subslab	(Y) / N	66	N/A	(Y) / N	Y / (N)	7012
Exterior	(Y) / N	~~49~~ 46 (JDB)	N/A	(Y) / N	Y / (N)	5947

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Subslab	(Y) / N	(Y) / N	0
Exterior	(Y) / N	(Y) / N	0

Observations/Notes:

in. H_2O: inches of water   fpm: feet per minute   ppm: parts per million   VRV: vacuum relief valve   psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 12-11-08 / 1048   Operator: J. Bouch / A. Lindley   Ambient T (°F) 30 - 60°

Monitoring Event (circle one): Biweekly / Monthly (circled) / Quarterly / Other

Subslab Wells (Wellhead Readings)

Monitoring Point	Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	-44.0	3531	65.6	0.0	20.75	0.25	1309		

Exterior Wells (Manifold Readings)

Monitoring Point	Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
AOC65-VEW15	~~-55.0~~ -32.2	540	55.0	0.0	20.5	1.2	1100		-0.3	
AOC65-VEW16	-31.6	5589	53.4	0.0	20.5	2.0	1102		-2.0	* condensation
AOC65-VEW18	-33.0	2089	50.7	*	*	*	1103		-2.8	* water in line - sucked H_2O into egg - no reading
AOC65-VEW28A	~~-36.5~~ -28.5	4398	54.5	*	*	*	1253		-30.2	* sucking water - no readings
AOC65-VEW28B	-31.2	471	59.5	*	*	*	1254		-33.5	* sucking water - no readings
B90-INTAKE-EX	-35.6	5049	64.0	0.0	19.25	2.0	1300			
B90-EXHAUST	+ 0.8	5576	78.2	0.0	19.00	1.25	1304			

Blower Information

System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Subslab	(Y) / N	74	NO	Y / (N)	Y / (N)	7012.7
Exterior	~~Y~~ / (N)	~~109 / 40~~ 410	NO	Y / (N)	Y / (N)	6245.2

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Subslab	(Y) / N	Y / (N)	~1/3 full
Exterior	(Y) / N	(Y) / N	~15 gallons

Observations/Notes: ≈20 gallons left in drum - drum is full

in. H_2O: inches of water   fpm: feet per minute   ppm: parts per million   VRV: vacuum relief valve   psi: pounds per square inch

month 7

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 12.11.08 / 0900 **Operator:** J. Bouchy / A. Lindley **Ambient T (°F)** 30°-55°

Monitoring Event (circle one): Biweekly / (Monthly) / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead: Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-31.9	4411	52.1	0.0	20.0	0.5	0940		-8.2	
AOC65-VEW20	-31.6	1587	58.4	0.0	21.0	0.0	0945		-24.3	
AOC65-VEW21	-31.5	574	60.2	0.0	20.0	0.25	0950		-26.4	
AOC65-VEW23	-31.6	743	64.5	0.0	20.5	0.15	1000		-30.9	
AOC65-VEW25	-31.3	2364	66.9	0.0	20.5	0.0	1005		-26.4	
AOC65-VEW27	-31.1	787	65.1	0.0	19.75	1.0	1010		-29.4	
AOC65-INTAKE-SW	-32.7	2532	60.2	0.0	21.0	0.25	0930			intake flow meter (SCFM)= 30
Deep Wells										
AOC65-VEW13	-34.1	8867	55.2	0.0	19.5	1.75	1015		-31.7	off on arrival
AOC65-VEW14	-34.4	6097	54.4	0.0	19.0	2.0	1020		-29.1	
AOC65-VEW17	-33.1	4896	51.6	0.0	19.0	2.5	1023		-13.9	
AOC65-VEW22	-32.9	4374	50.8	0.0	19.25	2.25	1025		-26.4	
AOC65-VEW24	-32.2	709	53.9	0.0	18.0	3.5	1028		-10.2	
AOC65-VEW26	-31.5	3101	53.7	0.0	19.0	3.0	1030		-20.6	
AOC65-INTAKE-DW	-38.7	4884	61.5	0.0	19.0	2.0	1013			intake flow meter (SCFM)= /
AOC65-EXHAUST	+3.1	5231	121.8	0.0	20.0	2.0	1034			

* Only running in hand mode

Blower Information: System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Shallow	Y / N	35	NO	(Y) / N	Y / N	/
Deep	Y / N	50	NA	(Y) / N	Y / N	/

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	(Y) / N	less than 1
Deep	(Y) / N	(Y) / N	34 gallons

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

month 7

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 12.31.08 Operator: Hbench Ambient T (°F) 55° – 65°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	-								

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac (in. H_2O)	Comments
Exterior Wells										
AOC65-VEW15	-								-	
AOC65-VEW16	-								-	
AOC65-VEW18	-								-	
AOC65-VEW28A	-								-	
AOC65-VEW28B	-								-	
B90-INTAKE-EX	-									
B90-EXHAUST	+									

Blower Information

System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Subslab	(Y) / N	70	N	(Y) / N	Y / (N)	9012.7
Exterior	Y / (N)	45	N	(Y) / N	Y / (N)	10449.4

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Subslab	(Y) / N	(Y) / N	≈ 5 gal
Exterior	(Y) / N	(Y) / N	≈ 30 gal

Observations/Notes: May want to look into changing filters — exterior filter is rusty

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 12.31.08 *Operator:* Jbouch *Ambient T (°F)* 55°-65°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-								-	* System is off — only runs in hand position. Not in "auto".
AOC65-VEW20	-								-	
AOC65-VEW21	-								-	
AOC65-VEW23	-								-	
AOC65-VEW25	-								-	
AOC65-VEW27	-								-	
AOC65-INTAKE-SW	-									intake flow meter (SCFM)= —
Deep Wells										
AOC65-VEW13	-								-	
AOC65-VEW14	-								-	
AOC65-VEW17	-								-	
AOC65-VEW22	-								-	
AOC65-VEW24	-								-	
AOC65-VEW26	-								-	
AOC65-INTAKE-DW	-									intake flow meter (SCFM)=
AOC65-EXHAUST	+									Ø

Blower Information: System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Shallow	Y / N	24	N	Y / N	Y / N	—
Deep	Y / N	Ø	N	Y / N	Y / N	—

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Shallow	Y / N	Y / N	= 20
Deep	Y / N	Y / N	** = 1.0

Observations/Notes:
May want to look at fixing intake flow meter for shallow wells *

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

** feels like there is more water in the Knock out pot — could not get it to come out w/ the hose and gravity drain

* checked filters — water in the bottom of the deep wells filter

when I opened valve at pot - water came out as well as it felt like it inside the drum. Tried using a cup at the valve — did not work. Not enough room. Need to figure out something flexible.

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 1.9.09 / 0930 Operator: S.Elliott / J.Bach Ambient T (°F) 40-77°

Monitoring Event (circle one): Biweekly / (Monthly) / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-				1				
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	- 44.3	6763	72.4	0	21.0	0			
Exterior Wells									

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac (in. H_2O)	Comments
AOC65-VEW15	- 32.9	985	59.5	0	21.0	1.5			- 0.5	
AOC65-VEW16	- 33.0	2022	60.02	0	19.5	2.0			- 2.9	
AOC65-VEW18	- 33.3	2837	58.9	0	20.5	2.5			- 2.7	
AOC65-VEW28A	- 32.5	1987	60.4	0	19.0	2.0			- 29.8	
AOC65-VEW28B	- 32.4	637	59.3	0	18.5	1.5			- 31.2	
B90-INTAKE-EX	- 37.1	3337	66.5	0	19.0	2.25				
B90-EXHAUST	+ 11.3	2322	109.3	0	20.0	1.25				

Blower Information: System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Subslab	(Y) / N	(Y) 40 70	N	(Y) / N	(Y) / N	7012.7
Exterior	(Y) / N	40	N	(Y) / N	(Y) / N	1464.1

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Subslab	(Y) / N	(Y) / N	N/A
Exterior	(Y) / N	(Y) / N	≈ 30

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 1-8-09 / 0900 Operator: S. Elliott & J. Bouch Ambient T (°F) 40-77°

Monitoring Event (circle one): Biweekly (Monthly) / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-24.6	614	70.8	0	20.5	0.25			-18.9	
AOC65-VEW20	-24.8	375	74.1	0	21.0	0			-23.3	
AOC65-VEW21	-24.5	425	74.6	0	20.0	0.25			-23.8	
AOC65-VEW23	-23.4	1119	72.1	0	20.0	0			-23.4	
AOC65-VEW25	-23.8	2308	71.0	0	21.0	0			-20.3	
AOC65-VEW27	-23.5	514	72.4	0	19.5	1.0			-18.3	
AOC65-INTAKE-SW	-24.3	4130	69.4	0	21.0	0				intake flow meter (SCFM)= 0
Deep Wells										
AOC65-VEW13	-33.6	14793	69.7	0	18.0	2.5			-1.4	
AOC65-VEW14	-32.2	1010	75.0	0	19.0	1.5			-3.1	
AOC65-VEW17	-31.8	1902	73.3	0	18.0	2.5			-13.9	
AOC65-VEW22	-32.8	2373	67.4	0	19.5	3.0			-20.8	
AOC65-VEW24	-31.8	606	66.0	0	18.0	3.0			-3.1	
AOC65-VEW26	-34.2	10329	60.6	0	17.0	3.5			-18.8	
AOC65-INTAKE-DW	-39.1	8954	69.2	0	18.0	2.5				intake flow meter (SCFM)= 0
AOC65-EXHAUST	+3.5	10227	135.1	0	18.5	2.25				

Blower Information

System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Shallow	(Y) / N	32	—	(Y) / N	Y (N)	—
Deep	Y / (N) *	49	—	(Y) / N	Y / (N)	—

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	(Y) / N	0
Deep	(Y) / N	(Y) / N	0

Observations/Notes:
* won't come on in Auto, something wrong with front, ~~run in hand for testing~~ * ken fixed it by kicking it

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 1.23.09 / 1030 *Operator:* J. Bouch / A. Lindley *Ambient T (°F)* 50-75°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

	Manifold Readings								Wellhead	
Monitoring Point	Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected Time	Analytical Sample Collected Summa Canister #	Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-								-	*deepwells were off
AOC65-VEW20	-								-	
AOC65-VEW21	-								-	
AOC65-VEW23	-								-	
AOC65-VEW25	-								-	
AOC65-VEW27	-								-	
AOC65-INTAKE-SW	-									intake flow meter (SCFM)= 0
Deep Wells										
AOC65-VEW13	-								-	
AOC65-VEW14	-								-	
AOC65-VEW17	-								-	
AOC65-VEW22	-								-	
AOC65-VEW24	-								-	
AOC65-VEW26	-								-	
AOC65-INTAKE-DW	-									intake flow meter (SCFM)= 0
AOC65-EXHAUST	+									

Blower Information	System	Pre Adjustment Blower On	Pre Adjustment Intake Pressure Gauge	Pre Adjustment Adjusted Pressure	Vacuum Relief Valve Check	Vacuum Relief Valve Lube	Hours Meter
	Shallow	(Y) / N	28	N	(Y) / N	Y / (N)	—
	Deep	Y / (N)	48	N	(Y) / N	Y / (N)	—

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)
	Shallow	(Y) / N	(Y) / N	≈ 15 gallons
	Deep	(Y) / N	(Y) / N	≈ 30 gallons

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 1-23-09 / 1030 Operator: J. Bench / A Lindley Ambient T (°F) 50-75°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	-								

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
Exterior Wells										
AOC65-VEW15	-								-	
AOC65-VEW16	-								-	
AOC65-VEW18	-								-	
AOC65-VEW28A	-								-	
AOC65-VEW28B	-								-	
B90-INTAKE-EX	-									
B90-EXHAUST	+									

Blower Information

System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Subslab	(Y) / N	80	N	(Y) / N	Y / (N)	7012.7
Exterior	Y / (N)	48	N	(Y) / N	Y / (N)	6928.6

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Subslab	(Y) / N	(Y) / N	0
Exterior	(Y) / N	(Y) / N	~ 38

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 2-4-09 / 0845 **Operator:** S. Elliott + J. Bosch **Ambient T (°F)** 50°

Monitoring Event (circle one): Biweekly / (Monthly) / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-23.3	1035	65.4	3.8	21.0	0.2	0937		-18.8	
AOC65-VEW20	-22.7	404	65.6	0.1	21.0	0	0940		-22.3	
AOC65-VEW21	-23.1	316	62.5	2.7	21.0	0.4	0943		-22.5	
AOC65-VEW23	-22.6	1149	62.5	1.8	21.0	0	0946		-22.2	
AOC65-VEW25	-22.3	942	61.3	0	21.0	0	0949		-19.2	
AOC65-VEW27	-22.6	384	60.4	8.6	20.5	1	0952		-18	
AOC65-INTAKE-SW	-24.2	2452	62.5	1.9	21.0	0	0933			intake flow meter (SCFM)= 0
Deep Wells										
AOC65-VEW13	-33.1	7453	57.1	3.9	20.0	2.25	0959		-1.3	
AOC65-VEW14	-33.2	594	56.8	2.8	21.0	2.5	1002		-0.2	
AOC65-VEW17	-32.2	1322	56.4	4.0	20.0	2.5	1004		-14.2	
AOC65-VEW22	-31.9	1036	57.3	3.5	20.5	2.5	1007		-26.1	
AOC65-VEW24	-30.9	621	57.9	2.8	19.5	2.5	1010		-0.3	
AOC65-VEW26	-31.0	6619	57.9	4.1	19.5	3.5	1012		-23.7	
AOC65-INTAKE-DW	-36.4	4730	63.1	3.8	20.5	2.5	0956			intake flow meter (SCFM)= 0
AOC65-EXHAUST	+4.2	10850	128.2	4.0	20.0	2.0	1013			

Blower Information

System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Shallow	(Y) / N	32	ND	(Y) / N	Y / (N)	NA
Deep	(Y) / N	46	ND	(Y) / N	Y / (N)	NA

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	(Y) / N	~1
Deep	(Y) / N	(Y) / N	~32

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Month 9

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 2-20-09 / 1130 *Operator:* J Bench *Ambient T (°F)* 35° - 70°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

	Manifold Readings								Wellhead	
Monitoring Point	Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected Time	Analytical Sample Collected Summa Canister #	Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-								-	
AOC65-VEW20	-								-	
AOC65-VEW21	-								-	
AOC65-VEW23	-								-	
AOC65-VEW25	-								-	
AOC65-VEW27	-								-	
AOC65-INTAKE-SW	-									intake flow meter (SCFM)= less than 10
Deep Wells										
AOC65-VEW13	-								-	
AOC65-VEW14	-								-	
AOC65-VEW17	-								-	
AOC65-VEW22	-								-	
AOC65-VEW24	-								-	
AOC65-VEW26	-								-	
AOC65-INTAKE-DW	-									intake flow meter (SCFM)= Ø
AOC65-EXHAUST	+									

Blower Information	System	Pre Adjustment Blower On	Pre Adjustment Intake Pressure Gauge	Pre Adjustment Adjusted Pressure	Vacuum Relief Valve Check	Vacuum Relief Valve Lube	Hours Meter
	Shallow	(Y) / N	28	N	(Y) / N	Y / (N)	
	Deep	(Y) / N	48	N	(Y) / N	Y / (N)	

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:
	Shallow	(Y) / N	(Y) / N	~ 20 gallons	
	Deep	(Y) / N	(Y) / N	0	

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 3/3/09 0945 Operator: A. Lindley, US Pearson Ambient T (°F) 50°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	- 44.1	~~14454~~ 13128	64.3	6.2	21.0	.25			
Exterior Wells									

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac (in. H_2O)	Comments
AOC65-VEW15	- 34.2	488	57.3	2.5	21.0	1.2			- 0.1	
AOC65-VEW16	- 33.9	963	58.6	2.9	20.75	1.5			- 3.0	
AOC65-VEW18	- 34.0	329	57.0						- 2.7	Water in VBW
AOC65-VEW28A	- 33.7	1378	54.8	3.9	19.5	2.5			- 30.8	
AOC65-VEW28B	- 34.1	682	53.0	3.8	19.75	1.75			- 11.2	
B90-INTAKE-EX	- 37.4	3675	63.4	3.9	19.75	2.0				
										Temp VOC O_2 CO_2
Pre GAC B90-EXHAUST	+ 10.8	14454	133.8	5.1	20.0	1.5			POST GAC 0.1 | 17537	94.0 | 4.9 | 20.8 | .75

