

# **2012 UPDATE TO AOC-65 SOIL VAPOR EXTRACTION OPERATIONS AND MAINTENANCE ASSESSMENT REPORT**



*Prepared for:*

**Camp Stanley Storage Activity  
Boerne, Texas**

**DECEMBER 2012**

## 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 Sub-slab, 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 4-year period between April 2008 and May 2012 with a focus on the period of November 9, 2010 through May 8, 2012. This report presents the results associated with system operation, and, based on those results, presents recommendations for cessation of SVE operations within AOC-65.

Over the four years covered by this O&M period, approximately 140 pounds (lb) (10 gal) 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 134.6 lb/yr (approximately 10 gal/yr) the first year (April 2008 to April 2009); 13.7 lb/yr (approximately 1 gal/yr) the second year (April 2009 to April 2010); 12.1 lb/yr (approximately 0.9 gal/yr) the third year (April 2010 to April 2011); and 11.95 lb/yr (approximately 0.9 gal/yr) the fourth year of SVE operation (April 2011 to April 2012). The significantly different values between year one and subsequent years 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 2012, weather conditions also affected VOC recovery rates.

Each subsystem contributed the following to the total mass removed during the four year O&M period:

- Sub-slab VEWs accounted for the removal of 5.92 gallons of PCE;
- AOC-65 Shallow VEWs accounted for the removal of 2.56 gallons of PCE;
- AOC-65 Deep VEWs accounted for the removal of 1.39 gallons of PCE; and
- Exterior Building 90 VEWs accounted for the removal of 0.49 gallons of PCE.

Recommendations for SVE pilot study activities at AOC-65 following four years of operation include:

- Deactivation of both Eastern and Western SVE systems,
- Plugging and abandoning of Building 90 Sub-Slab VEWs, and
- Re-purposing external VEWs for future treatability studies.

Overall system inefficiency during the last three years is the main reason for recommending a discontinuation of SVE treatability study activities and the cessation of SVE operations at AOC-65. During the 18-month focus period (November 2010 through May 2012), 0.83 gallons of PCE was removed from the contaminated soils and bedrock at AOC-65 via SVE. These 0.83 gallons removed represents less than 8% of the total volume of PCE removed since SVE

operations resumed in 2008. Additionally, CSSA is in the planning stages for the renovation of Building 90. Building 90 sub-slab VEWs are 1-inch diameter wells that are between 5 and 10 feet deep and are not likely to intercept the shallow groundwater at AOC-65, thus, are not useful for monitoring groundwater, nor are they useful as injection points because the volume within the casing and screen area is small owing to their shallow depth and small diameter. Removal of these sub-slab VEWs would allow CSSA to renovate Building 90 without impediments associated with preserving functionality and accessibility. Unlike the sub-slab VEWs, the VEWs outside Building 90 may be used as groundwater monitoring or injection wells in future iterations of ISCO or other treatability studies. Many of these wells encounter shallow groundwater, and those that do not are 4-inch diameter wells with a minimum of 10-foot screens.

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### ACRONYMS AND ABBREVIATIONS

AOC	Area of Concern
bgs	below ground surface
CO <sub>2</sub>	Carbon Dioxide
CSSA	Camp Stanley Storage Activity
ft	feet
GAC	Granular activated carbon
ISCO	<i>In-situ</i> chemical oxidation
lb	pounds
lb/hr	pounds per hour
lb/yr	pounds per year
O&M	operation and maintenance
O <sub>2</sub>	Oxygen
Parsons	Parsons Infrastructure and Technology, Inc.
PBR	permit by rule
PCE	tetrachloroethene
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 18 months of operation and maintenance (O&M) activities 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 November 9, 2010 and performed through May 8, 2012. 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 addition of five wells on the eastern Building 90 exterior portion of the system and a determination if thermal enhancement of the system potentially increases the annual tetrachloroethene (PCE) removal rate (*AOC-65 Steam Enhanced SVE Treatability Study Report (September 2011)*). Recommendations for additional groundwater source treatment applications at the AOC-65 site (e.g., trench installation and ISCO injection) were developed based on observations made during the O&M activities described in this report.

### 1.1 REPORT ORGANIZATION

This report is an update to the AOC-65 Soil Vapor Extraction O&M Assessment report completed in January 2011. The January 2011 report covered the period from April 8, 2010 through November 9, 2010. This update adds the period from November 9, 2010 through May 8, 2012.

This assessment report covers one and a half years of operation (November 2010 through May 2012) following the addition of Building 90 exterior wells. 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 studies at AOC-65. References are included in Chapter 5.

### 1.2 DESCRIPTION OF AOC-65 SVE SYSTEM

The current 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, 28B, 29, 30, 31, 32, and 33. 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 current SVE system is shown in Figure 1.1 through Figure 1.3.

### 1.3 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).

In 2011, prior to the AOC-65 Thermally Enhanced SVE Treatability Study, 2 steam injection wells (SIW01 and SIW02) and 5 VEWs (29-33) were installed and connected to the Building 90 exterior side of the SVE system. The thermally enhanced treatability study ran for a period of approximately one month between August 8, 2011 and August 30, 2011. Details and results of this study are presented in *AOC-65 Steam Enhanced SVE Treatability Study Report (September 2011)*.

In 2012 several additional wells were installed following an Interim Removal Action (IRA) in which contaminated soils and bedrock beneath a concrete-lined drainage ditch were removed. The resultant trench (approximately 4 feet wide, 12 to 15 feet deep and 300 feet long) was converted into an infiltration gallery to facilitate an *in-situ* chemical oxidant (ISCO) treatability study. Seven treatability study wells were installed to monitor groundwater during and after the ISCO solution application. Both steam injection wells (TSW-01 and -02) and three vapor monitoring points (VMP-03, -04A, and -04B) were plugged and abandoned to accommodate this treatability study (report forthcoming).

A chronology of activities associated with VOC treatment at AOC-65 and corresponding documentation is presented in **Table 1.1**.

**Table 1.1 AOC-65 Treatability Activities and Associated Reports**

<b>Activity</b>	<b>Report</b>	<b>Report Date</b>
SVE Operations	<i>Area of Concern 65 Soil Vapor Extraction Operations &amp; Maintenance Report</i>	August 2003
IRA	<i>Area of Concern 65 Interim Removal Action</i>	August 2003
SVE Operations	<i>AOC-65SVE Interim Treatability Study Test Report</i>	March 2005
SVE O&M Activities	<i>AOC-65 Soil Vapor Extraction Operations and Maintenance Report</i>	April 2005
AOC-65 Groundwater Recharge Study	<i>Treatment Evaluation Report for AOC-65 SVE</i>	December 2005

<b>Activity</b>	<b>Report</b>	<b>Report Date</b>
SVE Expansion	<i>Final AOC-65 Vapor Extraction Operations and Assessment Report (CDRL A001G)</i>	April 2008
Permit Application	<i>Area of Concern-65 Permit By Rule Application for Removal Action</i>	January 2008
SVE Operations	<i>2010 Update to AOC-65 Soil Vapor Extraction Operations And Maintenance Assessment Report</i>	July 2010
SVE Operations	<i>2011 Update to AOC-65 Soil Vapor Extraction Operations And Maintenance Assessment Report</i>	January 2011
SVE System Expansion and Thermal Enhancement	<i>Final Work Plan Addendum for the Installation of LGR Monitoring Wells and AOC-65 SVE Enhancement Wells</i>	March 2011
Thermally Enhanced SVE Treatability Study - Well Installation	<i>Final Steam Enhanced Vapor Extraction Treatability Study Work Plan</i>	July 2011
Thermally Enhanced SVE Treatability Study Results	<i>AOC-65 Steam Enhanced Soil Vapor Extraction Treatability Study</i>	September 2011
IRA - Well Installation	<i>Final Addendum Work Plan for AOC-65 Interim Removal Action</i>	January 2012
ISCO Treatability study	<i>Draft Work Plan for AOC-65 ISCO Treatability Study</i>	July 2012

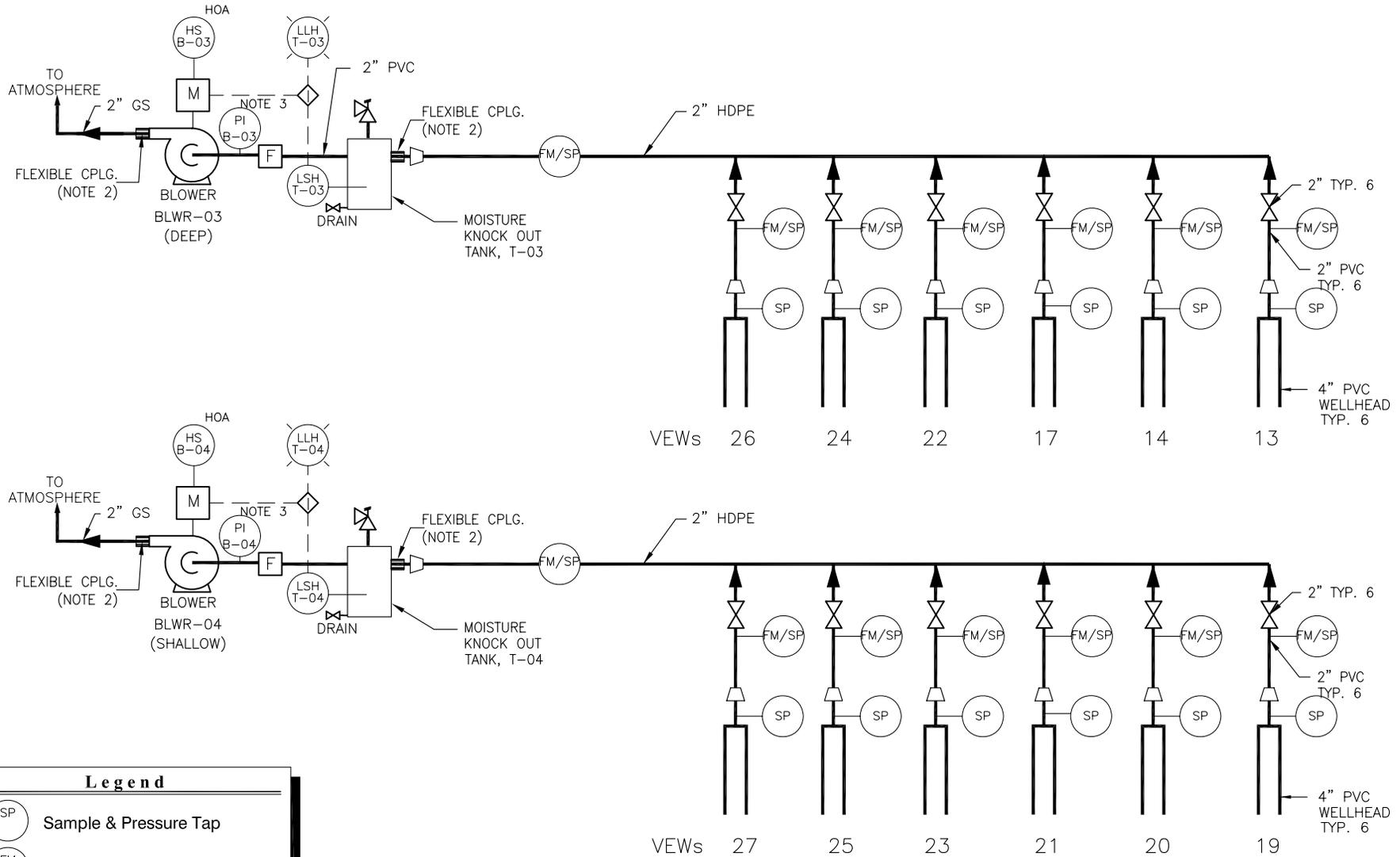
#### **1.4 SCOPE OF OPERATIONS & MAINTENANCE**

This document was prepared as an assessment of the AOC-65 SVE operations. The purpose of this assessment is to evaluate and assess 18 months of system monitoring.

Activities performed during the operations and monitoring included:

- Monthly determination of soil vapor/emissions for the Building 90 Sub-slab and Building 90 Exterior systems on the eastern SVE side of the site including:
  - Ten exterior Building 90 VEWs (VEWs 15, 16, 18, 28A, 28B, 29, 30, 31, 32, 33), and
  - Both Building 90 blowers.
- Monthly determination of soil vapor emissions for the AOC65 Shallow and AOC65 Deep systems on the western SVE 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;

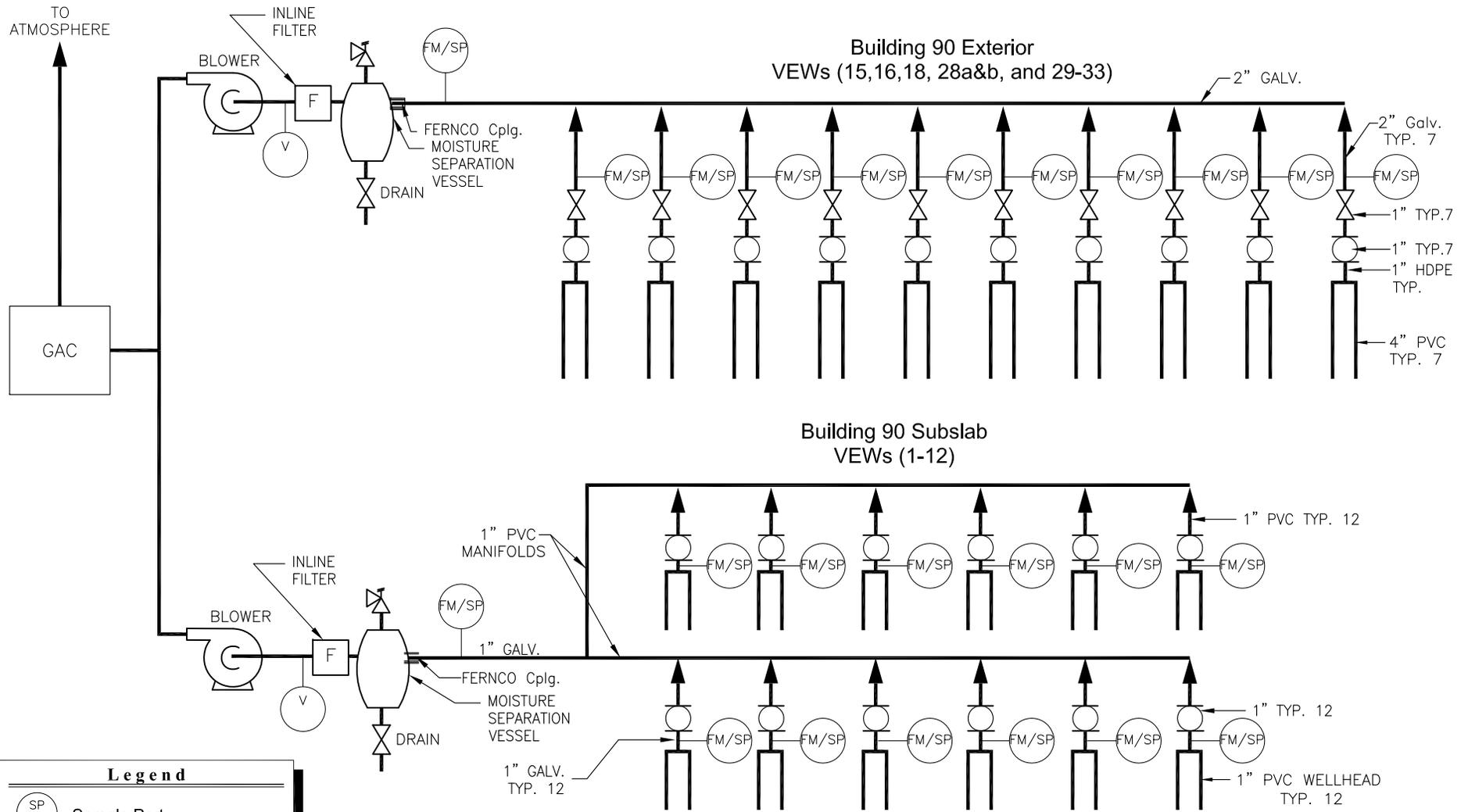
- Twice monthly system checks of the equipment and piping network to adjust, repair, and replace components as needed to maintain the systems in good operating condition.
- Semi-annual collection of vapor samples from individual VEWs, blower intakes, and system exhausts.



Legend	
	Sample & Pressure Tap
	Flow Measuring Tap
	Pressure/Vacuum Indicator
	Gate Valve
	Ball Valve
	Vacuum Relief Valve
	Inline Filter

**Figure 1.1**  
 AOC-65 Western SVE  
 System Schematic  
 Camp Stanley Storage Activity

Not To Scale



Legend	
	Sample Port
	Flow Measuring Port
	Pressure/Vacuum Indicator
	Gate Valve
	Ball Valve
	Vacuum Relief/Bleed Valve

**Figure 1.2**

AOC-65 Eastern SVE  
System Schematic

Camp Stanley Storage Activity

**PARSONS**

Not To Scale

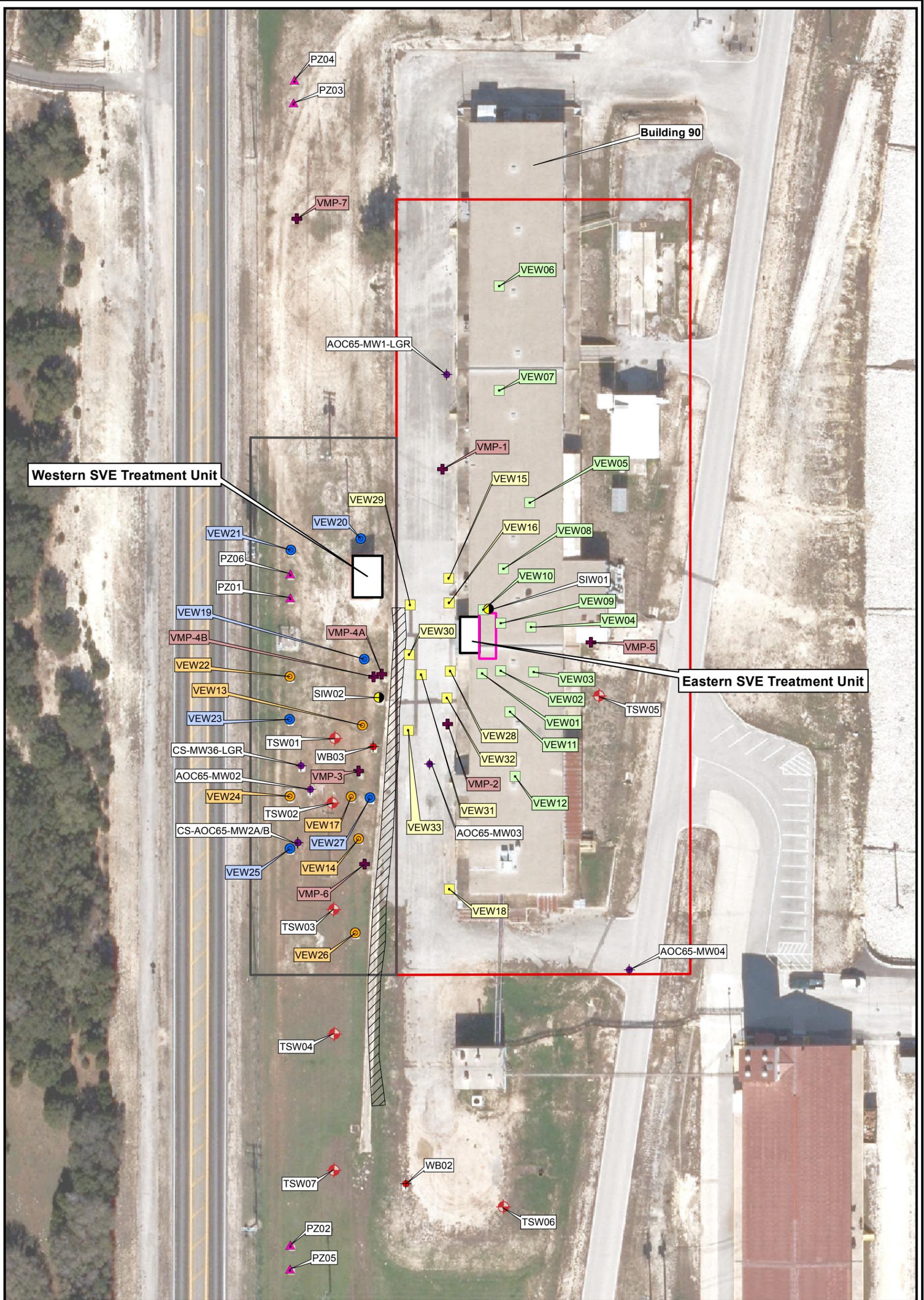


Figure 1.3  
 AOC-65 Monitoring  
 Overview Map  
 Camp Stanley Storage Activity

- |                            |                           |
|----------------------------|---------------------------|
| Trench                     | Western SVE - Deep VEW    |
| AOC-65 Vat                 | Western SVE - Shallow VEW |
| AOC 65 Eastern SVE System  | Steam Injection Well      |
| AOC 65 Western SVE System  | Piezometers               |
| Treatability Study Well    | Monitoring Well           |
| Eastern SVE - Sub-Slab VEW | Westbay Well              |
| Eastern SVE - Exterior VEW | VMP                       |

**PARSONS**

## **CHAPTER 2**

### **OPERATIONS AND MAINTENANCE TESTING PROTOCOLS**

#### **2.1 OVERVIEW**

This chapter summarizes the SVE monitoring activities, before and after the steam enhanced SVE treatability study in August 2011. The primary activities associated with the O&M included bi-weekly and monthly monitoring of system performance, and semi-annual sampling and analysis of extracted soil gas. In addition to these regularly scheduled activities, periodic gauging of VEW water levels was performed and groundwater extraction was completed as needed. SVE condensate and purge water was managed as authorized by Texas Commission on Environmental Quality (TCEQ) Underground Injection Control permit, authorization number 5X2600431. Results from monitoring events are presented in Chapter 3.

#### **2.2 INITIAL SOIL GAS AND FLOW ADJUSTMENTS**

Initial monitoring was performed on December 9, 2010. The system was shut down April 2011 through July 2011 for the drilling and installation of 2 SIWs, 5 VEWs, and plug and abandonment of VMPs. From August 8 through August 30, 2011 a steam enhanced treatability study was performed. Routine monitoring was resumed in October 2011. Field screening was performed at all VEWs using a 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 wells outside Building 90 (VEWs 15, 16, 18, 28B and new wells 29 through 33), wells inside Building 90 (VEWs 01, 02, 09, 10, 12, 13, 15), deep wells (VEWs 24 and 26), shallow wells (VEWs 19, 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 as well as water evacuation from VEWs and managed as authorized by CSSA's 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 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 18-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
December 9, 2010	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
December 16, 2010	Vapor Intrusion Sampling	Samples collected from VIP-12 through VIP-14
January 5, 2011	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
February 8, 2011	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes; SVE shut down for Noblis testing 2/8/11 – 2/11/11
March 10, 2011	Monthly monitoring, semi-annual sampling	Field readings and soil vapor sampling from VEWs 13-28B and all four intakes
March 23, 2011	SIW-01 drilling	Turned off western side of system for SIW drilling
April 8, 2011	Monthly monitoring, SIW & VEW drilling	Field readings from VEWs 13,14,17,19-27; and two intakes; Eastern system shut down for drilling
April 18-27, 2011	Noblis sampling for carbon stable isotope analysis	System shut down for Noblis sampling
May 4, 2011	SIW & VEW drilling	Both sides of SVE system shut down for drilling of SIWs and VEWs.
June 2, 2011	Water line investigation	SVE system remains off to check for leaks in water line around building 90
June 5, 2011	Monthly monitoring	Field readings from VEWs 13,14,17,19-27; and two intakes; eastern side of system remains off for SIW & VEWs installation
August 4, 2011	Treatability Study	Steam injected into wells within AOC-65
August 9, 2011	Maintenance	Eastern side exterior blower replaced
October 13, 2011	Monthly monitoring	Field readings from VEWs 13-33, and all four intakes
October 25, 2011	System maintenance	GAC used on the western side during the treatability study moved to eastern side just before existing GAC
November 9, 2011	Monthly monitoring, VEW purging	Field readings from VEWs 13-33, and all four intakes; VEWs purged and water levels in VEWs gauged
December 7, 2011	Monthly monitoring, VEW purging	Field readings from VEWs 13-33, and all four intakes; VEWs purged and water levels in VEWs gauged
January 6, 2012	Monthly monitoring, VEW purging	Field readings from VEWs 13-33, and all four intakes; VEWs purged and water levels in VEWs gauged
February 6, 2012	Sampling	Composite sample collected from KO pots

Date	Activity	Samples/Comments
February 7, 2012	Monthly monitoring, VEW purging	Western deep side shut down due to ineffectiveness; field readings from VEWs 15,16,18-21,23,25,27-33, and the three active intakes; VEWs purged and water levels in VEWs gauged
February 9-13, 2012	Plug and abandon VMPs	Plug and abandon SIW02, VMP-4a, & VMP-6 prior to trench installation
February 29 – May 3, 2012	Trench installation	Trench installed on the western side of building 90 along ditch; trench then filled with alternating layers of gravel and clay
March 9, 2012	Monthly monitoring	Field readings from VEWs 15,16,18-21,23,25,27-33, and the three active intakes; water levels in VEWs gauged
March 19-23, 2012	Power line work	SVE system shut down to move power lines from the west side of Bldg. 90 to the east side
March 20, 2012	Sampling	A sample was collected from water that accumulated in open trench
April 2012	Trench filling	Trench filled with gravel/clay layers and shallow, middle, and deep lines installed
April 2-3, 2012	Monthly monitoring, semi-annual sampling	Field readings and soil vapor sampling from VEWs 15,16,18-21,23,25,27-33 and the three active intakes
April 26, 2012	Plug and abandon VMP-3	Plug and abandon VMP-3 due to damage sustained from heavy equipment during trench installation
May 7, 2012	Trench concrete completion	Concrete ditch installed on top of trench
May 8, 2012	Monthly monitoring	Field readings from VEWs 15,16,18-21,23,25,27-33 and the three active intakes

Note: Biweekly monitoring events are not included in this table. Biweekly system checks included emptying of water accumulated in knock out pots, system pressure adjustments, and system maintenance as needed.

## 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 March 2011, August 2011, and April 2012. The second semi-annual sampling event for 2011 was performed during the steam injection study (August) and a more detailed account of those activities and results can be found in *AOC-65 Steam Enhanced Soil Vapor Extraction Treatability Study Report (Parsons, 2011)*. Samples were collected from the selected sampling points (VEWs 01 through 33), and all four intakes during each sampling event to allow for direct comparison of results. 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 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 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. On January 12, 2010, the GAC was replenished with 1,500 pounds of fresh carbon. The spent carbon was recycled through Calgon Carbon.

## **2.6 VEW WATER EVACUATION**

During significant rain events and when the water table is elevated, the VEW screened intervals fill with water. In order to keep the system running as effectively as possible the water in these VEWs are purged or evacuated. The purge water from these wells is managed within the Bioreactor located at SWMU B-3 under TCEQ UIC authorization number 5X2600431. In January 2012 system checks were performed before and after purging the VEWs for comparison.

## CHAPTER 3

### SYSTEM OPERATIONAL MEASUREMENTS

This section summarizes results of 18 months of monthly monitoring and soil gas sampling during the O&M period (November 9, 2010 through May 8, 2012). Results were evaluated, along with other periodic sample results, from this O&M task 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 November 9, 2010, with the semiannual 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 18 month period, 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 Underground Injection Control Permit at SWMU B-3 Bioreactor.

Extraction pressure and airflow velocity measurements at each VEW and blower were collected as specified in the *AOC-65 SVE Systems O&M Plan* (Parsons, 2010) 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. During months 36 through 39 (April through July, 2011) both sides of the system were shut down for the drilling of SIW-01, SIW-02, and VEWs 29-33. During months 40 and 41 (August and September, 2011) a steam injection treatability study was conducted, details from this study were reported in the *AOC-65 Steam Enhanced SVE Treatability Study Report* (Parsons, 2011). In February 2012 it was determined from VOC analysis that the AOC-65 deep wells were not contributing to the removal of significant amounts of VOCs, therefore the deep side was turned off for the remaining 4 months.

Intake pressures at 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

Monthly Blower and VEW Vacuum Pressure (in. H<sub>2</sub>O)

<b>Building 90</b>	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45		Month 46	Month 47	Month 48	Month 49				
<i>exterior</i>	11/9/10	12/9/10	1/5/11	2/8/11	3/10/11	4/8/11	May-11	Jun-11	7/5/11	8/18/11	9/1/11	10/13/11	11/9/11	12/7/11	1/4/12	1/6/12	2/7/12	3/9/12	4/3/12	5/8/2012				
Building 90 Intake-EX	-44.1	-42.1	-41.6	-39.1	-38.7	system off for drilling				-70.0		-12.4	-14.6	-20.3	-21.1	-20.3	-17.7	-17.2	-15.5	-12.1				
VEW 15	-41.6	-39.3	-39.8	-35.6	-36.9											-8.6	-11.6	-17.3	-18.3	-17.4	-15.4	-14.6	-12.8	-8.5
VEW 16	-43.3	-39.2	-39.6	-35.2	-33.4											-8.7	-11.2	-17.3	-17.6	-17.1	-15.8	-14.3	-12.8	-8.7
VEW 18	-44.1	-38.8	-39.8	-35.6	-36.5											-9.1	-12.7	-17.5	-18.4	-16.4	-15.5	-14.3	-12.7	-8.5
VEW 28A	-44.1	-37.6	-39.3	-34.1	-36.1											-8.9	-11.5	-14.9	-17.9	-17.9	-15.3	-14.7	-13.6	-7.9
VEW 28B	-44.1	-36.7	-42.3	-34.1	-30.3											-8.5	-10.8	-16.5	-18.7	-17.7	-15.5	-15.4	-13.5	-8.2
VEW 29	--	--	--	--	--											-8.1	-11.2	-16.2	-16.7	-14.7	-14.1	-14.4	-11.5	-7.8
VEW 30	--	--	--	--	--											-8.1	-11.9	-16.2	-18.3	-16.2	-14.7	-13.8	-11.8	-7.9
VEW 31	--	--	--	--	--											-8.0	-10.8	-16.3	-16.9	-15.8	-13.6	-13.4	-11.1	-7.9
VEW 32	--	--	--	--	--											-8.2	-10.9	-16.1	-17.1	-15.6	-14.9	-14.1	-12.2	-7.9
VEW 33	--	--	--	--	--											-8.1	-11.1	-15.4	-17.3	-16.4	-14.7	-13.6	-11.9	-8.2
<i>interior</i>																								
Building 90 Intake-SS	-38.6	---	-38.5	-35.6	-36.1					-62		-34.2	-30.8	-30.2	-32.8	-32.8	-32.2	-34.2	-44.0	-44.0				
<b>AOC-65</b>	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45		Month 46	Month 47	Month 48	Month 49				
<i>shallow wells</i>	11/9/10	12/9/10	1/5/11	2/8/11	3/10/11	4/8/11	May-11	Jun-11	7/5/11	8/18/11	9/1/11	10/13/11	11/9/11	12/7/11	1/4/12	1/6/12	2/7/12	3/9/12	4/3/12	5/8/2012				
AOC-65-Intake-SW	-37.1	-39.7	-38.0	-39.0	-35.6	-34.4	system off for drilling			-25.3	-22.0		-14.5	-25.5	-27.5	-33.4	-31.1	-37.3	-43.8	-40.2	-40.6			
VEW 19	-36.1	-38.6	-37.1	-38.3	-34.4	-33.8									-14.1	-24.8	-28.1	-32.8	-29.8	-36.7	-44.1	-40.9	-40.2	
VEW 20	-35.7	-37.5	-36.8	-36.5	-36.1	-33.7									-13.9	-24.9	-27.7	-32.5	-31.1	-36.4	-42.6	-41.3	-39.8	
VEW 21	-35.4	-37.8	-36.3	-37.6	-36.1	-34.5									-13.9	-24.6	-26.8	-32.8	-31.9	-37.1	-42.9	-40.3	-40.2	
VEW 23	-35.7	-37.1	-37.1	-36.3	-35.1	-33.8									-14.0	-24.6	-27.5	-32.6	-31.5	-36.7	-42.3	-40.5	-30.2	
VEW 25	-35.6	-37.2	-36.1	-37.3	-34.8	-34.2									-14.3	-24.5	-26.5	-33.4	-32.2	-36.5	-43.6	-40.3	-40.4	
VEW 27	-35.9	-37.2	-35.9	-36.3	-35.6	-33.6									-14.0	-24.9	-26.7	-32.9	-31.5	-36.9	-26.4	-40.5	-39.8	
<i>deep wells</i>																								
AOC-65-Intake-DW	-35.9	-38.4	-38.4	-39.0	-38.6	-35.7							-32.0	-46		-26.4	-32.7	-34.8	-36.1	-35.9	system shut down due to minimal VOC detections			
VEW 13	-32.1	-33.5	-33.7	-34.6	-33.3	-30.7							-27.9		-23.3	-29.8	-31.1	-34.8	-30.3					
VEW 14	-31.8	-34.1	-33.6	-33.7	-32.9	-31.1							-27.7		-23.1	-28.5	-31.1	-32.6	-31.5					
VEW 17	-31.5	-32.6	-33.3	-33.7	-33.1	-31.1							-27.7		-22.7	-27.7	-41.5	-33.3	-30.4					
VEW 22	-31.1	-32.6	-32.2	-34.3	-33.3	-30.2				-27.2		-22.5	-27.9	-30.7	-32.1	-30.2								
VEW 24	-30.6	-34.2	-32.2	-33.7	-32.8	-30.7				-27.2		-22.4	-27.9	-31.0	-33.3	-30.5								
VEW 26	-30.6	-32.4	-32.3	-33.1	-32.9	-30.8				-26.8		-22.3	-28.4	-30.3	-32.3	-30.4								

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

\* - No readings were collected following the conclusion of steam injection

\*\* - Readings were collected prior to purging VEWs on 1/4/12 and after purging VEWs on 1/6/12

Table 3.2

AOC-65 SVE System VEW Flow Rates (ft/min)

<b>Building 90</b>	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41*	Month 42	Month 43	Month 44	Month 45**		Month 46	Month 47	Month 48						
<i>exterior</i>	11/9/10	12/9/10	1/5/11	2/8/11	3/10/11	4/8/11	May-11	Jun-11	7/5/11	8/18/11	9/1/11	10/13/11	11/9/11	12/7/11	1/4/12	1/6/12	2/7/12	3/9/12	4/3/12						
Building 90 Intake-EX	4,480	3,312	3,611	2,149	6,990	system off for drilling					5,212		>15000	3,720	3,285	2,384	>15000	2,341	1,378	4,917					
VEW 15	614	7,078	667	525	686						71		92	243	226	230	8,424	272	285	230					
VEW 16	2,806	1,771	3,764	1,851	2,901						701		821	234	300	210	8,019	290	309	246					
VEW 18	751	2,253	668	667	662						797		103	251	464	279	217	279	264	254					
VEW 28A	556	3,182	1,371	2,418	4,532						677		949	1,604	277	372	516	279	273	229					
VEW 28B	2,032	671	708	610	1,471						79		115	250	466	410	370	284	279	250					
VEW 29	--	--	--	--	--						500		445	236	345	178	180	1,392	174	773					
VEW 30	--	--	--	--	--						64		170	229	420	160	183	1,390	115	221					
VEW 31	--	--	--	--	--						1584		2,181	1,640	2,790	1,347	3,172	1,420	3,675	3,136					
VEW 32	--	--	--	--	--						82		174	237	445	2,751	183	434	101	224					
VEW 33	--	--	--	--	--						270		282	224	384	1,830	210	736	173	283					
<i>interior</i>																									
Building 90 Intake-SS	7,540	--	9,112	6,608	4,153	2592		--	11,131	4,234	6,832	>15000	6,428	5,677	12,201										
<b>AOC-65</b>	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41*	Month 42	Month 43	Month 44	Month 45**		Month 46	Month 47	Month 48						
<i>shallow wells</i>	11/9/10	12/9/10	1/5/11	2/8/11	3/10/11	4/8/11	May-11	Jun-11	7/5/11	8/18/11	9/1/11	10/13/11	11/9/11	12/7/11	1/4/12	1/6/12	2/7/12	3/9/12	4/3/12						
AOC-65-Intake-SW	623	703	934	1,487	921	1,405	system off for drilling					1,820	1,905		1,760	1,553	1,523	1,204	>15000	1,381	901	829			
VEW 19	863	2,304	904	3,009	725	748						1,244	1,092		656	722	440	637	311	687	504	622			
VEW 20	1,312	1,478	772	701	777	686						449	300		196	512	438	631	443	656	602	601			
VEW 21	1,860	440	751	418	748	662						497	342		181	481	621	637	615	633	704	622			
VEW 23	836	637	759	474	763	620						1,431	1,436		733	734	1,334	1,206	1,315	856	384	561			
VEW 25	2,391	1,573	817	371	743	717						546	485		172	456	607	587	501	646	581	590			
VEW 27	533	545	800	617	822	713						567	515		170	457	597	645	611	631	516	622			
<i>deep wells</i>																									
AOC-65-Intake-DW	5,234	5,221	6,996	5,140	7,555	7,661						system shut down due to minimal VOC detections					8,550	6,629		6,318	5,572	4,907	6,537	4,804	
VEW 13	2,789	8,167	10,135	7,713	2,133	2,755											4,175	2,945		2,737	2,718	3,856	7,828	8,100	
VEW 14	637	1,655	566	605	641	517											550	497		466	565	688	7,171	413	
VEW 17	1,385	1,546	1,226	3,503	1,716	2,069											2,680	1,694		1,686	1,270	955	1,110	1,604	
VEW 22	1,161	7,032	1,510	915	1,343	1,550	2,114	1,306		914	859						961	1,708	11,817						
VEW 24	582	354	645	1,788	689	620	495	494		438	555						929	386	273						
VEW 26	1,941	1,906	1,364	753	900	1,523	1,864	1,223		1,086	858						799	1,011	751						

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

\* - No readings were collected following the conclusion of steam injection

\*\* - Readings were collected prior to purging VEWs on 1/4/12 and after purging VEWs on 1/6/12

Table 3.3

AOC-65 SVE System Intake/Exhaust Field Data Summary:  
November 2010 - May 2012

WESTERN AOC-65 SVE SYSTEM														
Date	AOC65-INTAKE-SW					AOC65-INTAKE-DW					AOC65-EXHAUST			
	Vacuum Pump Inlet (in. H2O)	Vac. @ Manifold (in.H2O)	Flow (fpm)	Temp. (deg. F)	TVH (ppm)	Vacuum Pump Inlet (in. H2O)	Vac. @ Manifold (in.H2O)	Flow (fpm)	Temp. (deg. F)	TVH (ppm)	Vac. @ Manifold (in.H2O)	Flow (fpm)	Temp. (deg. F)	TVH (ppm)
11/9/2010	40	-37.1	623	68.5	6.7	45	-35.9	5,234	71.2	2.5	2.0	6,327	126.1	2.7
12/9/2010	40	-39.7	703	64.5	0.0	51	-38.4	5,221	65.1	0.0	2.0	1,366	101.2	0.0
1/5/2011	42	-38.0	934	69.0	15.9	50	-38.4	6,996	65.2	6.6	2.1	5,330	121.2	5.6
2/8/2011	40	-39.0	1487	55.9	7.3	50	-39.0	5,140	53.0	5.2	2.3	5,210	110.6	5.4
3/10/2011	40	-35.6	921	75.5	5.2	50	-38.6	7,555	71.4	1.9	2.0	8,400	130.8	0.1
4/8/2011	35	-34.4	1405	79.8	2.4	45	-35.7	7,661	77.1	2.6	2.5	8,900	136.5	3.7
5/4/2011	System off for Drilling													
6/1/2011	System off for Drilling													
7/5/2011	27	-25.3	1820	88.5	6.7	42	-32.0	8,550	90.6	4.8	3.0	14,500	152.9	2.4
8/18/2011	22	---	1905	89.7	---	46	---	6,629	93.0	---	---	---	---	---
9/1/2011	---	---	---	---	---	---	---	---	---	---	---	---	---	---
10/13/2011	15	-14.5	1760	82.3	1.2	40	-26.4	6,318	78.6	0.1	---	---	---	---
11/9/2011	30	-25.5	1553	64.2	6.1	42	-32.7	5,572	69.0	5.8	3.4	12,508	120.3	6.6
12/7/2011	30	-27.5	1523	58.0	3.9	40	-34.8	4,907	59.3	4.3	3.5	9,579	122.5	4.6
1/4/2012	33	-33.4	1204	64.5	0.0	43	-36.1	6,537	62.9	4.7	2.4	10,341	106.5	4.1
1/6/2012	33	-31.1	>15000	58.6	11.2	40	-35.9	4,804	59.5	6.2	4.2	10,782	126.8	3.9
2/7/2012	39	-37.3	1381	57.1	2.6	Deep Blower off due to ineffectiveness					0.2	1,047	104.3	3.3
3/9/2012	42	-43.8	901	51.7	4.1	Deep Blower off due to ineffectiveness					0.1	986	110.2	4.1
4/3/2012	40	-40.2	829	80.7	7.3	Deep Blower off due to ineffectiveness					0.0	772	1448.0	1.1

EASTERN AOC-65 SVE SYSTEM														
Date	B90-INTAKE-EX					B90-INTAKE-SS					B90-EXHAUST			
	Vacuum Pump Inlet (in. H2O)	Vac. @ Manifold (in.H2O)	Flow (fpm)	Temp. (deg. F)	TVH (ppm)	Vacuum Pump Inlet (in. H2O)	Vac. @ Manifold (in.H2O)	Flow (fpm)	Temp. (deg. F)	TVH (ppm)	Vac. @ Manifold (in.H2O)	Flow (fpm)	Temp. (deg. F)	TVH (ppm)
11/9/2010	50	-44.1	4,480	69.4	1.9	62	-38.6	7,540	68.9	1.1	8.9	5,478	135.6	1.3
12/9/2010	38	-42.1	3,312	69.0	0.0	60	---	---	---	---	37.8	5,415	68.7	0.0
1/5/2011	50	-41.6	3,611	69.6	5.3	65	-38.5	9,112	71.4	4.0	10.8	8,513	132.7	1.5
2/8/2011	48	-39.1	2,149	57.1	4.3	64	-35.6	6,608	57.1	2.5	12.2	10,739	117.3	3.5
3/10/2011	48	-38.7	6,990	81.1	0.0	65	-36.1	4,153	86.3	0.0	12.6	>15000	150.2	0.0
4/8/2011	System off for Drilling													
5/4/2011	System off for Drilling													
6/1/2011	System off for Drilling													
7/5/2011	System off for Drilling													
8/18/2011	70	---	5,212	87.2	---	62	---	2,592	86.3	---	---	---	---	---
9/1/2011	---	---	---	---	---	---	---	---	---	---	---	---	---	---
10/13/2011	75	-12.4	>15000	74.2	1.9	69	-34.2	>15000	87.4	1.2	20.7	>15000	144.1	1.3
11/9/2011	---	-14.6	3,720	65.2	6.8	75	-30.8	11,131	67.4	5.5	21.1	>15000	134.4	6.1
12/7/2011	17	-20.3	3,285	62.2	8.3	72	-30.2	4,234	48.7	4.3	20.6	14,613	135.3	7.4
1/4/2012	35	-21.1	2,384	60.7	3.5	65	-32.8	6,832	62.8	2.0	20.4	>15000	137.1	2.7
1/6/2012	38	-20.3	1,919	60.7	5.1	64	-29.8	>15000	73.5	1.9	21.0	>15000	139.8	3.2
2/7/2012	30	-17.7	2,341	62.7	3.4	55	-32.2	6,428	65.1	2.0	33.6	>15000	136.2	3.4
3/9/2012	30	-17.2	1,378	55.5	2.1	66	-34.2	5,677	54.1	0.9	32.2	>15000	134.8	1.8
4/3/2012	33	-15.5	4,917	77.1	2.2	56	-44.0	12,201	78.7	0.0	28.1	>15000	164.8	0.0

### 3.2 Soil Gas Screening Results

Soil gas concentrations in each of the VEW monitoring points were measured using field instruments during the monthly monitoring events. 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. Additionally, the PID is susceptible to errors associated with temperature fluctuations and soil vapor moisture content.

TVH readings are screening data collected to assess the operational performance of each vapor extraction well or blower. The TVH field screening results indicate a slight increase in VOCs after the thermal enhancement study in both the western and eastern sides of the system. On the Western AOC-65 (deep and shallow) side of the system the TVH readings spiked in the same month, January 2012. On the Eastern Building 90 side of the system TVH readings spiked earlier, the Sub-slab in November and the exterior wells in December 2012.

Analysis of soil vapor samples over the entire 18 months of the O&M period are slightly dissimilar than the TVH readings, though both indicate a peak in TVH or VOC concentrations around the time of the steam injection treatability study. The TVH readings indicate stable or slightly increasing concentrations over the 18 month O&M period, while a VOC analysis of soil vapors indicate a moderate reduction in VOC concentrations in Western AOC-65 (deep and shallow) VEWs and blower intakes and a slight reduction in VOC concentrations in the Building 90 sub-slab intake.

### 3.3 SOIL GAS ANALYTICAL RESULTS

#### 3.3.1 Soil Vapor Summary

Soil vapor samples were collected for analytical testing during the eighteen months of O&M at AOC-65. Samples were collected on November 9, 2010, March 10, 2011; August 18, 2011; and April 3, 2012. Emission samples results are included in Table 3.4. Results from the Treatability Study sampling (August, 2011) are included in Table 3.4 and discussed briefly to provide context for overall removal trends (specifically, orders of magnitude increases in PCE concentrations in VEWs and blower intakes), however, these data are not included in calculations for the determination of PCE removal rates and quantities as they represent anomalous conditions. Results from the thermal enhancement treatability study performed during this O&M period are discussed in further detail in *AOC-65 Steam Enhanced SVE Treatability Study Report (September 2011)*.

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. SVE sampling results collected during the monitoring period indicated that tetrachloroethylene (PCE) emissions constituted over 97% 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 3.4.

Initial sample results showed higher concentrations of VOC removed from the bedrock during the thermal enhancement study. Just before this study began the system was shut down

for 3-4 months in order to install wells on the Building 90 exterior side of the system. This likely contributed to VOC accumulation in the soil gas within the underlying bedrock formation. PCE concentrations measured over the O&M period indicate increasing trends at some VEWs and at the Building 90 Exterior system exhaust (blower intake). Increases in PCE concentrations were detected following steam injection in three of the SVE system blower intakes followed by a decrease in PCE concentrations during final sampling event. The western deep wells were off during the final sampling event.

### 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 3.5** 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 over the 48-month lifespan of SVE operations at AOC-65. **Table 3.6** further separates the estimated mass removed per sub system on a semi-annual basis for this 18-month O&M period.

All calculated removal rates are below the allowable levels specified by TCEQ PBR Number 71208 (Parsons, 2008a).

The estimated sustainable removal rates for the AOC-65 systems in tables 3.5 and 3.6 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, and slow volatilization rates within the bedrock formation. The combined calculated PCE removed from all four sub-systems during the most recent 18-month O&M period in Table 3.6 (11.18 lbs) is less than the calculated mass removed in year 2 of resumed SVE operations in Table 3.5 (12.1 lbs) and less than one-tenth of the calculated mass removed during the first year of resumed SVE operations (113.1 lbs), indicating diminishing returns. Though the operational run-times vary from year to year, the yearly PCE removal rates (i.e. lb/hr) are estimated independently of operational time. The estimated PCE removal rates through four years of operation indicate a significant reduction from year one to year two and continued reductions through year 4 as shown in Table 3.5. During the fourth year of operation, the Western system deep well blower was shut down for the last four months due to ineffectiveness. Decreases in annualized removal rates are seen in each of the other systems with the exception of Eastern Sub-slab which showed a slight increase. This could be attributed to the steam injection during month 40. 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.

### 3.3.3 Air Emissions Summary

The total mass of contaminants removed by the SVE system during the O&M period (18 months) was estimated using the average removal rates from the intakes at each blower and system operational running times (see Table 3.6). The annualized mass removal rate by the AOC-65 SVE system during the O&M period is estimated to be 12.09 lbs/year (~0.9 gallons/yr) following the first semi-annual event and 11.95 lbs/yr (~0.9 gallons/yr) during the second and third semi-annual events in this O&M period, which are well below the permitted limit of 0.268 lb/hr or 2,347.68 lb/year.

Table 3.4

## Blower Intake and VEW VOC Summary

	Building 90	Tetrachloroethene				Trichloroethene				<i>cis</i> -1,2-Dichloroethene			
		Month 31	Month 35	Month 40	Month 48	Month 31	Month 35	Month 40	Month 48	Month 31	Month 35	Month 40	Month 48
Eastern AOC-65 SVE System	<i>exterior</i>	11/9/10	3/10/11	8/18/11	4/3/12	11/9/10	3/10/11	8/18/11	4/3/12	11/9/10	3/10/11	8/18/11	4/3/12
	Building 90 Intake-EX	31 B	65 B	570	310	8.3 B	22 B	7.9	9.2	ND	ND	1.8	2.4
	VEW 15	NS	2.6 B	340	180	NS	0.88 FB	20	5.7	NS	ND	26	1.3
	VEW 16	NS	11 B	4.4	220	NS	2.6 B	ND	6.3	NS	0.28 F	ND	1.5
	VEW 18	NS	NS	NS	23	NS	NS	NS	1.2	NS	NS	NS	ND
	VEW 28A	170 B	NS	16	NS	2.5 B	NS	7.8	NS	0.96 F	NS	ND	NS
	VEW 28B	9.6 B	42 B	36	240	51 B	3.5 B	3.7	12	ND	ND	ND	0.85
	VEW 29	NS	NS	14	22	NS	NS	ND	2.1	NS	NS	ND	1.0
	VEW 30	NS	NS	7,200	2,900	NS	NS	26	11.0	NS	NS	12	5.9 F
	VEW 31	NS	NS	430	170	NS	NS	ND	9.3	NS	NS	ND	2.2
	VEW 32	NS	NS	3,400	2,200	NS	NS	17	12.0	NS	NS	ND	ND
	VEW 33	NS	NS	NS	530	NS	NS	NS	24.0	NS	NS	NS	3.2
	<i>interior</i>												
	VEW 01	NS	1.0 FB	NS	NS	NS	0.74 FB	NS	NS	NS	ND	NS	NS
	VEW 02	NS	56 B	NS	NS	NS	0.50 FB	NS	NS	NS	ND	NS	NS
	VEW 09	NS	1500 B	2,700	NS	NS	3.0 FB	6.1	NS	NS	2.7 F	ND	NS
	VEW 10	NS	6.8 B	920	NS	NS	0.66 FB	1.6	NS	NS	0.38 FB	ND	NS
	VEW 12	NS	480 B	NS	NS	NS	0.79 FB	NS	NS	NS	ND	NS	NS
Building 90 Intake-SS	210 B	180 B	650	86	1.1 B	1.1 B	2.8	0.49 F	0.73 F	0.89 F	2.6	0.70 F	
Western AOC-65 SVE System	<b>AOC-65 Western</b>	Month 31	Month 35	Month 40	Month 48	Month 31	Month 35	Month 40	Month 48	Month 31	Month 35	Month 40	Month 48
	<i>shallow wells</i>	11/9/10	3/10/11	8/18/11	4/3/12	11/9/10	3/10/11	8/18/11	4/3/12	11/9/10	3/10/11	8/18/11	4/3/12
	AOC-65-Intake-SW	1,900	890 B	970	520	56	26 B	12	24	60	37 B	10	23
	VEW 19	1,800	680 B	190	330	80	26 B	20	44	100	43	60	46
	VEW 20	210	NS	ND	87	28	NS	190	1.2	19	NS	70	0.81
	VEW 21	12	NS	1.9	16	5	NS	3.4	5	0.87 F	NS	ND	0.82
	VEW 23	73	NS	7.8	23	9.4	NS	4.0	3.8	3	NS	ND	1.8
	VEW 25	6,200	2500 B	24	690	150	62 B	2.6	21	100	33	0.62	8.9
	VEW 27	2,400	1100 B	3,000	1,000	20	12 B	18	6.1	11	6.8	ND	3.4
	<i>deep wells</i>												
	AOC-65-Intake-DW	69 B	37 B	14	NS	11 B	8.7 B	4.1	NS	0.45 F	0.51 FB	ND	NS
	VEW 13	NS	34 B	8.2	NS	NS	3.4 B	0.33	NS	NS	ND	ND	NS
	VEW 14	NS	8.7 B	1.6	NS	NS	2.9 B	ND	NS	NS	ND	ND	NS
	VEW 17	78 B	NS	ND	NS	13 B	NS	ND	NS	0.50 F	NS	ND	NS
	VEW 22	28 B	NS	NS	NS	4.0 B	NS	NS	NS	ND	NS	NS	NS
VEW 24	NS	24 B	NS	NS	NS	11 B	NS	NS	NS	0.60 FB	NS	NS	
VEW 26	100 B	34 B	0.79	NS	31 B	16 B	2	NS	2.5	0.73 F	ND	NS	

\* 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 3.5**

**Estimated Yearly PCE  
Removal Rates and Mass/Volume Removed**

		<b>Estimated Removal Rates (gal/yr)</b>				
		yr1	yr2	yr3	yr4	
		Apr-09	Apr-10	Apr-11	Apr-12	
Blower	B 90 EX	0.31	0.10	0.11	0.19	
	B 90 SS	5.95	0.48	0.35	0.28	
	Shallow	2.42	0.18	0.30	0.29	
	Deep	1.26	0.24	0.13	0.13	
	<b>Yearly total</b>	<b>9.94</b>	<b>1.01</b>	<b>0.89</b>	<b>0.88</b>	
		<b>Blower operational time (per year)</b>				
		yr1	yr2	yr3	yr4	
		Apr-09	Apr-10	Apr-11	Apr-12	
Blower	B 90 EX	0.84	0.77	0.56	0.47	
	B 90 SS	0.84	1.00	0.76	0.64	
	Shallow	0.84	0.71	0.76	0.55	
	Deep	0.84	0.83	0.76	0.30	
	<b>Yearly total</b>	<b>3.36</b>	<b>3.31</b>	<b>2.84</b>	<b>2.06</b>	
* one year = May through April						
		<b>Calculated volume removed (gal)</b>				
		yr1	yr2	yr3	yr4	
		Apr-09	Apr-10	Apr-11	Apr-12	Blower total
Blower	B 90 EX	0.26	0.08	0.06	0.09	0.490
	B 90 SS	5.00	0.48	0.27	0.18	5.921
	Shallow	2.04	0.13	0.23	0.16	2.556
	Deep	1.06	0.20	0.10	0.04	1.392
	<b>Yearly total</b>	<b>8.35</b>	<b>0.89</b>	<b>0.66</b>	<b>0.46</b>	<b>10.36</b>
		<b>Calculated mass removed (lb)</b>				
		yr1	yr2	yr3	yr4	
		Apr-09	Apr-10	Apr-11	Apr-12	Blower total
Blower	B 90 EX	3.5	1.1	0.8	1.2	6.63
	B 90 SS	67.7	6.5	3.6	2.4	80.20
	Shallow	27.6	1.8	3.1	2.1	34.63
	Deep	14.3	2.7	1.3	0.5	18.86
	<b>Yearly total</b>	<b>113.1</b>	<b>12.1</b>	<b>8.9</b>	<b>6.3</b>	<b>140.31</b>

Table 3.6

**Estimated Semi-Annual PCE  
Removal Rates and Mass/Volume Removed  
for 18 month O&M period**

<b>Blower Operational Run-Time (year)</b>					
	Blower	Semi-annual	Nov 2010 -	Apr 2011 -	Nov 2011 -
		Event	Apr 2011	Nov 2011	Apr 2012
		B 90 EX	0.232	0.05	0.42
		B 90 SS	0.43	0.15	0.49
		Shallow	0.43	0.1	0.45
		Deep	0.43	0.1	0.2

<b>Estimated Removal Rates (gal/yr)</b>					
	Blower	Semi-annual	Nov 2010 -	Apr 2011 -	Nov 2011 -
		Event	Apr 2011	Nov 2011	Apr 2012
		B 90 EX	0.11	0.19	0.19
		B 90 SS	0.35	0.28	0.28
		Shallow	0.30	0.29	0.29
		Deep	0.13	0.13	0.13
		Semi-annual event total total	0.89	0.88	0.88

<b>Calculated Mass Removed (gal)</b>						
	Blower	Semi-annual	Nov 2010 -	Apr 2011 -	Nov 2011 -	Blower Total
		Event	Apr 2011	Nov 2011	Apr 2012	
		B 90 EX	0.03	0.01	0.08	0.12
		B 90 SS	0.15	0.04	0.13	0.33
		Shallow	0.13	0.03	0.13	0.29
		Deep	0.06	0.01	0.03	0.09
		Total by semi-annual event	0.36	0.09	0.37	<b>0.83</b>

<b>Calculated Mass Removed (lbs) per Semi-annual Event</b>						
	Blower	Semi-annual	Nov 2010 -	Apr 2011 -	Nov 2011 -	Blower Total
		Event	Apr 2011	Nov 2011	Apr 2012	
		B 90 EX	0.34	0.13	1.10	1.57
		B 90 SS	2.04	0.56	1.83	4.43
		Shallow	1.78	0.39	1.76	3.92
		Deep	0.75	0.17	0.34	1.26
		Total by semi-annual event	4.91	1.25	5.02	<b>11.18</b>

## 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 does remove VOC contamination present in the area, but its effectiveness is limited. Thermally enhancing the system through steam injection did show an increase in PCE levels within individual VEWs as well as the intakes with the exception of the western deep wells. Purging the VEW's improves flow rates as more available screen is exposed. 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 48 months of resumed O&M operation of the SVE system at AOC-65, the removal of approximately ~10.4 gallons of PCE was achieved. Mass removal estimates are based on the yearly average removal rates and operational times for the individual blowers. Observations of the overall performance of the SVE system during the four-year operational period at AOC-65 include:

- 80% of the estimated mass removed via the SVE system at AOC-65 occurred during the first year of resumed operation.
- The last three years of SVE operation at AOC-65 have collectively contributed a total of ~2 gallons of PCE removed, or 19.5% of the total PCE removed since 2008.
- Although thermal enhancement activities successfully increased volatilization of VOCs, secondary affects (e.g. increased condensate generation) limited system recovery effectiveness (reduced flow).

The overall conclusions for this 18-month AOC-65 SVE assessment period include:

- Approximately ~0.83 gallons (11.18 lb) of PCE has been removed from underlying limestone at AOC-65 since November 2010;
  - Sub-slab VEWs accounted for 0.33 gallons of removed mass;
  - AOC-65 shallow VEWs accounted for 0.29 gallons of removed mass;
  - Exterior Building 90 VEWs accounted for 0.12 gallons of removed mass;
  - AOC-65 deep VEWs accounted for 0.09 gallons of removed mass.
- During the last 18 months, the SVE system at AOC-65 has contributed less than 8% of the total PCE removed since operations resumed in 2008.
- The Western shallow system was more effective at removing PCE than the Western deep system when groundwater levels were not affecting screen intervals.

Although SVE has proven to be an effective approach for the removal of VOCs vapors in the shallow subsurface at AOC-65 in the past (~14.77 gallons removed in 2002 during initial SVE operations at AOC-65 and ~8.34 gallons removed during year one of this O&M (2009)); in its current configuration, the system is neither effective nor efficient and further modifications to the system to improve system effectiveness are impractical. Based on the observations of SVE system performance and overall conclusions stemming from these observations, Parsons

recommends the discontinuation of SVE operations at AOC-65 and repurposing VEWs as monitoring or injection points for future treatability studies.

## **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.
- Parsons, 2011. AOC-65 Steam Enhanced SVE Treatability Study Report. September 2011.