Blower Information: System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Subslab	(Y) / N	78 in H_2O		Y / N	Y / (N)	07012.7
Exterior	(Y) / N	44 in H_2O		Y / N	Y / (N)	676880

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Subslab	(Y) / N	(Y) / N	0
Exterior	(Y) / N	(Y) / N	12

Observations/Notes:
← 3/2/09

in. H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 3/3/09 Operator: A. Lindly, WS Pearson Ambient T (°F) 50°

Monitoring Event (circle one): Biweekly / ~~Monthly~~ / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-21.8	1254	70.5	3.7	20.7	0.1			-7.5	
AOC65-VEW20	-21.6	365	71.5	1.0	20.7	0.1			-8.1	
AOC65-VEW21	-21.6	454	71.0	4.1	20.5	0.25			-8.2	
AOC65-VEW23	-21.5	865	70.5	2.3	20.6	0.2			-8.1	
AOC65-VEW25	-21.4	1528	68.7	0.5	20.2	0.1			-7.1	
AOC65-VEW27	-21.5	SP ~~1725~~ 510	71.9	8.0	20.1	0.9			-3.7	
AOC65-INTAKE-SW	-22.9	3290	71.7	2.9	21.0	0				intake flow meter (SCFM)= 22.5
Deep Wells										
AOC65-VEW13	-33.7	4468	67.2	2.7	20.1	2.2			-1.3	
AOC65-VEW14	-33.4	587	66.7	2.9	19.5	1.7			-0.1	
AOC65-VEW17	-33.3	1464	61.1	3.0	20.2	2.0			-14.3	
AOC65-VEW22 **	-33.4	SP ~~1143~~ 1114 *	58.4	2.7	19.5	2.3			-23.6	
AOC65-VEW24	-32.9	585	58.0	2.3	20.0	1.9			-0.2	
AOC65-VEW26	-33.0	7474	55.0	3.4	20.0	3.0			-17.3	
AOC65-INTAKE-DW	-37.8	5842	69.5	3.2	19.25	2.5				intake flow meter (SCFM)= 0
AOC65-EXHAUST	+3.5	10571	127.9	3.0	19.9	1.8				

Blower Information: System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Shallow	(Y) / N	46 in H_2O	~~22.5~~	(Y) / N	Y / (N)	
Deep	(Y) / N	24 in H_2O	0	(Y) / N	Y / (N)	

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	(Y) / N	0
Deep	(Y) / N	(Y) / N	14

Observations/Notes: Vacuum Relief Valve on shallow side stuck open; deep stuck shut.
← 3/2/09

in. H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Cal: Photovac 2020 0=AIR 100 ppm Isobutylene
Gas Tech for 0=CO_2% 20.8% O_2

* ~~1143~~ 1114 VEW22 Flow
** H_2O in VEW 22 line

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 3.18.09 / 1300 Operator: S. Elliott Ambient T (°F) _____

Monitoring Event (circle one): ~~Biweekly~~ / Monthly / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-								-	
AOC65-VEW20	-								-	
AOC65-VEW21	-								-	
AOC65-VEW23	-								-	
AOC65-VEW25	-								-	
AOC65-VEW27	-								-	
AOC65-INTAKE-SW	-									intake flow meter (SCFM)=
Deep Wells										
AOC65-VEW13	-								-	
AOC65-VEW14	-								-	
AOC65-VEW17	-								-	
AOC65-VEW22	-								-	
AOC65-VEW24	-								-	
AOC65-VEW26	-								-	
AOC65-INTAKE-DW	-									intake flow meter (SCFM)=
AOC65-EXHAUST	+									

Blower Information

System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Shallow	(Y) / N	26	no	(Y) / N	Y (N)	NA
Deep	(Y) / N	45	no	(Y) / N	Y (N)	NA

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	(Y) / N	0
Deep	(Y) / N	(Y) / N	25

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 4/7/09 Operator: J. Bouch, A. Lindly Ambient T (°F) 55°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other

Monitoring Point	Wellhead Readings: Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	-44.3	7581	65.6	4.3	21.0	0.25	1155	2105	

Exterior Wells

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac (in. H_2O)	Comments
AOC65-VEW15	-33.7	466	58.4	4.9	20.75	0.8	1221	~~[illegible]~~ 34132	-0	extra summa used
AOC65-VEW16	-33.7	1464	59.1	5.6	20.75	1.3	1215	—	-3.1	
AOC65-VEW18	-33.2	2516	55.7	~~5.2~~ 5.3 AL	20	2.1	1212	—	-3.8	water in VEW line
AOC65-VEW28A	-33.1	3335	59.1	5.5	19.0	2.5	1200	36458	-29.6	
AOC65-VEW28B	-33.2	546	62.4	4.0	20.0	1.8	1208	25283	-7.1	
B90-INTAKE-EX	-36.7	~~5138~~ 5182 AL	~~91.2~~ 70.6 AL	5.3	19.5	2.1	1148	20773	//////	Flow 5182 Temp 70.6
Post GAC B90-EXHAUST	+.1	5138	91.2	5.6	20.0	1.25	1140	~~3257~~	35657	* pre GAC B-90 exhaust

Blower Information: System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Subslab	(Y) / N	72		Y / N NA	Y / N	70127
Exterior	(Y) / N	46		Y / N	Y / N	84008

readings taken 4.13.09

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Subslab	(Y) / N	(Y) / N	0
Exterior	(Y) / N	(Y) / N	~~[illegible]~~ 9

Observations/Notes:

+10.9	13753	140.1	19.75	1.25	0.6
VAC	FLOW	TEMP	O_2	CO_2	PID

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 5/7/09 1000 Operator: J. Bovek / A. Lindley Ambient T (°F) 78°

Monitoring Event (circle one): Biweekly / (Monthly) / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	- 44.1	12176	81.1	0.7	19.0	0.1			

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
Exterior Wells										
AOC65-VEW15	- 32.2	2048	80.4	1.5	19.0	1.5			- 8.0	(DUP)
AOC65-VEW16	- 32.2	2028	80.0	1.6	19.25	1.5			- 3.1	
AOC65-VEW18	- 32.2	971	80.4	2.0	18.75	2.0			- 7.2	
AOC65-VEW28A	- 31.6	2472	79.3	0.0	18	2.5			- 29.2	
AOC65-VEW28B	- 32.0	673	79.3	0.0	18.5	2.0			- 0.2	
B90-INTAKE-EX	- 35.6	5618	80.2	1.2	18.5	2.0				
B90-EXHAUST	+ 0.1	4093	111.9	4.0	19.0	1.5				

Blower Information: System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Subslab	(Y) / N	78	N/A	(Y) / N	Y / (N)	70127
Exterior	(Y) / N	44	N/A	(Y) / N	Y / (N)	91126

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Subslab	(Y) / N	(Y) / N	0
Exterior	(Y) / N	(Y) / N	0

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 5/7/09 0900 Operator: J. Bouch / A. Lindley Ambient T (°F) 78°

Monitoring Event (circle one): Biweekly / ~~Monthly~~ / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-24.2	681	77.1	1.1	20.0	0.25			-22.6	O_2 meter only calibrates
AOC65-VEW20	-24.1	511	77.8	0.0	20.0	0.25			-23.7	to 20.5
AOC65-VEW21	-24.1	384	78.0	0.0	20.0	0.5			-23.8	
AOC65-VEW23	-23.9	456	77.8	0.0	20.0	0.25			-23.4	
AOC65-VEW25	-23.8	1347	77.8	0.0	20.0	0.1			-20.8	
AOC65-VEW27	-23.9	490	78.2	2.9	19.25	1.25			-19.2	
AOC65-INTAKE-SW	-24.8	2543	76.6	0.3	20.5	0.25				intake flow meter (SCFM)= 16.33
Deep Wells										
AOC65-VEW13	-29.6	2880	77.3	0.0	18.75	2.5			-1.3	
AOC65-VEW14	-29.4	534	78.2	0.0	19.0	2.0			-0.1	
AOC65-VEW17	-28.9	1839	77.7	0.0	~~20~~ 19.0	2.25			-15.8	
AOC65-VEW22	-28.7	1281	77.5	0.0	18.5	2.5			-27.2	
AOC65-VEW24	-28.5	536	78.2	0.0	19.0	2.5			-0.1	
AOC65-VEW26	-28.4	1136	78.0	0.0	18.25	3.0			-22.6	
AOC65-INTAKE-DW	-33.8	6731	77.5	0.0	19.5	2.5				intake flow meter (SCFM)= 18.22
AOC65-EXHAUST	+3.5	11937	136.5	0.0	19.0	2.0				

Blower Information

System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Shallow	(Y) / N	26	N/A	(Y) / N	Y / (N)	—
Deep	(Y) / N	42	N/A	(Y) / N	Y / (N)	—

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	Y / (N)	0
Deep	(Y) / N	Y / (N)	0

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 5.21.09 Operator: JBouch Ambient T (°F) 60-85°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	-								
Exterior Wells									
	Manifold Readings								**Wellhead**
Monitoring Point	**Vac (in. H_2O)**	**Flow fpm**	**Temp °F**	**VOC ppm**	**O_2 vol %**	**CO_2 vol %**	**Analytical Sample Collected: Time**	**Analytical Sample Collected: Summa Canister #**	**Vac (in. H_2O)** / **Comments**
AOC65-VEW15	-								-
AOC65-VEW16	-								-
AOC65-VEW18	-								-
AOC65-VEW28A	-								-
AOC65-VEW28B	-								-
B90-INTAKE-EX	-								
B90-EXHAUST	+								

Blower Information	System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
	Subslab	(Y) / N	72	NO	(Y) / N	Y / (N)	7012.7
	Exterior	(Y) / N	44	NO	(Y) / N	Y / (N)	9448.9

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:
	Subslab	(Y) / N	(Y) / N		
	Exterior	(Y) / N	(Y) / N		

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 5.21.09 *Operator:* JBouch *Ambient T (°F)* 60-85°

Monitoring Event (circle one): ~~Biweekly~~ / *Monthly / Quarterly / Other* _____

Monitoring Point	*Manifold Readings*								*Wellhead*	
	Vac in.H_2O	*Flow fpm*	*Temp °F*	*VOC ppm*	*O_2 vol %*	*CO_2 vol %*	*Analytical Sample Collected Time*	*Summa Canister #*	*Vac in. H_2O*	*Comments*
Shallow Wells										
AOC65-VEW19	-								-	
AOC65-VEW20	-								-	
AOC65-VEW21	-								-	
AOC65-VEW23	-								-	
AOC65-VEW25	-								-	
AOC65-VEW27	-								-	
AOC65-INTAKE-SW	-									intake flow meter (SCFM)= ~ 22
Deep Wells										
AOC65-VEW13	-								-	
AOC65-VEW14	-								-	
AOC65-VEW17	-								-	
AOC65-VEW22	-								-	
AOC65-VEW24	-								-	
AOC65-VEW26	-								-	
AOC65-INTAKE-DW	-									intake flow meter (SCFM)= ~44
AOC65-EXHAUST	+									

Blower Information	*System*	Pre Adjustment			Vacuum Relief Valve		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube	Hours Meter
	Shallow	(Y) / N	28	No	Y / N	Y / N	—
	Deep	(Y) / N	44	NO	(Y) / N	Y / (N)	—

Moisture Separator Information	*System*	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:
	Shallow	(Y) / N	Y / N	0	
	Deep	(Y) / N	Y / N	0	

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 6/4/09 Operator: J. Boach/A. Lindley Ambient T (°F) 80.

Monitoring Event (circle one): Biweekly / (Monthly) / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-31.5	881	81.4	2.2	20.0	0.5			-22.7	-24.5
AOC65-VEW20	-29.5	486	82.9	0.0	20.0	0.25			-21.6	-23.6
AOC65-VEW21	-30.0	582	87.6	0.0	20.0	0.5			-22.6	-24.4
AOC65-VEW23	-29.8	568	88.5	0.0	19.75	0.25			-22.6	-24.6
AOC65-VEW25	-29.6	2269	84.0	0.0	20.0	0.0			-19.5	-20.8
AOC65-VEW27	-29.5	603	86.5	3.3	19.0	1.5			-16.0	-17.3 AL VEW cap was off (AL)
AOC65-INTAKE-SW	-32.1	2317	80.4	0.0	20.0	0.25				intake flow meter (SCFM)=
Deep Wells										
AOC65-VEW13	-29.5	4267	86.1	0.0	18.0	2.5			-1.2	~~PID drift recal = 2.8~~ (AL)
AOC65-VEW14	-29.4	431	88.1	0.0	19.	2.0			-1.7	
AOC65-VEW17	-28.7	2386	85.8	3.9	18.25	2.0			-15.5	← recal PID
AOC65-VEW22	-28.7	1500	86.3	3.0	18	2.5			-27.2	
AOC65-VEW24	-28.7	843	87.4	2.5	17.5	2.1			-0.1	
AOC65-VEW26	-28.5	1849	87.6	3.2	18.	3.0			-26.5	PID after recal = 2.8
AOC65-INTAKE-DW	-33.7	8519	85.2	0.0	18.0	2.5				intake flow meter (SCFM)= 0
AOC65-EXHAUST	+3.7	12700	146.2	2.4	18.5	2.0				

Blower Information: System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Shallow	(Y) / N	32		(Y) / N	Y / (N)	
Deep	(Y) / N	44		(Y) / N	Y / (N)	

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	Y / (N)	
Deep	(Y) / N	Y / (N)	

Observations/Notes:
J Empty

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 6/4 0950 Operator: J. Bouch / A. Lindley Ambient T (°F) 80

Monitoring Event (circle one): Biweekly / (Monthly) / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	-44.1	9968	79.3	5.9	20.0	0.25			

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
Exterior Wells										
AOC65-VEW15	-32.2	554	74.5	0.7	20.0	1.25			-0	
AOC65-VEW16	-32.4	1168	76.8	2.2	19.0	1.25			-0.6	
AOC65-VEW18	-32.0	556	76.8	2.0	19.0	2.0			-1.1	
AOC65-VEW28A	-31.4	1708	76.4	1.9	18.0	2.0			-4.4	
AOC65-VEW28B	-31.8	501	78.0	0.3	18.75	1.5			-0 (F)	
B90-INTAKE-EX	-35.6	3625	76.9	2.6	19.0	2.0				
B90-EXHAUST	+0.0	7571	108.1	5.2	19.5	1.5				

Blower Information

System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Subslab	(Y) / N	76		Y / N	Y / (N)	70127
Exterior	(Y) / N	42		Y / N	Y / (N)	97834

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Subslab	Y / N	Y / N	
Exterior	Y / N	Y / N	

Observations/Notes:

in H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 6-16-09 Operator: Thomas A. Lindley Ambient T (°F) 92°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	-								
Exterior Wells									

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
AOC65-VEW15	-								-	
AOC65-VEW16	-								-	
AOC65-VEW18	-								-	
AOC65-VEW28A	-								-	
AOC65-VEW28B	-								-	
B90-INTAKE-EX	-									
B90-EXHAUST	+									

Blower Information: System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Subslab	(Y) / N	72	NO	(Y) / N	Y / (N)	7012.7
Exterior	(Y) / N	42	NO	(Y) / N	Y / (N)	9821.2

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Subslab	(Y) / N	(Y) / N	0
Exterior	(Y) / N	(Y) / N	0

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 6.16.09 *Operator:* ~~J.Roach~~ A. Lindley *Ambient T (°F)* 92°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