**APPENDIX A**

**MONITORING AND PERFORMANCE FIELD DATA SHEETS**

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

Date/Time: 11.9.10 / 0830 Operator: Elliff + Bosch Monitoring Event: Biweekly / Monthly / Quarterly Other *semi-annual*

Monitoring Point	Wellhead Readings						Analytical Sample Collected		Comments
	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Time	Summa Canister #	
	<b>Subslab Wells</b>								
AOC65-VEW1			-						
AOC65-VEW2			-						
AOC65-VEW3			-						
AOC65-VEW4			-						
AOC65-VEW5			-						
AOC65-VEW6			-						
AOC65-VEW7			-						
AOC65-VEW8			-						
AOC65-VEW9			-						
AOC65-VEW10			-						
AOC65-VEW11			-						
AOC65-VEW12			-						
B90-INTAKE-SS			- 38.6	7540	68.9	1.1	1056	* 2695	

Monitoring Point	Manifold Readings						Analytical Sample Collected		Wellhead Vac (in. H <sub>2</sub> O)	Comments
	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Time	Summa Canister #		
	<b>Exterior Wells</b>									
AOC65-VEW15	13	5-12	- 41.6	614	69.4	0.7	1031	/	- 0.5	
AOC65-VEW16	41	15-40	- 43.3	2806	69.4	1.7	1033	/	- 3.5	
AOC65-VEW18	56	15.5-55.5	- 44.1	751	69.9	0.7	1035	/	- 0.3	
AOC65-VEW28A	120	80-120	- 44.1	556	70.1	1.9	1038	* 22962	- 44.1	
AOC65-VEW28B	179	139.3-179.3	- 44.1	2032	70.1	0	1042	* 12027	- 7.0	
B90-INTAKE-EX			- 44.1	4480	69.4	1.9	1046	* 36420		
B90-EXHAUST			+ 8.9	5478	135.6	1.3	1049	/		
AOC65-POSTGAC			+ 4.7	5212	95.1	0.6	1052	* 2129		

Blower Information	System	Pre Adjustment				Vacuum Relief Valve			Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube		
		(Y/N)	(psi)	(adjust to 65" H <sub>2</sub> O) (Y/N)	(psi)	(Y/N)	(Y/N)		
	Subslab	(Y) / (N)	60	(adjust to 65" H <sub>2</sub> O) (Y) / (N)	62	(Y) / (N)	(Y) / (N)	1606.0	
	Exterior	(Y) / (N)	50	(adjust to 50" H <sub>2</sub> O) (Y) / (N)	50	(Y) / (N)	(Y) / (N)	2132.0	

Moisture Separator Information	System	Inspected	Emptied	Amount Transferred (gals)	Observations/Notes:	Hours Meter
		(Y/N)	(Y/N)	(gals)		
		(Y/N)	(Y/N)	(gals)		
	Subslab	(Y) / (N)	(Y) / (N)	0	* changed filters	213.2
	Exterior	(Y) / (N)	(Y) / (N)	0		

in.H<sub>2</sub>O: 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 + Borch Monitoring Event: Biweekly / Monthly / Quarterly  Other Semi-annual

Monitoring Point	Manifold Readings							Wellhead		Comments
	Total Depth # BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected		Vac in. H <sub>2</sub> O	
							Time	Summa Canister #		

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	1460	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	22.0	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										
AOC65-VEW13	41	15-40	-32.1	<del>2789</del>	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	# 34169	-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	#		

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	38	(adjust to 75° H <sub>2</sub> O) (Y) / (N)	40	(Y) / N	
Deep	(Y) / N	45	(adjust to 75° H <sub>2</sub> O) (Y) / (N)	45	(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		3 gallons

in. H<sub>2</sub>O: 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: 11.24.10 / 1400 Operator: J. Bouch Monitoring Event: Biweekly / Monthly / Quarterly / Other

Wellhead Readings									
Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected		Comments
							Time	Summa Canister #	
<b>Subslab Wells</b>									
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			-						

Manifold Readings										
Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected		Wellhead Vac (in. H <sub>2</sub> O)	Comments
							Time	Summa Canister #		
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				Vacuum Relief Valve		Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube	
		Subslab	<input checked="" type="checkbox"/> / N	58	(adjust to 65" H <sub>2</sub> O) <input checked="" type="checkbox"/> N	65	<input checked="" type="checkbox"/> / N	
Exterior	<input checked="" type="checkbox"/> N	50	(adjust to 50" H <sub>2</sub> O) <input checked="" type="checkbox"/> N	50	<input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> N	270.8	

Moisture Separator Information

System	Inspected	Emptied	Amount Transferred (gals)
Subslab	<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> N	0
Exterior	<input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> N	0

Observations/Notes:

in. H<sub>2</sub>O: 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: 11-24-10 / 1310 Operator: J. Burch Monitoring Event: Biweekly / Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Manifold Readings						Wellhead		Comments
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected Time	Summa Canister #	

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				Vacuum Relief Valve		Hours Meter
		Blower On	Initial Intake Pressure	Adjusted Pressure	Final Intake Pressure	Check	Lube	
	Shallow	(Y) / N	36	(adjust to 75" H <sub>2</sub> O) (Y) / (N)	36	(Y) / N	(Y) / N	NA
Deep	(Y) / N	46	(adjust to 75" H <sub>2</sub> O) (Y) / (N)	46	(Y) / N	(Y) / N	NA	

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

in. H<sub>2</sub>O: 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: 12.9.10 / 1700 Operator: J. Bunch, E. Tinnyson Monitoring Event: Biweekly / Monthly / Quarterly / Other

Monitoring Point	Manifold Readings							Wellhead		Comments
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected		Vac in. H <sub>2</sub> O	
							Time	Summa Canister #		
<b>Shallow Wells</b>										
AOC65-VEW19	26	5-25	38.6	2302	57.5	φ			11.1	
AOC65-VEW20	27	10-25	37.5	1478	58.4	φ			34.9	
AOC65-VEW21	27	12-27	37.8	790	59.5	φ			33.3	
AOC65-VEW23	21	6-21	37.1	637	69.2	φ			35.2	
AOC65-VEW25	21	6-21	37.2	1573	65.2	φ			35.9	
AOC65-VEW27	21	6-21	37.2	545	65.1	φ			32.7	
AOC65-INT. KE-SW			39.7	703	64.5	φ				
<b>Deep Wells</b>										
AOC65-VEW13	41	15-40	33.5	8167	59.8	φ			1.5	
AOC65-VEW14	61	40-60	34.1	1655	63.1	φ			φ	
AOC65-VEW17	52.5	22-52	32.6	1546	65.2	φ			14.7	
AOC65-VEW22	51	25-56	32.6	7032	56.1	φ			29.0	
AOC65-VEW24	50	25-50	34.2	354	58.2	φ			0.2	
AOC65-VEW26	50	25-50	32.4	1906	59.8	φ			26.6	
AOC65-INTAKE-DW			38.2	5221	65.1	φ				
AOC65-EXHAUST			+2	1366	101.2					
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	38	(adjust to 75" H <sub>2</sub> O) Y / N	40	(Y) / N	(Y) / N	NA		
	Deep	Y / N	50	(adjust to 75" H <sub>2</sub> O) Y / N	51	(Y) / N	(Y) / N	NA		
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:					
	Shallow	(Y) / N	(Y) / N	1.02						
	Deep	(Y) / N	Y / N	2.2						

in H<sub>2</sub>O 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 / 1530 Operator: J. Bauch / E. Tennyson Monitoring Event: Biweekly / Monthly / Quarterly / Other

Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected		Comments
							Time	Summa Canister #	
<b>Subslab Wells</b>									
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	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected		Wellhead Vac (in. H <sub>2</sub> O)	Comments
							Time	Summa Canister #		
AOC65-VEW15	13	5-12	39.3	2028	56.1	φ			0.1	
AOC65-VEW16	41	15-40	39.2	1771	58.0	φ			2.7	
AOC65-VEW18	56	15.5-55.5	38.8	<del>2252</del> 3180	72.3	φ			0.2	
AOC65-VEW28A	120	80-120	37.6	3182	73.2	φ			39.5	
AOC65-VEW28B	179	139.3-179.3	36.7	671	76.8	φ			7.9	
B90-INTAKE-EX			42.1	3312	69.0	φ				
B90-EXHAUST			+ 37.8	5415	68.7	φ				
AOC65-POSTGAC			+ 9.1	656	79.8	φ				

Blower Information	System	Pre Adjustment			Final Intake Pressure	Vacuum Relief Valve		Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure		Check	Lube	
		Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	58		(adjust to 65" H <sub>2</sub> O) <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	60	
Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	30	(adjust to 50" H <sub>2</sub> O) <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	38	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	481.9	

Moisture Separator Information	System	Inspected	Emptied	Amount Transferred (gals)	Observations/Notes:					
						Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input type="checkbox"/> O / <input type="checkbox"/> N	<input checked="" type="checkbox"/> 1.75	oiled VRV (subslab). VRV cannot be adjusted (Exterior)
						Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	8.5	

in H<sub>2</sub>O, 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: 12/22/10 0920 Operator: S. Bouch / A. Lindley Monitoring Event: Biweekly Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Manifold Readings							Analytical Sample Collected		Wellhead	Comments
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Time	Summa Canister #	Vac In. H <sub>2</sub> O		
<b>Shallow Wells</b>											
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-INT. KE-SW											
<b>Deep Wells</b>											
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				Vacuum Relief Valve		Hours Meter			
		Blower On	Initial Intake Pressure	Adjusted Pressure	Final Intake Pressure	Check	Lube				
	Shallow	<input checked="" type="checkbox"/> / N	-36	(adjust to 75" H <sub>2</sub> O) <input checked="" type="checkbox"/> N	-46	<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> / N	NA			
	Deep	<input checked="" type="checkbox"/> / N	-48	(adjust to 75" H <sub>2</sub> O) Y / N	-48	<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> / N	NA			
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:						
	Shallow	<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> / N	≈ 1							
	Deep	<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> / N	≈ 25							

in H<sub>2</sub>O: 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: 12/22/10 0950 Operator: J. Bach, A. Lindley Monitoring Event: Biweekly / Monthly / Quarterly / Other

Monitoring Point	Wellhead Readings							Analytical Sample Collected Time Summa Canister #	Comments
	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm			
	<b>Subslab Wells</b>								
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							Wellhead Vac (in. H <sub>2</sub> O)	Comments
	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected Time Summa Canister #		
	<b>Exterior Wells</b>								
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	Pre Adjustment				Vacuum Relief Valve			Hours Meter
	System	Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube	
	Subslab	<input checked="" type="radio"/> Y / <input type="radio"/> N	-68	(adjust to 65" H <sub>2</sub> O)	<input checked="" type="radio"/> Y / <input type="radio"/> N	-66	<input type="radio"/> Y / <input checked="" type="radio"/> N	
Exterior	<input checked="" type="radio"/> Y / <input type="radio"/> N	-60	(adjust to 50" H <sub>2</sub> O)	<input checked="" type="radio"/> Y / <input type="radio"/> N	-50	<input type="radio"/> Y / <input checked="" type="radio"/> N	<input type="radio"/> Y / <input checked="" type="radio"/> N	

Moisture Separator Information

System	Inspected	Emptied	Amount Transferred (gals)	Observations/Notes:
Subslab	<input checked="" type="radio"/> Y / <input type="radio"/> N	<input type="radio"/> Y / <input checked="" type="radio"/> N	dry	
Exterior	<input checked="" type="radio"/> Y / <input type="radio"/> N	<input checked="" type="radio"/> Y / <input type="radio"/> N	17	

in H<sub>2</sub>O inches of water      fpm feet per minute      ppm parts per million      VRV vacuum relief valve      psi pounds per square inch

2428.3  
788.1

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

Date/Time: 1-5-11 / 1230 Operator: J. Bonch, A. Lindley Monitoring Event: Biweekly Monthly / Quarterly / Other

Monitoring Point	Manifold Readings							Wellhead		Comments
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected Time	Summa Canister #	Vac in. H <sub>2</sub> O	
Shallow Wells										
AOC65-VEW19	26	5-25	37.1	904	68.7	9.5			24.2	*slug of water
AOC65-VEW20	27	10-25	36.8	772	69.9	7.6			0.1	
AOC65-VEW21	27	12-27	36.3	751	70.1	5.9			34.3	
AOC65-VEW23	21	6-21	37.1	759	70.3	4.8			34.3	
AOC65-VEW25	21	6-21	36.1	817	69.9	11.4			34.1	
AOC65-VEW27	21	6-21	35.9	800	69.6	8.4			32.6	
AOC65-INT. KE-SW			38.0	934	69.0	15.9				
Deep Wells										
AOC65-VEW13	41	15-40	33.7	10135	55.9	6.8			1.4	
AOC65-VEW14	61	40-60	33.6	566	57.3	5.2			11.7	
AOC65-VEW17	52.5	22-52	33.3	1226	58.6	6.2			14.7	
AOC65-VEW22	51	25-56	32.2	1510	58.0	5.6			28.1	
AOC65-VEW24	50	25-50	32.2	645	62.2	4.8			0.2	
AOC65-VEW26	50	25-50	32.3	1364	66.9	5.6			26.8	
AOC65-INTAKE-DW			38.4	6996	65.2	6.6				
AOC65-EXHAUST			2.1	5330	121.2	5.6				
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	42	(adjust to 75° H <sub>2</sub> O) Y/N	42	Y/N		Y/N	NA
Deep	Y/N	48	(adjust to 75° H <sub>2</sub> O) Y/N	50	Y/N	Y/N	NA			
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:					
		Shallow	Y/N	Y/N					0 1/2 gallon	
		Deep	Y/N	Y/N					30	

in H<sub>2</sub>O 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: 1/5/11 Operator: S. Bouch, A. Lindy Monitoring Event: Biweekly / Monthly / Quarterly / Other

Monitoring Point	Wellhead Readings							Analytical Sample Collected		Comments
	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Time	Summa Canister #		
							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			-38.5	9112	71.4	4.0				

Monitoring Point	Manifold Readings							Wellhead Vac (in. H <sub>2</sub> O)	Comments	
	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected			
							Time			Summa Canister #
AOC65-VEW15	13	5-12	-39.8	667	68.8	4.0			0.1	
AOC65-VEW16	41	15-40	-39.6	3764	68.7	5.0			3.1	
AOC65-VEW18	56	15-55.5	-39.8	668	57.9	3.1			0.2	
AOC65-VEW28A	120	80-120	-39.3	1371	68.5	4.7			39.1	
AOC65-VEW28B	179	139-179.3	-42.3	708	68.5	2.6			5.8	
B90-INTAKE-EX			41.6	3611	69.6	5.3				
B90-EXHAUST		(AC)	+38.5	9112	71.4	1.5			8513 fpm, 132.7°C, +10.8	
AOC65-POSTGAC			+10.6	5132	99.4	1.8				

Blower Information	System	Pre Adjustment				Final Intake Pressure	Vacuum Relief Valve		Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check		Lube		
		Subslab	<input checked="" type="checkbox"/> / N	68	(adjust to 65" H <sub>2</sub> O) <input checked="" type="checkbox"/> N		65	<input checked="" type="checkbox"/> / N	
Exterior	<input checked="" type="checkbox"/> / N	55	(adjust to 50" H <sub>2</sub> O) <input checked="" type="checkbox"/> N	48.50	<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> / N	1129.4		

in H<sub>2</sub>O: inches of water      fpm: feet per minute      ppm: parts per million      VrV: vacuum relief valve      psi: pounds per square inch

Moisture Separator Information: System Inspected, Subslab  / N, Exterior  / N; Emptied, Subslab  / N, Exterior  / N; Amount Transferred (gals) 2.0

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

Date/Time: 1-17-11 1000 Operator: A. Lindley Monitoring Event: Biweekly / Monthly / Quarterly / Other

Monitoring Point	Manifold Readings							Analytical Sample Collected		Wellhead	Comments
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Time	Summa Canister #	Vac in. H <sub>2</sub> O		
<b>Shallow Wells</b>											
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-INT/ KE-SW											
<b>Deep Wells</b>											
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			+								
<b>Blower Information</b>	<b>Pre Adjustment</b>				<b>Vacuum Relief Valve</b>				<b>Hours Meter</b>		
	<b>System</b>	<b>Blower On</b>	<b>Initial Intake Pressure</b>	<b>Adjusted Pressure</b>	<b>Final Intake Pressure</b>	<b>Check</b>	<b>Lube</b>				
	Shallow	Y/N	42	(adjust to 75" H <sub>2</sub> O) Y/N	39	Y/N	Y/N				
	Deep	Y/N	52	(adjust to 75" H <sub>2</sub> O) Y/N	52	Y/N	Y/N				
<b>Moisture Separator Information</b>	<b>System</b>	<b>Inspected</b>	<b>Emptied</b>	<b>Amount Xfered (gals)</b>	<b>Observations/Notes:</b> ↳ VRV's on both good + Empty - won't come on in Auto, left turned off, kicked knock-out pot and it came on in Auto.						
	Shallow	Y/N	Y/N	NA							
	Deep	Y/N	Y/N	34							

in H<sub>2</sub>O inches of water

fpm feet per minute

ppm parts per million

VRV vacuum relief valve

psf pounds per square inch

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

Date/Time: 1-17-11 1000 Operator: A. Lindy Monitoring Event: Biweekly / Monthly / Quarterly / Other

Wellhead Readings										
Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected		Comments	
							Time	Summa Canister #		
<b>Subslab Wells</b>										
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										
<b>Exterior Wells</b>										
Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected		Wellhead Vac (in. H <sub>2</sub> O)	Comments
							Time	Summa Canister #		
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	Pre Adjustment					Vacuum Relief Valve				
	System	Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube	Hours Meter		
	Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	54	(adjust to 65" H <sub>2</sub> O) <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	64	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	Y / <input checked="" type="checkbox"/> N	3052.4		
Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	54	(adjust to 50" H <sub>2</sub> O) <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	50	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	Y / <input checked="" type="checkbox"/> N	1412.2			
Moisture Separator Information	System	Inspected	Emptied	Amount Transferred (gals)	Observations/Notes: <u>VRVs good</u>					
	Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	2						
	Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	32						

in H<sub>2</sub>O, 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: 2.8.11 / 0900 Operator: SE + JB Monitoring Event: Biweekly / Monthly / Quarterly / Other

Monitoring Point	Manifold Readings							Wellhead		Comments
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected		Vac in. H <sub>2</sub> O	
							Time	Summa Canister #		
<b>Shallow Wells</b>										
AOC65-VEW19	26	5-25	-38.3	3009	53.2	3.5	1000		-32.2	
AOC65-VEW20	27	10-25	-36.5	701	47.4	2.0	1005		-3.0	
AOC65-VEW21	27	12-27	-37.6	418	48.9	1.1	1007		-32.9	
AOC65-VEW23	21	6-21	-36.3	474	48.3	1.6	1009		-36.9	
AOC65-VEW25	21	6-21	-37.3	371	49.0	11.6	1012		-35.7	
AOC65-VEW27	21	6-21	-36.3	617	49.9	9.7	1015		-30.0	
AOC65-INTAKE-SW			-39	1487	55.9	7.3	0956			
<b>Deep Wells</b>										
AOC65-VEW13	41	15-40	-34.6	7713	48.0	4.5	1024		-1.5	
AOC65-VEW14	61	40-60	-33.7	605	50.7	4.4	1028		-10.8	
AOC65-VEW17	52.5	22-52	-33.7	3503	50.5	7.4	1051		-14.7	
AOC65-VEW22	51	25-56	-34.3	915	52.3	4.6	1034		-28.4	
AOC65-VEW24	50	25-50	-33.7	1768	52.5	0.8	1036		-2.1	
AOC65-VEW26	50	25-50	-33.1	753	53.5	5.9	1038		-26.6	
AOC65-INTAKE-DW			-39.0	5140	53.0	5.2	1021			
AOC65-EXHAUST			+2.3	5210	110.4	5.4				
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)	40	(adjust to 75" H <sub>2</sub> O) Y/N	40	(Y/N)		(Y/N)	NA
Deep	(Y/N)	50	(adjust to 75" H <sub>2</sub> O) Y/N	50	(Y/N)	(Y/N)	NA			
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:					
		Shallow	(Y/N)	(Y/N)					10	
		Deep	(Y/N)	(Y/N)					35	

in. H<sub>2</sub>O: 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: 2.8.11 / 0900 Operator: SE & JB Monitoring Event: Biweekly Monthly Quarterly / Other \_\_\_\_\_

Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected		Comments
							Time	Summa Canister #	
<b>Subslab Wells</b>									
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			- 35.6	6608	57.1	2.5	1143		

Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected		Wellhead Vac (in. H <sub>2</sub> O)	Comments
							Time	Summa Canister #		
<b>Exterior Wells</b>										
<b>Manifold Readings</b>										
AOC65-VEW15	13	5-12	- 35.6	525	54.1	3.4	1132		- 0.2	
AOC65-VEW16	41	15-40	- 35.2	1851	52.3	4.2	1130		- 2.6	
AOC65-VEW18	56	15.5-55.5	- 35.6	667	57.1	3.3	1129		- 0.1	
AOC65-VEW28A	120	80-120	- 34.1	2418	60.4	3.5	1128		- 33.7	
AOC65-VEW28B	179	139.3-179.3	- 34.1	610	55.2	0.2	1126		- 8.3	
B90-INTAKE-EX			- 39.1	2149	57.1	4.3	1135			
B90-EXHAUST			+ 12.2	10739	117.3	3.5	1139			
AOC65-POSTGAC			+ 17.1	6774	77.1	0.6	1140			

Blower Information	System	Pre Adjustment			Final Intake Pressure	Vacuum Relief Valve		Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure		Check	Lube	
		Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N			(adjust to 65" H <sub>2</sub> O) <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	64	
Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N		(adjust to 50" H <sub>2</sub> O) <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	48	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	14420	

Moisture Separator Information	System	Inspected	Emptied	Amount Transferred (gals)	Observations/Notes:	
		Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N		3.5
		Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N		2.5

in. H<sub>2</sub>O: inches of water      fpm: feet per minute      ppm: parts per million      VRV: vacuum relief valve      psi: pounds per square inch

\* must always lube this valve, or will get stuck

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

Date/Time: 2.25.11 Operator: J. Bauch; B. Butler Monitoring Event: Biweekly / Monthly / Quarterly / Other

Monitoring Point	Wellhead Readings						Analytical Sample Collected		Comments
	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Time	Summa Canister #	
	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						Wellhead		Comments
	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Time	Summa Canister #	
	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			Vacuum Relief Valve			Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube	
		Subslab	Y / N	68	(adjust to 65" H <sub>2</sub> O) Y / N	65	Y / N	
Exterior	Y / N	70	(adjust to 50" H <sub>2</sub> O) Y / N	70	Y / N	Y / N	1558.4	

Moisture Separator Information	System	Inspected	Emptied	Amount Transferred (gals)	Observations/Notes:	
		Subslab	Y / N	Y / N		0
		Exterior	Y / N	Y / N		≈ 40

in. H<sub>2</sub>O: 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: 2.25.11 / 1300 Operator: J. Bonch / B. Butler Monitoring Event: Biweekly / Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Manifold Readings							Wellhead		Comments
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected		Vac in. H <sub>2</sub> O	
							Time	Summa Canister #		
<i>Shallow Wells</i>										
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			-							
<i>Deep Wells</i>										
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			+							
<i>Blower Information</i>	System		Pre Adjustment			Vacuum Relief Valve		Hours Meter		
		Blower On	Initial Intake Pressure	Adjusted Pressure	Final Intake Pressure	Check	Lube			
	Shallow	(Y) / N	40	(adjust to 75° H <sub>2</sub> O) (Y) / (N)	40	(Y) / N	(Y) / N		NA	
Deep	(Y) / N	40	(adjust to 75° H <sub>2</sub> O) (Y) / (N)	40	(Y) / N	(Y) / N	NA			
<i>Moisture Separator Information</i>	System		Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:				
	Shallow	(Y) / N	(Y) / N	≈ 0						
	Deep	(Y) / N	(Y) / N	≈ 25						

in H<sub>2</sub>O: 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: 3-10-11 / 0900 Operator: S. Elliott & A. Lindley Monitoring Event: Biweekly / Monthly / Quarterly / Other Semi-Annual

Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected		Comments
							Time	Summa Canister #	
							Subslab Wells		
AOC65-VEW1			1.4	1753	69.7	0.1	1330	34178	
AOC65-VEW2			1.9	2648	70.5	2.6	1332	31755	
AOC65-VEW3									OFFLINE
AOC65-VEW4									OFFLINE ✓
AOC65-VEW5									OFFLINE ✓
AOC65-VEW6									OFFLINE ✓
AOC65-VEW7									OFFLINE ✓
AOC65-VEW8			10.9	588	69.7	2.1	1309		
AOC65-VEW9			11.3	1523	70.1	8.7	1317	9330	
AOC65-VEW10			10.5	3904	68.8	1.5	1323	36437 34134	
AOC65-VEW11									OFFLINE
AOC65-VEW12			4.2	339	69.4	5.2	1345	34116	
B90-INTAKE-SS			36.1	4153	86.3	0	1552	34607	

Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected		Wellhead Vac (in. H <sub>2</sub> O)	Comments
							Time	Summa Canister #		
							Exterior Wells			
AOC65-VEW15	13	5-12	36.9	686	87.0	0	1606	31794	0.1	WL = 7.32' (BTOC), purged 8-10 gallons, 11.84' = 29.98', purged 15-20 gal., 40.15' BTOC
AOC65-VEW16	41	15-40	33.4	2901	79.5	0	1612	9459	2.6	
AOC65-VEW18	56	15.5-55.5	36.5	662	85.4	0	1602	X	0.5	
AOC65-VEW28A	120	80-120	36.1	4532	81.3	0	1604	X	36.4	
AOC65-VEW28B	179	139.3-179.3	30.3	1471	91.7	0	1544	9350	0.1	
B90-INTAKE-EX			38.7	6990	81.1	0	1558	12376		
B90-EXHAUST			12.6	>15,000	150.2	0	1617	X		
AOC65-POSTGAC			0	12,508	125.2	0	1620	X		

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube	Hours Meter
		Subslab	Y/N	96	(adjust to 65" H <sub>2</sub> O) Y/N	65	Y/N	Y/N
Exterior	Y/N	0	(adjust to 50" H <sub>2</sub> O) Y/N	48	Y/N	Y/N	1560.9	

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

in. H<sub>2</sub>O: 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: 3/10/11 0900 Operator: A. Lindley / S. Elliott Monitoring Event: Biweekly / Monthly / Quarterly / Other Bi-Annual Sampling

Monitoring Point	Total Depth ft BTOC	Screened Interval	Manifold Readings						Wellhead		Comments
			Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected		Vac in. H <sub>2</sub> O		
							Time	Summa Canister #			
<b>Shallow Wells</b>											
AOC65-VEW19	26	5-25	34.4	725	67.0	4.9	1435	37366	30.1		
AOC65-VEW20	27	10-25	36.1	777	73.2	3.9	1439	X	0.1		
AOC65-VEW21	27	12-27	36.1	748	73.3	0.7	1441	X	30.3		
AOC65-VEW23	21	6-21	35.1	763	73.3	0.9	1443	X	35.1		
AOC65-VEW25	21	6-21	34.8	743	73.5	10.8	1446	37332	34.8		
AOC65-VEW27	21	6-21	35.6	822	73.7	5.9	1452	11827	23.8		
AOC65-INT: KE-SW			35.6	921	75.5	5.2	1427	35547			
<b>Deep Wells</b>											
AOC65-VEW13	41	15-40	33.3	2133	60.0	1.4	1505	36442	1.4		
AOC65-VEW14	61	40-60	32.9	641	66.1	0	1510	35657	3.1		
AOC65-VEW17	52.5	22-52	33.1	1716	68.8	0	1513	X	15.2		
AOC65-VEW22	51	25-56	33.3	1343	70.6	0	1516	X	29.1		
AOC65-VEW24	50	25-50	32.8	689	72.6	0	1520	34585	0.2		
AOC65-VEW26	50	25-50	32.9	900	61.1	0	1526	3010	24.2		
AOC65-INTAKE-DW			38.6	7555	71.4	1.9	1459	33712			
AOC65-EXHAUST			2.0	8400	130.8	0.1	1529	X			
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	30	(adjust to 75° H <sub>2</sub> O) Y / N	40	(Y) / N	(Y) / N		NA	
Deep	(Y) N	48	(adjust to 75° H <sub>2</sub> O) Y / N	50	(Y) / N	(Y) / N	NA				
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:						
		Shallow	(Y) / N	(Y) N					0.1		
		Deep	(Y) / N	(Y) N					13		

in. H<sub>2</sub>O: 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: 4.8.11

Operator: S. Elliott + A. Lindley

Ambient T (°F) \_\_\_\_\_

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

Monitoring Point	Wellhead Readings							Analytical Sample Collected		Comments
	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	O <sub>2</sub> vol %	CO <sub>2</sub> vol %	Time	Summa Canister #		
							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							Analytical Sample Collected		Wellhead Vac (in. H <sub>2</sub> O)	Comments
	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	O <sub>2</sub> vol %	CO <sub>2</sub> vol %	Time	Summa Canister #			
							AOC65-VEW15	-			
AOC65-VEW16	-										
AOC65-VEW18	-										
AOC65-VEW28A	-										
AOC65-VEW28B	-										
B90-INTAKE-EX	-										
B90-EXHAUST	+										
AOC65-POSTGAC	+										

Blower Information	System	Pre Adjustment			Vacuum Relief Valve		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube	Hours Meter
		Subslab	Y / <u>N</u>		(adjust to 65" H <sub>2</sub> O) Y / N	Y / N	<u>Y</u> / N
Exterior	Y / <u>N</u>		(adjust to 50" H <sub>2</sub> O) Y / N	Y / N	<u>Y</u> / N	1579.1	

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:	
		Subslab	<u>Y</u> / N	<u>Y</u> / N		0
		Exterior	<u>Y</u> / N	<u>Y</u> / N		0

\* Bldg 90 side off for drilling

in. H<sub>2</sub>O: 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: 4.8.11 / 1000

Operator: S. Elliott + A. Lindly

Ambient T (°F) \_\_\_\_\_

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

Monitoring Point	Manifold Readings							Wellhead		Comments
	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	O <sub>2</sub> vol %	CO <sub>2</sub> vol %	Analytical Sample Collected		Vac in. H <sub>2</sub> O	
							Time	Summa Canister #		
<b>Shallow Wells</b>										
AOC65-VEW19	- 33.8	748	81.6	3.1	/	/	1016	/	- 31.6	* PID not working
AOC65-VEW20	- 33.7	686	82.2	0	/	/	1019	/	- 0.2	correctly, put on
AOC65-VEW21	- 34.5	662	81.1	0	/	/	1021	/	- 29.6	cal gas and reads 100
AOC65-VEW23	- 33.9	620	82.2	0	/	/	1022	/	- 32.6	
AOC65-VEW25	- 34.2	717	82.2	10.2	/	/	1028	/	- 32.9	
AOC65-VEW27	- 33.4	713	80.5	5.2	/	/	1030	/	- 22.7	
AOC65-INTAKE-SW	- 34.4	1405	79.8	2.4	/	/	1013	/		intake flow meter (SCFM)=
<b>Deep Wells</b>										
AOC65-VEW13	- 30.7	2755	76.9	2.4	/	/	1034	/	- 1.3	pucker test being run
AOC65-VEW14	- 31.1	517	80.0	1.7	/	/	1036	/	- 8.5	on MW36-LGR at time
AOC65-VEW17	- 31.1	2069	79.1	2.6	/	/	1039	/	- 15.1	of readings
AOC65-VEW22	- 30.2	1550	78.7	2.1	/	/	1040	/	- 27.6	
AOC65-VEW24	- 30.7	620	80.0	0.8	/	/	1042	/	- 0.1	
AOC65-VEW26	- 30.8	1523	79.3	3.0	/	/	1044	/	- 23.9	
AOC65-INTAKE-DW	- 35.7	7661	77.1	2.6	/	/	1033	/		intake flow meter (SCFM)=
AOC65-EXHAUST	+ 2.5	8900	136.5	3.7	/	/	1047	/		
<b>Blower Information</b>	System	Pre Adjustment			Vacuum Relief Valve			Hours Meter		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
	Shallow	(Y/N)	35	(adjust to 75" H <sub>2</sub> O) (Y/N)	(Y/N)	(Y/N)	NA			
	Deep	(Y/N)	45	(adjust to 75" H <sub>2</sub> O) (Y/N)	(Y/N)	(Y/N)	NA			
<b>Moisture Separator Information</b>	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:					
	Shallow	(Y/N)	(Y/N)	0						
	Deep	(Y/N)	(Y/N)	0.5						

in.H<sub>2</sub>O: 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: 4.21.11 / 1050 Operator: S. Elliott Ambient T (°F) \_\_\_\_\_