	Manifold Readings								Wellhead	
Monitoring Point	**Vac in.H_2O**	**Flow fpm**	**Temp °F**	**VOC ppm**	**O_2 vol %**	**CO_2 vol %**	**Analytical Sample Collected Time**	**Analytical Sample Collected Summa Canister #**	**Vac in. H_2O**	**Comments**
Shallow Wells										
AOC65-VEW19	-								-	
AOC65-VEW20	-								-	
AOC65-VEW21	-								-	
AOC65-VEW23	-								-	
AOC65-VEW25	-								-	
AOC65-VEW27	-								-	
AOC65-INTAKE-SW	-									intake flow meter (SCFM)= 18
Deep Wells										
AOC65-VEW13	-								-	
AOC65-VEW14	-								-	
AOC65-VEW17	-								-	
AOC65-VEW22	-								-	
AOC65-VEW24	-								-	
AOC65-VEW26	-								-	
AOC65-INTAKE-DW	-									intake flow meter (SCFM)= 54
AOC65-EXHAUST	+									

Blower Information	System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
	Shallow	(Y) / N	28	NO	(Y) / N	Y / (N)	
	Deep	(Y) / N	44	NO	(Y) / N	Y / (N)	

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:
	Shallow	(Y) / N	(Y) / N	0	
	Deep	(Y) / N	(Y) / N	0	

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 7.9.09 / 745 **Operator:** S. Elliott / J. Bosch **Ambient T (°F)** 80 - 100°

Monitoring Event (circle one): Biweekly / (Monthly) / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in. H_2O	Flow fpm	Temp °F	VOC ppm *	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										~~Flow~~ Flow
AOC65-VEW19	- 16.5	~~767~~	83.8	NA	20.2	0.5	0818	—	- 25.8	~~730~~ 605 filter cup loose when we took the first reading
AOC65-VEW20	- 16.5	~~253~~	83.8	↓	20.4	0	0827	—	- 25.1	521
AOC65-VEW21	- 16.5	~~315~~	83.6	↓	20.2	0.3	0831	—	- 25.8	470 ← resample
AOC65-VEW23	- 16.5	~~298~~	85.8	↓	20.1	0.3	0836	—	- 26.1	536
AOC65-VEW25	- 16.4	~~1370~~	87.6	↓	20.5	0	0837	—	- 27.3	2719
AOC65-VEW27	- 16.3	~~273~~	87.4	↓	18.6	2.1	0840	—	- 25.3	538
AOC65-INTAKE-SW	- 16.9	~~931~~	82.2	↓	20.4	0.1	0814	—		2224 intake flow meter (SCFM)= 29
Deep Wells										
AOC65-VEW13	- 28.3	3167	88.6	NA	18.1	2.7	0846	—	- 1.3	
AOC65-VEW14	- 28.3	654	89.9	↓	19.1	1.7	0848	—	- 3.9	
AOC65-VEW17	- 27.5	2465	92.6	↓	18.5	2.4	0850	—	- 15.6	
AOC65-VEW22	- 27.5	1687	91.2	↓	17.8	2.7	0852	—	- 27.2	
AOC65-VEW24	- 27.5	623	92.6	↓	18.4	2.6	0853	—	- 0.2	
AOC65-VEW26	- 27.5	928	92.6	↓	17.8	3.1	0856	—	- 24.6	
AOC65-INTAKE-DW	- 32.3	6806	87.6	↓	18.2	2.5	0844	—		intake flow meter (SCFM)= 43
AOC65-EXHAUST	+ 4	12106	143.2	↓	18.8	2.1	0857	—		

Blower Information

System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Shallow	(Y) / N	0	no	(Y) / N	Y / (N)	—
Deep	(Y) / N	85	no	(Y) / N	Y / (N)	—

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	(Y) / N	0
Deep	(Y) / N	(Y) / N	0

Observations/Notes:
* PID not working today
CO_2/O_2 meter rented Landtec

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 7/14/09 / 0910 Operator: S. Elliott & J. Bouch Ambient T (°F) 80-100

Monitoring Event (circle one): Biweekly / (Monthly) / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	- 44.1	>15,000	92.2	—	20.6	0	0931	—	
Exterior Wells									

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac (in. H_2O)	Comments
AOC65-VEW15	- 30.0	514	82.3	NA	20.3	0.2	0923	—	- 0	
AOC65-VEW16	- 28.6	1624	83.6	↓	19.4	1.6	0921	—	- 2.4	
AOC65-VEW18	- 30.2	800	84.1		18.4	2.7	0918	—	- 6.3	
AOC65-VEW28A	- 28.9	2336	83.2		17.9	2.3	0914	—	- 27.2	
AOC65-VEW28B	- 28.7	6042	82.3		18.9	1.5	0913	—	- 0	
B90-INTAKE-EX	- 33.4	4984	83.6	↓	18.6	2.1	0926	—		
B90-EXHAUST	+ 10.9	>15,000	141.3	↓	19.3	1.5	0928	—	pre GAC	

Blower Information

System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Subslab	(Y) / N	39	—	(Y) / N	Y / (N)	7012.7
Exterior	(Y) / N	72	—	(Y) / N	Y / (N)	10038.8

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Subslab	(Y) / N	(Y) / N	0
Exterior	(Y) / N	(Y) / N	0

Observations/Notes:
* PID not working today
CO_2/O_2 meter rented 'Landtec'

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 7.24.09 / 1045 Operator: J. Bouch Ambient T (°F) 85°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected Time	Analytical Sample Collected Summa Canister #	Comments
Wellhead Readings									
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	-								
Exterior Wells									
Manifold Readings									**Wellhead**
Monitoring Point	**Vac (in. H_2O)**	**Flow fpm**	**Temp °F**	**VOC ppm**	**O_2 vol %**	**CO_2 vol %**	**Analytical Sample Collected Time**	**Analytical Sample Collected Summa Canister #**	**Vac (in. H_2O)** / **Comments**
AOC65-VEW15	-								-
AOC65-VEW16	-								-
AOC65-VEW18	-								-
AOC65-VEW28A	-								-
AOC65-VEW28B	-								-
B90-INTAKE-EX	-								
B90-EXHAUST	+								

Blower Information	System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
	Subslab	(Y) / N	42	NO	(Y) / N	Y / (N)	7012.7
	Exterior	(Y) / N	70	NO	(Y) / N	Y / (N)	10223.9

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)
	Subslab	(Y) / N	(Y) / N	NO (Ø)
	Exterior	(Y) / N	(Y) / N	NO (Ø)

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 7.24.09 / 1045 Operator: J. Bench Ambient T (°F) 85°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-								-	
AOC65-VEW20	-								-	
AOC65-VEW21	-								-	
AOC65-VEW23	-								-	
AOC65-VEW25	-								-	
AOC65-VEW27	-								-	
AOC65-INTAKE-SW	-									intake flow meter (SCFM)=~22
Deep Wells										
AOC65-VEW13	-								-	
AOC65-VEW14	-								-	
AOC65-VEW17	-								-	
AOC65-VEW22	-								-	
AOC65-VEW24	-								-	
AOC65-VEW26	-								-	
AOC65-INTAKE-DW	-									intake flow meter (SCFM)= ~90
AOC65-EXHAUST	+									

Blower Information

System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Shallow	(Y) / N	30	NO	(Y) / N	Y / (N)	—
Deep	Y / N	44	NO	(Y) / N	Y / (N)	—

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	(Y) / N	0
Deep	(Y) / N	(Y) / N	0

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 8.12.09 / 0900 Operator: S. Elliott & J. Bouch Ambient T (°F) 78-102°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								* O_2/CO_2 + PID meters broken
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	- 44.1	>15,000	90.8				0919		
Exterior Wells									

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
AOC65-VEW15	- 26.4	392	85.8				0916		- 0.1	
AOC65-VEW16	- 26.3	1246	86.5				0915		- 1.9	
AOC65-VEW18	- 25.4	1062	86.7				0914		- 5.4	
AOC65-VEW28A	- 24.2	3069	87.4				0913		- 23.8	
AOC65-VEW28B	- 24.4	1102	88.6				0912		- 0.7	
B90-INTAKE-EX	- 30.6	5453	87.6				0917			
B90-EXHAUST	+ 12.3	14138	146.4				0918			

Blower Information

System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Subslab	(Y) / N	72	NS	(Y) / N	Y / (N)	7012
Exterior	Y / (N) off upon arrival	38	No	(Y) / N	Y / (N)	10265

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Subslab	(Y) / N	(Y) / N	0
Exterior	(Y) / N	(Y) / N	0

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 8/12/09 - 0850 Operator: S Elliott + J. Burch Ambient T (°F) 78-102°

Monitoring Event (circle one): Biweekly / (Monthly) / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	- 23.6	1062	92.6	/	/	/	0855	/	- 20.8	O_2/CO_2 + PID meters are
AOC65-VEW20	- 23.4	430	95.3	/	/	/	0856	/	- 23.3	broken, no readings
AOC65-VEW21	- 23.4	504	96.2	/	/	/	0857	/	- 23.1	
AOC65-VEW23	- 23.4	466	96.2	/	/	/	0858	/	- 23.3	
AOC65-VEW25	- 23.3	1974	92.8	/	/	/	0858	/	- 19.7	
AOC65-VEW27	- 23.3	478	94.8	/	/	/	0900	/	- 23.1	
AOC65-INTAKE-SW	- 24.1	2504	91.3	/	/	/	0854	/		intake flow meter (SCFM)= 0
Deep Wells										
AOC65-VEW13	- 29.1	3543	91.2	/	/	/	0900	/	- 1.2	
AOC65-VEW14	- 29.0	620	95.5	/	/	/	0902	/	- 3.6	
AOC65-VEW17	- 28.5	2353	94.0	/	/	/	0903	/	- 15.6	
AOC65-VEW22	- 28.3	1410	94.6	/	/	/	0904	/	- 27.4	
AOC65-VEW24	- 27.9	513	96.9	/	/	/	0905	/	- 0.1	
AOC65-VEW26	- 28.1	996	94.2	/	/	/	0906	/	- 26.8	
AOC65-INTAKE-DW	- 33.2	7324	90.6	/	/	/	0900	/		intake flow meter (SCFM)= 80
AOC65-EXHAUST	+ 3.6	11692	155.4	/	/	/	0906	/		

Blower Information

System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Shallow	(Y) / N	25	NO	(Y) / N	Y / (N)	NA
Deep	(Y) / N	44	NO	(Y) / N	Y / (N)	NA

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:
Shallow	(Y) / N	(Y) / N	0 gallons	
Deep	(Y) / N	(Y) / N	0	

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 8-26-09 / 0900 Operator: J.Bouch Ambient T (°F) 73°-95°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	-								

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
Exterior Wells										
AOC65-VEW15	-								-	
AOC65-VEW16	-								-	
AOC65-VEW18	-								-	
AOC65-VEW28A	-								-	
AOC65-VEW28B	-								-	
B90-INTAKE-EX	-									
B90-EXHAUST	+									

Blower Information

System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Subslab	(Y) / N	70	NO	(Y) / N	Y / (N)	7012.7
Exterior	(Y) / N	43	NO	(Y) / N	Y / (N)	10446.9

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Subslab	(Y) / N	(Y) / N	0
Exterior	(Y) / N	(Y) / N	0

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 8-26-09 / 0900 *Operator:* Jbouch *Ambient T (°F)* 73°-95°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	*Manifold Readings*								*Wellhead*	
	Vac in.H_2O	*Flow fpm*	*Temp °F*	*VOC ppm*	*O_2 vol %*	*CO_2 vol %*	Analytical Sample Collected: *Time*	Analytical Sample Collected: *Summa Canister #*	Vac *in. H_2O*	*Comments*
Shallow Wells										
AOC65-VEW19	-								-	
AOC65-VEW20	-								-	
AOC65-VEW21	-								-	
AOC65-VEW23	-								-	
AOC65-VEW25	-								-	
AOC65-VEW27	-								-	
AOC65-INTAKE-SW	-									intake flow meter (SCFM)= ≈84
Deep Wells										
AOC65-VEW13	-								-	
AOC65-VEW14	-								-	
AOC65-VEW17	-								-	
AOC65-VEW22	-								-	
AOC65-VEW24	-								-	
AOC65-VEW26	-								-	
AOC65-INTAKE-DW	-									intake flow meter (SCFM)= ≈18
AOC65-EXHAUST	+									

Blower Information	*System*	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	*Hours Meter*
	Shallow	(Y) / N	25	No	(Y) / N	Y / (N)	—
	Deep	(Y) / N	43	No	(Y) / N	Y / (N)	—

Moisture Separator Information	*System*	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:
	Shallow	(Y) / N	(Y) / N	8	
	Deep	(Y) / N	(Y) / N	8	

$in.H_2O$: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 9.11.09 / 1025 Operator: S. Elliott + J. Bosch Ambient T (°F) _____

Monitoring Event (circle one): Biweekly / (Monthly) / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	- 44.1	715,000	84.0	0			1040		
Exterior Wells									

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
AOC65-VEW15	- 29.1	456	74.6	0			1037		- 0.1	
AOC65-VEW16	- 28.7	1378	75.7	0			1031		- 2.1	
AOC65-VEW18	- 28.1	861	75.3	0			1028		- 6.6	
AOC65-VEW28A	- 26.4	2590	75.1	0			1027		- 25.6	
AOC65-VEW28B	- 25.9	423	74.2	0			1023		- 4.6	
B90-INTAKE-EX	- 32.9	5554	77.1	0			1035			
B90-EXHAUST	+ 10.7	12603	140.1	0			1039			

Blower Information: System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Subslab	(Y) / N	80	NO	(Y) / N	Y / (N)	70127
Exterior	(Y) / N *	38	NO	(Y) / N	Y / (N)	107416

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Subslab	(Y) / N	(Y) / N	0
Exterior	(Y) / N	(Y) / N	0

Observations/Notes:
* blower off upon arrival

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 9.11.09 / 0900 Operator: S. Elliott + J. Bosch Ambient T (°F) _____

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-32.2	596	74.8	0			0950		-31.7	
AOC65-VEW20	-32.2	504	73.9	0			0952		-31.8	
AOC65-VEW21	-32.3	535	72.9	0			0954		-32.7	
AOC65-VEW23	-32.3	461	72.9	0			0956		-32.6	
AOC65-VEW25	-32.1	498	73.9	0			0958		-32.6	
AOC65-VEW27	-32.9	450	73.3	5.8			1000		-32.6	
AOC65-INTAKE-SW	-33.3	726	75.3	0			0948			intake flow meter (SCFM)= 0
Deep Wells										
AOC65-VEW13	-31.1	1963	75.5	0			1005		-1.6	
AOC65-VEW14	-31.0	486	75.0	0			1007		-4.4	
AOC65-VEW17	-30.3	1201	75.5	0			1009		-16.5	
AOC65-VEW22	-30.3	822	75.1	0			1011		-28.9	
AOC65-VEW24	-30.0	509	74.6	0			1012		-0.2	
AOC65-VEW26	-30.2	627	75.0	0			1014		-28.5	
AOC65-INTAKE-DW	-35.2	5140	74.4	0			1001			intake flow meter (SCFM)= 80
AOC65-EXHAUST	+2.6	8019	136.9	0			1016			

Blower Information: System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Shallow	(Y) / N	34	NO	Y / N	Y / N	—
Deep	(Y) / N	45	NO	(Y) / N	Y / (N)	—

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	(Y) / N	0
Deep	(Y) / N	(Y) / N	0

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 9.25.09 - 0900 *Operator:* J. Bouch *Ambient T (°F)* 65°-75°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

	Manifold Readings								Wellhead	
Monitoring Point	Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected Time	Analytical Sample Collected Summa Canister #	Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-								-	
AOC65-VEW20	-								-	
AOC65-VEW21	-								-	
AOC65-VEW23	-								-	
AOC65-VEW25	-								-	
AOC65-VEW27	-								-	
AOC65-INTAKE-SW	-									intake flow meter (SCFM)= 0
Deep Wells										
AOC65-VEW13	-								-	
AOC65-VEW14	-								-	
AOC65-VEW17	-								-	
AOC65-VEW22	-								-	
AOC65-VEW24	-								-	
AOC65-VEW26	-								-	
AOC65-INTAKE-DW	-									intake flow meter (SCFM)= ~68
AOC65-EXHAUST	+									