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

Monitoring Point	Manifold Readings							Wellhead		Comments
	Vac in.H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	O <sub>2</sub> vol %	CO <sub>2</sub> vol %	Analytical Sample Collected		Vac in. H <sub>2</sub> O	
							Time	Summa Canister #		
<b>Shallow Wells</b>										
AOC65-VEW19	-									
AOC65-VEW20	-									
AOC65-VEW21	-									
AOC65-VEW23	-									
AOC65-VEW25	-									
AOC65-VEW27	-									
AOC65-INTAKE-SW	-									intake flow meter (SCFM)=
<b>Deep Wells</b>										
AOC65-VEW13	-									
AOC65-VEW14	-									
AOC65-VEW17	-									
AOC65-VEW22	-									
AOC65-VEW24	-									
AOC65-VEW26	-									
AOC65-INTAKE-DW	-									intake flow meter (SCFM)=
AOC65-EXHAUST	+									
<b>Blower Information</b>	System	Pre Adjustment			Vacuum Relief Valve			Hours Meter		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
	Shallow	Y / N	33	(adjust to 75" H <sub>2</sub> O) Y / N	Y / N	Y / N	NA			
	Deep	Y / N	43	(adjust to 75" H <sub>2</sub> O) Y / N	Y / N	Y / N	NA			
<b>Moisture Separator Information</b>	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes: <i>can't adjust</i> <i>*system shut down at 1100 for Mobils Sampling Monday</i>					
		Shallow	Y / N	Y / N				0		
	Deep	Y / N	Y / N	0						

in.H<sub>2</sub>O: 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: <u>4.21.11 / 1050</u>		Operator: <u>S. Elliott</u>				Ambient T (°F) _____			
Monitoring Event (circle one) <u>Biweekly</u> / Monthly / Quarterly / Other _____									
<b>Wellhead Readings</b>									
Monitoring Point	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	O <sub>2</sub> vol %	CO <sub>2</sub> vol %	Analytical Sample Collected	Comments	
							Time		Summa Canister #
<b>Subslab Wells</b>									
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	-								
<b>Exterior Wells</b>									
<b>Manifold Readings</b>							<b>Wellhead</b>	Comments	
Monitoring Point	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	O <sub>2</sub> vol %	CO <sub>2</sub> vol %	Analytical Sample Collected		Vac (in. H <sub>2</sub> O)
							Time	Summa Canister #	
AOC65-VEW15	-								
AOC65-VEW16	-								
AOC65-VEW18	-								
AOC65-VEW28A	-								
AOC65-VEW28B	-								
B90-INTAKE-EX	-								
B90-EXHAUST	+								
AOC65-POSTGAC	+								
<b>Blower Information</b>	<b>System</b>			<b>Pre Adjustment</b>			<b>Vacuum Relief Valve</b>		<b>Hours Meter</b>
	<b>Blower On</b>			<b>Intake Pressure Gauge</b>	<b>Adjusted Pressure</b>		<b>Check</b>	<b>Lube</b>	
	Subslab	Y / N		62	(adjust to 65" H <sub>2</sub> O) Y / N		Y / N	Y / N	
Exterior	Y / N		40	(adjust to 50" H <sub>2</sub> O) Y / N		Y / N	Y / N		
<b>Moisture Separator Information</b>	<b>System</b>			<b>Amount Xfered (gals)</b>			<b>Observations/Notes:</b>		
	<b>Inspected</b>			<b>Emptied</b>					
	Subslab	Y / N		Y / N					
Exterior	Y / N		Y / N						

in. H<sub>2</sub>O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

System shut down for Noblis sampling on Monday 11:00

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

Date/Time: 5.4.11/1200

Operator: S. Elliott

Ambient T (°F) \_\_\_\_\_

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

Wellhead Readings										
Monitoring Point	Vac in.H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	O <sub>2</sub> vol %	CO <sub>2</sub> vol %	Analytical Sample Collected		Comments	
							Time	Summa Canister #		
<b>Subslab Wells</b>										
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	-									
<b>Exterior Wells</b>										
Monitoring Point	Manifold Readings							Wellhead		Comments
	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	O <sub>2</sub> vol %	CO <sub>2</sub> vol %	Time	Summa Canister #	Vac (in. H <sub>2</sub> O)	
AOC65-VEW15	-								-	
AOC65-VEW16	-								-	
AOC65-VEW18	-								-	
AOC65-VEW28A	-								-	
AOC65-VEW28B	-								-	
B90-INTAKE-EX	-									
B90-EXHAUST	+									
AOC65-POSTGAC	+									
Blower Information	Pre Adjustment					Vacuum Relief Valve			Hours Meter	
	System	Blower On		Intake Pressure Gauge	Adjusted Pressure	Check	Lube			
	Subslab	Y / N			(adjust to 65" H <sub>2</sub> O) Y / N	Y / N	Y / N			
	Exterior	Y / N			(adjust to 50" H <sub>2</sub> O) Y / N	Y / N	Y / N			
Moisture Separator Information	System	Inspected	Emptied		Amount Xfered (gals)	Observations/Notes: <i>* system off for drilling</i>				
	Subslab	Y / N	Y / N							
	Exterior	Y / N	Y / N							

in.H<sub>2</sub>O: 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: 5.4.11/1200

Operator: S. Elliott

Ambient T (°F) \_\_\_\_\_

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

Monitoring Point	Manifold Readings							Wellhead		Comments
	Vac in.H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	O <sub>2</sub> vol %	CO <sub>2</sub> vol %	Analytical Sample Collected		Vac in. H <sub>2</sub> O	
							Time	Summa Canister #		
<b>Shallow Wells</b>										
AOC65-VEW19	-									
AOC65-VEW20	-									
AOC65-VEW21	-									
AOC65-VEW23	-									
AOC65-VEW25	-									
AOC65-VEW27	-									
AOC65-INTAKE-SW	-									intake flow meter (SCFM)=
<b>Deep Wells</b>										
AOC65-VEW13	-									
AOC65-VEW14	-									
AOC65-VEW17	-									
AOC65-VEW22	-									
AOC65-VEW24	-									
AOC65-VEW26	-									
AOC65-INTAKE-DW	-									intake flow meter (SCFM)=
AOC65-EXHAUST	+									
<b>Blower Information</b>	System	Pre Adjustment				Vacuum Relief Valve			Hours Meter	
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
	Shallow	Y / N		(adjust to 75° H <sub>2</sub> O) Y / N	Y / N	Y / N	NA			
	Deep	Y / N		(adjust to 75° H <sub>2</sub> O) Y / N	Y / N	Y / N	NA			
<b>Moisture Separator Information</b>	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes: <i>*system off for drilling</i>					
	Shallow	Y / N	Y / N							
	Deep	Y / N	Y / N							

in.H<sub>2</sub>O: 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: 5.18.11/0945 Operator: Elliot Monitoring Event: Biweekly / Monthly / Quarterly / Other

Monitoring Point	Manifold Readings							Wellhead		Comments
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected		Vac in. H <sub>2</sub> O	
							Time	Summa Canister #		
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			Vacuum Relief Valve		Hours Meter		
		Blower On	Initial Intake Pressure	Adjusted Pressure	Final Intake Pressure	Check	Lube			
	Shallow	Y (N)	/	(adjust to 75° H <sub>2</sub> O) Y (N)	31	(Y) / N	(Y) / N		NA	
Deep	Y (N)	/	(adjust to 75° H <sub>2</sub> O) Y (N)	45	(Y) / N	(Y) / N	NA			
Moisture Separator Information	System		Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:				
	Shallow	(Y) / N	(Y) / N	1.0	pressure valves are closed, can't adjust pressure					
	Deep	(Y) / N	(Y) / N	0						

in. H<sub>2</sub>O: 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: 5.18.11 / 0945 Operator: S. Elliott Monitoring Event: Biweekly Monthly / Quarterly / Other

Wellhead Readings									
Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected		Comments
							Time	Summa Canister #	
<b>Subslab Wells</b>									
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			-						

Manifold Readings								Wellhead	Comments	
Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Analytical Sample Collected			Vac (in. H <sub>2</sub> O)
							Time	Summa Canister #		
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				Vacuum Relief Valve		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube	Hours Meter
		Subslab	Y / <u>N</u>		(adjust to 65" H <sub>2</sub> O) <u>Y</u> / N	65	<u>Y</u> / N	<u>Y</u> / N
Exterior	Y / <u>N</u>		(adjust to 50" H <sub>2</sub> O) <u>Y</u> / <u>N</u>	40	<u>Y</u> / N	<u>Y</u> / N	1698.0	

Moisture Separator Information

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

Observations/Notes:  
pressure valve shut, no adjustment can be made

in. H<sub>2</sub>O: 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: 7-5-11

Operator: Elliott

Ambient T (°F) hot

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

Monitoring Point	Wellhead Readings							Analytical Sample Collected		Comments
	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	O <sub>2</sub> vol %	CO <sub>2</sub> vol %	Time	Summa Canister #		
							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							Analytical Sample Collected		Wellhead	Comments
	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	O <sub>2</sub> vol %	CO <sub>2</sub> vol %	Time	Summa Canister #	Vac (in. H <sub>2</sub> O)		
							Exterior Wells				
AOC65-VEW15	-								-		
AOC65-VEW16	-								-		
AOC65-VEW18	-								-		
AOC65-VEW28A	-								-		
AOC65-VEW28B	-								-		
B90-INTAKE-EX	-										
B90-EXHAUST	+										
AOC65-POSTGAC	+										

Blower Information	Pre Adjustment			Vacuum Relief Valve			
	System	Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube	Hours Meter
	Subslab	Y / N		(adjust to 65" H <sub>2</sub> O)	Y / N	Y / N	5325.1
Exterior	Y / N		(adjust to 50" H <sub>2</sub> O)	Y / N	Y / N	1854.8	

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

in.H<sub>2</sub>O: 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 : 7.5.11 / 1320

Operator: Elliot

Ambient T (°F) hot

Monitoring Event (circle one): Biweekly  Monthly  Quarterly  Other

Monitoring Point	Manifold Readings							Wellhead		Comments
	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	O <sub>2</sub> vol %	CO <sub>2</sub> vol %	Analytical Sample Collected		Vac in. H <sub>2</sub> O	
							Time	Summa Canister #		
<b>Shallow Wells</b>										
AOC65-VEW19	- 24.9	1244	92.3	9.2			1334		- 21.5	
AOC65-VEW20	- 24.6	449	93.5	4.9					- 0	
AOC65-VEW21	- 24.5	497	93.7	5.7					- 24.3	
AOC65-VEW23	- 24.4	1431	93.0	4.7			1342		- 23.1	
AOC65-VEW25	- 24.2	546	93.3	6.6					- 24.3	
AOC65-VEW27	- 24.4	567	93.5	7.6					- 24.1	
AOC65-INTAKE-SW	- <del>18.2</del> <sup>25.3</sup>	1820	88.5	6.7			1329			intake flow meter (SCFM)=
<b>Deep Wells</b>										
AOC65-VEW13	- 27.9	4175	91.7	4.5					- 1.3	* can hear cap leaking
AOC65-VEW14	- 27.7	650	94.8	2.5			1357		- 18.7	
AOC65-VEW17	- 27.2	2680	93.5	1.9					- 15.1	
AOC65-VEW22	- 27.2	2114	94.8	0					- 26.1	
AOC65-VEW24	- 27.2	495	95.5	0					- 0.1	
AOC65-VEW26	- 26.8	1864	95.7	0			1406		- 24.3	
AOC65-INTAKE-DW	- 32.0	8550	90.6	4.8			1351			intake flow meter (SCFM)=
AOC65-EXHAUST	+ 3.0	14500	152.9	2.4						
<b>Blower Information</b>	System	Pre Adjustment			Vacuum Relief Valve			Hours Meter		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
	Shallow	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	27	(adjust to 75" H <sub>2</sub> O) <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	NA			
	Deep	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	42	(adjust to 75" H <sub>2</sub> O) <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	NA			
<b>Moisture Separator Information</b>	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes: * Eastern side of system off for SIW install					
	Shallow	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	0						
	Deep	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	0						

in. H<sub>2</sub>O: 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 : 7-22-11/1000

Operator: S. Elliott

Ambient T (°F) \_\_\_\_\_

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

Monitoring Point	Manifold Readings							Wellhead		Comments
	Vac in.H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	O <sub>2</sub> vol %	CO <sub>2</sub> vol %	Analytical Sample Collected		Vac in. H <sub>2</sub> O	
							Time	Summa Canister #		
<b>Shallow Wells</b>										
AOC65-VEW19	-									
AOC65-VEW20	-									
AOC65-VEW21	-									
AOC65-VEW23	-									
AOC65-VEW25	-									
AOC65-VEW27	-									
AOC65-INTAKE-SW	-									intake flow meter (SCFM)=
<b>Deep Wells</b>										
AOC65-VEW13	-									
AOC65-VEW14	-									
AOC65-VEW17	-									
AOC65-VEW22	-									
AOC65-VEW24	-									
AOC65-VEW26	-									
AOC65-INTAKE-DW	-									intake flow meter (SCFM)=
AOC65-EXHAUST	+									
<b>Blower Information</b>	System	Pre Adjustment			Vacuum Relief Valve			Hours Meter		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
	Shallow	Y / N	26	(adjust to 75" H <sub>2</sub> O) Y / N	Y / N	Y / N	NA			
	Deep	Y / N	42	(adjust to 75" H <sub>2</sub> O) Y / N	Y / N	Y / N	NA			
<b>Moisture Separator Information</b>	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:					
	Shallow	Y / N	Y / N	0						
	Deep	Y / N	Y / N	0						

in.H<sub>2</sub>O: 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: 7.22.11/1000

Operator: S. Elliott

Ambient T (°F) \_\_\_\_\_

Monitoring Event (circle one) Biweekly / Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Wellhead Readings							Analytical Sample Collected		Comments
	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	O <sub>2</sub> vol %	CO <sub>2</sub> vol %	Time	Summa Canister #		
<b>Subslab Wells</b>										
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							Analytical Sample Collected		Wellhead Vac (in. H <sub>2</sub> O)	Comments
	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	O <sub>2</sub> vol %	CO <sub>2</sub> vol %	Time	Summa Canister #			
AOC65-VEW15	-										
AOC65-VEW16	-										
AOC65-VEW18	-										
AOC65-VEW28A	-										
AOC65-VEW28B	-										
B90-INTAKE-EX	-										
B90-EXHAUST	+										
AOC65-POSTGAC	+										

Blower Information	System	Pre Adjustment			Vacuum Relief Valve		Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube	
		Subslab	Y / N <u>*</u>		(adjust to 65" H <sub>2</sub> O) Y / N	Y / N	
Exterior	Y / N <u>*</u>		(adjust to 50" H <sub>2</sub> O) Y / N	Y / N	<u>Y</u> / N	1854.8	

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

\* system off for SIW install  
 removed subslab VRV, stuck shut

in.H<sub>2</sub>O: 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: 10-13-11 / 0900 Operators: Elliott + Bosch Monitoring Event: Biweekly Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Total Depth ft BTOC	Screened Interval	Manifold Readings						Wellhead		Comments
			Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. btoc	Analytical Sample Collected Time	Summa Canister #	Vac in. H <sub>2</sub> O	

Shallow Wells											
AOC65-VEW19	26	5-25	- 14.1	656	80.9	3.3	9.68			- 12.3	
AOC65-VEW20	27	10-25	- 13.9	196	80.4	0	13.42			- <del>13.2</del> 0.1	
AOC65-VEW21	27	12-27	- 13.9	181	80.5	0	12.6			- 14.3	
AOC65-VEW23	21	6-21	- 14.0	733	80.2	0.3	14.95			- 13.4	
AOC65-VEW25	21	6-21	- 14.3	172	80.5	0.4	18.43			- 13.8	
AOC65-VEW27	21	6-21	- 14.0	170	80.5	2.6	10.12			- 13.6	
AOC65-INTAKE-SW			- 14.5	1760	82.3	1.2	X				

Deep Wells											
AOC65-VEW13	41	15-40	- 23.3	2737	78.6	0	35.62			- 1.1	
AOC65-VEW14	61	40-60	- 23.1	466	78.9	0	57.5			- 23.1	
AOC65-VEW17	52.5	22-52	- 22.7	1686	78.7	0	50.65			- 12.8	
AOC65-VEW22	(51)	25-56	- 22.5	914	78.9	0	44.12			- 21.4	
AOC65-VEW24	50	25-50	- 22.4	438	79.5	0	50.0			- 0.1	
AOC65-VEW26	50	25-50	- 22.3	1086	79.3	0	47.78			- 20.3	
AOC65-INTAKE-DW			- 26.4	6318	78.6	0.1	X				
AOC65-EXHAUST			+				X				* no port

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	15	(adjust to 75° H <sub>2</sub> O) (Y) / N	15 *	(Y) / N	
Deep	(Y) / N	40	(adjust to 75° H <sub>2</sub> O) (Y) / N	40 *	(Y) / N	(Y) / N	NA	

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes: * relief valves shut, can't increase pressures can hear leaks everywhere	
		Shallow	(Y) / N	(Y) / N		0
		Deep	(Y) / N	(Y) / N		0

in. H<sub>2</sub>O: 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: 10.13.11 / 0900 Operators: Elliott + Borch Monitoring Event: Biweekly / Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Wellhead Readings								Analytical Sample Collected		Comments
	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Time	Summa Canister #		
								Subslab Wells			
AOC65-VEW1	10	2.5 - 10.5	-								
AOC65-VEW2	10	2.5 - 10	-								
AOC65-VEW3	9.8	2.5 - 9.8	-							OFFLINE	
AOC65-VEW4	6.7	2.5 - 6.6	-							OFFLINE	
AOC65-VEW5	9.1	2.5 - 9	-							OFFLINE	
AOC65-VEW6	5	2.5 - 5	-							OFFLINE	
AOC65-VEW7	5.25	2.5 - 5	-							OFFLINE	
AOC65-VEW8	9.7	2.5 - 9.7	-								
AOC65-VEW9	9.75	2.5 - 9.75	-								
AOC65-VEW10	5.4	2.5 - 5.1	-								
AOC65-VEW11	9.33	2.5 - 9.3	-							OFFLINE	
AOC65-VEW12	9.7	2.5 - 9.4	-								
B90-INTAKE-SS			- 34.2	>15,000	87.4	1.2					

Monitoring Point	Manifold Readings								Wellhead Vac (in. H <sub>2</sub> O)	Comments	
	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected			
								Time			Summa Canister #
AOC65-VEW15	13	5-12	- 8.6	92	72.4	3.1	6.45			- 9.0	
AOC65-VEW16	41	15-40	- 8.7	821	74.2	1.4	29.97			- 0.8	
AOC65-VEW18	56	15.5-55.5	- 9.1	103	72.4	0.4	50.86			- 0.1	valve on manifold broke off, open hole, temp. fix
AOC65-VEW28A	120	80-120	- 8.9	944	73.9	1.7	113.81			- 8.9	
AOC65-VEW28B	179	139.3-179.3	- 8.5	115	73.3	0	153.28			- 1.2	
AOC65-VEW29	40	5-39.5	- 8.1	445	73.5	0	32.86			- 10.8	
AOC65-VEW30	25	5-24.5	- 8.1	170	73.9	11.2	24.25			- 7.8	wrong lids installed on these wells, need to purchase proper lids
AOC65-VEW31	40	5-39.5	- 8.0	2181	77.5	2.1	30.04			- 5.5	
AOC65-VEW32	25	5-24.5	- 8.2	174	74.6	0.2	*			- 7.8	* can't get lid off
AOC65-VEW33	25	5-24.5	- 8.1	282	74.2	1.2	24.28			- 7.5	
B90-INTAKE-EX			- 12.4	>15000	74.2	1.9					
B90-EXHAUST			+ 20.7	>15000	144.1	1.3					
AOC65-POSTGAC			+								couldnt find pvc w/ port piece

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube	Hours Meter
		Subslab	(Y) / N	79	(adjust to 65" H <sub>2</sub> O) (Y) / N	69	(Y) / N	(Y) / N
Exterior	(Y) / N	75	(adjust to 50" H <sub>2</sub> O) (Y) / N	75*	(Y) / N	(Y) / N	2790.9	

Observations/Notes:  
\* relief valve won't adjust, needs maint.  
- on subslab side by filter, can hear an air leak

in.H<sub>2</sub>O: 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: 10-25-11 / 0930 Operators: Elliott Monitoring Event: Biweekly / Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Wellhead Readings							Analytical Sample Collected		Comments
	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Time	Summa Canister #	
<b>Subslab Wells</b>										
AOC65-VEW1	10	2.5 - 10.5	-							
AOC65-VEW2	10	2.5 - 10	-							
AOC65-VEW3	9.8	2.5 - 9.8	-							OFFLINE
AOC65-VEW4	6.7	2.5 - 6.6	-							OFFLINE
AOC65-VEW5	9.1	2.5 - 9	-							OFFLINE
AOC65-VEW6	5	2.5 - 5	-							OFFLINE
AOC65-VEW7	5.25	2.5 - 5	-							OFFLINE
AOC65-VEW8	9.7	2.5 - 9.7	-							
AOC65-VEW9	9.75	2.5 - 9.75	-							
AOC65-VEW10	5.4	2.5 - 5.1	-							
AOC65-VEW11	9.33	2.5 - 9.3	-							OFFLINE
AOC65-VEW12	9.7	2.5 - 9.4	-							
B90-INTAKE-SS			-							

Manifold Readings										Wellhead	Comments
Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Vac (in. H <sub>2</sub> O)	
									Time	Summa Canister #	
AOC65-VEW15	13	5-12	-								* with subslab on exterior off pressure still reading 52 on exterior side, need to replace check valve on subslab side (SC)
AOC65-VEW16	41	15-40	-								
AOC65-VEW18	56	15.5-55.5	-								
AOC65-VEW28A	120	80-120	-								
AOC65-VEW28B	179	139.3-179.3	-								
AOC65-VEW29	40	5-39.5	-								
AOC65-VEW30	25	5-24.5	-								
AOC65-VEW31	40	5-39.5	-								
AOC65-VEW32	25	5-24.5	-								
AOC65-VEW33	25	5-24.5	-								
B90-INTAKE-EX			-								
B90-EXHAUST			+								
AOC65-POSTGAC			+								

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure		Final Intake Pressure	Check	
	Subslab	Y / N	64	(adjust to 65" H <sub>2</sub> O) Y / N			Y / N	Y / N
Exterior	Y / N	* 76	(adjust to 50" H <sub>2</sub> O) Y / N			Y / N	Y / N	

Moisture Separator Information	System	Inspected	Emptied	Amount Transferred (gals)	Canister Filter Change	Observations/Notes:
				(last changed 8/2011)		
	Subslab	Y / N	Y / N	9	Y / N	
Exterior	Y / N	Y / N		Y / N		

in. H<sub>2</sub>O: 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 : 10.25.11/0930 Operators: Ellott Monitoring Event: Biweekly / Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Manifold Readings							Wellhead		Comments
	Total Depth ft BTOC	Screened Interval	Vac in.H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. btoc	Analytical Sample Collected Time	Summa Canister #	

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			-				X				

Deep Wells											
AOC65-VEW13	41	15-40	-								
AOC65-VEW14	61	40-60	-								
AOC65-VEW17	52.5	22-52	-								
AOC65-VEW22	51	25-50	-								
AOC65-VEW24	50	25-50	-								
AOC65-VEW26	50	25-50	-								
AOC65-INTAKE-DW			-				X				
AOC65-EXHAUST			+				X				

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter
		Blower On	Initial Intake Pressure	Adjusted Pressure	Final Intake Pressure	Check	Lube	
	Shallow	<input checked="" type="checkbox"/> / <input type="checkbox"/>	18	(adjust to 75" H <sub>2</sub> O) Y / N		<input checked="" type="checkbox"/> / <input type="checkbox"/>	Y / <input type="checkbox"/> N	NA
Deep	<input checked="" type="checkbox"/> / <input type="checkbox"/>	40	(adjust to 75" H <sub>2</sub> O) Y / N		<input checked="" type="checkbox"/> / <input type="checkbox"/>	Y / <input type="checkbox"/> N	NA	

Moisture Separator Information	System	Inspected	Emptied	Amt Xfered	Canister Filter Change (last changed 8/2011)	Observations/Notes:
		Shallow	Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> / <input type="checkbox"/> N	0	
	Deep	Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> / <input type="checkbox"/> N	0	Y / <input type="checkbox"/> N	

disconnected GAC to move to other side, connected deep side, need to order new check valve for shallow side deep

in.H<sub>2</sub>O: 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: 11-9-11 / 1450		Operators: <u>Bouch E-Lice</u>		Monitoring Event: <u>Biweekly</u> <u>Monthly</u> / Quarterly / Other						
Wellhead Readings										
Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Comments
								Time	Summa Canister #	
Subslab Wells										
AOC65-VEW1	10	2.5 - 10.5	-							
AOC65-VEW2	10	2.5 - 10	-							
AOC65-VEW3	9.8	2.5 - 9.8	-							OFFLINE
AOC65-VEW4	6.7	2.5 - 6.6	-							OFFLINE
AOC65-VEW5	9.1	2.5 - 9	-							OFFLINE
AOC65-VEW6	5	2.5 - 5	-							OFFLINE
AOC65-VEW7	5.25	2.5 - 5	-							OFFLINE
AOC65-VEW8	9.7	2.5 - 9.7	-							
AOC65-VEW9	9.75	2.5 - 9.75	-							
AOC65-VEW10	5.4	2.5 - 5.1	-							
AOC65-VEW11	9.33	2.5 - 9.3	-							OFFLINE
AOC65-VEW12	9.7	2.5 - 9.4	-							
B90-INTAKE-SS			-	30.8	1131	67.4	5.5			
Exterior Wells										
Manifold Readings									Wellhead	Comments
Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		
								Time	Summa Canister #	
AOC65-VEW15	13	5-12	-11.6	243	55.7	6.3	7.13			-0.1
AOC65-VEW16	41	15-40	-11.2	234	54.4	6.1	30.0			-0.3
AOC65-VEW18	56	15.5-55.5	-12.7	251	54.8	5.0	52.68			-0.1
AOC65-VEW28A	120	80-120	-11.5	1604	64.9	6.1	113.8			-10.4
AOC65-VEW28B	179	139.3-179.3	-10.8	250	61.3	6.5	153.28			-0.1
AOC65-VEW29	40	5-39.5	-11.2	236	58.0	6.1	31.24			-4.9
AOC65-VEW30	25	5-24.5	-11.9	229	58.8	36.9	24.20			-11.1
AOC65-VEW31	40	5-39.5	-10.8	1640	64.9	6.0	30.04			-5.0
AOC65-VEW32	25	5-24.5	-10.9	237	58.4	8.2	15.30			-11.1
AOC65-VEW33	25	5-24.5	-11.1	224	59.5	5.8	<del>9.23</del> 243 - copied over wrong			-10.4
B90-INTAKE-EX			-14.6	3720	65.2	6.8				
B90-EXHAUST			+18.8	10523	96.2	5.0				
AOC65-POSTGAC			+21.1	715000	134.4	6.1				
Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube			
		Subslab	Y/N	76	(adjust to 65" H <sub>2</sub> O) Y/N	75	Y/N		Y/N	7323.5
Exterior	Y/N	No gauge	(adjust to 50" H <sub>2</sub> O) Y/N		Y/N	Y/N	3232.1			
Moisture Separator Information	System	Emptied	Amount Transferred (gals)	Canister Filter Change	Observations/Notes: * a sample part was added, use <sup>manometer</sup> vac gauge until vac Gauge can be replaced = 36" H <sub>2</sub> O, VRV closed, no adjustment 11/11 (6)					
		Subslab	Y/N	~1.0					Y/N	
		Exterior	Y/N	~7.0					Y/N	

in.H<sub>2</sub>O: 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: 0930 / 11-9-11 Operators: J. Bouch / E. Rice Monitoring Event: Biweekly / Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Manifold Readings							Wellhead		Comments
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. btoc	Analytical Sample Collected Time	Summa Canister #	

Shallow Wells											
AOC65-VEW19	26	5-25	24.8	722	64.7	8.4	10.35			20.3	
AOC65-VEW20	27	10-25	24.9	512	61.6	4.3	13.7			25.3	
AOC65-VEW21	27	12-27	24.6	481	61.6	4.7	13.7			25.2	
AOC65-VEW23	21	6-21	24.6	734	63.1	4.7	11.85			24.7	
AOC65-VEW25	21	6-21	24.5	456	62.2	11.4	18.59			24.6	
AOC65-VEW27	21	6-21	24.9	457	62.5	9.3	9.23			0.1	
AOC65-INTAKE-SW			25.5	1553	64.2	6.1					

Deep Wells											
AOC65-VEW13	41	15-40	29.8	2718	66.7	5.8	31.1			1.3	
AOC65-VEW14	61	40-60	28.5	565	62.4	5.4	47.45	probably wrong		29.0	57.37 on 11/11 (SU)
AOC65-VEW17	52.5	22-52	27.7	1270	67.2	5.9	50.58			15.4	
AOC65-VEW22	51	25-50	27.9	859	65.8	5.7	49.21			26.4	
AOC65-VEW24	50	25-50	27.9	555	62.0	4.8	DRY			0.1	
AOC65-VEW26	50	25-50	28.4	858	65.4	6.4	46.75			24.6	
AOC65-INTAKE-DW			32.7	5572	69.0	5.8					
AOC65-EXHAUST			3.4	12508	120.3	6.6					

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	30	(adjust to 75° H <sub>2</sub> O) Y/N	30	Y/N	Y/N	NA
Deep	Y/N	49	(adjust to 75° H <sub>2</sub> O) Y/N	42 *	Y/N	Y/N	NA	

Moisture Separator Information	System	Emptied	Amt Xfered	Canister Filter Change (last changed 8/2011)	Observations/Notes:
		Shallow	Y/N	2.25	
	Deep	Y/N	2.25	Y/N	

in. H<sub>2</sub>O: inches of water      fpm: feet per minute      ppm: parts per million      VRV: vacuum relief valve      psi: pounds per square inch

## AOC-65/BUILDING 90 SVE WATER LEVELS AND PURGE FORM

Personnel: J. Bouch / E. Rice

Date: 11.9.11

	Total Depth (ft.)	Screened Interval	Well ID	Initial Water Level (ft. BTOC)	Time (began purging)	Amount Purged (gallons)	Time (end of purging)	Final Water Level (ft. BTOC)	Time (final water level)	Comments/Problems
AOC-65 Deep Wells	41	15-40	VEW-13	36.1						
	61	40-60	VEW-14	47.45						
	52.5	22-52	VEW-17	50.58						
	51	25-50	VEW-22	49.26						
	50	25-50	VEW-24	DRY						
	50	25-50	VEW-26	46.75						
Building 90 Exterior Wells	13	5-12	VEW-15	7.13						water in manhole
	41	15-40	VEW-16	30.0						water in manhole
	81	15.5-55.5	VEW-18	52.68						Water in manhole
	120	80-120	VEW-28A	113.8						
	179.3	139.3-179.3	VEW-28B	153.28						
AOC-65 Shallow Wells	26	5-25	VEW-19	<del>46.75</del> <sup>47.75</sup>	10:35					
	27	10-25	VEW-20	13.7						
	27	12-27	VEW-21	13.7						
	21	6-21	VEW-23	14.85						
	21	6-21	VEW-25	18.59						
	21	6-21	VEW-27	9.23						

VEW-29 31.24  
 VEW-30 24.2  
 VEW-31 30.04  
 VEW-32 15.3  
 VEW-33 24.3

32' Water in manhole cover

AOC-65/BUILDING 90 SVE WATER LEVELS AND PURGE FORM

Personnel: Ellott / E. Rice / Bouch

Date: 11/10/11

	Total Depth (ft.)	Screened Interval	Well ID	Initial Water Level (ft. BTOC)	Time (began purging)	Amount Purged (gallons)	Time (end of purging)	Final Water Level (ft. BTOC)	Time (final water level)	Comments/Problems
AOC-65 Deep Wells	41	15-40	VEW-13	36.11		2		37.63		
	61	40-60	VEW-14	57.36		tried nothing		came up		
	52.5	22-52	VEW-17	50.58		/				
	51	25-50	VEW-22	49.45		/				
	50	25-50	VEW-24	DRY		/				
	50	25-50	VEW-26	46.78		4.5		49.85		
Building 90 Exterior Wells	13	5-12	VEW-15	7.09		6.5		11.55		2" water around wellhead, removed 1 gal
	41	15-40	VEW-16	30.0		14.0		<del>44.0</del> 40.0		no water around wellhead
	<del>56</del> 81	15.5-55.5	VEW-18	52.74		2.0		54.3		7" water around wellhead
	120	80-120	VEW-29A	114.11						
	179.3	139.3-179.3	VEW-28B	153.5						
	40	5-39.5	VEW-29	31.29		8.0		38.04		no water around wellhead
	25	5-24.5	VEW-30	24.18		/				no water around wellhead
	40	5-39.5	VEW-31	30.15		9		36.6		no water around wellhead
	25	5-24.5	VEW-32	10.70		16.5		22.4		1.5" water around wellhead
25	5-24.5	VEW-33	24.72		/					
AOC-65 Shallow Wells	26	5-25	VEW-19	10.55		17		23.91		
	27	10-25	VEW-20	13.61		12.5		23.82		
	27	12-27	VEW-21	13.65		14.0		25.93		
	21	6-21	VEW-23	14.82		7.0		20.08		
	21	6-21	VEW-25	19.10		2		20.10		
	21	6-21	VEW-27	9.14		15		20.51		

11/11/11 PFI # water on the west side of Bldg 90 turned back on @ 0800, fire hydrant on south end of site flushed for 2 hours

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

Date/Time: 11.22.11 1030 Operators: J. Bouch Monitoring Event: Biweekly / Monthly / Quarterly / Other

Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Comments
								Time	Summa Canister #	
<b>Subslab Wells</b>										
AOC65-VEW1	10	2.5 - 10.5	-							
AOC65-VEW2	10	2.5 - 10	-							
AOC65-VEW3										
AOC65-VEW4										
AOC65-VEW5										
AOC65-VEW6										
AOC65-VEW7										
AOC65-VEW8	9.7	2.5 - 9.7	-							
AOC65-VEW9	9.75	2.5 - 9.75	-							
AOC65-VEW10	5.4	2.5 - 5.1	-							
AOC65-VEW11										
AOC65-VEW12	9.7	2.5 - 9.4	-							
B90-INTAKE-SS										

Manifold Readings										Wellhead	Comments
Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Vac (in. H <sub>2</sub> O)	
								Time	Summa Canister #		
AOC65-VEW15	13	5-12	-				9.32			-	water in manhole
AOC65-VEW16	41	15-40	-				30.73			-	
AOC65-VEW18	56	15.5-55.5	-				54.04			-	
AOC65-VEW28A	120	80-120	-				114.10			-	
AOC65-VEW28B	179	139.3-179.3	-				152.96			-	
AOC65-VEW29	40	5-39.5	-				35.62			-	
AOC65-VEW30	25	5-24.5	-				24.80			-	
AOC65-VEW31	40	5-39.5	-				30.12			-	
AOC65-VEW32	25	5-24.5	-				17.73			-	water in manhole
AOC65-VEW33	25	5-24.5	-				24.22			-	water in manhole
B90-INTAKE-EX											
B90-EXHAUST											
AOC65-POSTGAC											

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube	
		Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	70	(adjust to 85" H <sub>2</sub> O) <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	66	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	
Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	32.6	(adjust to 50" H <sub>2</sub> O) <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N		<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	Y / <input checked="" type="checkbox"/> N	7631.2	

Moisture Separator Information	System	Emptied	Amount Transferred (gals)	Canister Filter Change	Observations/Notes:
				(last changed 8/2011)	
		Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	0	
Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	5	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N		

in.H<sub>2</sub>O: 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: 11-22-11 1006 Operators: J. Bowch Monitoring Event: Biweekly / Monthly / Quarterly / Other

Monitoring Point	Manifold Readings							Wellhead		Comments	
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. btoc	Analytical Sample Collected			Vac in. H <sub>2</sub> O
								Time	Summa Canister #		
<b>Shallow Wells</b>											
AOC65-VEW19	26	5-25	-				22.88				
AOC65-VEW20	27	10-25	-				23.02				
AOC65-VEW21	27	12-27	-				24.75				
AOC65-VEW23	21	6-21	-				19.26				
AOC65-VEW25	21	6-21	-				19.32				
AOC65-VEW27	21	6-21	-				15.43				
AOC65-INTAKE-SW							X				

<b>Deep Wells</b>										
AOC65-VEW13	41	15-40	-				36.96			looks like there is ground water level
AOC65-VEW14	61	40-60	-				57.64			
AOC65-VEW17	52.5	22-52	-				50.67			
AOC65-VEW22	51	25-50	-				49.59			
AOC65-VEW24	50	25-50	-				DRY			
AOC65-VEW26	50	25-50	-				44.25			
AOC65-INTAKE-DW							X			
AOC65-EXHAUST			+							

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	28	(adjust to 75° H <sub>2</sub> O) Y/N	29		Y/N
Deep	Y/N	40	(adjust to 75° H <sub>2</sub> O) Y/N	40	Y/N	Y/N	NA	

Moisture Separator Information	System	Emptied	Amt Xfered	Canister Filter Change (last changed 8/2011)	Observations/Notes:				
						Shallow	Y/N	0	Y/N
						Deep	Y/N	10	Y/N

in. H<sub>2</sub>O: 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: 12/7/11 1115 Operators: A. Lindy, J. McQueen Monitoring Event: Biweekly / Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Comments
								Time	Summa Canister #	
<b>Wellhead Readings</b>										
<b>Subslab Wells</b>										
AOC65-VEW1	10	2.5 - 10.5	-							
AOC65-VEW2	10	2.5 - 10	-							
AOC65-VEW8	9.7	2.5 - 9.7	-							
AOC65-VEW9	9.75	2.5 - 9.75	-							
AOC65-VEW10	5.4	2.5 - 5.1	-							
AOC65-VEW12	9.7	2.5 - 9.4	-							
B90-INTAKE-SS			- 30.2	4234	48.7	4.3				

Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Wellhead Vac (in. H <sub>2</sub> O)	Comments
								Time	Summa Canister #		
<b>Exterior Wells</b>											
<b>Manifold Readings</b>											
AOC65-VEW15	13	5-12	- 17.3	226	43.5	7.5	6.71			- 0.4	6 gal. removed
AOC65-VEW16	41	15-40	- 17.3	300	45.1	7.2	29.93			- 0.6	10 gal. removed
AOC65-VEW18	56	15.5-55.5	- 17.5	464	46.7	5.8	47.11			- 0.4	6 gal. removed
AOC65-VEW28A	120	80-120	- 14.9	277	47.6	6.7	114.27			- 2.8	didn't purge
AOC65-VEW28B	179	139.3-179.3	- 16.5	466	49.4	6.3	151.90			- 2.9	didn't purge
AOC65-VEW29	40	5-39.5	- 16.2	345	49.4	5.0	34.13			- 1.8	6 gal. removed
AOC65-VEW30	25	5-24.5	- 16.2	420	45.8	22.7	24.19			- 7.0	16.5
AOC65-VEW31	40	5-39.5	- 16.3	2790	60.2	—	30.09			- 7.0	VOC's not sampled due to water in well
AOC65-VEW32	25	5-24.5	- 16.1	445	44.0	4.0	7.25			- 14.5	14 gal removed.
AOC65-VEW33	25	5-24.5	- 15.4	384	46.3	6.8	24.12			- 16.3	didn't purge
B90-INTAKE-EX			- 20.3	3285	62.2	8.3					
B90-EXHAUST			+ 20.6	14613	135.3	7.4					
AOC65-POSTGAC			+ 6.2	6764	86.6	5.8					

14 gal. removed

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube	
		Subslab	<input checked="" type="checkbox"/> N	70	(adjust to 65" H <sub>2</sub> O) Y / <input checked="" type="checkbox"/> N	72	<input checked="" type="checkbox"/> N	
Exterior	<input checked="" type="checkbox"/> N	15	(adjust to 50" H <sub>2</sub> O) Y / <input checked="" type="checkbox"/> N	17	<input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> N	3892.4	

Moisture Separator Information	System	Emptied	Amount Transferred (gals)	Canister Filter Change (last changed 8/2011)	Observations/Notes:				
						Subslab	<input checked="" type="checkbox"/> N	3	Y / <input checked="" type="checkbox"/> N
						Exterior	<input checked="" type="checkbox"/> N	17	Y / <input checked="" type="checkbox"/> N

in. H<sub>2</sub>O: 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: 12/7/11 1030

Operators: A. Lindley, J. McQueen

Monitoring Event: Biweekly / Monthly / Quarterly / Other

Monitoring Point	Manifold Readings								Wellhead		Comments
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. btoc	Analytical Sample Collected		Vac in. H <sub>2</sub> O	
								Time	Summa Canister #		
<b>Shallow Wells</b>											
AOC65-VEW19	26	5-25	-28.1	440	50.1	5.4	9.01			-20.1	15 gal removed
AOC65-VEW20	27	10-25	-27.7	438	55.5	3.1	22.81			-1.6	2 gal removed
AOC65-VEW21	27	12-27	-26.8	621	57.0	4.3	23.66			-27.0	did not purge 2 gal removed
AOC65-VEW23	21	6-21	-27.5	1334	58.6	3.8	18.64			-27.3	did not purge
AOC65-VEW25	21	6-21	-26.5	607	56.1	4.9	17.68			-26.4	4 gal removed
AOC65-VEW27	21	6-21	-26.7	597	55.9	5.4	7.81			-26.6	13 gal removed
AOC65-INTAKE-SW			-27.5	1523	58.0	3.9	X				
<b>Deep Wells</b>											
AOC65-VEW13	41	15-40	-31.1	3856	52.1	<del>4.2</del>	36.67			-1.8	2.5 gal removed
AOC65-VEW14	61	40-60	-31.1	688	48.1	3.4	50.89			-0.1	12 gal removed
AOC65-VEW17	52.5	22-52	-41.5	955	49.9	4.4	50.38			-14.2	did not purge
AOC65-VEW22	51	26-50	-30.7	961	51.4	3.4	48.7			-25.5	did not purge
AOC65-VEW24	50	25-50	-31.0	929	48.3	3.1	dry			-0.7	did not purge
AOC65-VEW26	50	25-50	-30.3	799	50.6	4.4	45.1			-24.2	5 gal removed
AOC65-INTAKE-DW			-34.8	4907	59.3	4.3	X				
AOC65-EXHAUST			+3.5	9579	122.5	4.6	X				
Blower Information	Pre Adjustment					Vacuum Relief Valve		Hours Meter			
	System	Blower On	Initial Intake Pressure	Adjusted Pressure		Final Intake Pressure	Check		Lube		
	Shallow	(Y) N	30	(adjust to 75° H <sub>2</sub> O) Y(N)		30	(Y) N		(Y) N		
Deep	(Y) N	40	(adjust to 75° H <sub>2</sub> O) Y(N)		40	(Y) N	(Y) N				
Moisture Separator Information	System	Emptied	Amt Xfered	Canister Filter Change (last changed 8/2011)		Observations/Notes:					
	Shallow	(Y) N	1	Y(N)							
	Deep	(Y) N	29	Y(N)							

\*WL and VEW purge on 12/8/11

In. H<sub>2</sub>O: 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: 12/11/11 / 1345 Operators: Elliott + Borch Monitoring Event: Biweekly / Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Comments
								Time	Summa Canister #	
<b>Subslab Wells</b>										
AOC65-VEW1	10	2.5 - 10.5	-							
AOC65-VEW2	10	2.5 - 10	-							
AOC65-VEW8	9.7	2.5 - 9.7	-							
AOC65-VEW9	9.75	2.5 - 9.75	-							
AOC65-VEW10	5.4	2.5 - 5.1	-							
AOC65-VEW12	9.7	2.5 - 9.4	-							
B90-INTAKE-SS										

<b>Manifold Readings</b>											Wellhead Vac (in. H <sub>2</sub> O)	Comments
Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected				
								Time	Summa Canister #			
AOC65-VEW15	13	5-12	-				7.75	1428				
AOC65-VEW16	41	15-40	-				29.94					
AOC65-VEW18	56	15.5-55.5	-				45.94					
AOC65-VEW28A	120	80-120	-				114.48					
AOC65-VEW28B	179	139.3-179.3	-				150.29					
AOC65-VEW29	40	5-39.5	-				35.53					
AOC65-VEW30	25	5-24.5	-				24.19					
AOC65-VEW31	40	5-39.5	-				30.10					
AOC65-VEW32	25	5-24.5	-				7.49					
AOC65-VEW33	25	5-24.5	-				24.21					
B90-INTAKE-EX												
B90-EXHAUST												
AOC65-POSTGAC												

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube	
		Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	70	(adjust to 65" H <sub>2</sub> O) <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N + 1/2 in. - won't shut	70	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	
Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	36	(adjust to 50" H <sub>2</sub> O) <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N VRV shut	36	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	4231.1	

Moisture Separator Information	System	Emptied	Amount Transferred (gals)	Canister Filter Change (last changed 8/2011)	Observations/Notes:					
						Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	1	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	
						Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	16	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	→ water around filter

in. H<sub>2</sub>O: 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: 12/21/11 / 1345 Operators: Bryce Elliott & Buck Monitoring Event: Biweekly / Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Manifold Readings							Wellhead		Comments	
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. btoc	Analytical Sample Collected Time	Summa Canister #		Vac in. H <sub>2</sub> O
Shallow Wells											
AOC65-VEW19	26	5-25	-				9.45			-	
AOC65-VEW20	27	10-25	-				23.74			-	valve left open upon arrival
AOC65-VEW21	27	12-27	-				21.92			-	
AOC65-VEW23	21	6-21	-				16.80			-	
AOC65-VEW25	21	6-21	-				15.88			-	
AOC65-VEW27	21	6-21	-				8.62			-	
AOC65-INTAKE-SW			-				X				
Deep Wells											
AOC65-VEW13	41	15-40	-				37.42			-	
AOC65-VEW14	61	40-60	-				51.22			-	
AOC65-VEW17	52.5	22-52	-				51.55			-	
AOC65-VEW22	51	25-50	-				50.38			-	
AOC65-VEW24	50	25-50	-				dry			-	
AOC65-VEW26	50	25-50	-				46.03			-	
AOC65-INTAKE-DW			-				X				
AOC65-EXHAUST			+				X				
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	30	(adjust to 75" H <sub>2</sub> O) Y (N)	30	(Y) / N	(Y) / N		NA	
Deep	Y (N)	46	(adjust to 75" H <sub>2</sub> O) Y (N)	46	(Y) / N	(Y) / N	NA				
Moisture Separator Information	System	Emptied	Amt Xfered	Canister Filter Change (last changed 8/2011)	Observations/Notes: - deep side blower sounds bad, water in canister filter prob getting to blower - leak at top of KO pot, can hear it on shallow side						
		Shallow	(Y) / N	12						Y (N)	
		Deep	(Y) / N	30						Y (N)	

in. H<sub>2</sub>O: 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

\* readings taken before wells purged

Date/Time: 1.4.12 / 0830 Operators: Elliott + Bouch Monitoring Event: Biweekly / Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Manifold Readings							Wellhead		Comments
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. btoc	Analytical Sample Collected Time	Summa Canister #	

Shallow Wells											
AOC65-VEW19	26	5-25	-32.8	637	61.3	0				-18.4	
AOC65-VEW20	27	10-25	-32.5	631	62.9	0				0	recalibrated PID/was reading 82.7 w/100 span 945
AOC65-VEW21	27	12-27	-32.8	637	62.5	3.6				-30.6	
AOC65-VEW23	21	6-21	-32.6	1206	63.3	3.4	13.55			-31.0	4 gal - 18.23
AOC65-VEW25	21	6-21	-33.4	587	67.0	5.7	18.79			-31.8	3 gal - 20.90
AOC65-VEW27	21	6-21	-32.9	645	66.5	6.6	9.03			-32.2	5 gal - 20.42
AOC65-INTAKE-SW			-33.4	1204	64.5	0					

Deep Wells											
AOC65-VEW13	41	15-40	-34.8	7878	58.9	4.3	36.6			-1.6	40.01 - 5 gals
AOC65-VEW14	61	40-60	-32.6	7171	60.0	4.2	53.11			0	4 gal - 51.05
AOC65-VEW17	52.5	22-52	-33.3	1110	58.8	4.5	50.64			-14.7	
AOC65-VEW22	51	25-50	-32.1	1708	57.5	3.5	48.23			-24.2	
AOC65-VEW24	50	25-50	-33.3	386	60.4	3.0	DRY			-0.2	
AOC65-VEW26	50	25-50	-32.3	1011	59.7	4.2	41.78			-26.8	12 gal - 49.63
AOC65-INTAKE-DW			-36.1	6537	62.9	4.7					
AOC65-EXHAUST			+2.4	10341	106.5	4.1					

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter
		Blower On	Initial Intake Pressure	Adjusted Pressure	Final Intake Pressure	Check	Lube	
		Shallow	<input checked="" type="checkbox"/> / N	33	(adjust to 75° H <sub>2</sub> O) Y / N		<input checked="" type="checkbox"/> / N	
Deep	<input checked="" type="checkbox"/> / N	43	(adjust to 75° H <sub>2</sub> O) Y / N		<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> / N	NA	

Moisture Separator Information	System	Emptied	Amt Xfered	Canister Filter Change (last changed 8/2011)	Observations/Notes:				
					Shallow	<input checked="" type="checkbox"/> / N	0	Y / N	Shut system down 1345 to purge water
					Deep	<input checked="" type="checkbox"/> / N	20	Y / N	

in. H<sub>2</sub>O: inches of water      fpm: feet per minute      ppm: parts per million      VRV: vacuum relief valve      psi: pounds per square inch

\* readings taken before wells purged

Date/Time: 1.4.12 / 0920 Operators: Elliott + Bauch Monitoring Event: Biweekly Monthly Quarterly / Other \_\_\_\_\_

Wellhead Readings										
Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Comments
								Time	Summa Canister #	
Subslab Wells										
AOC65-VEW1	10	2.5 - 10.5	-							
AOC65-VEW2	10	2.5 - 10	-							
AOC65-VEW3	9.8	2.5 - 9.8	-							OFFLINE
AOC65-VEW4	6.7	2.5 - 6.6	-							OFFLINE
AOC65-VEW5	9.1	2.5 - 9	-							OFFLINE
AOC65-VEW6	5	2.5 - 5	-							OFFLINE
AOC65-VEW7	5.25	2.5 - 5	-							OFFLINE
AOC65-VEW8	9.7	2.5 - 9.7	-							
AOC65-VEW9	9.75	2.5 - 9.75	-							
AOC65-VEW10	5.4	2.5 - 5.1	-							
AOC65-VEW11	9.33	2.5 - 9.3	-							OFFLINE
AOC65-VEW12	9.7	2.5 - 9.4	-	6632	62.8					
B90-INTAKE-SS			- 32.8	75,000	75.1	2.0				

Manifold Readings										Wellhead	Comments
Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Vac (in. H <sub>2</sub> O)	
								Time	Summa Canister #		
AOC65-VEW15	13	5-12	- 18.3	230	50.1	3.9	7.03			- 0.4	6 gal - 11.47' BTOC
AOC65-VEW16	41	15-40	- 17.6	210	50.3	2.9	30.02			- 0.3	9 gal - 36.45'
AOC65-VEW18	56	15.5-55.5	- 18.4	279	49.2	1.8	50.70			- 0.2	4 gal - 53.49
AOC65-VEW28A	120	80-120	- 17.9	372	49.7	pulling water	11.23	41.23	(S)	- 4.2	can hear water + its messing w/ readings
AOC65-VEW28B	179	139.3-179.3	- 18.7	410	62.0	3.0	149.24			- 1.4	
AOC65-VEW29	40	5-39.5	- 16.7	178	51.0	2.0	32.7			- 1.7	7 gal - 38.53'
AOC65-VEW30	25	5-24.5	- 18.3	160	50.8	12.4	24.29			- 17.2	
AOC65-VEW31	40	5-39.5	- 16.9	1347	60.4	pulling water	30.24			- 7.6	12 gal - 31.20'
AOC65-VEW32	25	5-24.5	- 17.1	2751	49.0	5.9	8.05			- 18.1	14 gal - 22.56'
AOC65-VEW33	25	5-24.5	- 17.3	1830	51.0	2.8	24.29			- 16.8	
B90-INTAKE-EX			- 21.1	2384	60.7	3.5					
B90-EXHAUST			+ 20.4	75,000	137.1	2.7					
AOC65-POSTGAC			+ 7.8	7383	95.1	1.7					

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube	
		Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	71 *	(adjust to 65" H <sub>2</sub> O) Y / N		Y / N	
Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	34.6	(adjust to 50" H <sub>2</sub> O) Y / N		Y / N	Y / N	4545.6	

Moisture Separator Information	System	Emptied	Amount Transferred (gals)	Canister Filter Change (last changed 8/2011)	Observations/Notes:				
					Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	0	Y / <input checked="" type="checkbox"/> N	- Shut system down at 1445 to purge * subslab vac gauge stuck on 6 when system is off
					Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	7	Y / <input checked="" type="checkbox"/> N	

in. H<sub>2</sub>O: 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: 1.19.12 / 0800 Operators: E.H. Holt Monitoring Event: Biweekly / Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Comments
								Time	Summa Canister #	
								Wellhead Readings		
<b>Subslab Wells</b>										
AOC65-VEW1	10	2.5 - 10.5	-							
AOC65-VEW2	10	2.5 - 10	-							
AOC65-VEW3	9.8	2.5 - 9.8	-							OFFLINE
AOC65-VEW4	6.7	2.5 - 6.6	-							OFFLINE
AOC65-VEW5	9.1	2.5 - 9	-							OFFLINE
AOC65-VEW6	5	2.5 - 5	-							OFFLINE
AOC65-VEW7	5.25	2.5 - 5	-							OFFLINE
AOC65-VEW8	9.7	2.5 - 9.7	-							
AOC65-VEW9	9.75	2.5 - 9.75	-							
AOC65-VEW10	5.4	2.5 - 5.1	-							
AOC65-VEW11	9.33	2.5 - 9.3	-							OFFLINE
AOC65-VEW12	9.7	2.5 - 9.4	-							
B90-INTAKE-SS			-							

Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Wellhead Vac (in. H <sub>2</sub> O)	Comments
								Time	Summa Canister #		
								Manifold Readings			
AOC65-VEW15	13	5-12	-				7.07			-	
AOC65-VEW16	41	15-40	-				30.04			-	
AOC65-VEW18	56	15.5-55.5	-				52.76			-	
AOC65-VEW28A	120	80-120	-				114.30			-	
AOC65-VEW28B	179	139.3-179.3	-				149.31			-	
AOC65-VEW29	40	5-39.5	-				33.79			-	
AOC65-VEW30	25	5-24.5	-				24.33			-	
AOC65-VEW31	40	5-39.5	-				30.22			-	
AOC65-VEW32	25	5-24.5	-				8.48			-	
AOC65-VEW33	25	5-24.5	-							-	→ screw to well lid bent by heavy equipment - can't open
B90-INTAKE-EX			-								
B90-EXHAUST			+								
AOC65-POSTGAC			+								

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube	
		Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	62	(adjust to 65" H <sub>2</sub> O) <input type="checkbox"/> Y / <input checked="" type="checkbox"/> N	64-6=58	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	
Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	29	(adjust to 50" H <sub>2</sub> O) <input type="checkbox"/> Y / <input checked="" type="checkbox"/> N	31.3	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	4850.2	

Moisture Separator Information	System	Emptied	Amount Transferred (gals)	Canister Filter Change (last changed 8/2011)	Observations/Notes:					
						Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N		<input type="checkbox"/> Y / <input checked="" type="checkbox"/> N	
						Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	15	<input type="checkbox"/> Y / <input checked="" type="checkbox"/> N	

in.H<sub>2</sub>O: 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: 1-19-12/0900 Operators: Elliot Monitoring Event: Biweekly Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Manifold Readings								Wellhead		Comments
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. btoc	Analytical Sample Collected		Vac in. H <sub>2</sub> O	
								Time	Summa Canister #		
<b>Shallow Wells</b>											
AOC65-VEW19	26	5-25	-				20.02				
AOC65-VEW20	27	10-25	-				24.19				
AOC65-VEW21	27	12-27	-				23.70				
AOC65-VEW23	21	6-21	-				16.14				
AOC65-VEW25	21	6-21	-				20.09				
AOC65-VEW27	21	6-21	-				10.51				
AOC65-INTAKE-SW			-				X				
<b>Deep Wells</b>											
AOC65-VEW13	41	15-40	-				38.38				
AOC65-VEW14	61	40-60	-				53.36				
AOC65-VEW17	52.5	22-52	-				51.60				
AOC65-VEW22	51	25-50	-				dry				
AOC65-VEW24	50	25-50	-				dry				
AOC65-VEW26	50	25-50	-				48.68				
AOC65-INTAKE-DW			-				X				
AOC65-EXHAUST			+				X				
<b>Blower Information</b>	<b>System</b>	<b>Pre Adjustment</b>				<b>Vacuum Relief Valve</b>		<b>Hours Meter</b>			
		<b>Blower On</b>	<b>Initial Intake Pressure</b>	<b>Adjusted Pressure</b>	<b>Final Intake Pressure</b>	<b>Check</b>	<b>Lube</b>				
	<b>Shallow</b>	Y / <input checked="" type="checkbox"/> N		(adjust to 75" H <sub>2</sub> O) Y / N	38 / 38	<input checked="" type="checkbox"/> Y / N	<input checked="" type="checkbox"/> Y / N	NA			
	<b>Deep</b>	Y / <input checked="" type="checkbox"/> N		(adjust to 75" H <sub>2</sub> O) Y / N		<input checked="" type="checkbox"/> Y / N	<input checked="" type="checkbox"/> Y / N	NA			
<b>Moisture Separator Information</b>	<b>System</b>	<b>Emptied</b>	<b>Amt Xfered</b>	<b>Canister Filter Change (last changed 8/2011)</b>	<b>Observations/Notes:</b> - deep side off						
	<b>Shallow</b>	<input checked="" type="checkbox"/> Y / N	1	Y / <input checked="" type="checkbox"/> N							
	<b>Deep</b>	<input checked="" type="checkbox"/> Y / N	6	Y / <input checked="" type="checkbox"/> N							

in. H<sub>2</sub>O: 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: 2-6-12 Operators: Elkott + Bach Monitoring Event: Biweekly / Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Manifold Readings								Wellhead		Comments
	Total Depth ft BTOC	Screened Interval	Vac in.H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. btoc	Analytical Sample Collected		Vac in. H <sub>2</sub> O	
								Time	Summa Canister #		
<b>Shallow Wells</b>											
AOC65-VEW19	26	5-25	-				9.94			-	purged 21.67
AOC65-VEW20	27	10-25	-				23.57			-	purged 24.77
AOC65-VEW21	27	12-27	-				20.40			-	purged 25.85
AOC65-VEW23	21	6-21	-				14.02			-	purged 23.0'
AOC65-VEW25	21	6-21	-				18.60			-	no purge
AOC65-VEW27	21	6-21	-				9.05			-	purged 19.96
AOC65-INTAKE-SW							X				
<b>Deep Wells</b>											
AOC65-VEW13	41	15-40	-				38.14			-	purged 38.91
AOC65-VEW14	61	40-60	-				56.60			-	58.75' purged well
AOC65-VEW17	52.5	22-52	-				51.82			-	no purge
AOC65-VEW22	51	25-50	-				50.5			-	<del>purged 24.69</del> no purge
AOC65-VEW24	50	25-50	-				DRY			-	no purge
AOC65-VEW26	50	25-50	-				49.35			-	no purge
AOC65-INTAKE-DW							X				
AOC65-EXHAUST			+				X				
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	(adjust to 75" H <sub>2</sub> O)	Y / N	Y / N	Y / N		NA		
Deep	Y / N	(adjust to 75" H <sub>2</sub> O)	Y / N	Y / N	Y / N	Y / N	NA				
Moisture Separator Information	System	Emptied	Amt Xfered	Canister Filter Change (last changed 8/2011)	Observations/Notes:						
		Shallow	Y / N	0.5	Y / N	- <del>at open circuit</del> - deep side off					
		Deep	Y / N		Y / N	- shallow side restarted at end of day					

in.H<sub>2</sub>O: 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: 2.6.12 Operators: Elliott + Bosch Monitoring Event: Biweekly / Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Wellhead Readings							Analytical Sample Collected		Comments
	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Time	Summa Canister #	
	<b>Subslab Wells</b>									
AOC65-VEW1	10	2.5 - 10.5	-							
AOC65-VEW2	10	2.5 - 10	-							
AOC65-VEW3	9.8	2.5 - 9.8	-							OFFLINE
AOC65-VEW4	6.7	2.5 - 6.6	-							OFFLINE
AOC65-VEW5	9.1	2.5 - 9	-							OFFLINE
AOC65-VEW6	5	2.5 - 5	-							OFFLINE
AOC65-VEW7	5.25	2.5 - 5	-							OFFLINE
AOC65-VEW8	9.7	2.5 - 9.7	-							
AOC65-VEW9	9.75	2.5 - 9.75	-							
AOC65-VEW10	5.4	2.5 - 5.1	-							
AOC65-VEW11	9.33	2.5 - 9.3	-							OFFLINE
AOC65-VEW12	9.7	2.5 - 9.4	-							
B90-INTAKE-SS			-							