Blower Information	System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
	Shallow	(Y) / N	30	NO	(Y) / N	Y / (N)	—
	Deep	(Y) / N	48	No	(Y) / N	Y / (N)	—

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)
	Shallow	(Y) / N	(Y) / N	0
	Deep	(Y) / N	(Y) / N	0

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 9-25-09 – 0900 Operator: J. Bonch Ambient T (°F) 65°-75°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	-								

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac (in. H_2O)	Comments
Exterior Wells										
AOC65-VEW15	-								-	
AOC65-VEW16	-								-	
AOC65-VEW18	-								-	
AOC65-VEW28A	-								-	
AOC65-VEW28B	-								-	
B90-INTAKE-EX	-									
B90-EXHAUST	+									

Blower Information	System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
	Subslab	(Y) / N	44	NU	(Y) / N	Y / (N)	7012.7
	Exterior	(Y) / N	70	NU	(Y) / N	Y / (N)	11076.4

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)
	Subslab	(Y) / N	(Y) / N	0
	Exterior	(Y) / N	(Y) / N	0

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 10.8.09 / **Operator:** S. Elliott & J. Bouch **Ambient T (°F)** 69-88°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / (Other) Semi Annual

Monitoring Point	Manifold Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead: Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-34.2	556	79.1	1555			X 0905	36526	-30.2	
AOC65-VEW20	-32.5	513	80.4	0			X 0909	22964	-32.4	
AOC65-VEW21	-33.8	306	80.2	0			X 0912	12365	-32.9	
AOC65-VEW23	-33.5	641	80.0	0			X 0915	34602	-32.9	
AOC65-VEW25	-33.9	310	80.0	0			X 0918	35630	-33.1	
AOC65-VEW27	-33.7	283	80.0	1310			X 0920	12808	-32.9	
AOC65-INTAKE-SW	-345	479	79.5	539			X 0900	36483		intake flow meter (SCFM)= 0
Deep Wells										
AOC65-VEW13	-31.8	2860	79.3	0			~~0900~~ 1045	34094	-1.5	sampled w/extra SUMMA
AOC65-VEW14	-31.4	476	80.0	0			0932		-6.8	
AOC65-VEW17	-30.6	1842	80.2	0			0935		-17.9	
AOC65-VEW22	-30.6	1272	80.4	0			X 0937	35640	-29.4	
AOC65-VEW24	-30.4	429	80.2	0			X 0940	36391	-0.2	
AOC65-VEW26	-30.5	1356	81.6	0			X 0953	36570	-29.2	
AOC65-INTAKE-DW	-35.6	6440	79.3	0			X 0925	36469		intake flow meter (SCFM)= 80
AOC65-EXHAUST	+2.7	9150	131.8	0			0951			

Blower Information: System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Shallow	(Y) / N	35	No	(Y) / N	Y / (N)	NA
Deep	(Y) / N	45	No	(Y) / N	Y / (N)	NA

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	(Y) / N	0
Deep	(Y) / N	(Y) / N	0

Observations/Notes: VEW13 - can hear it leaking at wellhead

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 10.8.09 / Operator: S. Elliott + J. Bosch Ambient T (°F) 69-88°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / (Other) Semi Annual

Monitoring Point	Wellhead Readings: Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	- 44.1	3611	81.1	0			X 1030	22963	
Exterior Wells									

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
AOC65-VEW15	- 28.8	443	81.8	0			X 1018	12038	- 0	
AOC65-VEW16	- 28.7	1856	82.2	0				/	- 2.6	
AOC65-VEW18	- 28.3	824	82.2	0				/	- 7.4	
AOC65-VEW28A	- 26.8	3218	81.1	0			X 1010	2187	- 26.9	
AOC65-VEW28B	- 26.1	517	81.4	0			X 1006	36470	- 0	
B90-INTAKE-EX	- 33.1	6074	81.3	0			X 1023	1460		
B90-EXHAUST	+ 10.7	10685	147.3	0			1034		~~Sample name AOC65-Post6AC~~	

Blower Information	System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
	Subslab	(Y) / N	74	No	(Y) / N	Y (N)	712
	Exterior	(Y) / N X	38	No	(Y) / N	Y / (N)	11356.7

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)
	Subslab	(Y) / N	(Y) / N	0
	Exterior	(Y) / N	(Y) / N	0

Observations/Notes: problems calibrating PID, says lamp is bad
Exterior blower off upon arrival

in. H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC65 - Post GAC: +72 (vac) 7640 (flow) 109.9 (temp) PID = 0 samp time = 1036 summa 12042

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 10-23-09 0815 **Operator:** J Bench **Ambient T (°F)** 50°-70°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead: Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-								-	
AOC65-VEW20	-								-	
AOC65-VEW21	-								-	
AOC65-VEW23	-								-	
AOC65-VEW25	-								-	
AOC65-VEW27	-								-	
AOC65-INTAKE-SW	-									intake flow meter (SCFM)= 0
Deep Wells										
AOC65-VEW13	-								-	
AOC65-VEW14	-								-	
AOC65-VEW17	-								-	
AOC65-VEW22	-								-	
AOC65-VEW24	-								-	
AOC65-VEW26	-								-	
AOC65-INTAKE-DW	-									intake flow meter (SCFM)= 22
AOC65-EXHAUST	+									

Blower Information: System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Shallow	(Y) / N	37	NO	(Y) / N	Y / (N)	—
Deep	(Y) / N	47	NO	(Y) / N	Y / (N)	—

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Shallow	Y / N	(Y) / N	>.25 gallon
Deep	Y / N	(Y) / N	N/A

Observations/Notes: Deep filter had water in the filter chamber

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 10-23-09 / 0815 Operator: J. Bench Ambient T (°F) 50° - 70°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	-								

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
Exterior Wells										
AOC65-VEW15	-								-	
AOC65-VEW16	-								-	
AOC65-VEW18	-								-	
AOC65-VEW28A	-								-	
AOC65-VEW28B	-								-	
B90-INTAKE-EX	-									
B90-EXHAUST	+									

Blower Information

System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Subslab	(Y) / N	78	NO	(Y) / N	Y / (N)	115 30.4
Exterior	Y / (N)	37	NO	(Y) / N	Y / (N)	7012.7

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Subslab	(Y) / N	(Y) / N	0
Exterior	(Y) / N	(Y) / N	0.75 gallons

Observations/Notes: Filters were dry

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 11-3-09 / 0900 Operator: S. Elliott + J. Bosch Ambient T (°F) _____

Monitoring Event (circle one): Biweekly / ~~Monthly~~ / Quarterly / (Other)

Monitoring Point	Manifold Readings: Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead: Vac in. H_2O	Comments	screens
Shallow Wells											
AOC65-VEW19	-								-	WL=9.85	5-25
AOC65-VEW20	-								-	WL= 14.55	10-25
AOC65-VEW21	-	* surface	completion damaged, look	like someone	ran into	it			-	WL= 12.82	12-27
AOC65-VEW23	-								-	WL= 7.15	6-21
AOC65-VEW25	-								-	WL= 18.22	6-21
AOC65-VEW27	-								-	WL= 8.97	6-21
AOC65-INTAKE-SW	-									intake flow meter (SCFM)= 40	
Deep Wells											
AOC65-VEW13	-								-	WL= 32.05	15-40
AOC65-VEW14	-								-	WL=60.1 ~~TD=61~~	40-60
AOC65-VEW17	-								-	WL= 49.96	22-52
AOC65-VEW22	-								-	WL= 47.62	25-50
AOC65-VEW24	-								-	WL= 49.78	25-50
AOC65-VEW26	-								-	WL=41.53, TD=50'	25-50
AOC65-INTAKE-DW	-									intake flow meter (SCFM)= 20	
AOC65-EXHAUST	+										

Blower Information

System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Shallow	(Y) / N	38	No	(Y) / N	Y / (N)	NA
Deep	(Y) / N	50	No	(Y) / N	Y / (N)	NA

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	(Y) / N	~.25 gallons
Deep	(Y) / N	(Y) / N	~6 gallons

Observations/Notes:
*Shallow side would not turn on

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 11·3·09 / 0900 Operator: S. Elliott + J. Bush Ambient T (°F) _____

Monitoring Event (circle one): Biweekly ~~Monthly~~ Quarterly Other _____

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	-								

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
Exterior Wells										
AOC65-VEW15	-								-	WL=7.2, TD=12.5, removed 7.5 gallons, WL=12.4'
AOC65-VEW16	-								-	WL=29.98, TD=40.7, removed 14 gal, WL=39'
AOC65-VEW18	-								-	WL=43, TD=61' (?) removed 16 gal WL=53.14'
AOC65-VEW28A	-								-	WL=113.15', TD=120.0
AOC65-VEW28B	-								-	WL=118.49, TD=181.0
B90-INTAKE-EX	-									
B90-EXHAUST	+									

	System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Blower Information	Subslab	(Y) / N	76	NO	Y / N	Y / N	
	Exterior	(Y) / N	40	NO	Y / N	Y / N	

	System	Inspected	Emptied	Amount Xfered (gals)
Moisture Separator Information	Subslab	(Y) / N	(Y) / N	0
	Exterior	(Y) / N	(Y) / N	~6.5 gallons

Observations/Notes:
- need to replace ball valve at KO pot drain on exterior side
- plumb building drains into drain line under dock

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

New VEW Construction Summary - AOC-65 SVE System Expansion 2007

	VEW	Completed Date(s) 2007	total depth (fbgs)	screen (fbgs)	sand (fbgs)	bent seal (fbgs)	grout (fbgs)	open hole DTW after drilling (fbgs)	Borehole Field screening with packer apparatus: Vacuum Pressure inches H2O (approx. screen interval)	PID VOCs (ppm)	O2 %	CO2 %
	VEW 20	4/10	27	10 - 25	8 - 27	5 - 8	2 - 5	dry	65	>2000	21	0.05
	VEW 21	4/19	27	12 - 27	10 - 27	8 - 10	2 - 8	dry	106	1	18.9	0.3
	VEW 22	4/9	51	25 - 50	23 - 51	20 - 23	2 - 20	dry	62	0	19.5	1.8
	VEW 23	4/10	21	6 - 21	4 - 21	2 - 4	n/a	dry	78	0	21	0.05
	VEW 24	4/11	50	25 - 50	23 - 50	20 - 23	2 - 20	dry	61	0	21	0.05
	VEW 25	4/11	21	6 - 21	4 - 21	2 - 4	n/a	20.5	78	0	21	0.05
	VEW 26	4/12	50	25 - 50	23 - 50	20 - 23	2 - 20	dry	67	0	21	0.05
	VEW 27	4/12-13	21	6 - 21	4 - 21	2 - 4	n/a	dry	71	0	19.8	0.9
Nested	VEW 28a	4/26	120	80 - 120	78 - 120	75 - 78	2 - 75	106.35	see note *	*	*	*
Nested	VEW 28b	4/27	179.3	139.3 - 179.3	137.3- 179.3	135.3 - 137.3	120 - 135.3		submerged	no samp.	no samp.	no samp.

* discrete interval				
25-37'	60	0	17.5	2.0
53-65'	124	0	19	1.5
77-89'	80	0	18.5	2.2
101-106'	60	0	18.4	2.7

Well ID	Date Completed	Depth Cored, fbgs	Depth Reamed, fbgs	Screened Intervals, fbgs
AOC65-VEW 13-LGR	6/25/2002	43.8	41	15-40
AOC65-VEW 14-LGR	7/9/2002	59.2	61	40-60
AOC65-VEW 15-UGR	8/6/2002	NC	13	5-12
AOC65-VEW 16-UGR	8/6/2002	NC	41	15-40
AOC65-VEW 17-LGR	8/25/2002	53.5	52.5	22-52
AOC65-VEW 18-LGR	8/22/2002	79	81	15.5-55.5
AOC65-VEW 19-UGR	8/9/2002	NC	26	5-25

NC – Borehole not cored

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 12.11.09/1900 **Operator:** J. Bouch / K. Rice **Ambient T (°F)** 45°-55°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-								-	* blower has been removed for maintenance *
AOC65-VEW20	-								-	
AOC65-VEW21	-								-	
AOC65-VEW23	-								-	
AOC65-VEW25	-								-	
AOC65-VEW27	-								-	
AOC65-INTAKE-SW	-									intake flow meter (SCFM)=
Deep Wells										
AOC65-VEW13	-39.3	9073	46.2						- -1.6	* switched filter from shallow into deep side — filter was wet *
AOC65-VEW14	-39.1	2053	44.0						- -21.8	
AOC65-VEW17	-38.4	3199	41.4						- -17.1	
AOC65-VEW22	-38.4	3062	48.1						- -24.8	
AOC65-VEW24	-39.7	1424	49						- -0.2	
AOC65-VEW26	-38.3	905	54.4						- -33.1	
AOC65-INTAKE-DW	-44.1	22344	47.8							intake flow meter (SCFM)=
AOC65-EXHAUST	+96.	17485	86.1							

Blower Information: System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Shallow	Y / N			Y / N	Y / N	
Deep	Y / N	55	NO	Y / N	Y / N	

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Shallow	~~Y / N~~	~~Y / N~~	0
Deep	Y / N	Y / N	≈ 40 gal.

Observations/Notes:
* pressure relief valve closed in deep side * Ken switched them out

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 12.11.09 / 0900 Operator: J Bouch / ~~A Lindley~~ SOH K. Rice Ambient T (°F) 45°-55°

Monitoring Event (circle one): Biweekly / (Monthly) / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	-								
Exterior Wells									
	Manifold Readings								~~Wellhead~~
Monitoring Point	**Vac ~~(in. H_2O)~~ wellhead**	**Flow fpm**	**Temp °F**	**VOC ppm**	**O_2 vol %**	**CO_2 vol %**	**Analytical Sample Collected: Time**	**Analytical Sample Collected: Summa Canister #**	**Vac (in. H_2O)**	**Comments**
AOC65-VEW15	- 0.0	514	43.1						-33.8	PID is in for maintenance and CO_2/O_2 meter is broken
AOC65-VEW16	- 2.1	~~1093~~ 1093	48.5						-33.3	
AOC65-VEW18	- 3.3	1011	47.5						-33.5	
AOC65-VEW28A	- 30.0	2411	46.3						-32.0	
AOC65-VEW28B	- 0.1	643	48.0						-32.7	
B90-INTAKE-EX	- 33.7	2879	48.7							
B90-EXHAUST	+ 10.6	6334	112.4							

Blower Information	System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
	Subslab	(Y) / N	-8	NO	(Y) / N	Y / (N)	7012.7
	Exterior	Y / (N)	44	NO	(Y) / N	Y / (N)	12070.4

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)
	Subslab	(Y) / N	(Y) / N	≈ 2.0
	Exterior	(Y) / N	(Y) / N	≈ ~~37~~ 40

Observations/Notes: Water in exterior filter container - emptied water

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 12.23.09 Operator: J Bonch Ambient T (°F) 55°-65°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	-								

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
Exterior Wells										
AOC65-VEW15	-								-	
AOC65-VEW16	-								-	
AOC65-VEW18	-								-	
AOC65-VEW28A	-								-	
AOC65-VEW28B	-								-	
B90-INTAKE-EX	-									
B90-EXHAUST	+									

Blower Information

System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Subslab	(Y) / N	78	NO	(Y) / N	Y / (N)	7012.7
Exterior	Y / (N)	42	NO	(Y) / N	Y / (N)	12272.9

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Subslab	(Y) / N	(Y) / N	≈ .5
Exterior	(Y) / N	(Y) / N	≈ 40

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 12.23.09 **Operator:** J Bouch **Ambient T (°F)** 55°-65°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead: Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-								-	*blower still being repaired*
AOC65-VEW20	-								-	
AOC65-VEW21	-								-	
AOC65-VEW23	-								-	
AOC65-VEW25	-								-	
AOC65-VEW27	-								-	
AOC65-INTAKE-SW	-									intake flow meter (SCFM)=
Deep Wells										
AOC65-VEW13	-								-	
AOC65-VEW14	-								-	
AOC65-VEW17	-								-	
AOC65-VEW22	-								-	
AOC65-VEW24	-								-	
AOC65-VEW26	-								-	
AOC65-INTAKE-DW	-									intake flow meter (SCFM)= —
AOC65-EXHAUST	+									