Monitoring Point	Manifold Readings							Analytical Sample Collected		Wellhead	Comments
	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Time	Summa Canister #	Vac (in. H <sub>2</sub> O)	
	<b>Exterior Wells</b>										
AOC65-VEW15	13	5-12	-				7.14			-	Purged 11.2 DTW
AOC65-VEW16	41	15-40	-				29.96			-	purged 39.95
AOC65-VEW18	56	15.5-55.5	-				50.69			-	purged 53.72
AOC65-VEW28A	120	80-120	-				114.56			-	no purge
AOC65-VEW28B	179	139.3-179.3	-				150.13			-	" "
AOC65-VEW29	40	5-39.5	-				31.74			-	Purged 38.93 DTW
AOC65-VEW30	25	5-24.5	-				24.35			-	no purge
AOC65-VEW31	40	5-39.5	-				30.15			-	38.68' Purged
AOC65-VEW32	25	5-24.5	-				8.84			-	purged 22.36
AOC65-VEW33	25	5-24.5	-				24.4			-	no purge
B90-INTAKE-EX			-								
B90-EXHAUST			+								
AOC65-POSTGAC			+								

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube	
		Subslab	Y / N		(adjust to 65" H <sub>2</sub> O) Y / N		Y / N	
Exterior	Y / N		(adjust to 50" H <sub>2</sub> O) Y / N		Y / N	Y / N		

Moisture Separator Information	System	Emptied	Amount Transferred (gals)	Canister Filter Change (last changed 8/2011)	Observations/Notes:				
					Subslab	0 / N	0	Y / N	- off upon arrival, storm this weekend probably shut it down - system restarted at end of day
					Exterior	0 / N	12	Y / N	

in. H<sub>2</sub>O: 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: 2-7-12 Operators: Elliot + Bouch Monitoring Event: Biweekly / Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Manifold Readings							Wellhead		Comments
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. btoc	Analytical Sample Collected Time	Summa Canister #	

Shallow Wells											
AOC65-VEW19	26	5-25	36.7	687	56.8	4.7	12.94			32.9	
AOC65-VEW20	27	10-25	36.4	654	56.2	2.2	24.62			0.1	
AOC65-VEW21	27	12-27	37.1	633	56.4	2.0	25.47			31.9	
AOC65-VEW23	21	6-21	36.7	856	57.1	1.6	19.77			34.5	
AOC65-VEW25	21	6-21	36.5	646	57.5	1.9	15.91			36.3	
AOC65-VEW27	21	6-21	36.9	631	57.3	6.4	14.85			35.3	
AOC65-INTAKE-SW			37.3	1381	57.1	2.0	X				

Deep Wells											
AOC65-VEW13	41	15-40	-				38.81			0.1	
AOC65-VEW14	61	40-60	-				57.81			0.1	
AOC65-VEW17	52.5	22-52	-				51.76			0	
AOC65-VEW22	51	25-50	-				dry			0	
AOC65-VEW24	50	25-50	-				dry			0.1	
AOC65-VEW26	50	25-50	-				49.25			0.1	
AOC65-INTAKE-DW			-				X				
AOC65-EXHAUST			0.2	1047	104.3	3.3	X				

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter
		Blower On	Initial Intake Pressure	Adjusted Pressure	Final Intake Pressure	Check	Lube	
		Shallow	<input checked="" type="checkbox"/> / N	39	(adjust to 75° H <sub>2</sub> O) <input checked="" type="checkbox"/>	39	<input checked="" type="checkbox"/> / N	
Deep	<input checked="" type="checkbox"/> / N		(adjust to 75° H <sub>2</sub> O) Y / N		Y / N	<input checked="" type="checkbox"/> / N	0 NA	

Moisture Separator Information	System	Amt Xfered		Canister Filter Change (last changed 8/2011)	Observations/Notes:
		Emptied			
		Shallow	Y / N		
Deep	Y / N		Y / N		

in. H<sub>2</sub>O: 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: 2-7-12 Operators: Elliott & Bouch Monitoring Event: Biweekly / Monthly / Quarterly / Other

Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Comments
								Time	Summa Canister #	
<b>Subslab Wells</b>										
AOC65-VEW1	10	2.5 - 10.5	-							
AOC65-VEW2	10	2.5 - 10	-							
AOC65-VEW3	9.8	2.5 - 9.8	-							OFFLINE
AOC65-VEW4	6.7	2.5 - 6.6	-							OFFLINE
AOC65-VEW5	9.1	2.5 - 9	-							OFFLINE
AOC65-VEW6	5	2.5 - 5	-							OFFLINE
AOC65-VEW7	5.25	2.5 - 5	-							OFFLINE
AOC65-VEW8	9.7	2.5 - 9.7	-							
AOC65-VEW9	9.75	2.5 - 9.75	-							
AOC65-VEW10	5.4	2.5 - 5.1	-							
AOC65-VEW11	9.33	2.5 - 9.3	-							OFFLINE
AOC65-VEW12	9.7	2.5 - 9.4	-							
B90-INTAKE-SS			- 32.2	6428	65.1	2.0				

Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Wellhead Vac (in. H <sub>2</sub> O)	Comments
								Time	Summa Canister #		
<b>Exterior Wells</b>											
AOC65-VEW15	13	5-12	- 15.4	272	54.1	3.7	9.54			- 0.7	
AOC65-VEW16	41	15-40	- 15.8	290	53.2	3.2	37.51			- 0.1	
AOC65-VEW18	56	15.5-55.5	- 15.5	279	53.4	5.7	52.53			- 0.1	
AOC65-VEW28A	120	80-120	- 15.3	279	54.4	16.7	114.48			- 0.7	
AOC65-VEW28B	179	139.3-179.3	- 15.5	284	57.0	8.7	150.17			- 0.5	
AOC65-VEW29	40	5-39.5	- 14.1	1392	49.4	2.4	38.34			- 0.9	
AOC65-VEW30	25	5-24.5	- 14.7	1390	49.2	8.2	24.35			- 14.9	
AOC65-VEW31	40	5-39.5	- 13.6	1420	62.4	3.8	29.97			- 5.9	
AOC65-VEW32	25	5-24.5	- 14.9	434	49.2	6.7	14.85			- 14.3	
AOC65-VEW33	25	5-24.5	- 14.7	736	48.4	4.0	24.35			- 14.2	
B90-INTAKE-EX			- 17.7	2341	62.7	3.4					
B90-EXHAUST			+ 33.6	>15000	136.2	3.4					
AOC65-POSTGAC			+ 13.0	8904	90.1	1.9					

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube	
		Subslab	<input checked="" type="checkbox"/> / N	63-8 = 55	(adjust to 65" H <sub>2</sub> O) <input checked="" type="checkbox"/> / N (1.2)	55	<input checked="" type="checkbox"/> / N	
Exterior	<input checked="" type="checkbox"/> / N	30.3	(adjust to 50" H <sub>2</sub> O) <input checked="" type="checkbox"/> / N	30.3	<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> / N	5247.2	

Moisture Separator Information	System	Emptied	Amount Transferred (gals)	Canister Filter Change (last changed 8/2011)	Observations/Notes:			
						Subslab	Y / N	Y / N
						Exterior	Y / N	Y / N

In H<sub>2</sub>O: 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: 2-23-12 / 1000 Operators: Ellerth + Beach Monitoring Event: Biweekly / Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Comments
								Time	Summa Canister #	
<b>Wellhead Readings</b>										
<b>Subslab Wells</b>										
AOC65-VEW1	10	2.5 - 10.5	-							
AOC65-VEW2	10	2.5 - 10	-							OFFLINE
AOC65-VEW3	9.8	2.5 - 9.8	-							OFFLINE
AOC65-VEW4	6.7	2.5 - 6.6	-							OFFLINE
AOC65-VEW5	9.1	2.5 - 9	-							OFFLINE
AOC65-VEW6	5	2.5 - 5	-							OFFLINE
AOC65-VEW7	5.25	2.5 - 5	-							
AOC65-VEW8	9.7	2.5 - 9.7	-							
AOC65-VEW9	9.75	2.5 - 9.75	-							
AOC65-VEW10	5.4	2.5 - 5.1	-							OFFLINE
AOC65-VEW11	9.33	2.5 - 9.3	-							
AOC65-VEW12	9.7	2.5 - 9.4	-							
B90-INTAKE-SS			-							

Manifold Readings										Wellhead	Comments
Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Vac (in. H <sub>2</sub> O)	
								Time	Summa Canister #		
AOC65-VEW15	13	5-12	-				7.26			-	
AOC65-VEW16	41	15-40	-				30.02			-	
AOC65-VEW18	56	15.5-55.5	-				47.70			-	
AOC65-VEW28A	120	80-120	-				114.39			-	
AOC65-VEW28B	179	139.3-179.3	-				150.6			-	
AOC65-VEW29	40	5-39.5	-				34.49			-	
AOC65-VEW30	25	5-24.5	-				24.35			-	
AOC65-VEW31	40	5-39.5	-				39.45			-	
AOC65-VEW32	25	5-24.5	-				8.64			-	
AOC65-VEW33	25	5-24.5	-				24.38			-	
B90-INTAKE-EX			-								
B90-EXHAUST			+								
AOC65-POSTGAC			+								

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube	
		Subslab	<input checked="" type="checkbox"/> / N	84.6 = 78	(adjust to 65" H <sub>2</sub> O) <input checked="" type="checkbox"/> N	70.6 = 64	<input checked="" type="checkbox"/> / N	
Exterior	Y / <input checked="" type="checkbox"/> N		(adjust to 50" H <sub>2</sub> O) Y / N	28.4	<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> / N	5443.7	

Moisture Separator Information	System	Emptied	Amount Transferred (aals)	Canister Filter Change	Observations/Notes:
				(last changed 8/2011)	
			Subslab	<input checked="" type="checkbox"/> / N	
Exterior	<input checked="" type="checkbox"/> / N	10	Y / <input checked="" type="checkbox"/> N		

in.H<sub>2</sub>O: 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 : 2-23-12 / 1000 Operators: Elliott + Bouch Monitoring Event: Biweekly / Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Manifold Readings							Wellhead		Comments
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. btoc	Analytical Sample Collected		
								Time	Summa Canister #	
<b>Shallow Wells</b>										
AOC65-VEW19	26	5-25	-				8.51			
AOC65-VEW20	27	10-25	-				22.72			
AOC65-VEW21	27	12-27	-				17.33			
AOC65-VEW23	21	6-21	-				14.67			
AOC65-VEW25	21	6-21	-				15.45			
AOC65-VEW27	21	6-21	-				8.32			
AOC65-INTAKE-SW			-				X			
<b>Deep Wells</b>										
AOC65-VEW13	41	15-40	-				38.35			
AOC65-VEW14	61	40-60	-				59.10			
AOC65-VEW17	52.5	22-52	-				51.66			
AOC65-VEW22	51	25-50	-				50.38			
AOC65-VEW24	50	25-50	-				dry			
AOC65-VEW26	50	25-50	-				47.83			
AOC65-INTAKE-DW			-				X			
AOC65-EXHAUST			+				X			
<b>Blower Information</b>	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter		
		Blower On	Initial Intake Pressure	Adjusted Pressure	Final Intake Pressure	Check	Lube			
		Shallow	Y / N	40	(adjust to 75" H <sub>2</sub> O) Y (N)	40	Y / N		Y / N	643.7
Deep	Y / (N)		(adjust to 75" H <sub>2</sub> O) Y / N		Y / N	Y / N	0			
<b>Moisture Separator Information</b>	System	Emptied	Amt Xfered	Canister Filter (last changed 8/2011)	Observations/Notes:					
		Shallow	Y / N	2 gal						Y (N) dry
		Deep	Y (N)	off						Y (N)

in.H<sub>2</sub>O: 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: 3.9.12/ 1520 Operators: J Bouch & Rice Monitoring Event: Biweekly / Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Comments
								Time	Summa Canister #	
								Subslab Wells		
AOC65-VEW1	10	2.5 - 10.5	-							
AOC65-VEW2	10	2.5 - 10	-							
AOC65-VEW3	9.8	2.5 - 9.8	-							OFFLINE
AOC65-VEW4	6.7	2.5 - 6.6	-							OFFLINE
AOC65-VEW5	9.1	2.5 - 9	-							OFFLINE
AOC65-VEW6	5	2.5 - 5	-							OFFLINE
AOC65-VEW7	5.25	2.5 - 5	-							OFFLINE
AOC65-VEW8	9.7	2.5 - 9.7	-							
AOC65-VEW9	9.75	2.5 - 9.75	-							
AOC65-VEW10	5.4	2.5 - 5.1	-							
AOC65-VEW11	9.33	2.5 - 9.3	-							OFFLINE
AOC65-VEW12	9.7	2.5 - 9.4	-							
B90-INTAKE-SS			-34.2	5677	54.1	0.9				

Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Wellhead Vac (in. H <sub>2</sub> O)	Comments
								Time	Summa Canister #		
								Manifold Readings			
AOC65-VEW15	13	5-12	-14.6	285	44.9	2.1	7.1			-0.1	
AOC65-VEW16	41	15-40	-14.3	309	44.9	2.4	29.99			-10.5	
AOC65-VEW18	56	15.5-55.5	-14.3	264	45.1	1.7	51.87			-0.1	
AOC65-VEW28A	120	80-120	-14.7	273	45.8	6.1	114.63			-1.8	
AOC65-VEW28B	179	139.3-179.3	-15.4	279	46.9	1.2	150.62			-3.5	
AOC65-VEW29	40	5-39.5	-14.4	174	43.6	1.1	32.95			-1.9	
AOC65-VEW30	25	5-24.5	-13.8	115	44.0	10.2	24.35			-15.8	
AOC65-VEW31	40	5-39.5	-13.4	3675	61.6	2.2	29.96			-5.9	
AOC65-VEW32	25	5-24.5	-14.1	101	43.1	3.7	158.27			-15.4	
AOC65-VEW33	25	5-24.5	-13.6	173	43.8	2.0	24.29			-14.1	
B90-INTAKE-EX			-17.2	1378	55.5	2.1					
B90-EXHAUST			+32.2	>15000	134.8	1.8					
AOC65-POSTGAC			+20.6	1703	61.6	1.1					

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube	
		Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	66	(adjust to 65" H <sub>2</sub> O) <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	66	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	
Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	30.2	(adjust to 50" H <sub>2</sub> O) <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	30.2	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	5808.2	

Moisture Separator Information	System	Emptied	Amount Transferred (gals)	Canister Filter Change (last changed 8/2011)	Observations/Notes:					
						Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	0	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	
						Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	9	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	

in. H<sub>2</sub>O: 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: 3.9.12/1500 Operators: J. Bouch, E. Rice Monitoring Event: Biweekly / Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Manifold Readings								Wellhead		Comments
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. btoc	Analytical Sample Collected		Vac in. H <sub>2</sub> O	
								Time	Summa Canister #		
<b>Shallow Wells</b>											
AOC65-VEW19	26	5-25	44.1	504	49.8	5.6	8.85			30.2	
AOC65-VEW20	27	10-25	42.6	602	45.8	2.1	21.25			0.1	
AOC65-VEW21	27	12-27	42.9	704	45.6	2.0	11.74			40.7	
AOC65-VEW23	21	6-21	42.3	384	48.7	1.6	14.65			42.5	
AOC65-VEW25	21	6-21	43.6	581	47.1	7.3	16.88			42.8	
AOC65-VEW27	21	6-21	26.4	516	48.3	5.3	8.74			43.3	
AOC65-INTAKE-SW			43.8	901	51.7	4.1	X				
<b>Deep Wells</b>											
AOC65-VEW13	41	15-40	-				38.25			0.1	
AOC65-VEW14	61	40-60	-				59.85			0.0	Deep Side Off
AOC65-VEW17	52.5	22-52	-				51.88			0.0	
AOC65-VEW22	51	25-50	-				DRY			0.1	
AOC65-VEW24	50	25-50	-				DRY			2.2	
AOC65-VEW26	50	25-50	-				48.7			0.1	
AOC65-INTAKE-DW			-				X				
AOC65-EXHAUST			+0.1	986	110.2	4.1	X				
Blower Information	System	Pre Adjustment					Vacuum Relief Valve			Hours Meter	
		Blower On	Initial Intake Pressure	Adjusted Pressure		Final Intake Pressure	Check	Lube			
		Shallow	<input checked="" type="checkbox"/> / N	42	(adjust to 75" H <sub>2</sub> O) <input checked="" type="checkbox"/> / N		42	<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> / N		1007.3
Deep	Y / <input checked="" type="checkbox"/> N		(adjust to 75" H <sub>2</sub> O) Y / N			Y / N	Y / N				
Moisture Separator Information	System	Emptied	Amt Xfered	Canister Filter Change (last changed 8/2011)		Observations/Notes:					
		Shallow	<input checked="" type="checkbox"/> / N	1.5 gal	Y / <input checked="" type="checkbox"/> N						
		Deep	Y / N		Y / N						

in H<sub>2</sub>O: 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: 3.26.12 / 0900 Operators: Elliott Monitoring Event: Biweekly / Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Wellhead Readings							Analytical Sample Collected		Comments
	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Time	Summa Canister #	
	<b>Subslab Wells</b>									
AOC65-VEW1	10	2.5 - 10.5	-							
AOC65-VEW2	10	2.5 - 10	-							
AOC65-VEW3	9.8	2.5 - 9.8	-							OFFLINE
AOC65-VEW4	6.7	2.5 - 6.6	-							OFFLINE
AOC65-VEW5	9.1	2.5 - 9	-							OFFLINE
AOC65-VEW6	5	2.5 - 5	-							OFFLINE
AOC65-VEW7	5.25	2.5 - 5	-							OFFLINE
AOC65-VEW8	9.7	2.5 - 9.7	-							
AOC65-VEW9	9.75	2.5 - 9.75	-							
AOC65-VEW10	5.4	2.5 - 5.1	-							
AOC65-VEW11	9.33	2.5 - 9.3	-							OFFLINE
AOC65-VEW12	9.7	2.5 - 9.4	-							
B90-INTAKE-SS			-							

Monitoring Point	Manifold Readings							Analytical Sample Collected		Wellhead	Comments
	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Time	Summa Canister #	Vac (in. H <sub>2</sub> O)	
	<b>Exterior Wells</b>										
AOC65-VEW15	13	5-12	-				7.33				
AOC65-VEW16	41	15-40	-				30.03				
AOC65-VEW18	56	15.5-55.5	-				32.28				
AOC65-VEW28A	120	80-120	-				114.24				
AOC65-VEW28B	179	139.3-179.3	-				150.3				
AOC65-VEW29	40	5-39.5	-				31.17				
AOC65-VEW30	25	5-24.5	-				24.37				
AOC65-VEW31	40	5-39.5	-				30.25				
AOC65-VEW32	25	5-24.5	-				9.38				
AOC65-VEW33	25	5-24.5	-				24.40				
B90-INTAKE-EX			-								
B90-EXHAUST			+								
AOC65-POSTGAC			+								

Blower Information	Pre Adjustment				Vacuum Relief Valve			Hours Meter
	System	Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube	
	Subslab	Y / <u>N</u>		(adjust to 65" H <sub>2</sub> O) Y / N	65	<u>Y</u> / N	<u>Y</u> / N	
Exterior	Y / <u>N</u>		(adjust to 50" H <sub>2</sub> O) Y / N	37	<u>Y</u> / N	<u>Y</u> / N	6113.2	

Moisture Separator Information	Pre Adjustment			Canister Filter Change (last changed 8/2011)	Observations/Notes: - system off upon arrival, power line work last week - new vac. gauges installed on both sides of system - system turned back on @ 1030
	System	Emptied	Amount Transferred (gals)		
	Subslab	<u>Y</u> / N	0		
Exterior	<u>Y</u> / N	7.0	<u>Y</u> / <u>N</u>		

in. H<sub>2</sub>O: 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: 3-26-12 / Operators: Elliot Monitoring Event: Biweekly Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Manifold Readings							Wellhead		Comments
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. btoc	Analytical Sample Collected Time	Summa Canister #	
<b>Shallow Wells</b>										
AOC65-VEW19	26	5-25	-				10.37			
AOC65-VEW20	27	10-25	-				18.66			
AOC65-VEW21	27	12-27	-				13.62			
AOC65-VEW23	21	6-21	-				10.80			
AOC65-VEW25	21	6-21	-				18.30			
AOC65-VEW27	21	6-21	-				10.17			
AOC65-INTAKE-SW			-				X			

<b>Deep Wells</b>										
AOC65-VEW13	41	15-40	-				38.06			
AOC65-VEW14	61	40-60	-				60.48			
AOC65-VEW17	52.5	22-52	-				51.65			
AOC65-VEW22	51	25-50	-				50.07			
AOC65-VEW24	50	25-50	-				DRY			
AOC65-VEW26	50	25-50	-				46.19			
AOC65-INTAKE-DW			-				X			
AOC65-EXHAUST			+				X			

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)		(adjust to 75" H <sub>2</sub> O) Y / N	43	(Y) / N	(Y) / N	1312.6
Deep	Y / (N)		(adjust to 75" H <sub>2</sub> O) Y / N		(Y) / N	(Y) / N	0	

Moisture Separator Information	System	Emptied	Amt Xfered	Canister Filter Change (last changed 8/2011)	Observations/Notes:
		Shallow	(Y) / N	2.0	
	Deep	Y / (N)	off	Y / (N)	-deep side off

in. H<sub>2</sub>O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

-system turned back on @ 1030

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

Date/Time: 4.3.12 / 1050 Operators: Elliott + Bach Monitoring Event: Biweekly / Monthly / Quarterly / Other semi-annual

Monitoring Point	Manifold Readings									Wellhead	Comments
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. btoc	Analytical Sample Collected		Vac in. H <sub>2</sub> O	
							Time	Summa Canister #			
Shallow Wells											
AOC65-VEW19	26	5-25	- 40.9	622	76.4	12.0	18.75	1102	3127	- 32.8	
AOC65-VEW20	27	10-25	- 41.3	601	78.0	0	23.72	1108	37412	- 4.8	
AOC65-VEW21	27	12-27	- 40.3	622	79.3	0	23.03	1112	<del>35547</del>	- 37.8	sample time 1355
AOC65-VEW23	21	6-21	- 40.5	561	79.3	0	19.98	1115	12036	- 39.5	
AOC65-VEW25	21	6-21	- 40.3	590	80.2	2.3	16.70	1121	<del>3690</del>	- 39.2	31759
AOC65-VEW27	21	6-21	- 40.5	622	78.9	3.8	17.50	1124	37674	- 39.2	
AOC65-INTAKE-SW			- 40.2	829	80.7	7.3	X	1057	3465		
Deep Wells											
AOC65-VEW13	41	15-40	-				39.29			- 25.2	
AOC65-VEW14	61	40-60	-				60.48			- 0	
AOC65-VEW17	52.5	22-52	-				51.54			- 28.3	
AOC65-VEW22	51	25-50	-				50.21			- 0.1	OFF
AOC65-VEW24	50	25-50	-				dry			- 0.1	
AOC65-VEW26	50	25-50	-				47.28			- 0	
AOC65-INTAKE-DW			-				X				
AOC65-EXHAUST			+ 0	772	1448	1.1	X	1031			
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	40	(adjust to 75" H <sub>2</sub> O) Y/N			Y/N		1499.7	
Deep	Y/N		(adjust to 75" H <sub>2</sub> O) Y/N			Y/N	Y/N	0			
Moisture Separator Information	System	Emptied	Amt Xfered	Canister Filter (last changed 8/2011)		Observations/Notes:					
		Shallow	Y/N		Y/N						
		Deep	Y/N		Y/N						

in. H<sub>2</sub>O: 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: 4.3.12 / 0900 Operators: Elliot & Bosch Monitoring Event: Biweekly / Monthly / Quarterly / Other (Semi-annual)

Wellhead Readings										
Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Comments
								Time	Summa Canister #	
Subslab Wells										
AOC65-VEW1	10	2.5 - 10.5	-							
AOC65-VEW2	10	2.5 - 10	-							
AOC65-VEW3	9.8	2.5 - 9.8	-							OFFLINE
AOC65-VEW4	6.7	2.5 - 6.8	-							OFFLINE
AOC65-VEW5	9.1	2.5 - 9	-							OFFLINE
AOC65-VEW6	5	2.5 - 5	-							OFFLINE
AOC65-VEW7	5.25	2.5 - 5	-							OFFLINE
AOC65-VEW8	9.7	2.5 - 9.7	-							
AOC65-VEW9	9.75	2.5 - 9.75	-							
AOC65-VEW10	5.4	2.5 - 5.1	-							
AOC65-VEW11	9.33	2.5 - 9.3	-							OFFLINE
AOC65-VEW12	9.7	2.5 - 9.4	-							
B90-INTAKE-SS			- 44.0	12201	78.7	0		1035	1706	

Manifold Readings											
Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Vac (in. H <sub>2</sub> O)	Comments
								Time	Summa Canister #		
AOC65-VEW15	13	5-12	- 12.8	230	76.9	4.9	11.12	0941	37661	0	
AOC65-VEW16	41	15-40	- 12.8	246	77.1	0	36.85	0935	1354	- 7.3	
AOC65-VEW18	56	15.5-55.5	- 12.7	254	76.2	0	49.65	0925	33643	- 6.6	sample fine 1400
AOC65-VEW28A	120	80-120	- 13.6	229	75	2.5	114.18	0922		- 1.1	
AOC65-VEW28B	179	139.3-179.3	- 13.5	250	76.2	0	149.69	0929	1042	- 4.0	
AOC65-VEW29	40	5-39.5	- 11.5	773	77.5	0	37.88	1017	34654	- 9.8	
AOC65-VEW30	25	5-24.5	- 11.8	221	76.8	11.8	24.32	1010	34111	- 13.2	
AOC65-VEW31	40	5-39.5	- 11.1	3136	75.9	4.3	30.02	0951	2043	- 4.8	
AOC65-VEW32	25	5-24.5	- 12.2	224	76.0	11.2	20.36	0957	36438	- 11.6	
AOC65-VEW33	25	5-24.5	- 11.9	283	76.2	4.8	24.32	1004	12027	- 19.9	
B90-INTAKE-EX			- 15.5	4917	77.1	2.2		1024	35630		
B90-EXHAUST			+ 28.1	715,000	164.8	0		1038			
AOC65-POSTGAC			+ 16	6811	108.6	0		1027			

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube	
		Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	50	(adjust to 65" H <sub>2</sub> O) Y <input type="checkbox"/> N		<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	
Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	33	(adjust to 50" H <sub>2</sub> O) Y <input type="checkbox"/> N		<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	6700.1	

Moisture Separator Information	System	Emptied	Amount Transferred (gals)	Canister Filter Change (last changed 8/2011)	Observations/Notes:					
						Subslab	<input type="checkbox"/> Y / <input checked="" type="checkbox"/> N		<input type="checkbox"/> Y / <input checked="" type="checkbox"/> N	
						Exterior	<input type="checkbox"/> Y / <input checked="" type="checkbox"/> N		<input type="checkbox"/> Y / <input checked="" type="checkbox"/> N	

in. H<sub>2</sub>O: 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: 4/2/12 Operators: Elliott + Borch Monitoring Event: Biweekly / Monthly / Quarterly / Other Semi-annual

Monitoring Point	Manifold Readings							Wellhead		Comments	
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. btoc	Analytical Sample Collected			Vac in. H <sub>2</sub> O
								Time	Summa Canister #		
<b>Shallow Wells</b>											
AOC65-VEW19	26	5-25	-				9.97				purged, WL = 25.09
AOC65-VEW20	27	10-25	-				18.12				purged, WL = 23.83
AOC65-VEW21	27	12-27	-				13.02				purged = WL = 24.80
AOC65-VEW23	21	6-21	-				10.29				purged, WL = 20.59
AOC65-VEW25	21	6-21	-				18.92				purged, WL = 20.80
AOC65-VEW27	21	6-21	-				9.25				purged = WL = 19.8
AOC65-INTAKE-SW							X				

<b>Deep Wells</b>											
AOC65-VEW13	41	15-40	-				37.95				purged, WL = 39.9
AOC65-VEW14	61	40-60	-				60.48				no purge
AOC65-VEW17	52.5	22-52	-				51.83				no purge
AOC65-VEW22	51	25-50	-				dry				
AOC65-VEW24	50	25-50	-				dry				
AOC65-VEW26	50	25-50	-				45.18				purged, WL = 49.08
AOC65-INTAKE-DW							X				
AOC65-EXHAUST			+				X				

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		(adjust to 75" H <sub>2</sub> O) Y / N	45	Y (N)	Y (N)	1479.4
	Deep	Y (N)		(adjust to 75" H <sub>2</sub> O) Y / N		Y (N)	Y (N)	0

Moisture Separator Information	System	Emptied	Amt Xfered	Canister Filter Change (last changed 8/2011)	Observations/Notes:					
						Shallow	Y / N	off	Y (N)	System shut down for purging wells, turned back on @ 1500
						Deep	Y / N	off	Y / (N)	

in.H<sub>2</sub>O: 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: 4/2/12 Operators: Elliott + Bouch Monitoring Event: Biweekly / Monthly / Quarterly / Other SEMI-ANNUAL

Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Comments
								Time	Summa Canister #	
								Subslab Wells		
AOC65-VEW1	10	2.5 - 10.5	-							
AOC65-VEW2	10	2.5 - 10	-							
AOC65-VEW3	9.8	2.5 - 9.8	-							OFFLINE
AOC65-VEW4	6.7	2.5 - 6.6	-							OFFLINE
AOC65-VEW5	9.1	2.5 - 9	-							OFFLINE
AOC65-VEW6	5	2.5 - 5	-							OFFLINE
AOC65-VEW7	5.25	2.5 - 5	-							OFFLINE
AOC65-VEW8	9.7	2.5 - 9.7	-							
AOC65-VEW9	9.75	2.5 - 9.75	-							
AOC65-VEW10	5.4	2.5 - 5.1	-							
AOC65-VEW11	9.33	2.5 - 9.3	-							OFFLINE
AOC65-VEW12	9.7	2.5 - 9.4	-							
B90-INTAKE-SS			-							

Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Wellhead Vac (in. H <sub>2</sub> O)	Comments
								Time	Summa Canister #		
								Exterior Wells			
AOC65-VEW15	13	5-12	-				7.29			-	purged, WL = 11.4
AOC65-VEW16	41	15-40	-				30.04			-	purged, WL = 39.94
AOC65-VEW18	56	15.5-55.5	-				46.43			-	purged, WL = 53.02
AOC65-VEW28A	120	80-120	-				114.12			-	no purge
AOC65-VEW28B	179	139.3-179.3	-				149.82			-	no purge
AOC65-VEW29	40	5-39.5	-				30.68			-	purged, WL = 39.08
AOC65-VEW30	25	5-24.5	-				24.32			-	no purge
AOC65-VEW31	40	5-39.5	-				30.25			-	purged, WL = 36.78
AOC65-VEW32	25	5-24.5	-				8.84			-	purged, WL = 22.64
AOC65-VEW33	25	5-24.5	-				24.32			-	no purge
B90-INTAKE-EX			-								
B90-EXHAUST			+								
AOC65-POSTGAC			+								

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube	
		Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N		(adjust to 65" H <sub>2</sub> O) Y / N	68	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	
Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N		(adjust to 50" H <sub>2</sub> O) Y / N	35	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	6280.0	

Moisture Separator Information	System	Emptied	Amount Transferred (gals)	Canister Filter Change (last changed 8/2011)	Observations/Notes:				
					Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	0	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	System shut down to purge wells, turned back on @ 1500
					Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	0.2	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	

in. H<sub>2</sub>O: 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: 4.16.12 / 1300 Operators: S. Elliott Monitoring Event: Biweekly / Monthly / Quarterly / Other

Monitoring Point	Manifold Readings								Wellhead	Comments
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. btoc	Analytical Sample Collected	Vac in. H <sub>2</sub> O	
							Time	Summa Canister #		
<b>Shallow Wells</b>										
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			-				X			
<b>Deep Wells</b>										
AOC65-VEW13	41	15-40	-							
AOC65-VEW14	61	40-60	-							
AOC65-VEW17	52.5	22-52	-							
AOC65-VEW22	51	25-50	-							
AOC65-VEW24	50	25-50	-							
AOC65-VEW26	50	25-50	-							
AOC65-INTAKE-DW			-				X			
AOC65-EXHAUST			+				X			
<b>Blower Information</b>	<b>System</b>	<b>Pre Adjustment</b>				<b>Vacuum Relief Valve</b>		<b>Hours Meter</b>		
		<b>Blower On</b>	<b>Initial Intake Pressure</b>	<b>Adjusted Pressure</b>	<b>Final Intake Pressure</b>	<b>Check</b>	<b>Lube</b>			
	<i>Shallow</i>	Y / N	41	(adjust to 75" H <sub>2</sub> O) Y / N	41	Y / N	Y / N			
	<i>Deep</i>	Y / N	/	(adjust to 75" H <sub>2</sub> O) Y / N	/	Y / N	Y / N			
<b>Moisture Separator Information</b>	<b>System</b>	<b>Emptied</b>	<b>Amt Xfered</b>	<b>Canister Filter (last changed 8/2011)</b>	<b>Observations/Notes:</b>					
	<i>Shallow</i>	Y / N	8	Y / N						
	<i>Deep</i>	Y / N		Y / N						

in. H<sub>2</sub>O: 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: 5.8.12 / 0900 Operators: Elliott & Bach Monitoring Event: Biweekly / Monthly / Quarterly / Other

Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Comments
								Time	Summa Canister #	
<b>Subslab Wells</b>										
AOC65-VEW1	10	2.5 - 10.5	-							
AOC65-VEW2	10	2.5 - 10	-							
AOC65-VEW3	9.8	2.5 - 9.8	-							OFFLINE
AOC65-VEW4	6.7	2.5 - 6.8	-							OFFLINE
AOC65-VEW5	9.1	2.5 - 9	-							OFFLINE
AOC65-VEW6	5	2.5 - 5	-							OFFLINE
AOC65-VEW7	5.25	2.5 - 5	-							OFFLINE
AOC65-VEW8	9.7	2.5 - 9.7	-							
AOC65-VEW9	9.75	2.5 - 9.75	-							
AOC65-VEW10	5.4	2.5 - 5.1	-							
AOC65-VEW11	9.33	2.5 - 9.3	-							OFFLINE
AOC65-VEW12	9.7	2.5 - 9.4	-							
B90-INTAKE-SS			- 44.1	5559	69.4	0		0950		

<b>Manifold Readings</b>											
Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Wellhead Vac (in. H <sub>2</sub> O)	Comments
								Time	Summa Canister #		
AOC65-VEW15	13	5-12	- 8.5	80	68.3	3.3	9.78	0932		- 0.3	
AOC65-VEW16	41	15-40	- 8.7	89	68.5	3.1	30.09	0930		- 0.1	
AOC65-VEW18	56	15.5-55.5	- 8.5	97	69.4	0.1	52.23	0927		- 0.1	
AOC65-VEW28A	120	80-120	- 7.9	1168	73.2	0.2	150.41	0925		- 8.5	
AOC65-VEW28B	179	139.3-179.3	- 8.2	104	68.7	2.5	146.28	0921		- 0.1	
AOC65-VEW29	40	5-39.5	- 7.8	664	72.3	1.0	29.99	0939		- 8.0	
AOC65-VEW30	25	5-24.5	- 7.9	79	69.7	16.0	24.38	0940		- 8.3	
AOC65-VEW31	40	5-39.5	- 7.9	2250	75.1	2.7	30.08	0935		- 3.8	
AOC65-VEW32	25	5-24.5	- 7.9	77	69.7	41.9	15.98	0936		- 8.1	
AOC65-VEW33	25	5-24.5	- 8.2	163	70.1	4.4	24.34	0937		- 8.5	
B90-INTAKE-EX			- 12.1	3905	73.5	1.7		0943			
B90-EXHAUST			+								
AOC65-POSTGAC			+ 10.6	6187	93.7	0		0947			

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube	
		Subslab	<input checked="" type="radio"/> Y / <input type="radio"/> N	60	(adjust to 65" H <sub>2</sub> O) <input type="radio"/> Y / <input checked="" type="radio"/> N	60	<input checked="" type="radio"/> Y / <input type="radio"/> N	
Exterior	<input checked="" type="radio"/> Y / <input type="radio"/> N	30	(adjust to 50" H <sub>2</sub> O) <input type="radio"/> Y / <input checked="" type="radio"/> N	30	<input checked="" type="radio"/> Y / <input type="radio"/> N	<input checked="" type="radio"/> Y / <input type="radio"/> N	6812.8	

Moisture Separator Information	System	Emptied	Amount Transferred (gals)	Canister Filter Change	Observations/Notes:	
				(last changed 8/2011)		
		Subslab	<input checked="" type="radio"/> Y / <input type="radio"/> N	0		<input type="radio"/> Y / <input checked="" type="radio"/> N
Exterior	<input checked="" type="radio"/> Y / <input type="radio"/> N	0	<input type="radio"/> Y / <input checked="" type="radio"/> N			

in.H<sub>2</sub>O: 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: 5.8.12/0900 Operators: Elliott & Bouch Monitoring Event: Biweekly / Monthly / Quarterly / Other

Monitoring Point	Total Depth ft BTOC	Screened Interval	Manifold Readings						Wellhead		Comments
			Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. btoc	Analytical Sample Collected Time	Summa Canister #	Vac in. H <sub>2</sub> O	

Shallow Wells											
AOC65-VEW19	26	5-25	40.2	632	70.3	2.8	8.2	1001		-37.6	
AOC65-VEW20	27	10-25	39.8	872	68.5	0	83.24	1003		-1.3	
AOC65-VEW21	27	12-27	40.2	934	68.3	1.2	11.6	1005		-36.5	
AOC65-VEW23	21	6-21	30.2	678	68.7	0	18.8	1006		-39.4	
AOC65-VEW25	21	6-21	40.4	875	69.2	3.0	39.73	1008		-39.1	
AOC65-VEW27	21	6-21	39.8	667	69.6	1.4	10.52	1010		-39.1	
AOC65-INTAKE-SW			40.6	1161	70.3	1.7		0958			

Deep Wells											
AOC65-VEW13	41	15-40	-				38.62			-0.1	
AOC65-VEW14	61	40-60	-				60.52			-0	
AOC65-VEW17	52.5	22-52	-				51.65			-0.1	Off
AOC65-VEW22	51	25-50	-				dry			-0.1	
AOC65-VEW24	50	25-50	-				dry			-0.1	
AOC65-VEW26	50	25-50	-				49.2			-0.3	
AOC65-INTAKE-DW			-								
AOC65-EXHAUST			+0	923	121.9	2.2					

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)	40	(adjust to 75" H <sub>2</sub> O) Y(N)	40	(Y/N)	
Deep	(Y/N)		(adjust to 75" H <sub>2</sub> O) Y(N)		(Y/N)	(Y/N)	0	

Moisture Separator Information	System	Amt Xfered		Canister Filter (last changed 8/2011)	Observations/Notes:
		Emptied			
		Shallow	(Y/N)		
Deep	(Y/N)		Y(N)		

in. H<sub>2</sub>O: inches of water      fpm: feet per minute      ppm: parts per million      VRV: vacuum relief valve      psr: pounds per square inch

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

Date/Time: 5.17.12 / 1020 Operators: Elliot Monitoring Event: Biweekly / Monthly / Quarterly / Other VEW purge

Monitoring Point	Manifold Readings							Wellhead		Comments
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. btoc	Analytical Sample Collected Time	Summa Canister #	

Shallow Wells											
AOC65-VEW19	26	5-25	-				9.98			-	purged, WL = 25.77
AOC65-VEW20	27	10-25	-				23.21			-	purged, WL = 25.33
AOC65-VEW21	27	12-27	-				12.5			-	purged, WL = 27.4
AOC65-VEW23	21	6-21	-				18.51			-	purged, WL = 20.86
AOC65-VEW25	21	6-21	-				18.42			-	purged, WL = 21.18
AOC65-VEW27	21	6-21	-				9.82			-	purged, WL = 20.77
AOC65-INTAKE-SW			-				X				

Deep Wells											
AOC65-VEW13	41	15-40	-				38.57			-	purged, WL = 40.11
AOC65-VEW14	61	40-60	-				60.52			-	no purge
AOC65-VEW17	52.5	22-52	-				51.73			-	no purge
AOC65-VEW22	51	25-50	-				50.50			-	no purge
AOC65-VEW24	50	25-50	-				dry			-	no purge
AOC65-VEW26	50	25-50	-				49.14			-	no purge
AOC65-INTAKE-DW			-				X				
AOC65-EXHAUST			+				X				

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		(adjust to 75° H <sub>2</sub> O) Y / N		Y / N	Y / N	
	Deep	Y / N		(adjust to 75° H <sub>2</sub> O) Y / N		Y / N	Y / N	

Moisture Separator Information	System	Emptied	Amt Xfered	Canister Filter (last changed 8/2011)	Observations/Notes
		Shallow	Y / N		
	Deep	Y / N		Y / N	

in. H<sub>2</sub>O: inches of water      fpm: feet per minute      ppm: parts per million      VRV: vacuum relief valve      psi: pounds per square inch

System shut down for VEW purging, will restart after when done today

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

Date/Time: 5.17.12 / 0745 Operators: Ellott Monitoring Event: Biweekly / Monthly / Quarterly  Other VEW Purge

Monitoring Point	Wellhead Readings							Analytical Sample Collected		Comments
	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Time	Summa Canister #	
<b>Subslab Wells</b>										
AOC65-VEW1	10	2.5 - 10.5	-							
AOC65-VEW2	10	2.5 - 10	-							
AOC65-VEW3	9.8	2.5 - 9.8	-							OFFLINE
AOC65-VEW4	6.7	2.5 - 6.6	-							OFFLINE
AOC65-VEW5	9.1	2.5 - 9	-							OFFLINE
AOC65-VEW6	5	2.5 - 5	-							OFFLINE
AOC65-VEW7	5.25	2.5 - 5	-							OFFLINE
AOC65-VEW8	9.7	2.5 - 9.7	-							
AOC65-VEW9	9.75	2.5 - 9.75	-							
AOC65-VEW10	5.4	2.5 - 5.1	-							
AOC65-VEW11	9.33	2.5 - 9.3	-							OFFLINE
AOC65-VEW12	9.7	2.5 - 9.4	-							
B90-INTAKE-SS			-							

Monitoring Point	Manifold Readings							Wellhead Vac (in. H <sub>2</sub> O)	Comments
	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC		
AOC65-VEW15	13	5-12	-				7.04	-	purged, WL=11.77
AOC65-VEW16	41	15-40	-				30.04	-	purged, WL=40.26
AOC65-VEW18	56	15.5-55.5	-				45.83	-	purged, WL=54.65
AOC65-VEW28A	120	80-120	-				114.48	-	
AOC65-VEW28B	179	139.3-179.3	-				146.40	-	
AOC65-VEW29	40	5-39.5	-				29.57	-	purged, WL=38.98
AOC65-VEW30	25	5-24.5	-				24.36	-	no purge
AOC65-VEW31	40	5-39.5	-				30.23	-	purged, WL=39.28
AOC65-VEW32	25	5-24.5	-				8.42	-	purged, WL=23.01
AOC65-VEW33	25	5-24.5	-				24.32	-	no purge
B90-INTAKE-EX			-						
B90-EXHAUST			+						
AOC65-POSTGAC			+						

Blower Information	System	Pre Adjustment			Vacuum Relief Valve		Hours Meter	
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check		Lube
		Subslab	Y / N		(adjust to 65" H <sub>2</sub> O) Y / N			Y / N
Exterior	Y / N		(adjust to 50" H <sub>2</sub> O) Y / N		Y / N	Y / N		

Moisture Separator Information	System	Emptied	Amount Transferred (gals)	Canister Filter Change (last changed 8/2011)	Observations/Notes:			
					Subslab	Y / N	Y / N	system shut down for VEW purging, will restart when done today
					Exterior	Y / N	Y / N	

in. H<sub>2</sub>O: 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: 6.6.12 / 1330 Operators: Elliott / E. Rice Monitoring Event: Biweekly / Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Comments
								Time	Summa Canister #	
<b>Wellhead Readings</b>										
<b>Subslab Wells</b>										
AOC65-VEW1	10	2.5 - 10.5	-							
AOC65-VEW2	10	2.5 - 10	-							
AOC65-VEW3	9.8	2.5 - 9.8	-							OFFLINE
AOC65-VEW4	6.7	2.5 - 6.6	-							OFFLINE
AOC65-VEW5	9.1	2.5 - 9	-							OFFLINE
AOC65-VEW6	5	2.5 - 5	-							OFFLINE
AOC65-VEW7	5.25	2.5 - 5	-							OFFLINE
AOC65-VEW8	9.7	2.5 - 9.7	-							
AOC65-VEW9	9.75	2.5 - 9.75	-							
AOC65-VEW10	5.4	2.5 - 5.1	-							
AOC65-VEW11	9.33	2.5 - 9.3	-							OFFLINE
AOC65-VEW12	9.7	2.5 - 9.4	-							
B90-INTAKE-SS			- 41.3	215,000	100.5	0				

<b>Manifold Readings</b>											
Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Wellhead Vac (in. H <sub>2</sub> O)	Comments
								Time	Summa Canister #		
AOC65-VEW15	13	5-12	- 8.4	96	99.1	0	7.39			- 0.1	
AOC65-VEW16	41	15-40	- 8.5	107	97.6	0	30.04			- 0	
AOC65-VEW18	56	15.5-55.5	- 8.5	105	95.8	0	51.47			- 0.2	
AOC65-VEW28A	120	80-120	- 8.2	1514	91.2	0	114.22			- 7.5	
AOC65-VEW28B	179	139.3-179.3	- 8.0	200	93.7	0	146.67			- 0.0	
AOC65-VEW29	40	5-39.5	- 7.4	1387	102.7	0	29.87			- 7.0	
AOC65-VEW30	25	5-24.5	- 7.4	82	105.6	0	24.34			- 7.2	
AOC65-VEW31	40	5-39.5	- 7.4	3814	91.5	0	30.11			- 3.0	
AOC65-VEW32	25	5-24.5	- 7.5	102	100.9	0	9.48			- 6.8	
AOC65-VEW33	25	5-24.5	- 7.6	458	104.1	0	24.29			- 6.8	
B90-INTAKE-EX			- 10.8	7213	100.9	4.4					Zero'd PID, seems to be
B90-EXHAUST			+ 29.1	715000	182.2	1.4					working better now
AOC65-POSTGAC			+ 35	8306	123.0	0					

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube	
		Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	-62	(adjust to 65" H <sub>2</sub> O) Y <input checked="" type="checkbox"/> N		<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	
Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	-30	(adjust to 50" H <sub>2</sub> O) Y <input checked="" type="checkbox"/> N		<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	7385.0	

Moisture Separator Information	System	Emptied	Amount Transferred (gals)	Canister Filter Change (last changed 8/2011)	Observations/Notes:				
						Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N
						Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N

in. H<sub>2</sub>O: 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: 6.6.12/1330 Operators: Elliott & E. Rice Monitoring Event: Biweekly / Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Manifold Readings							Wellhead		Comments
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. btoc	Analytical Sample Collected Time	Summa Canister #	

Shallow Wells											
AOC65-VEW19	26	5-25	-32.9	771	96.9	17.2	9.15			-32.6	
AOC65-VEW20	27	10-25	-32.7	786	96.7	5.0	24.15			-0.6	
AOC65-VEW21	27	12-27	-32.6	847	97.1	0	20.64			-31.9	
AOC65-VEW23	21	6-21	-32.7	907	96.0	6.7	20.39			-32.9	hd needs to flow
AOC65-VEW25	21	6-21	-32.8	797	96.6	7.7	17.76			-32.4	
AOC65-VEW27	21	6-21	-32.7	751	96.6	7.5	8.07			-32.6	
AOC65-INTAKE-SW			-32.9	1204	96.2	10.0					

Deep Wells											
AOC65-VEW13	41	15-40	-26.4	5185	92.1	0	39.21			-1.3	
AOC65-VEW14	61	40-60	-26.4	623	95.8	0	60.51			-2.4	
AOC65-VEW17	52.5	22-52	-25.8	2723	92.6	0	50.11			-14.5	
AOC65-VEW22	51	25-50	-25.7	1722	93.7	0	27.83			-24.6	
AOC65-VEW24	50	25-50	-25.5	585	96.0	0	dry			-0.3	
AOC65-VEW26	50	25-50	-25.6	2036	94.6	0	45.02			-22.7	
AOC65-INTAKE-DW			-30.4	9122	89.7	0					
AOC65-EXHAUST			+2.3	10646	150.2	0					

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter
		Blower On	Initial Intake Pressure	Adjusted Pressure	Final Intake Pressure	Check	Lube	
	Shallow	<input checked="" type="checkbox"/> / N	-35	(adjust to 75" H <sub>2</sub> O) Y/N		<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> / N	2922.0
Deep	<input checked="" type="checkbox"/> / N	-40	(adjust to 75" H <sub>2</sub> O) Y/N		<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> / N	2729	

Moisture Separator Information	System	Emptied	Amt Xfered	Canister Filter (last changed 8/2011)	Observations/Notes:
		Shallow	<input checked="" type="checkbox"/> / N	0	
	Deep	<input checked="" type="checkbox"/> / N	0	<input checked="" type="checkbox"/> / N	

in. H<sub>2</sub>O: 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: 6/21/12 1330 Operators: Elliott Monitoring Event: Biweekly / Monthly / Quarterly / Other

Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Comments
								Time	Summa Canister #	
<i>Subslab Wells</i>										
AOC65-VEW1	10	2.5 - 10.5	-							
AOC65-VEW2	10	2.5 - 10	-							
AOC65-VEW3	9.8	2.5 - 9.8	-							OFFLINE
AOC65-VEW4	6.7	2.5 - 6.6	-							OFFLINE
AOC65-VEW5	9.1	2.5 - 9	-							OFFLINE
AOC65-VEW6	5	2.5 - 5	-							OFFLINE
AOC65-VEW7	5.25	2.5 - 5	-							OFFLINE
AOC65-VEW8	9.7	2.5 - 9.7	-							
AOC65-VEW9	9.75	2.5 - 9.75	-							
AOC65-VEW10	5.4	2.5 - 5.1	-							
AOC65-VEW11	9.33	2.5 - 9.3	-							OFFLINE
AOC65-VEW12	9.7	2.5 - 9.4	-							
B90-INTAKE-SS			-							

<i>Manifold Readings</i>											
Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Wellhead Vac (in. H <sub>2</sub> O)	Comments
								Time	Summa Canister #		
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	-								
AOC65-VEW29	40	5-39.5	-								
AOC65-VEW30	25	5-24.5	-								
AOC65-VEW31	40	5-39.5	-								
AOC65-VEW32	25	5-24.5	-								
AOC65-VEW33	25	5-24.5	-								
B90-INTAKE-EX			-								
B90-EXHAUST			+								
AOC65-POSTGAC			+								

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube	
		Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	-60	(adjust to 65" H <sub>2</sub> O) Y <input checked="" type="checkbox"/> N	-60	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	
Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	-30	(adjust to 50" H <sub>2</sub> O) Y <input checked="" type="checkbox"/> N	-30	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	7745.0	

Moisture Separator Information	System	Emptied	Amount Transferred (aals)	Canister Filter Change	Observations/Notes:	
		Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/>		Y <input checked="" type="checkbox"/> N
		Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/>		Y <input checked="" type="checkbox"/> N

In. H<sub>2</sub>O: 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: 6/21/12 1330 Operators: Elliott Monitoring Event: Biweekly / Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Manifold Readings							Wellhead		Comments
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. btoc	Analytical Sample Collected Time	Summa Canister #	

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	25-50	-								
AOC65-VEW24	50	25-50	-								
AOC65-VEW26	50	25-50	-								
AOC65-INTAKE-DW			-								
AOC65-EXHAUST			+								

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter
		Blower On	Initial Intake Pressure	Adjusted Pressure	Final Intake Pressure	Check	Lube	
	Shallow	<input checked="" type="checkbox"/> / <input type="checkbox"/>	-34	(adjust to 75" H <sub>2</sub> O) <input checked="" type="checkbox"/>	-34	<input checked="" type="checkbox"/> / <input type="checkbox"/>	<input checked="" type="checkbox"/> / <input type="checkbox"/>	382.0 NA
Deep	<input checked="" type="checkbox"/> / <input type="checkbox"/>	-40	(adjust to 75" H <sub>2</sub> O) <input checked="" type="checkbox"/>	-40	<input checked="" type="checkbox"/> / <input type="checkbox"/>	<input checked="" type="checkbox"/> / <input type="checkbox"/>	632.9 NA	

Moisture Separator Information	System	Emptied	Amt Xfered	Canister Filter (last changed 8/2011)	Observations/Notes:
		Shallow	<input checked="" type="checkbox"/> / <input type="checkbox"/>	<input checked="" type="checkbox"/>	
	Deep	<input checked="" type="checkbox"/> / <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

in. H<sub>2</sub>O: 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

\* readings taken after wells purged

Date/Time: 1-6-12 Operators: Elliott & Bouch Monitoring Event: Biweekly / Monthly / Quarterly / Other

Monitoring Point	Wellhead Readings							Analytical Sample Collected		Comments
	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Time	Summa Canister #	
	Subslab Wells									
AOC65-VEW1	10	2.5 - 10.5	-							
AOC65-VEW2	10	2.5 - 10	-							
AOC65-VEW3	9.8	2.5 - 9.8	-							OFFLINE
AOC65-VEW4	6.7	2.5 - 6.6	-							OFFLINE
AOC65-VEW5	9.1	2.5 - 9	-							OFFLINE
AOC65-VEW6	5	2.5 - 5	-							OFFLINE
AOC65-VEW7	5.25	2.5 - 5	-							OFFLINE
AOC65-VEW8	9.7	2.5 - 9.7	-							
AOC65-VEW9	9.75	2.5 - 9.75	-							
AOC65-VEW10	5.4	2.5 - 5.1	-							
AOC65-VEW11	9.33	2.5 - 9.3	-							OFFLINE
AOC65-VEW12	9.7	2.5 - 9.4	-							
B90-INTAKE-SS			- 29.8	>15,000	73.5	1.9				

Monitoring Point	Manifold Readings							Analytical Sample Collected		Wellhead Vac (in. H <sub>2</sub> O)	Comments
	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Time	Summa Canister #		
	Exterior Wells										
AOC65-VEW15	13	5-12	- 17.4	8424	55.2	4.2	11.0			- 0.1	
AOC65-VEW16	41	15-40	- 17.1	8019	54.8	4.6	32.13			- 0.3	
AOC65-VEW18	56	15.5-55.5	- 16.4	217	55.3	1.7	53.10			- 0.2	
AOC65-VEW28A	120	80-120	- 17.9	516	55.2	water				- 1.1	
AOC65-VEW28B	179	139.3-179.3	- 17.7	370	71.5	1.1				- 3.1	
AOC65-VEW29	40	5-39.5	- 14.7	180	55.2	4.8	36.86			- 2.4	
AOC65-VEW30	25	5-24.5	- 16.2	183	55.2	25.5	24.30			- 16.2	
AOC65-VEW31	40	5-39.5	- 15.8	3172	57.9	3.7	30.22			- 6.8	
AOC65-VEW32	25	5-24.5	- 15.6	183	55.3	14.3	20.79			- 16.5	
AOC65-VEW33	25	5-24.5	- 16.4	210	54.8	3.7	24.38			- 16.4	
B90-INTAKE-EX			- 20.3	1919	60.7	5.1					
B90-EXHAUST			+ 21.0	>15,000	139.8	3.2					
AOC65-POSTGAC			+ 15.8	9252	90.4	1.2					

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube	
		Subslab	<input checked="" type="checkbox"/> / N		(adjust to 65" H <sub>2</sub> O) <input checked="" type="checkbox"/> / N	70-6	<input checked="" type="checkbox"/> / N	
Exterior	<input checked="" type="checkbox"/> / N		(adjust to 50" H <sub>2</sub> O) <input checked="" type="checkbox"/> / N	37.6	<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> / N	4545.6	

Moisture Separator Information	System	Emptied	Amount Transferred (gals)	Canister Filter Change (last changed 8/2011)	Observations/Notes:			
					Subslab	Y / N	Y / N	↓ gauge is stuck on 6 when off. System restarted @ 1000 + eline access ports completed on each wellhead, adds w.o.i to
					Exterior	Y / N	Y / N	

the surveyed TOC (minus 28A + 28B)

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

\* readings taken after wells purged

Date/Time: 1.6.12/1000 Operators: Elliott + Bauch

Monitoring Event: Biweekly Monthly / Quarterly / Other

Monitoring Point	Manifold Readings								Wellhead		Comments
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level + ft. btoc	Analytical Sample Collected Time	Summa Canister #	Vac in. H <sub>2</sub> O	
Shallow Wells											
AOC65-VEW19	26	5-25	29.8	311	58.6	12.3	10.31			15.4	purged 18 gal - 25.34
AOC65-VEW20	27	10-25	31.1	443	59.8	2.2	22.93			0.5	purged 2 gal. - 24.7
AOC65-VEW21	27	12-27	31.9	615	67.0	3.0	17.08			30.7	purged 11 gal - 25.05
AOC65-VEW23	21	6-21	31.5	1315	66.0	2.9	16.11			32.2	
AOC65-VEW25	21	6-21	32.2	501	60.6	24.9	19.95			17.6	
AOC65-VEW27	21	6-21	31.5	611	61.1	20.0	19.68			17.5	
AOC65-INTAKE-SW			31.1	>15,000	58.6	11.2	X				
Deep Wells											
AOC65-VEW13	41	15-40	30.3	8100	58.2	5.7	39.3			1.4	
AOC65-VEW14	61	40-60	31.5	413	57.3	2.7	51.89			0.1	
AOC65-VEW17	52.5	22-52	30.4	1604	56.6	4.4	51.63			13.6	
AOC65-VEW22	51	25-50	30.2	11817	56.8	3.8	50.33			23.8	
AOC65-VEW24	50	25-50	30.5	273	57.3	2.6	Dry			0.1	
AOC65-VEW26	50	25-50	30.4	751	57.0	3.2	46.59			25.3	
AOC65-INTAKE-DW			35.9	4804	59.5	6.2	X				
AOC65-EXHAUST			4.2	10782	126.8	3.9	X				
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 <sub>2</sub> O) (Y) (N)			(Y) N		(Y) N	NA
Deep	(Y) N	40	(adjust to 75" H <sub>2</sub> O) (Y) (N)			(Y) N	(Y) N	NA			
Moisture Separator Information	System	Emptied	Amt Xfered	Canister Filter Change (last changed 8/2011)	Observations/Notes: System restarted @ 1000 + eline access ports completed on each wellhead; add about 0.1" to the surveyed TOC						
		Shallow		Y / N							
		Deep		Y / N							

in. H<sub>2</sub>O: 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: 7.2.12 / 1000 Operators: Elliott + Lindley Monitoring Event: Biweekly Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Comments
								Time	Summa Canister #	
<b>Subslab Wells</b>										
AOC65-VEW1	10	2.5 - 10.5	-							
AOC65-VEW2	10	2.5 - 10	-							
AOC65-VEW3	9.8	2.5 - 9.8	-							OFFLINE
AOC65-VEW4	6.7	2.5 - 6.6	-							OFFLINE
AOC65-VEW5	9.1	2.5 - 9	-							OFFLINE
AOC65-VEW6	5	2.5 - 5	-							OFFLINE
AOC65-VEW7	5.25	2.5 - 5	-							OFFLINE
AOC65-VEW8	9.7	2.5 - 9.7	-							
AOC65-VEW9	9.75	2.5 - 9.75	-							
AOC65-VEW10	5.4	2.5 - 5.1	-							
AOC65-VEW11	9.38	2.5 - 9.3	-							OFFLINE
AOC65-VEW12	9.7	2.5 - 9.4	-							
B90-INTAKE-SS			- 42	3964	82.9	0				