Blower Information	System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
	Shallow	Y / N			Y / N	Y / N	
	Deep	Y / N	5?	NO	Y / N	Y / N	—

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)
	Shallow	Y / N	Y / N	
	Deep	Y / N	Y / N	≈35 gal

Observations/Notes:

in.H_2O: inches of water fpm: ~~feet~~ per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 1.5.10 / 0930 Operator: S.Elliott / J. Bouch Ambient T (°F) 25-51°

Monitoring Event (circle one): Biweekly / (Monthly) / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead: Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-								-	
AOC65-VEW20	-	Off	blower being						-	
AOC65-VEW21	-								-	
AOC65-VEW23	-			repaired					-	
AOC65-VEW25	-								-	
AOC65-VEW27	-								-	
AOC65-INTAKE-SW	-									intake flow meter (SCFM)=
Deep Wells										
AOC65-VEW13	- 38.7	4981	43.6	4.1			0946		- 1.6	
AOC65-VEW14	- 38.9	698	44.2	15.6			0948		- 26.0	
AOC65-VEW17	- 38.0	4852	44.0	39.1			0949		- 16.4	
AOC65-VEW22	- 36.3	462	44.4	water-n sump			0953		- 21.1	can hear water when sample port ope
AOC65-VEW24	- 36.3	2988	44.2	3.7			0954		- 0.2	
AOC65-VEW26	- ~~40.8~~ 37.6	645	44.0	6.8			0956		- 33.5	
AOC65-INTAKE-DW	- ~~50.8~~	4682	50.8	16.2			0944			intake flow meter (SCFM)=
AOC65-EXHAUST	+ 1.9	5833	102.9	15.9			1000			

Blower Information	System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
	Shallow	Y / (N)	—	—	~~Y~~ / ~~N~~	~~Y~~ / ~~N~~	~~NA~~
	Deep	Y / (N) *	57	NO	(Y) / N	(Y) / N	NA

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)
	Shallow	~~Y~~ / ~~N~~	~~Y~~ / ~~N~~	—
	Deep	(Y) / N	(Y) / N	~40 gal

Observations/Notes:
* blower off upon arrival, KO pot full
PID just back from being repaired

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 1.5.10 / 1015 Operator: S. Elliott / J. Bouch Ambient T (°F) 25-51°

Monitoring Event (circle one): Biweekly / (Monthly) / Quarterly / Other

Monitoring Point	Wellhead Readings: Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3									OFFLINE
AOC65-VEW4									OFFLINE
AOC65-VEW5									OFFLINE
AOC65-VEW6									OFFLINE
AOC65-VEW7									OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11									OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	- 44.4	3195	51.4	8.7	/	/	1032	/	
Exterior Wells									

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac (in. H_2O)	Comments
AOC65-VEW15	- 35.6	4276	58.2	4.5			1024		- 0.2	
AOC65-VEW16	- 34.1	2214	39.5	4.9			1022		- 2.5	
AOC65-VEW18	- 34.6	1083	46.0	water - no sump.			1020		- 3.1	can hear water at sump. port
AOC65-VEW28A	- 33.3	1498	46.5	4.5			1019		- 29.8	
AOC65-VEW28B	- 33.4	593	41.5	3.9			1017		- 2.9	
B90-INTAKE-EX	- 34.1	1041	50.1	5.3			1027			
B90-EXHAUST	+ 10.2	8917	118.2	7.0			1024			

Blower Information	System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
	Subslab	(Y) / N	40	NO	(Y) / N	Y / (N)	70127
	Exterior	Y / (N) *	47	NO	(Y) / N	Y / (N)	124580

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)
	Subslab	(Y) / N	(Y) / N	0
	Exterior	(Y) / N	(Y) / N	~30

Observations/Notes:
* blower off upon arrival, KO pot full

in H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 1-22-10/0830 Operator: S. Elliott + B. Martin Ambient T (°F) 54-73° sunny

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-								-	
AOC65-VEW20	-								-	
AOC65-VEW21	-								-	
AOC65-VEW23	-								-	
AOC65-VEW25	-								-	
AOC65-VEW27	-								-	
AOC65-INTAKE-SW	-									intake flow meter (SCFM)=
Deep Wells										
AOC65-VEW13	-								-	
AOC65-VEW14	-								-	
AOC65-VEW17	-								-	
AOC65-VEW22	-								-	
AOC65-VEW24	-								-	
AOC65-VEW26	-								-	
AOC65-INTAKE-DW	-									intake flow meter (SCFM)=
AOC65-EXHAUST	+									

Blower Information

System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Shallow	Y / (N)	/	/	Y / N	Y / N	/
Deep	(Y) / N ~~7~~	50	40	(Y) / N	Y / (N)	/

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Shallow	Y / N	Y / N	
Deep	(Y) / N	(Y) / N	315

Observations/Notes:
* blower off upon arrival - deep blower being rebuilt - shallow

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 1·22·10/0830 Operator: S. Elliott & B. Martin Ambient T (°F) 54-73° sunny

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

Wellhead Readings

Monitoring Point	Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected Time	Analytical Sample Collected Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	-								

Exterior Wells

Monitoring Point	Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected Time	Analytical Sample Collected Summa Canister #	Wellhead Vac (in. H_2O)	Comments
	Manifold Readings									
AOC65-VEW15	-								-	
AOC65-VEW16	-								-	
AOC65-VEW18	-								-	
AOC65-VEW28A	-								-	
AOC65-VEW28B	-								-	
B90-INTAKE-EX	-									
B90-EXHAUST	+									

Blower Information	System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
	Subslab	(Y) / N	84	no	(Y) / N	Y (N)	70127
	Exterior	Y (N)	44	no	(Y) / N	Y (N)	125946

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:
	Subslab	(Y) / N	(Y) / N	0	exterior off upon arrival
	Exterior	(Y) / N	(Y) / N	28	

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 2.9.10 / 0900 Operator: S. Elliott & J. Beach Ambient T (°F) 29-47°

Monitoring Event (circle one): Biweekly / (Monthly) / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-								-	
AOC65-VEW20	-								-	
AOC65-VEW21	-								-	
AOC65-VEW23	-	off → blower being rebuilt							-	
AOC65-VEW25	-								-	
AOC65-VEW27	-								-	
AOC65-INTAKE-SW	-									intake flow meter (SCFM)=
Deep Wells										
AOC65-VEW13	-38.6	5231	41.5	10.1					- 2.0	
AOC65-VEW14	- 40.3	1405	41.8	/			1024		- 12.4	pulling water from port
AOC65-VEW17	- 37.1	1821	42.4	98.1					- 18.4	
AOC65-VEW22	- 37.6	1312	51.9	/					- 22.4	pulling water from port
AOC65-VEW24	- 37.5	656	42.2	8.2					- 0.4	
AOC65-VEW26	- 37.8	754	43.5	16.2					- 30.6	
AOC65-INTAKE-DW	- 43.9	2284	44.0	28.2						intake flow meter (SCFM)=
AOC65-EXHAUST	+ 1.5	2078	88.3	36.0						

Blower Information

System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Shallow	Y / (N)	/	/	Y / (N)	Y / (N)	/
Deep	Y / (N)	65	/	(Y) / N	Y / (N)	/

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Shallow	Y / (N)	Y / (N)	/
Deep	(Y) / N	(Y) / N	40

Observations/Notes: off upon arrival

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 2.9.10 / 0900 Operator: S. Elliott + J. Bach Ambient T (°F) 39-47°

Monitoring Event (circle one): Biweekly (Monthly) / Quarterly / Other

Subslab Wells

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Comments
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	- 44.3	2501	47.8	5.4					

Exterior Wells

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac (in. H_2O)	Comments
AOC65-VEW15	- 44.1	710	39.1	3.8					- 0.4	
AOC65-VEW16	- 44.1	925	~~42.5~~ 42.7	5.6					- 3.6	
AOC65-VEW18	- 44.1	610	39.0	4.8					- 0.5	
AOC65-VEW28A	- 43.0	637	46.7	5.1					- 42.6	
AOC65-VEW28B	- 41.9	2021	42.2	2.9					- 4.7	
B90-INTAKE-EX	- 44.3	1108	44.7	6.4						
B90-EXHAUST	+ 8.2	9085	116.7	6.6						

Blower Information	System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
	Subslab	(Y) / N	80		Y / N	Y / N	70127
	Exterior	Y / (N)	50		~~Y~~ / N	~~Y~~ / N	130165

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)
	Subslab	(Y) / N	(Y) / N	1
	Exterior	(Y) / N	(Y) / N	~~20~~ 40

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV vacuum relief valve psi: Pounds per square inch

AOC-65 SVE Inspecti. and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 2.22.10/0900 Operator: S. Elliott Ambient T (°F) 58°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-								-	
AOC65-VEW20	-								-	
AOC65-VEW21	-								-	
AOC65-VEW23	-								-	
AOC65-VEW25	-								-	
AOC65-VEW27	-								-	
AOC65-INTAKE-SW	-									intake flow meter (SCFM)=
Deep Wells										
AOC65-VEW13	-								-	
AOC65-VEW14	-								-	
AOC65-VEW17	-								-	
AOC65-VEW22	-								-	
AOC65-VEW24	-								-	
AOC65-VEW26	-								-	
AOC65-INTAKE-DW	-									intake flow meter (SCFM)=
AOC65-EXHAUST	+									

Blower Information

System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Shallow	Y / N	—	(adjust to 75" H_2O) Y / N	Y / N	Y / N	NA
Deep	(Y) / N	51	(adjust to 75" H_2O) (Y) / N	(Y) / N	(Y) / N	NA

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Shallow	Y / N	Y / N	off
Deep	(Y) / N	(Y) / N	30

Observations/Notes: VRV would not adjust to a higher pressure

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspec[illegible] and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 2.22.10/0900 Operator: SELL Ambient T (°F) 58°

Monitoring Event (circle one): (Biweekly) / Monthly / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	-								

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
Exterior Wells										
AOC65-VEW15	-								-	
AOC65-VEW16	-								-	
AOC65-VEW18	-								-	
AOC65-VEW28A	-								-	
AOC65-VEW28B	-								-	
B90-INTAKE-EX	-									
B90-EXHAUST	+									

Blower Information

System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Subslab	(Y) / N	67	(adjust to 65" H_2O) (Y) N	(Y) / N	(Y) / N	133125
Exterior	(Y) / N	~~60~~ 55	(adjust to 50" H_2O) (Y) / N	(Y) / N	(Y) / N	70127

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Subslab	Y / N	Y / N	0
Exterior	(Y) / N	(Y) / N	25

Observations/Notes: ~~[illegible]~~ replaced mufflers with VRV's, adjusted pressures 55" H_2O was the lowest I could get pressure to

in.H_2O: inches of water fpm feet per minute ppm: parts per million VRV: vacuum relief valve psi pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 3.19.10/0900 **Operator:** S. Elliott + J. Bosch **Ambient T (°F)** 54

Monitoring Event (circle one): Biweekly / (Monthly) / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-								-	
AOC65-VEW20	-	System off, needs VRV							-	
AOC65-VEW21	-								-	
AOC65-VEW23	-								-	
AOC65-VEW25	-								-	
AOC65-VEW27	-								-	
AOC65-INTAKE-SW	-									intake flow meter (SCFM)=
Deep Wells										
AOC65-VEW13	- 34.9	4824	57.3	2.2			0905		- 1.5	
AOC65-VEW14	- 34.6	10540	58.0	2.3			0907		- 0	
AOC65-VEW17	- 33.4	1158	58.8	4.0			0909		- 15.7	
AOC65-VEW22	- 34.1	8808	57.0	0.9			0911		- 27.9	
AOC65-VEW24	- 34.6	6028	57.0	1.7			0913		- 0.1	
AOC65-VEW26	- 32.6	4570	57.3	2.3			0915		- 25.3	
AOC65-INTAKE-DW	- 34.5	4041	59.7	2.8			0902			intake flow meter (SCFM)=
AOC65-EXHAUST	+ 1.9	2702	99.4	1.4			0917			

Blower Information: System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Shallow	Y / (N)		(adjust to 75" H_2O) Y / N	Y / N	Y / N	NA
Deep	(Y) / N	50	(adjust to 75" H_2O) (Y) / N	(Y) / N	Y / (N)	NA

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Shallow	Y / N	Y / N	see log book
Deep	(Y) / N	(Y) / N	

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 3.19.10 / 0900 Operator: S. Elliott + J. Bach Ambient T (°F) 54°

Monitoring Event (circle one): Biweekly (Monthly) / Quarterly / Other

Monitoring Point	Wellhead Readings: Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	- 42.3	9544	67.8	0	/	/	0944	/	
Exterior Wells									

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac (in. H_2O)	Comments
AOC65-VEW15	- 44.1	585	59.3	0			0937		- 0.1	
AOC65-VEW16	- 44.1	1389	60.2	0			0935		- 2.5	
AOC65-VEW18	- 44.1	617	58.2	0			0934		- 0.2	
AOC65-VEW28A	- 44.1	690	58.4	0			0932		- 39.5	
AOC65-VEW28B	- 44.1	663	59.3	0			0930		- 0	→ cap may be leaking
B90-INTAKE-EX	- 44.1	1510	61.3	0			0940			
B90-EXHAUST	+ 10.2	10913	126.1	0			0942			

Blower Information

System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Subslab	(Y) / N	~~62~~ 65	(adjust to 65" H_2O) (Y) / N	(Y) / N	Y / (N)	70127
Exterior	(Y) / N	~~48~~ 52	(adjust to 50" H_2O) (Y) / N	(Y) / N	Y / (N)	134377

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:
Subslab	(Y) / N	(Y) / N	See log book	
Exterior	(Y) / N	(Y) / N		

in.H_2O inches of water fpm: feet per minute ppm: parts per million VRV vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 3/30/10 / 0900 Operator: S. Elliott Ambient T (°F) 70°

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-								-	
AOC65-VEW20	-	VRV replaced and System turned							-	
AOC65-VEW21	-								ON	
AOC65-VEW23	-								-	
AOC65-VEW25	-								-	
AOC65-VEW27	-								-	
AOC65-INTAKE-SW	-									intake flow meter (SCFM)=
Deep Wells										
AOC65-VEW13	-								-	
AOC65-VEW14	-								-	
AOC65-VEW17	-								-	
AOC65-VEW22	-								-	
AOC65-VEW24	-								-	
AOC65-VEW26	-								-	
AOC65-INTAKE-DW	-									intake flow meter (SCFM)=
B90-EXHAUST	+									

Blower Information

System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Shallow	(Y) / N	40	couldn't	(Y) / N	Y / (N)	—
Deep	(Y) / N	45	couldn't	(Y) / N	(Y) / N	—

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	(Y) / N	0
Deep	(Y) / N	(Y) / N	25

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 3.30.10/0900 Operator: S.Elliott Ambient T (°F) 70°

Monitoring Event (circle one): (Biweekly) Monthly / Quarterly / Other

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	-								

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
Exterior Wells										
AOC65-VEW15	-								-	
AOC65-VEW16	-								-	
AOC65-VEW18	-								-	
AOC65-VEW28A	-								-	
AOC65-VEW28B	-								-	
B90-INTAKE-EX	-									
B90-EXHAUST	+									

Blower Information

System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Subslab	(Y) / N	80	50	(Y) / N	Y / (N)	
Exterior	(Y) / N	52	48	(Y) / N	Y / (N)	

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Subslab	(Y) / N	(Y) / N	0
Exterior	(Y) / N	(Y) / N	3

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 4/8/10 Operator: S. Elliott + J. Bouch Ambient T (°F) _____

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / (Other) Annual Sampling

Monitoring Point	Manifold Readings: Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-34.9	780	69.2	4.5			1317	✓ 34204	-30.7	
AOC65-VEW20	-35.9	807	69.2	0			1324	✓ 33322	-36.3	
AOC65-VEW21	-35.4	453	69.7	0			1330	✓ 33652	-34.6	
AOC65-VEW23	-36.1	436	69.2	0			1338	✓ 4182	-36.3	
AOC65-VEW25	-35.6	482	70.3	0			1345	✓ 35161	-36.9	
AOC65-VEW27	-35.4	473	70.1	17.7			1351	✓ 2672	-36.5	
AOC65-INTAKE-SW	-34.5	555	67.8	6.6			1311	✓ 34467		intake flow meter (SCFM)=
Deep Wells										
AOC65-VEW13	-34.3	5618	67.9	0				X	-1.6	
AOC65-VEW14	-34.6	364	65.6	0				X	-2.1	
AOC65-VEW17	-32.2	1206	67.0	0			1243	✓ 35254	-15.4	
AOC65-VEW22	-34.3	4140	58.9	0			1250	✓ 30851	-29.0	
AOC65-VEW24	-33.7	335	60.6	0				X	-0.2	
AOC65-VEW26	-32.6	1243	60.2	0			1300	✓ 2987	-23.6	
AOC65-INTAKE-DW	-38.3	4347	66.5	0			1233	✓ 12672		intake flow meter (SCFM)=
AOC65-EXHAUST	+2.4	1044	121.2	0				X		

Blower Information

System	Blower On	Pre Adjustment Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Shallow	(Y) / N	45	(adjust to 75" H_2O) Y (N)	(Y) / N	Y / (N)	NA
Deep	(Y) / N	50	(adjust to 75" H_2O) Y / (N)	(Y) / N	Y / (N)	NA

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	(Y) / N	0
Deep	(Y) / N	(Y) / N	10

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 4/8/10 Operator: S. Elliott + J. Bouch Ambient T (°F) _____

Monitoring Event (circle one): Biweekly / Monthly / Quarterly (Other) Annual Sampling

Monitoring Point	Wellhead Readings: Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	- 37.2	3441	60.2	0			1120	✓ 34423	

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
Exterior Wells										
AOC65-VEW15	- 44.3	775	58.6	0				X	- 0.1	
AOC65-VEW16	- 44.1	1404	59.3	0				~~X~~	- ~~3.2~~	3.5
AOC65-VEW18	- 44.3	710	58.0	0				X	- ~~0.1~~	0.2
AOC65-VEW28A	- 44.1	744	57.9	0			1050	✓ 11879	- 44.1	
AOC65-VEW28B	- 44.3	591	58.9	0			1057	✓ 12938	- ~~3.1~~	4.2
B90-INTAKE-EX	- 43.6	1507	60.9	0			1105	✓ 34348		
B90-EXHAUST	+ 10.2	485	~~17.8~~	0				X		
AOC65-POSTGAC	+	2133	74.1	0			1113	✓ 12338		

Blower Information: System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Subslab	(Y) / N	50	(adjust to 65" H_2O) (Y) / N	60 (Y) / N	Y / (N)	70127
Exterior	(Y) / N	55	(adjust to 50" H_2O) (Y) / N	58 (Y) / N	Y / (N)	138 296

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Subslab	(Y) / N	(Y) / N	~~0~~
Exterior	(Y) / N	(Y) / N	~~0~~

Observations/Notes:

in. H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 4.22.10 / 0830 Operator: S. Elliott Ambient T (°F) _____

Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Manifold Readings: Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	-								-	
AOC65-VEW20	-								-	
AOC65-VEW21	-								-	
AOC65-VEW23	-								-	
AOC65-VEW25	-								-	
AOC65-VEW27	-								-	
AOC65-INTAKE-SW	-									intake flow meter (SCFM)=
Deep Wells										
AOC65-VEW13	-								-	
AOC65-VEW14	-								-	
AOC65-VEW17	-								-	
AOC65-VEW22	-								-	
AOC65-VEW24	-								-	
AOC65-VEW26	-								-	
AOC65-INTAKE-DW	-									intake flow meter (SCFM)=
AOC65-EXHAUST	+									

Blower Information

System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Shallow	(Y) / N	39	(adjust to 75" H_2O) Y (N)*	(Y) / N	(Y) / N	NA
Deep	(Y) / N	48	(adjust to 75" H_2O) Y (N) can't	(Y) / N	Y (N)	NA

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	(Y) / N	0
Deep	(Y) / N	(Y) / N	8

Observations/Notes:
* VRV completely shut, can't increase pressure

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 4.22.10 / 0830 Operator: S. Elliott Ambient T (°F) _____

Monitoring Event (circle one): ~~Biweekly~~ / Monthly / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	-								
Exterior Wells									

Monitoring Point	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	O_2 vol %	CO_2 vol %	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac (in. H_2O)	Comments
AOC65-VEW15	-								-	
AOC65-VEW16	-								-	
AOC65-VEW18	-								-	
AOC65-VEW28A	-								-	
AOC65-VEW28B	-								-	
B90-INTAKE-EX	-									
B90-EXHAUST	+									
AOC65-POSTGAC	+									

Blower Information

System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Subslab	Y / (N) *	100 / 60	(adjust to 65" H_2O) (Y) / N	(Y) / N	(Y) / N	70127
Exterior	Y / (N) *	40 / 58	(adjust to 50" H_2O) (Y) / N	(Y) / N	(Y) / N	139177

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Subslab	(Y) / N	(Y) / N	0
Exterior	(Y) / N	(Y) / N	0

Observations/Notes:
* both blowers off upon arrival
- subslab VRV needs maintenance

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

0050 Month 1

Date/Time: 5.11.10 / 0830 Operator: J. Bouch; S. Elliott Monitoring Event: Biweekly / (Monthly) / Quarterly / Other _____

Monitoring Point	Manifold Readings: Total Depth ft BTOC	Screened Interval	Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	26	5-25	-35.2	540	76.9	8.5	0924		-34.1	
AOC65-VEW20	27	10-25	-35.3	884	76.9	0	0925		-33.3	
AOC65-VEW21	27	12-27	-35.2	544	76.4	0	0927		-33.2	
AOC65-VEW23	21	6-21	-35.3	1910	76.8	0	0930		-34.4	
AOC65-VEW25	21	6-21	-35.0	573	77.3	0.3	0932		-34.8	
AOC65-VEW27	21	6-21	-35.2	606	77.3	10.1	0934		-34.2	
AOC65-INTAKE-SW			-35.1	~~577~~ 618	79.5	7.2	0921			
Deep Wells										
AOC65-VEW13	41	15-40	-30.5	2491	76.0	0	0907		-1.4	
AOC65-VEW14	61	40-60	-30.3	541	76.2	0	0903		-0	
AOC65-VEW17	52.5	22-52	-29.3	1703	76.0	0	0910		-16.5	
AOC65-VEW22	51	25-56	-29.5	1027	75.9	0	0912		-28.1	
AOC65-VEW24	50	25-50	-29.5	440	76.4	0	0914		-0.1	
AOC65-VEW26	50	25-50	-29.4	1006	76.0	0	0916		-26.7	
AOC65-INTAKE-DW			-34.8	6736	75.3	0.2	0904			
AOC65-EXHAUST			+2.2	5144	121.2	0	0918			

Blower Information: System	Pre Adjustment: Blower On	Initial Intake Pressure	Adjusted Pressure	Final Intake Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Shallow	(Y) / N	33	(adjust to 75" H_2O) Y (N) *	35	(Y) / N	Y (N)	NA
Deep	(Y) / N	44	(adjust to 75" H_2O) Y (N) *	44	(Y) / N	Y / (N)	NA

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	(Y) / N	0
Deep	(Y) / N	(Y) / N	0

Observations/Notes:
* both VRV's are completely shut, can't get pressure any higher

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

0050 Month 1

Date/Time: 5-11-10 / 0830 Operator: J.Bonch; S.Elliott Monitoring Event: Biweekly (Monthly) Quarterly / Other _____

Monitoring Point	Wellhead Readings: Total Depth ft. BTOC	Screened Interval	Water Level ft. BTOC	Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells										
AOC65-VEW1				-						
AOC65-VEW2				-						
AOC65-VEW3				-						OFFLINE
AOC65-VEW4				-						OFFLINE
AOC65-VEW5				-						OFFLINE
AOC65-VEW6				-						OFFLINE
AOC65-VEW7				-						OFFLINE
AOC65-VEW8				-						
AOC65-VEW9				-						
AOC65-VEW10				-						
AOC65-VEW11				-						OFFLINE
AOC65-VEW12				-						
B90-INTAKE-SS				- 35.4	1240	80.7	0	1000		

Monitoring Point	Manifold Readings: Total Depth ft. BTOC	Screened Interval	Water Level ft. BTOC	Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
Exterior Wells											
AOC65-VEW15	13	5-12		- 44.1	615	78.2	0	0951		- 0	
AOC65-VEW16	41	15-40		- 44.1	2314	77.8	0	0950		- 3.2	
AOC65-VEW18	56	15.5-55.5		- 44.1	771	77.5	0	0946		- 0.2	
AOC65-VEW28A	120	80-120		- 44.1	664	77.3	0	0945		- 41.9	
AOC65-VEW28B	179	139.3-179.3		- 44.1	754	77.3	0	0943		- 0	
B90-INTAKE-EX				- 44.1	2215	78.2	0	0954			
B90-EXHAUST				+ 9.6	1446	131.8	0	0956			
AOC65-POSTGAC				+							

Blower Information: System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure (tried)	Final Intake Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Subslab	Y / (N)	50	(adjust to 65" H_2O) (Y) / N	56	(Y) / N	Y / (N)	70127
Exterior	Y / (N)	60	(adjust to 50" H_2O) (Y) / N	58	(Y) / N	Y / (N)	139258

Moisture Separator Information: System	Inspected	Emptied	Amount Transferred (gals)
Subslab	(Y) / N	(Y) / N	0
Exterior	(Y) / N	(Y) / N	0

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 5.27.10 / 0630 Operator: S. Elliott & B. Martin Monitoring Event: Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Total Depth ft. BTOC	Screened Interval	Water Level ft. BTOC	Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells										
AOC65-VEW1				-						
AOC65-VEW2				-						
AOC65-VEW3				-						OFFLINE
AOC65-VEW4				-						OFFLINE
AOC65-VEW5				-						OFFLINE
AOC65-VEW6				-						OFFLINE
AOC65-VEW7				-						OFFLINE
AOC65-VEW8				-						
AOC65-VEW9				-						
AOC65-VEW10				-						
AOC65-VEW11				-						OFFLINE
AOC65-VEW12				-						
B90-INTAKE-SS				-						

Monitoring Point	Manifold Readings: Total Depth ft. BTOC	Screened Interval	Water Level ft. BTOC	Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
Exterior Wells											
AOC65-VEW15	13	5-12		-						-	
AOC65-VEW16	41	15-40		-						-	
AOC65-VEW18	56	15.5-55.5		-						-	
AOC65-VEW28A	120	80-120		-						-	
AOC65-VEW28B	179	139.3-179.3		-						-	
B90-INTAKE-EX				-							
B90-EXHAUST				+							
AOC65-POSTGAC				+							

Blower Information: System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Subslab	(Y) / N	50	(adjust to 65" H_2O) (Y) / N	62	(Y) / N	(Y) / N	70127
Exterior	Y (N)	60	(adjust to 50" H_2O) (Y) / N	50	(Y) / N	(Y) / N	140563

Moisture Separator Information: System	Inspected	Emptied	Amount Transferred (gals)
Subslab	(Y) / N	(Y) / N	0
Exterior	(Y) / N	(Y) / N	0

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Spanner wrench

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 5.27.10 / 0830 Operator: S.Elliott & B.Martin Monitoring Event: (Biweekly) / Monthly / Quarterly / Other _____

Monitoring Point	Manifold Readings: Total Depth ft BTOC	Screened Interval	Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	26	5-25	-						-	
AOC65-VEW20	27	10-25	-						-	
AOC65-VEW21	27	12-27	-						-	
AOC65-VEW23	21	6-21	-						-	
AOC65-VEW25	21	6-21	-						-	
AOC65-VEW27	21	6-21	-						-	
AOC65-INTAKE-SW			-							
Deep Wells										
AOC65-VEW13	41	15-40	-						-	
AOC65-VEW14	61	40-60	-						-	
AOC65-VEW17	52.5	22-52	-						-	
AOC65-VEW22	51	25-56	-						-	
AOC65-VEW24	50	25-50	-						-	
AOC65-VEW26	50	25-50	-						-	
AOC65-INTAKE-DW		-	-							
AOC65-EXHAUST			+							

Blower Information

System	Pre Adjustment: Blower On	Initial Intake Pressure	Adjusted Pressure	Final Intake Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Shallow	(Y) / N	36	(adjust to 75" H_2O) Y / (N)	valve shut	(Y) / N	(Y) / N	NA
Deep	(Y) / N	54	(adjust to 75" H_2O) Y / (N)	no VRV	Y / (N)	Y / (N)	NA

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:
Shallow	(Y) / N	(Y) / N	0	
Deep	(Y) N	(Y) N	0	

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 6.15.10 / 0400 Operator: S. Elliott + A. Lindley Monitoring Event: Biweekly / (Monthly) / Quarterly / Other _____

Monitoring Point	Total Depth ft. BTOC	Screened Interval	Water Level ft. BTOC	Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected Time	Analytical Sample Collected Summa Canister #	Comments
				Wellhead Readings						
Subslab Wells										
AOC65-VEW1				-						
AOC65-VEW2				-						
AOC65-VEW3				-						OFFLINE
AOC65-VEW4				-						OFFLINE
AOC65-VEW5				-						OFFLINE
AOC65-VEW6				-						OFFLINE
AOC65-VEW7				-						OFFLINE
AOC65-VEW8				-						
AOC65-VEW9				-						
AOC65-VEW10				-						
AOC65-VEW11				-						OFFLINE
AOC65-VEW12				-						
B90-INTAKE-SS				- 34.4	1042.6	83.6	0	1031		
Exterior Wells										
				Manifold Readings						**Wellhead**
Monitoring Point	**Total Depth ft. BTOC**	**Screened Interval**	**Water Level ft. BTOC**	**Vac (in. H_2O)**	**Flow fpm**	**Temp °F**	**VOC ppm**	**Analytical Sample Collected Time**	**Analytical Sample Collected Summa Canister #**	**Vac (in. H_2O)**	**Comments**
AOC65-VEW15	13	5-12		- 40.6	886	86.1	0	1015		- 0	
AOC65-VEW16	41	15-40		- 40.5	2555	85.4	0	1018		- 3.9	
AOC65-VEW18	56	15.5-55.5		- 40.9	888	85.2	0	1020		- 0.2	
AOC65-VEW28A	120	80-120		- 40.9	741	83.2	0	1022		- 39.1	
AOC65-VEW28B	179	139.3-179.3		- 40.7	723	82.9	0	1024		- 0	
B90-INTAKE-EX				- 41.3	2278	83.1	0	1027			
B90-EXHAUST				+ 1.4	>15,000	148.2	0	1033			
AOC65-POSTGAC				+							

Blower Information	System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
	Subslab	(Y) / N	52	(adjust to 65" H_2O) (Y) / N	54	(Y) / N	(Y) / N	70127
	Exterior	(Y) / N	46	(adjust to 50" H_2O) (Y) / N	50	(Y) / N	(Y) / N	140977

Moisture Separator Information	System	Inspected	Emptied	Amount Transferred (gals)
	Subslab	(Y) / N	(Y) / N	0
	Exterior	(Y) / N	(Y) / N	0

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Month 2

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 6.15.10 / 0900 Operator: S. Elliott + A. Lindley Monitoring Event: Biweekly / (Monthly) / Quarterly / Other _____