<b>Manifold Readings</b>											
Monitoring Point	Total Depth ft. BTOC	Screened Interval	Vac (in. H <sub>2</sub> O)	Flow fpm	Temp °F	VOC ppm	Water Level ft. BTOC	Analytical Sample Collected		Wellhead Vac (in. H <sub>2</sub> O)	Comments
								Time	Summa Canister #		
AOC65-VEW15	13	5-12	- 9.3	94	80.0	0	7.42			- 0.1	
AOC65-VEW16	41	15-40	- 9.7	99	79.3	0	30.08			- 0.5	
AOC65-VEW18	56	15.5-55.5	- 10.1	122	80.0	0	52.76			- 0.2	
AOC65-VEW28A	120	80-120	- 9.6	1060	80.4	0	114.47			- 8.3	
AOC65-VEW28B	179	139.3-179.3	- 9.3	133	77.8	0	146.87			- 0	
AOC65-VEW29	40	5-39.5	- 8.3	709	83.2	0	29.4			- 8.2	
AOC65-VEW30	25	5-24.5	- 8.6	91	82.7	7.6	24.34			- 8.3	
AOC65-VEW31	40	5-39.5	- 8.2	2788	82.5	0	30.30			- 3.4	
AOC65-VEW32	25	5-24.5	- 8.4	107	82.5	8.0	10.1			- 8.2	
AOC65-VEW33	25	5-24.5	- 8.4	265	82.5	0	24.3			- 8.1	
B90-INTAKE-EX			- 11.9	4734	83.2	0					
B90-EXHAUST			+ 29.8	>15,000	167.1	0					
AOC65-POSTGAC			+ 0	5855	108.1	0					

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Final Intake Pressure	Check	Lube	
		Subslab	<input checked="" type="checkbox"/> / N	64	(adjust to 65" H <sub>2</sub> O) Y <input checked="" type="checkbox"/> N	64	<input checked="" type="checkbox"/> / N	
Exterior	<input checked="" type="checkbox"/> / N	31	(adjust to 50" H <sub>2</sub> O) Y <input checked="" type="checkbox"/> N	31	<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> / N	8005.6	

Moisture Separator Information	System	Emptied	Amount Transferred (gals)	Canister Filter Change	Observations/Notes:
				(last changed 8/2011)	
		Subslab	<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/>	
Exterior	<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/>	Y <input checked="" type="checkbox"/> N		

in.H<sub>2</sub>O: 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: 7-2-12 / 1000 Operators: Ellisott & Lindley Monitoring Event: Biweekly / Monthly / Quarterly / Other \_\_\_\_\_

Monitoring Point	Manifold Readings							Wellhead		Comments
	Total Depth ft BTOC	Screened Interval	Vac in. H <sub>2</sub> O	Flow fpm	Temp °F	VOC ppm	Water Level ft. btoc	Analytical Sample Collected Time	Summa Canister #	

Shallow Wells											
AOC65-VEW19	26	5-25	-31.0	1382	83.8	0	9.58			-27.2	
AOC65-VEW20	27	10-25	-30.7	630	83.8	0	24.02			-0.2	
AOC65-VEW21	27	12-27	-30.7	645	83.6	0	19.6			-30.4	
AOC65-VEW23	21	6-21	-30.5	765	84.1	0	20.19			-30.2	
AOC65-VEW25	21	6-21	-30.7	776	84.5	0	18.28			-30.0	
AOC65-VEW27	21	6-21	-30.5	711	85.2	0	8.67			-30.0	
AOC65-INTAKE-SW			-31.1	1612	85.8	0	X				

Deep Wells											
AOC65-VEW13	41	15-40	-26.8	2121	85.0	0	38.74			-1.3	
AOC65-VEW14	61	40-60	-26.8	637	85.2	0	60.5			-10.8	
AOC65-VEW17	52.5	22-52	-26.1	1764	85.2	0	50.3			-14.4	
AOC65-VEW22	51	25-50	-25.8	1255	85.0	0	48.98			-25.0	
AOC65-VEW24	50	25-50	-25.7	532	85.4	0	dry			-0.1	
AOC65-VEW26	50	25-50	-25.7	1404	85.6	0	45.81			-23.4	
AOC65-INTAKE-DW			-30.8	6505	85.0	0	X				
AOC65-EXHAUST			+2.9	12071	147.5	0	X				

Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter
		Blower On	Initial Intake Pressure	Adjusted Pressure	Final Intake Pressure	Check	Lube	
		Shallow	<input checked="" type="checkbox"/> / N	32	(adjust to 75° H <sub>2</sub> O) Y / <input checked="" type="checkbox"/> N	32	<input checked="" type="checkbox"/> / N	
Deep	<input checked="" type="checkbox"/> / N	35.40	(adjust to 75° H <sub>2</sub> O) Y / <input checked="" type="checkbox"/> N	40	<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> / N	893.5 NA	

Moisture Separator Information	System	Canister Filter (last changed 8/2011)		Observations/Notes:
		Emptied	Amt Xfered	
		Shallow	<input checked="" type="checkbox"/> / N	
Deep	<input checked="" type="checkbox"/> / N	0	Y / <input checked="" type="checkbox"/> N	

in.H<sub>2</sub>O: inches of water      fpm: feet per minute      ppm: parts per million      VRV: vacuum relief valve      psi: pounds per square inch

**APPENDIX B**

**LABORATORY DATA**

3/24/2011  
Ms. Cynthia Clark  
APPL, Inc.  
908 North Temperance Ave

Clovis CA 93611

Project Name:  
Project #: 747780.01000  
Workorder #: 1103303

Dear Ms. Cynthia Clark

The following report includes the data for the above referenced project for sample(s) received on 3/14/2011 at Air Toxics Ltd.

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

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

Regards,



Kyle Vagadori  
Project Manager

**WORK ORDER #: 1103303**

Work Order Summary

<b>CLIENT:</b>	Ms. Cynthia Clark APPL, Inc. 908 North Temperance Ave Clovis, CA 93611	<b>BILL TO:</b>	Ms. Cynthia Clark APPL, Inc. 908 North Temperance Ave Clovis, CA 93611
<b>PHONE:</b>	559-275-2175	<b>P.O. #</b>	
<b>FAX:</b>	559-275-4422	<b>PROJECT #</b>	747780.01000
<b>DATE RECEIVED:</b>	03/14/2011	<b>CONTACT:</b>	Kyle Vagadori
<b>DATE COMPLETED:</b>	03/24/2011		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	AOC65-VEW09-UGR	Modified TO-15	1.0 "Hg	15 psi
02A	AOC65-VEW10-UGR	Modified TO-15	1.5 "Hg	15 psi
03A	AOC65-VEW02-UGR	Modified TO-15	1.0 "Hg	15 psi
04A	AOC65-VEW01-UGR	Modified TO-15	2.0 "Hg	15 psi
05A	AOC65-VEW12-UGR	Modified TO-15	1.5 "Hg	15 psi
06A	AOC65-INTAKE-SW	Modified TO-15	1.5 "Hg	15 psi
07A	AOC65-VEW19-UGR	Modified TO-15	1.0 "Hg	15 psi
08A	AOC65-VEW25	Modified TO-15	1.5 "Hg	15 psi
09A	AOC65-VEW27	Modified TO-15	1.5 "Hg	15 psi
10A	AOC65-INTAKE-DW	Modified TO-15	1.5 "Hg	15 psi
11A	AOC65-VEW13-LGR	Modified TO-15	2.0 "Hg	15 psi
12A	AOC65-VEW14-LGR	Modified TO-15	2.0 "Hg	15 psi
13A	AOC65-VEW24	Modified TO-15	2.0 "Hg	15 psi
14A	AOC65-VEW26	Modified TO-15	1.5 "Hg	15 psi
15A	AOC65-VEW28B	Modified TO-15	3.0 "Hg	15 psi
16A	B90-INTAKE-SS	Modified TO-15	2.0 "Hg	15 psi
17A	B90-INTAKE-EX	Modified TO-15	2.0 "Hg	15 psi

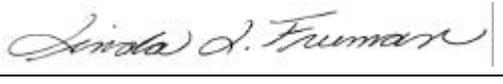
Continued on next page

**WORK ORDER #: 1103303**

Work Order Summary

<b>CLIENT:</b>	Ms. Cynthia Clark APPL, Inc. 908 North Temperance Ave Clovis, CA 93611	<b>BILL TO:</b>	Ms. Cynthia Clark APPL, Inc. 908 North Temperance Ave Clovis, CA 93611
<b>PHONE:</b>	559-275-2175	<b>P.O. #</b>	
<b>FAX:</b>	559-275-4422	<b>PROJECT #</b>	747780.01000
<b>DATE RECEIVED:</b>	03/14/2011	<b>CONTACT:</b>	Kyle Vagadori
<b>DATE COMPLETED:</b>	03/24/2011		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
18A	AOC65-VEW15-UGR	Modified TO-15	2.0 "Hg	15 psi
19A	AOC65-VEW16-LGR	Modified TO-15	2.5 "Hg	15 psi
20A	Lab Blank	Modified TO-15	NA	NA
20B	Lab Blank	Modified TO-15	NA	NA
21A	CCV	Modified TO-15	NA	NA
21B	CCV	Modified TO-15	NA	NA
22A	LCS	Modified TO-15	NA	NA
22AA	LCSD	Modified TO-15	NA	NA
22B	LCS	Modified TO-15	NA	NA
22BB	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: 

DATE: 03/24/11

Laboratory Director

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,  
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,  
Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11

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

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(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

**LABORATORY NARRATIVE  
EPA Method TO-15  
APPL, Inc.  
Workorder# 1103303**

Nineteen 1 Liter Summa Canister samples were received on March 14, 2011. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

**Receiving Notes**

There were no receiving discrepancies.

**Analytical Notes**

As per project specific client request the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified may be false positives.

Dilution was performed on samples AOC65-VEW09-UGR, AOC65-VEW12-UGR, AOC65-INTAKE-SW, AOC65-VEW19-UGR, AOC65-VEW25, and AOC65-VEW27 due to the presence of high level target species.

All Quality Control Limit exceedences and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page. Target compound non-detects in the samples that are associated with high bias in QC analyses have not been flagged.

**Definition of Data Qualifying Flags**

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

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV and/or LCS.

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds  
EPA METHOD TO-15 GC/MS**

**Client Sample ID: AOC65-VEW09-UGR**

**Lab ID#: 1103303-01A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
cis-1,2-Dichloroethene	4.2	2.7 F	16	10 F
Methylene Chloride	4.2	0.74 FB	14	2.6 FB
Trichloroethene	4.2	3.0 FB	22	16 FB
Tetrachloroethene	4.2	1500 B	28	10000 B
Benzene	4.2	1.1 F	13	3.5 F
Toluene	4.2	1.6 F	16	6.2 F

**Client Sample ID: AOC65-VEW10-UGR**

**Lab ID#: 1103303-02A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
1,2-Dichloroethane	1.1	0.38 FB	4.3	1.5 FB
1,1,1-Trichloroethane	1.1	0.16 FB	5.8	0.86 FB
cis-1,2-Dichloroethene	1.1	0.38 FB	4.2	1.5 FB
Methylene Chloride	1.1	0.58 FB	3.7	2.0 FB
Trichloroethene	1.1	0.66 FB	5.7	3.5 FB
Tetrachloroethene	1.1	6.8 B	7.2	46 B
Benzene	1.1	0.75 FB	3.4	2.4 FB
Toluene	1.1	1.3 B	4.0	4.9 B

**Client Sample ID: AOC65-VEW02-UGR**

**Lab ID#: 1103303-03A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
1,2-Dichloroethane	1.0	0.19 FB	4.2	0.78 FB
1,1,1-Trichloroethane	1.0	0.14 FB	5.7	0.74 FB
Methylene Chloride	1.0	0.49 FB	3.6	1.7 FB
Trichloroethene	1.0	0.50 FB	5.6	2.7 FB
Tetrachloroethene	1.0	56 B	7.1	380 B
Benzene	1.0	0.88 FB	3.3	2.8 FB
Toluene	1.0	1.8 B	3.9	6.8 B

**Summary of Detected Compounds  
EPA METHOD TO-15 GC/MS**

**Client Sample ID: AOC65-VEW01-UGR**

**Lab ID#: 1103303-04A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
1,1,1-Trichloroethane	1.1	0.15 FB	5.9	0.80 FB
Methylene Chloride	1.1	0.41 FB	3.8	1.4 FB
Trichloroethene	1.1	0.74 FB	5.8	4.0 FB
Tetrachloroethene	1.1	1.0 FB	7.3	6.8 FB
Benzene	1.1	0.87 FB	3.4	2.8 FB
Toluene	1.1	1.6 B	4.1	6.2 B

**Client Sample ID: AOC65-VEW12-UGR**

**Lab ID#: 1103303-05A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
1,1,1-Trichloroethane	1.8	0.25 FB	9.7	1.3 FB
Trichloroethene	1.8	0.79 FB	9.5	4.2 FB
Tetrachloroethene	1.8	480 B	12	3300 B
Benzene	1.8	0.56 FB	5.7	1.8 FB
Toluene	1.8	1.6 FB	6.7	6.0 FB

**Client Sample ID: AOC65-INTAKE-SW**

**Lab ID#: 1103303-06A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
cis-1,2-Dichloroethene	2.7	37 B	10	140 B
Methylene Chloride	2.7	0.65 FB	9.2	2.3 FB
Trichloroethene	2.7	26 B	14	140 B
Tetrachloroethene	2.7	890 B	18	6000 B
trans-1,2-Dichloroethene	2.7	0.57 FB	10	2.3 FB
Benzene	2.7	0.82 FB	8.5	2.6 FB
Toluene	2.7	1.3 FB	10	5.0 FB

**Client Sample ID: AOC65-VEW19-UGR**

**Lab ID#: 1103303-07A**

**Summary of Detected Compounds  
EPA METHOD TO-15 GC/MS**

**Client Sample ID: AOC65-VEW19-UGR**

**Lab ID#: 1103303-07A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
1,2-Dichloroethane	2.1	0.50 FB	8.4	2.0 FB
1,1,1-Trichloroethane	2.1	0.24 F	11	1.3 F
cis-1,2-Dichloroethene	2.1	43	8.3	170
Methylene Chloride	2.1	0.76 FB	7.3	2.6 FB
Trichloroethene	2.1	26 B	11	140 B
Tetrachloroethene	2.1	680 B	14	4600 B
trans-1,2-Dichloroethene	2.1	0.67 F	8.3	2.7 F
Toluene	2.1	1.0 F	7.9	3.9 F

**Client Sample ID: AOC65-VEW25**

**Lab ID#: 1103303-08A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
cis-1,2-Dichloroethene	8.5	33	34	130
Trichloroethene	8.5	62 B	46	330 B
Tetrachloroethene	8.5	2500 B	58	17000 B
Toluene	8.5	2.2 F	32	8.3 F

**Client Sample ID: AOC65-VEW27**

**Lab ID#: 1103303-09A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
cis-1,2-Dichloroethene	3.6	6.8	14	27
Methylene Chloride	3.6	1.5 FB	12	5.1 FB
Trichloroethene	3.6	12 B	19	67 B
Tetrachloroethene	3.6	1100 B	24	7400 B
Benzene	3.6	0.88 F	11	2.8 F
Toluene	3.6	1.3 F	13	4.9 F

**Client Sample ID: AOC65-INTAKE-DW**

**Lab ID#: 1103303-10A**

**Summary of Detected Compounds  
EPA METHOD TO-15 GC/MS**

**Client Sample ID: AOC65-INTAKE-DW**

**Lab ID#: 1103303-10A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
1,2-Dichloroethane	1.1	0.20 FB	4.3	0.82 FB
1,1,1-Trichloroethane	1.1	0.16 FB	5.8	0.88 FB
cis-1,2-Dichloroethene	1.1	0.51 FB	4.2	2.0 FB
Methylene Chloride	1.1	0.46 FB	3.7	1.6 FB
Trichloroethene	1.1	8.7 B	5.7	47 B
Tetrachloroethene	1.1	37 B	7.2	250 B
Benzene	1.1	0.55 F	3.4	1.8 F
Toluene	1.1	1.8 B	4.0	6.9 B

**Client Sample ID: AOC65-VEW13-LGR**

**Lab ID#: 1103303-11A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
1,2-Dichloroethane	1.1	0.18 FB	4.4	0.74 FB
Methylene Chloride	1.1	0.38 FB	3.8	1.3 FB
Trichloroethene	1.1	3.4 B	5.8	18 B
Tetrachloroethene	1.1	34 B	7.3	230 B
Benzene	1.1	0.58 F	3.4	1.9 F
Toluene	1.1	1.3 B	4.1	4.8 B

**Client Sample ID: AOC65-VEW14-LGR**

**Lab ID#: 1103303-12A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
1,1,1-Trichloroethane	1.1	0.15 FB	5.9	0.82 FB
Methylene Chloride	1.1	0.44 FB	3.8	1.5 FB
Trichloroethene	1.1	2.9 B	5.8	16 B
Tetrachloroethene	1.1	8.7 B	7.3	59 B
Benzene	1.1	0.54 F	3.4	1.7 F
Toluene	1.1	1.3 B	4.1	4.9 B

**Summary of Detected Compounds  
EPA METHOD TO-15 GC/MS**

**Client Sample ID: AOC65-VEW24**

**Lab ID#: 1103303-13A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
cis-1,2-Dichloroethene	1.1	0.60 FB	4.3	2.4 FB
Methylene Chloride	1.1	0.42 FB	3.8	1.5 FB
Trichloroethene	1.1	11 B	5.8	62 B
Tetrachloroethene	1.1	24 B	7.3	160 B
Benzene	1.1	0.65 F	3.4	2.1 F
Toluene	1.1	1.4 B	4.1	5.4 B

**Client Sample ID: AOC65-VEW26**

**Lab ID#: 1103303-14A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
1,2-Dichloroethane	1.1	0.24 FB	4.3	0.96 FB
cis-1,2-Dichloroethene	1.1	0.73 F	4.2	2.9 F
Methylene Chloride	1.1	0.52 FB	3.7	1.8 FB
Trichloroethene	1.1	16 B	5.7	86 B
Tetrachloroethene	1.1	34 B	7.2	230 B
Benzene	1.1	0.53 F	3.4	1.7 F
Toluene	1.1	1.2	4.0	4.7

**Client Sample ID: AOC65-VEW28B**

**Lab ID#: 1103303-15A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
1,2-Dichloroethane	1.1	0.31 FB	4.5	1.2 FB
1,1,1-Trichloroethane	1.1	0.13 F	6.1	0.72 F
Methylene Chloride	1.1	0.46 FB	3.9	1.6 FB
Trichloroethene	1.1	3.5 B	6.0	19 B
Tetrachloroethene	1.1	42 B	7.6	280 B
Benzene	1.1	0.85 F	3.6	2.7 F
Toluene	1.1	4.4	4.2	16

**Summary of Detected Compounds  
EPA METHOD TO-15 GC/MS**

**Client Sample ID: B90-INTAKE-SS**

**Lab ID#: 1103303-16A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
1,1,1-Trichloroethane	1.1	0.16 F	5.9	0.85 F
cis-1,2-Dichloroethene	1.1	0.89 F	4.3	3.5 F
Methylene Chloride	1.1	2.5 B	3.8	8.6 B
Trichloroethene	1.1	1.1 B	5.8	5.8 B
Tetrachloroethene	1.1	180 B	7.3	1200 B
Benzene	1.1	0.63 F	3.4	2.0 F
Toluene	1.1	2.3	4.1	8.5

**Client Sample ID: B90-INTAKE-EX**

**Lab ID#: 1103303-17A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
1,2-Dichloroethane	1.1	0.25 FB	4.4	1.0 FB
1,1,1-Trichloroethane	1.1	0.26 F	5.9	1.4 F
Methylene Chloride	1.1	1.0 FB	3.8	3.6 FB
Trichloroethene	1.1	22 B	5.8	120 B
Tetrachloroethene	1.1	65 B	7.3	440 B
Benzene	1.1	0.69 F	3.4	2.2 F
Toluene	1.1	1.5	4.1	5.6

**Client Sample ID: AOC65-VEW15-UGR**

**Lab ID#: 1103303-18A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
1,2-Dichloroethane	1.1	0.28 FB	4.4	1.2 FB
1,1,1-Trichloroethane	1.1	0.18 F	5.9	0.97 F
Methylene Chloride	1.1	0.92 FB	3.8	3.2 FB
Trichloroethene	1.1	0.88 FB	5.8	4.7 FB
Tetrachloroethene	1.1	2.6 B	7.3	18 B
Benzene	1.1	0.99 F	3.4	3.2 F
Toluene	1.1	1.9	4.1	7.1

**Summary of Detected Compounds  
EPA METHOD TO-15 GC/MS**

**Client Sample ID: AOC65-VEW16-LGR**

**Lab ID#: 1103303-19A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
1,2-Dichloroethane	1.1	0.31 FB	4.4	1.3 FB
1,1,1-Trichloroethane	1.1	0.17 F	6.0	0.94 F
cis-1,2-Dichloroethene	1.1	0.28 F	4.4	1.1 F
Methylene Chloride	1.1	0.28 FB	3.8	0.98 FB
Trichloroethene	1.1	2.6 B	5.9	14 B
Tetrachloroethene	1.1	11 B	7.5	75 B
Benzene	1.1	0.56 F	3.5	1.8 F
Toluene	1.1	0.66 F	4.1	2.5 F

Client Sample ID: AOC65-VEW09-UGR

Lab ID#: 1103303-01A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6031643</b>	<b>Date of Collection:</b> 3/10/11 1:17:00 PM
<b>Dil. Factor:</b>	<b>8.36</b>	<b>Date of Analysis:</b> 3/17/11 04:20 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	4.2	Not Detected U	11	Not Detected U
1,2-Dichloroethane	4.2	Not Detected U	17	Not Detected U
1,1-Dichloroethene	4.2	Not Detected U	16	Not Detected U
1,1,1-Trichloroethane	4.2	Not Detected U	23	Not Detected U
cis-1,2-Dichloroethene	4.2	2.7 F	16	10 F
Methylene Chloride	4.2	0.74 FB	14	2.6 FB
Trichloroethene	4.2	3.0 FB	22	16 FB
Tetrachloroethene	4.2	1500 B	28	10000 B
trans-1,2-Dichloroethene	4.2	Not Detected U	16	Not Detected U
Benzene	4.2	1.1 F	13	3.5 F
Toluene	4.2	1.6 F	16	6.2 F

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

F = The analyte was positively identified but the associated numerical value is below the RL.

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

**Container Type: 1 Liter Summa Canister**

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	115	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	89	70-130

Client Sample ID: AOC65-VEW10-UGR

Lab ID#: 1103303-02A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6031618</b>	<b>Date of Collection:</b> 3/10/11 1:23:00 PM
<b>Dil. Factor:</b>	<b>2.13</b>	<b>Date of Analysis:</b> 3/16/11 03:03 PM

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Vinyl Chloride	1.1	Not Detected U	2.7	Not Detected U
1,2-Dichloroethane	1.1	0.38 FB	4.3	1.5 FB
1,1-Dichloroethene	1.1	Not Detected U	4.2	Not Detected U
1,1,1-Trichloroethane	1.1	0.16 FB	5.8	0.86 FB
cis-1,2-Dichloroethene	1.1	0.38 FB	4.2	1.5 FB
Methylene Chloride	1.1	0.58 FB	3.7	2.0 FB
Trichloroethene	1.1	0.66 FB	5.7	3.5 FB
Tetrachloroethene	1.1	6.8 B	7.2	46 B
trans-1,2-Dichloroethene	1.1	Not Detected U	4.2	Not Detected U
Benzene	1.1	0.75 FB	3.4	2.4 FB
Toluene	1.1	1.3 B	4.0	4.9 B

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

F = The analyte was positively identified but the associated numerical value is below the RL.

**Container Type: 1 Liter Summa Canister**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	119	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	91	70-130



Client Sample ID: AOC65-VEW02-UGR

Lab ID#: 1103303-03A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6031619</b>	<b>Date of Collection:</b> 3/10/11 1:32:00 PM
<b>Dil. Factor:</b>	<b>2.09</b>	<b>Date of Analysis:</b> 3/16/11 03:23 PM

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Vinyl Chloride	1.0	Not Detected U	2.7	Not Detected U
1,2-Dichloroethane	1.0	0.19 FB	4.2	0.78 FB
1,1-Dichloroethene	1.0	Not Detected U	4.1	Not Detected U
1,1,1-Trichloroethane	1.0	0.14 FB	5.7	0.74 FB
cis-1,2-Dichloroethene	1.0	Not Detected U	4.1	Not Detected U
Methylene Chloride	1.0	0.49 FB	3.6	1.7 FB
Trichloroethene	1.0	0.50 FB	5.6	2.7 FB
Tetrachloroethene	1.0	56 B	7.1	380 B
trans-1,2-Dichloroethene	1.0	Not Detected U	4.1	Not Detected U
Benzene	1.0	0.88 FB	3.3	2.8 FB
Toluene	1.0	1.8 B	3.9	6.8 B

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

F = The analyte was positively identified but the associated numerical value is below the RL.

**Container Type: 1 Liter Summa Canister**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	116	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	91	70-130

Client Sample ID: AOC65-VEW01-UGR

Lab ID#: 1103303-04A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6031621</b>	<b>Date of Collection:</b> 3/10/11 1:36:00 PM
<b>Dil. Factor:</b>	<b>2.16</b>	<b>Date of Analysis:</b> 3/16/11 04:41 PM

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Vinyl Chloride	1.1	Not Detected U	2.8	Not Detected U
1,2-Dichloroethane	1.1	Not Detected U	4.4	Not Detected U
1,1-Dichloroethene	1.1	Not Detected U	4.3	Not Detected U
1,1,1-Trichloroethane	1.1	0.15 FB	5.9	0.80 FB
cis-1,2-Dichloroethene	1.1	Not Detected U	4.3	Not Detected U
Methylene Chloride	1.1	0.41 FB	3.8	1.4 FB
Trichloroethene	1.1	0.74 FB	5.8	4.0 FB
Tetrachloroethene	1.1	1.0 FB	7.3	6.8 FB
trans-1,2-Dichloroethene	1.1	Not Detected U	4.3	Not Detected U
Benzene	1.1	0.87 FB	3.4	2.8 FB
Toluene	1.1	1.6 B	4.1	6.2 B

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

F = The analyte was positively identified but the associated numerical value is below the RL.

**Container Type: 1 Liter Summa Canister**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	118	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	93	70-130



Client Sample ID: AOC65-VEW12-UGR

Lab ID#: 1103303-05A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6031623</b>	<b>Date of Collection:</b> 3/10/11 1:45:00 PM
<b>Dil. Factor:</b>	<b>3.55</b>	<b>Date of Analysis:</b> 3/16/11 05:40 PM

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Vinyl Chloride	1.8	Not Detected U	4.5	Not Detected U
1,2-Dichloroethane	1.8	Not Detected U	7.2	Not Detected U
1,1-Dichloroethene	1.8	Not Detected U	7.0	Not Detected U
1,1,1-Trichloroethane	1.8	0.25 FB	9.7	1.3 FB
cis-1,2-Dichloroethene	1.8	Not Detected U	7.0	Not Detected U
Methylene Chloride	1.8	Not Detected U	6.2	Not Detected U
Trichloroethene	1.8	0.79 FB	9.5	4.2 FB
Tetrachloroethene	1.8	480 B	12	3300 B
trans-1,2-Dichloroethene	1.8	Not Detected U	7.0	Not Detected U
Benzene	1.8	0.56 FB	5.7	1.8 FB
Toluene	1.8	1.6 FB	6.7	6.0 FB

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

F = The analyte was positively identified but the associated numerical value is below the RL.

**Container Type: 1 Liter Summa Canister**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	117	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	90	70-130

Client Sample ID: AOC65-INTAKE-SW

Lab ID#: 1103303-06A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6031626</b>	<b>Date of Collection:</b> 3/10/11 2:27:00 PM
<b>Dil. Factor:</b>	<b>5.32</b>	<b>Date of Analysis:</b> 3/16/11 07:19 PM

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Vinyl Chloride	2.7	Not Detected U	6.8	Not Detected U
1,2-Dichloroethane	2.7	Not Detected U	11	Not Detected U
1,1-Dichloroethene	2.7	Not Detected U	10	Not Detected U
1,1,1-Trichloroethane	2.7	Not Detected U	14	Not Detected U
cis-1,2-Dichloroethene	2.7	37 B	10	140 B
Methylene Chloride	2.7	0.65 FB	9.2	2.3 FB
Trichloroethene	2.7	26 B	14	140 B
Tetrachloroethene	2.7	890 B	18	6000 B
trans-1,2-Dichloroethene	2.7	0.57 FB	10	2.3 FB
Benzene	2.7	0.82 FB	8.5	2.6 FB
Toluene	2.7	1.3 FB	10	5.0 FB

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

F = The analyte was positively identified but the associated numerical value is below the RL.

**Container Type: 1 Liter Summa Canister**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	122	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	92	70-130

Client Sample ID: AOC65-VEW19-UGR

Lab ID#: 1103303-07A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6031645</b>	<b>Date of Collection:</b> 3/10/11 2:35:00 PM
<b>Dil. Factor:</b>	<b>4.18</b>	<b>Date of Analysis:</b> 3/17/11 05:27 AM

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Vinyl Chloride	2.1	Not Detected U	5.3	Not Detected U
1,2-Dichloroethane	2.1	0.50 FB	8.4	2.0 FB
1,1-Dichloroethene	2.1	Not Detected U	8.3	Not Detected U
1,1,1-Trichloroethane	2.1	0.24 F	11	1.3 F
cis-1,2-Dichloroethene	2.1	43	8.3	170
Methylene Chloride	2.1	0.76 FB	7.3	2.6 FB
Trichloroethene	2.1	26 B	11	140 B
Tetrachloroethene	2.1	680 B	14	4600 B
trans-1,2-Dichloroethene	2.1	0.67 F	8.3	2.7 F
Benzene	2.1	Not Detected U	6.7	Not Detected U
Toluene	2.1	1.0 F	7.9	3.9 F

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

F = The analyte was positively identified but the associated numerical value is below the RL.

**Container Type: 1 Liter Summa Canister**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	121	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	92	70-130

Client Sample ID: AOC65-VEW25

Lab ID#: 1103303-08A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6031646</b>	<b>Date of Collection:</b> 3/10/11 2:46:00 PM
<b>Dil. Factor:</b>	<b>17.0</b>	<b>Date of Analysis:</b> 3/17/11 05:45 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	8.5	Not Detected U	22	Not Detected U
1,2-Dichloroethane	8.5	Not Detected U	34	Not Detected U
1,1-Dichloroethene	8.5	Not Detected U	34	Not Detected U
1,1,1-Trichloroethane	8.5	Not Detected U	46	Not Detected U
cis-1,2-Dichloroethene	8.5	33	34	130
Methylene Chloride	8.5	Not Detected U	30	