Monitoring Point	Manifold Readings: Total Depth ft BTOC	Screened Interval	Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	26	5-25	-35.3	815	82.7	27.0	0927		-33.8	
AOC65-VEW20	27	10-25	-35.6	717	92.2	1.2	0930		-33.9	
AOC65-VEW21	27	12-27	-35.2	691	91.3	0	0934		-33.9	
AOC65-VEW23	21	6-21	-34.6	641	91.3	0	0936		-33.8	
AOC65-VEW25	21	6-21	-34.5	699	91.7	5.0	0938		-34.0	
AOC65-VEW27	21	6-21	-34.4	711	92.1	18.4	0939		-34.0	
AOC65-INTAKE-SW			-34.6	772	89.5	14.8	0942			
Deep Wells										
AOC65-VEW13	41	15-40	-28.3	4310	85.4	0	0946		-1.3	
AOC65-VEW14	61	40-60	-27.9	466	89.9	0	0948		-0	
AOC65-VEW17	52.5	22-52	-27.5	2389	86.5	0	0950		-15.7	
AOC65-VEW22	51	25-56	-26.8	1818	88.6	0	0952		-26.4	
AOC65-VEW24	50	25-50	-26.8	455	89.1	0	0954		-0.1	
AOC65-VEW26	50	25-50	-27.2	1571	87.2	0	0956		-25.3	
AOC65-INTAKE-DW			-31.8	7527	83.8	0	0958			
AOC65-EXHAUST			+2.0	10800	144.4	0	1000			

Blower Information

System	Pre Adjustment: Blower On	Initial Intake Pressure	Adjusted Pressure	Final Intake Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Shallow	(Y) / N	~~40~~ 36	(adjust to 75" H_2O) (Y) / N	~~40~~ 36	(Y) / N	(Y) / N	NA
Deep	(Y) / N	40	(adjust to 75" H_2O) (Y) / N	43	(Y) / N	(Y) / N	NA

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	(Y) / N	0
Deep	(Y) / N	(Y) / N	0

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

month 2

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 6.24.10 / 1000 Operator: S. Elliott / J. Bouch Monitoring Event: (Biweekly) / Monthly / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Total Depth ft. BTOC	Screened Interval	Water Level ft. BTOC	Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells										
AOC65-VEW1				-						
AOC65-VEW2				-						
AOC65-VEW3				-						OFFLINE
AOC65-VEW4				-						OFFLINE
AOC65-VEW5				-						OFFLINE
AOC65-VEW6				-						OFFLINE
AOC65-VEW7				-						OFFLINE
AOC65-VEW8				-						
AOC65-VEW9				-						
AOC65-VEW10				-						
AOC65-VEW11				-						OFFLINE
AOC65-VEW12				-						
B90-INTAKE-SS				-						

Monitoring Point	Manifold Readings: Total Depth ft. BTOC	Screened Interval	Water Level ft. BTOC	Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
Exterior Wells											
AOC65-VEW15	13	5-12		-						-	
AOC65-VEW16	41	15-40		-						-	
AOC65-VEW18	56	15.5-55.5		-						-	
AOC65-VEW28A	120	80-120		-						-	
AOC65-VEW28B	179	139.3-179.3		-						-	
B90-INTAKE-EX				-							
B90-EXHAUST				+							
AOC65-POSTGAC				+							

Blower Information

System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Subslab	(Y) / N	65	(adjust to 65" H_2O) (Y) / N	56	(Y) / N	(Y) / N	70127
Exterior	Y / (N)	52	(adjust to 50" H_2O) Y / N	50	(Y) / N	(Y) / N	141068

Moisture Separator Information

System	Inspected	Emptied	Amount Transferred (gals)
Subslab	(Y) / N	(Y) / N	0
Exterior	(Y) / N	(Y) / N	0

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 6.24.10 / 1000 Operator: S.Elliott / J. Bach Monitoring Event: (Biweekly) / Monthly / Quarterly / Other _____

Monitoring Point	Manifold Readings: Total Depth ft BTOC	Screened Interval	Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	26	5-25	-						-	
AOC65-VEW20	27	10-25	-						-	
AOC65-VEW21	27	12-27	-						-	
AOC65-VEW23	21	6-21	-						-	
AOC65-VEW25	21	6-21	-						-	
AOC65-VEW27	21	6-21	-						-	
AOC65-INTAKE-SW			-							
Deep Wells										
AOC65-VEW13	41	15-40	-						-	
AOC65-VEW14	61	40-60	-						-	
AOC65-VEW17	52.5	22-52	-						-	
AOC65-VEW22	51	25-56	-						-	
AOC65-VEW24	50	25-50	-						-	
AOC65-VEW26	50	25-50	-						-	
AOC65-INTAKE-DW			-							
AOC65-EXHAUST			+							

Blower Information

System	Pre Adjustment: Blower On	Initial Intake Pressure	Adjusted Pressure	Final Intake Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Shallow	(Y) / N	34	(adjust to 75" H_2O) (Y) / N	34	(Y) / N	(Y) / N	NA
Deep	(Y) / N	42	(adjust to 75" H_2O) (Y) / N	44	(Y) / N	(Y) / N	NA

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:
Shallow	(Y) / N	(Y) / N	0	
Deep	(Y) / N	(Y) / N	0	

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 7-6-2010 1330 Operator: Ken Rice / Julie Bouch Monitoring Event: Biweekly / (Monthly) / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Total Depth ft. BTOC	Screened Interval	Water Level ft. BTOC	Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells										
AOC65-VEW1				-						
AOC65-VEW2				-						
AOC65-VEW3				-						OFFLINE
AOC65-VEW4				-						OFFLINE
AOC65-VEW5				-						OFFLINE
AOC65-VEW6				-						OFFLINE
AOC65-VEW7				-						OFFLINE
AOC65-VEW8				-						
AOC65-VEW9				-						
AOC65-VEW10				-						
AOC65-VEW11				-						OFFLINE
AOC65-VEW12				-						
B90-INTAKE-SS				- 31.5	14864	90.3	1.3			

Monitoring Point	Manifold Readings: Total Depth ft. BTOC	Screened Interval	Water Level ft. BTOC	Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
Exterior Wells											
AOC65-VEW15	13	5-12		- 41.1	773	93.1	0.0			- 0.9	
AOC65-VEW16	41	15-40		- 40.7	3830	91.0	0.0			- 3.4	Water in Well head area
AOC65-VEW18	56	15.5-55.5		- 41.1	1547	93.1	0.0			- 0.0	"
AOC65-VEW28A	120	80-120		- 41.3	590	92.2	0.0			- 39.1	
AOC65-VEW28B	179	139.3-179.3		- 41.2	631	89.9	0.0			- 6.6	
B90-INTAKE-EX				- 41.6	3556	92.4	0.0				
B90-EXHAUST				+ 10.0	14946	154.2	0.0				
AOC65-POSTGAC				+ 0.1	9220	123.2	0.0				

Blower Information

System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Final Intake Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Subslab	Y / N	-58	(adjust to 65" H_2O) Y / (N)	58	(Y) / N	Y / (N)	07012.7
Exterior	Y / N	-50	(adjust to 50" H_2O) Y / (N)	50	(Y) / N	Y / (N)	14117.4

Moisture Separator Information

System	Inspected	Emptied	Amount Transferred (gals)
Subslab	(Y) / N	Y / (N)	
Exterior	(Y) / N	Y / (N)	

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 07-06-2010 1030 **Operator:** JDB **Monitoring Event:** Biweekly / (Monthly) / Quarterly / Other ______

Monitoring Point	Manifold Readings									Wellhead	Comments
	Total Depth ft BTOC	Screened Interval	Vac $in.H_2O$	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected			Vac $in. H_2O$	
							Time	Summa Canister #			
Shallow Wells											
AOC65-VEW19	26	5-25	-33.2	~~1321~~ 614	90.8	20.6				-32.3	
AOC65-VEW20	27	10-25	-33.1	545	89.7	2.6				-31.3	
AOC65-VEW21	27	12-27	-33.2	460	90.1	0.0				-32.4	
AOC65-VEW23	21	6-21	-33.3	909	90.3	0.0				-32.6	
AOC65-VEW25	21	6-21	-33.2	629	90.6	69.2				-32.8	
AOC65-VEW27	21	6-21	-33.3	632	90.1	27.3				-32.6	
AOC65-INTAKE-SW			33.1	1321	94.2	26.6					
Deep Wells											
AOC65-VEW13	41	15-40	-28.7	4289	89.2	0.2				-1.3	
AOC65-VEW14	61	40-60	-28.4	401	91.5	0.0				-0.0	
AOC65-VEW17	52.5	22-52	-27.5	2775	88.6	7.4				-15.1	
AOC65-VEW22	51	25-56	-27.1	1803	89.2	0.0				-25.7	
AOC65-VEW24	50	25-50	-27.1	332	90.3	0.0				-0.1	
AOC65-VEW26	50	25-50	26.9	1276	89.2	0.0				-24.9	
AOC65-INTAKE-DW			-33.1	8943	87.9	2.7					
AOC65-EXHAUST			+2.4	7942	145.2	3.1					

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter
		Blower On	Initial Intake Pressure	Adjusted Pressure	Final Intake Pressure	Check	Lube	
	Shallow	(Y) / N	33	(adjust to 75" H_2O) Y / (N)	33	(Y) / N	Y / (N)	NA
	Deep	(Y) / N	42	(adjust to 75" H_2O) Y / (N)	42	(Y) / N	Y / (N)	NA

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:
	Shallow	(Y) / N	Y / (N)		VEV's Closed
	Deep	(Y) / N	Y / (N)		

$in.H_2O$: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 7.26.10 / 1300 Operator: S. Elliott Monitoring Event: (Biweekly) / Monthly / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Total Depth ft. BTOC	Screened Interval	Water Level ft. BTOC	Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells										
AOC65-VEW1				-						
AOC65-VEW2				-						
AOC65-VEW3				-						OFFLINE
AOC65-VEW4				-						OFFLINE
AOC65-VEW5				-						OFFLINE
AOC65-VEW6				-						OFFLINE
AOC65-VEW7				-						OFFLINE
AOC65-VEW8										
AOC65-VEW9										
AOC65-VEW10				-						
AOC65-VEW11				-						OFFLINE
AOC65-VEW12				-						
B90-INTAKE-SS				-						

Monitoring Point	Manifold Readings: Total Depth ft. BTOC	Screened Interval	Water Level ft. BTOC	Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
Exterior Wells											
AOC65-VEW15	13	5-12		-						-	
AOC65-VEW16	41	15-40		-						-	
AOC65-VEW18	56	15.5-55.5		-						-	
AOC65-VEW28A	120	80-120		-						-	
AOC65-VEW28B	179	139.3-179.3		-						-	
B90-INTAKE-EX				-							
B90-EXHAUST				+							
AOC65-POSTGAC				+							

Blower Information

System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Subslab	(Y) / N	59	(adjust to 65" H_2O) (Y) / N	65	(Y) / N	(Y) / N	408.0
Exterior	Y (N)	0	(adjust to 50" H_2O) (Y) / N	50	(Y) / N	(Y) / N	93.3

Moisture Separator Information

System	Inspected	Emptied	Amount Transferred (gals)
Subslab	(Y) / N	(Y) / N	0
Exterior	(Y) / N	(Y) / N	0

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 7.26.10/1300 Operator: S. Elliott Monitoring Event: (Biweekly) / Monthly / Quarterly / Other _____

Monitoring Point	Manifold Readings: Total Depth ft BTOC	Screened Interval	Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	26	5-25	-						-	
AOC65-VEW20	27	10-25	-						-	
AOC65-VEW21	27	12-27	-						-	
AOC65-VEW23	21	6-21	-						-	
AOC65-VEW25	21	6-21	-						-	
AOC65-VEW27	21	6-21	-						-	
AOC65-INTAKE-SW			-							
Deep Wells										
AOC65-VEW13	41	15-40	-						-	
AOC65-VEW14	61	40-60	-						-	
AOC65-VEW17	52.5	22-52	-						-	
AOC65-VEW22	51	25-56	-						-	
AOC65-VEW24	50	25-50	-						-	
AOC65-VEW26	50	25-50	-						-	
AOC65-INTAKE-DW			-							
AOC65-EXHAUST			+							

Blower Information

System	Pre Adjustment: Blower On	Initial Intake Pressure	Adjusted Pressure	Final Intake Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Shallow	(Y) / N	34	(adjust to 75" H_2O) Y (N)	34	(Y) / N	(Y) / N	NA
Deep	(Y) / N	41	(adjust to 75" H_2O) Y (N)	42	(Y) / N	(Y) / N	NA

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	(Y) / N	0
Deep	(Y) / N	(Y) / N	0

Observations/Notes:

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 8.10.10 / 1000 Operator: S. Elliott / J. Bouch Monitoring Event: Biweekly / (Monthly) / Quarterly / Other _____

Monitoring Point	Manifold Readings: Total Depth ft BTOC	Screened Interval	Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	26	5-25	-32.8	590	95.3	0	1021		-30.9	
AOC65-VEW20	27	10-25	-32.8	543	95.1	0	1022		-31.3	
AOC65-VEW21	27	12-27	-32.9	1714	94.6	0	1024		-31.2	
AOC65-VEW23	21	6-21	-32.8	446	94.2	0	1026		-32.0	
AOC65-VEW25	21	6-21	-32.9	451	94.6	6.2	1028		-31.8	
AOC65-VEW27	21	6-21	-33.0	1549	43.7	2.0	1029		-	
AOC65-INTAKE-SW			-32.9	1438	99.3	0	1019			
Deep Wells										
AOC65-VEW13	41	15-40	-28.3	3704	92.4	0	1008		-1.4	
AOC65-VEW14	61	40-60	-28.1	370	92.1	0	1009		-0.8	
AOC65-VEW17	52.5	22-52	-27.2	2195	92.1	0	1011		-15.3	
AOC65-VEW22	51	25-56	-27.0	1398	92.2	0	1012		-26.3	
AOC65-VEW24	50	25-50	-27.1	365	93.0	0	1014		-0.2	
AOC65-VEW26	50	25-50	-26.9	1065	93.0	6	1015		-25.1	
AOC65-INTAKE-DW			-22.2	~~10~~51	89.4	0	1006			
AOC65-EXHAUST			+2.4	8188	154.9	0	1017			

Blower Information: System	Pre Adjustment: Blower On	Initial Intake Pressure	Adjusted Pressure	Final Intake Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Shallow	(Y) / N	34	(adjust to 75" H_2O) Y / N	33	(Y) / N	(Y) / N	NA
Deep	(Y) / N	43	(adjust to 75" H_2O) Y / N	42	(Y) / N	(Y) / N	NA

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	(Y) / N	0
Deep	(Y) / N	(Y) / N	0

Observations/Notes:

in. H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 8.10.10 / 1038 Operator: S. Elliott & J. Bouch Monitoring Event: Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Total Depth ft. BTOC	Screened Interval	Water Level ft. BTOC	Vac in. H_2O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Summa Canister #	Comments
Subslab Wells										
AOC65-VEW1				-						
AOC65-VEW2				-						
AOC65-VEW3				-						OFFLINE
AOC65-VEW4				-						OFFLINE
AOC65-VEW5				-						OFFLINE
AOC65-VEW6				-						OFFLINE
AOC65-VEW7				-						OFFLINE
AOC65-VEW8				-						
AOC65-VEW9				-						
AOC65-VEW10				-						
AOC65-VEW11				-						OFFLINE
AOC65-VEW12				-						
B90-INTAKE-SS				- 42.1	>15,000	90.3	0	1055		

Monitoring Point	Manifold Readings: Total Depth ft. BTOC	Screened Interval	Water Level ft. BTOC	Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac (in. H_2O)	Comments
Exterior Wells											
AOC65-VEW15	13	5-12		- 38.2	530	88.8	0	1046		- 0.5	
AOC65-VEW16	41	15-40		- 37.9	2069	89.2	0	1044		- 2.4	
AOC65-VEW18	56	15.5-55.5		- 38.2	1404	89.7	0	1042		- 0.2	
AOC65-VEW28A	120	80-120		- 37.6	556	90.3	0	1041		- 33.0	
AOC65-VEW28B	179	139.3-179.3		- 37.6	1206	90.1	0	1038		- 0	
B90-INTAKE-EX				- 38.4	2030	89.7	0	1048			
B90-EXHAUST				+ 11.2	14307	152.2	0	1050			
AOC65-POSTGAC				+ 7.0	9433	104.1	0	1052			

Blower Information: System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Subslab	(Y) / N	60	(adjust to 65" H_2O) (Y) / N	65	(Y) / N	(Y) / N	7644
Exterior	Y / (N)	0	(adjust to 50" H_2O) (Y) N	50	(Y) N	(Y) N	143.0

Moisture Separator Information: System	Inspected	Emptied	Amount Transferred (gals)
Subslab	(Y) / N	(Y) / N	0
Exterior	(Y) / N	(Y) / N	0

Observations/Notes:

in. H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 8.24.10 Operator: S. Elliott Monitoring Event: Biweekly / Monthly / Quarterly / Other _____

Monitoring Point	Manifold Readings: Total Depth ft BTOC	Screened Interval	Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	26	5-25	-						-	
AOC65-VEW20	27	10-25	-						-	
AOC65-VEW21	27	12-27	-						-	
AOC65-VEW23	21	6-21	-						-	
AOC65-VEW25	21	6-21	-						-	
AOC65-VEW27	21	6-21	-						-	
AOC65-INTAKE-SW			-							
Deep Wells										
AOC65-VEW13	41	15-40	-							
AOC65-VEW14	61	40-60	-						-	
AOC65-VEW17	52.5	22-52	-						-	
AOC65-VEW22	51	25-56	-						-	
AOC65-VEW24	50	25-50	-						-	
AOC65-VEW26	50	25-50	-						-	
AOC65-INTAKE-DW			-							
AOC65-EXHAUST			+							

Blower Information: System	Pre Adjustment: Blower On	Initial Intake Pressure	Adjusted Pressure	Final Intake Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Shallow	Y / N		(adjust to 75" H_2O) Y / N		Y / N	Y / N	NA
Deep	Y / N		(adjust to 75" H_2O) Y / N		Y / N	Y / N	NA

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Shallow	Y / N	Y / N	
Deep	Y / N	Y / N	

Observations/Notes:
* system [redacted] off for vapor intrusion sampling

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 8.24.10 Operator: S. Elliott Monitoring Event: Biweekly / Monthly / Quarterly / Other _____

	Wellhead Readings									
Monitoring Point	Total Depth ft. BTOC	Screened Interval	Water Level ft. BTOC	Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected Time	Analytical Sample Collected Summa Canister #	Comments
Subslab Wells										
AOC65-VEW1				-						
AOC65-VEW2				-						
AOC65-VEW3				-						OFFLINE
AOC65-VEW4				-						OFFLINE
AOC65-VEW5				-						OFFLINE
AOC65-VEW6				-						OFFLINE
AOC65-VEW7				-						OFFLINE
AOC65-VEW8				-						
AOC65-VEW9				-						
AOC65-VEW10				-						
AOC65-VEW11				-						OFFLINE
AOC65-VEW12				-						
B90-INTAKE-SS				-						
Exterior Wells										
	Manifold Readings								Wellhead	
Monitoring Point	Total Depth ft. BTOC	Screened Interval	Water Level ft. BTOC	Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected Time	Analytical Sample Collected Summa Canister #	Vac (in. H_2O)	Comments
AOC65-VEW15	13	5-12		-						-	
AOC65-VEW16	41	15-40		-						-	
AOC65-VEW18	56	15.5-55.5		-						-	
AOC65-VEW28A	120	80-120		-						-	
AOC65-VEW28B	179	139.3-179.3		-						-	
B90-INTAKE-EX				-							
B90-EXHAUST				+							
AOC65-POSTGAC				+							

Blower Information	System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Final Intake Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
	Subslab	Y / N		(adjust to 65" H_2O) Y / N		Y / N	Y / N	
	Exterior	Y / N		(adjust to 50" H_2O) Y / N		Y / N	Y / N	

Moisture Separator Information	System	Inspected	Emptied	Amount Transferred (gals)
	Subslab	Y / N	Y / N	
	Exterior	Y / N	Y / N	

Observations/Notes: * System [redacted] off for vapor intrusion sampling

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 9/7/10 Operator: S. Elliott Monitoring Event: Biweekly / (Monthly) / Quarterly / Other Month 5

Monitoring Point	Manifold Readings: Total Depth ft BTOC	Screened Interval	Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	26	5-25	-						-	
AOC65-VEW20	27	10-25	-						-	
AOC65-VEW21	27	12-27	-						-	
AOC65-VEW23	21	6-21	-						-	
AOC65-VEW25	21	6-21	-						-	
AOC65-VEW27	21	6-21	-						-	
AOC65-INTAKE-SW			-							
Deep Wells										
AOC65-VEW13	41	15-40	-						-	
AOC65-VEW14	61	40-60	-						-	
AOC65-VEW17	52.5	22-52	-						-	
AOC65-VEW22	51	25-56	-						-	
AOC65-VEW24	50	25-50	-						-	
AOC65-VEW26	50	25-50	-						-	
AOC65-INTAKE-DW			-							
AOC65-EXHAUST			+							

Blower Information: System	Pre Adjustment: Blower On	Initial Intake Pressure	Adjusted Pressure	Final Intake Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Shallow	Y / N		(adjust to 75" H_2O) Y / N		Y / N	Y / N	NA
Deep	Y / N		(adjust to 75" H_2O) Y / N		Y / N	Y / N	NA

Moisture Separator Information: System	Inspected	Emptied	Amount Xfered (gals)
Shallow	Y / N	Y / N	
Deep	Y / N	Y / N	

Observations/Notes:
* System off for vapor intrusion sampling

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 9/7/10 Operator: S. Elliott Monitoring Event: Biweekly / (Monthly) / Quarterly / Other Month 5

Monitoring Point	Wellhead Readings: Total Depth ft. BTOC	Screened Interval	Water Level ft. BTOC	Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells										
AOC65-VEW1				-						
AOC65-VEW2				-						
AOC65-VEW3				-						OFFLINE
AOC65-VEW4				-						OFFLINE
AOC65-VEW5				-						OFFLINE
AOC65-VEW6				-						OFFLINE
AOC65-VEW7				-						OFFLINE
AOC65-VEW8				-						
AOC65-VEW9				-						
AOC65-VEW10				-						
AOC65-VEW11				-						OFFLINE
AOC65-VEW12				-						
B90-INTAKE-SS				-						

Monitoring Point	Manifold Readings: Total Depth ft. BTOC	Screened Interval	Water Level ft. BTOC	Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
Exterior Wells											
AOC65-VEW15	13	5-12		-						-	
AOC65-VEW16	41	15-40		-						-	
AOC65-VEW18	56	15.5-55.5		-						-	
AOC65-VEW28A	120	80-120		-						-	
AOC65-VEW28B	179	139.3-179.3		-						-	
B90-INTAKE-EX				-							
B90-EXHAUST				+							
AOC65-POSTGAC				+							

Blower Information: System	Pre Adjustment: Blower On	Pre Adjustment: Intake Pressure Gauge	Pre Adjustment: Adjusted Pressure	Final Intake Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Subslab	Y / N		(adjust to 65" H_2O) Y / N		Y / N	Y / N	
Exterior	Y / N		(adjust to 50" H_2O) Y / N		Y / N	Y / N	

Moisture Separator Information: System	Inspected	Emptied	Amount Transferred (gals)
Subslab	Y / N	Y / N	
Exterior	Y / N	Y / N	

Observations/Notes: System off for vapor intrusion sampling

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 10/18/10 1500 Operator: S. Elliott Monitoring Event: (Biweekly) / Monthly / Quarterly / Other _____

Monitoring Point	Wellhead Readings: Total Depth ft. BTOC	Screened Interval	Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
Subslab Wells									
AOC65-VEW1			-						
AOC65-VEW2			-						
AOC65-VEW3			-						OFFLINE
AOC65-VEW4			-						OFFLINE
AOC65-VEW5			-						OFFLINE
AOC65-VEW6			-						OFFLINE
AOC65-VEW7			-						OFFLINE
AOC65-VEW8			-						
AOC65-VEW9			-						
AOC65-VEW10			-						
AOC65-VEW11			-						OFFLINE
AOC65-VEW12			-						
B90-INTAKE-SS			-						

Monitoring Point	Manifold Readings: Total Depth ft. BTOC	Screened Interval	Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
Exterior Wells										
AOC65-VEW15	13	5-12	-						-	
AOC65-VEW16	41	15-40	-						-	
AOC65-VEW18	56	15.5-55.5	-						-	
AOC65-VEW28A	120	80-120	-						-	
AOC65-VEW28B	179	139.3-179.3	-						-	
B90-INTAKE-EX			-							
B90-EXHAUST			+							
AOC65-POSTGAC			+							

Blower Information: System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Subslab	Y / (N)	/	(adjust to 65" H_2O) (Y) / N	62	(Y) / N	(Y) / N	1081.9
Exterior	Y / (N)	/	(adjust to 50" H_2O) (Y) / N	50	(Y) / N	(Y) / N	147.2

Moisture Separator Information: System	Inspected	Emptied	Amount Transferred (gals)
Subslab	(Y) / N	(Y) / N	8
Exterior	(Y) / N	(Y) / N	8

Observations/Notes: System restarted after being off for pulse testing

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time : 10/18/10 1455 Operator: S. Elliott Monitoring Event: (Biweekly) / Monthly / Quarterly / Other _____

Monitoring Point	Manifold Readings: Total Depth ft BTOC	Screened Interval	Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac in. H_2O	Comments
Shallow Wells										
AOC65-VEW19	26	5-25	-						-	
AOC65-VEW20	27	10-25	-						-	
AOC65-VEW21	27	12-27	-						-	
AOC65-VEW23	21	6-21	-						-	
AOC65-VEW25	21	6-21	-						-	
AOC65-VEW27	21	6-21	-						-	
AOC65-INTAKE-SW			-							
Deep Wells										
AOC65-VEW13	41	15-40	-						-	
AOC65-VEW14	61	40-60	-						-	
AOC65-VEW17	52.5	22-52	-						-	
AOC65-VEW22	51	25-56	-						-	
AOC65-VEW24	50	25-50	-						-	
AOC65-VEW26	50	25-50	-						-	
AOC65-INTAKE-DW			-							
AOC65-EXHAUST			+							

Blower Information

System	Pre Adjustment: Blower On	Initial Intake Pressure	Adjusted Pressure	Final Intake Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
Shallow	Y / (N)	—	(adjust to 75" H_2O) Y / N	40	(Y) / N	(Y) / N	NA
Deep	Y / (N)	—	(adjust to 75" H_2O) Y / N	45	(Y) / N	(Y) / N	NA

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	(Y) / N	0
Deep	(Y) / N	(Y) / N	0

Observations/Notes: can't adjust
system off for pulse testing, started back up today

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Building 90 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 11.9.10 / 0830 Operator: Elliott + Bosch Monitoring Event: Biweekly / Monthly / Quarterly (Other) Semi-annual

	Monitoring Point	Total Depth ft. BTOC	Screened Interval	Wellhead Readings: Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Comments
	Subslab Wells									
	AOC65-VEW1			-						
	AOC65-VEW2			-						
	[redacted]									
	AOC65-VEW8			-						
	AOC65-VEW9			-						
	AOC65-VEW10			-						
	[redacted]									
	AOC65-VEW12			-						
4/8	B90-INTAKE-SS			- 38.6	7540	68.9	1.1	1056	* 2695	
	Exterior Wells									

	Monitoring Point	Total Depth ft. BTOC	Screened Interval	Manifold Readings: Vac (in. H_2O)	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Analytical Sample Collected: Summa Canister #	Wellhead Vac (in. H_2O)	Comments
	AOC65-VEW15	13	5-12	- 41.6	614	69.4	0.7	1031		- 0.5	
	AOC65-VEW16	41	15-40	- 43.3	2406	69.4	1.7	1033		- 3.5	
	AOC65-VEW18	56	15.5-55.5	- 44.1	751	69.9	0.7	1035		- 0.3	
4/8	AOC65-VEW28A	120	80-120	- 44.1	556	70.1	1.9	1038	* 22962	- 44.1	
4/8	AOC65-VEW28B	179	139.3-179.3	- 44.1	2032	70.1	0	1042	* 12027	- 7.0	
4/8	B90-INTAKE-EX			- 44.1	4480	69.4	1.9	1046	* 36420		
	B90-EXHAUST			+ 8.9	5478	135.6	1.3	1049			
4/8	AOC65-POSTGAC			+ 4.7	5212	95.1	0.6	1052	* 2179		

Blower Information	System	Pre Adjustment: Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Vacuum Relief Valve: Check	Vacuum Relief Valve: Lube	Hours Meter
	Subslab	(Y) / N	60	(adjust to 65" H_2O) (Y) / N	62	(Y) / N	(Y) / N	1606.0
	Exterior	(Y) / N	50	(adjust to 50" H_2O) Y (N)	50	(Y) / N	(Y) / N	~~2132.0~~ 2131.0

Moisture Separator Information	System	Inspected	Emptied	Amount Transferred (gals)
	Subslab	(Y) / N	(Y) / N	0
	Exterior	(Y) / N	(Y) / N	0

Observations/Notes:
* Changed filters

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC-65 SVE Inspection and Monitoring Form
Camp Stanley Storage Activity, Texas

Date/Time: 11.9.10 / 0830 Operator: Elliott + Beech Monitoring Event: Biweekly / Monthly / Quarterly / (Other) semi-annual

	Monitoring Point	Manifold Readings: Total Depth ft BTOC	Screened Interval	Vac in.H_2O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected: Time	Summa Canister #	Wellhead Vac in. H_2O	Comments
	Shallow Wells										
4/8	AOC65-VEW19	26	5-25	-36.1	863	64.2	8.9	0915	* 1455	-20.1	pulling up water, wellhead Vac fluctuating significantly
4/8	AOC65-VEW20	27	10-25	-35.7	1312	72.3	1.0	0923	* 36455	-33.7	
4/8	AOC65-VEW21	27	12-27	-35.4	1860	75.3	0.9	0929	* 36530	-34.3	
4/8	AOC65-VEW23	21	6-21	-35.7	836	77.3	1.1	0934	* 33397	-34.8	
4/8	AOC65-VEW25	21	6-21	-35.6	2391	77.5	2.0	0937	* 36405	-35.4	
4/8	AOC65-VEW27	21	6-21	-35.9	533	72.4	10.1	0941	* 34113	-34.8	
4/8	AOC65-INTAKE-SW			-37.1	623	68.5	6.7	0909	* 35558		
	Deep Wells				2789						
	AOC65-VEW13	41	15-40	-32.1	2789	69.9	2.5	0953	—	-1.4	
	AOC65-VEW14	61	40-60	-31.8	637	70.8	1.2	0954	—	-19.2	
4/8	AOC65-VEW17	52.5	22-52	-31.5	1385	70.3	2.1	0959	* 2119	-14.5	
4/8	AOC65-VEW22	51	25-56	-31.1	1161	69.6	2.0	1002	* 34164	-28.3	
	AOC65-VEW24	50	25-50	-30.6	582	71.4	0.7	0956	—	-0.1	
4/8	AOC65-VEW26	50	25-50	-30.6	1941	70.1	2.2	1005	* 34102	-27.2	
4/8	AOC65-INTAKE-DW			-35.9	5234	71.2	2.5	0949	* 36465		
	AOC65-EXHAUST			+2.0	6327	126.1	2.7	1010	[redacted]		

Blower Information

System	Pre Adjustment: Blower On	Initial Intake Pressure	Adjusted Pressure	Final Intake Pressure	Vacuum Relief Valve: Check	Lube	Hours Meter
Shallow	(Y) / N	38	(adjust to 75" H_2O) Y (N)	40	(Y) / N	(Y) / N	NA
Deep	(Y) / N	45	(adjust to 75" H_2O) Y (N)	45	(Y) / N	(Y) / N	NA

Moisture Separator Information

System	Inspected	Emptied	Amount Xfered (gals)
Shallow	(Y) / N	(Y) / N	0
Deep	(Y) / N	(Y) / N	3 gallons

Observations/Notes:
*changed filters

in.H_2O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch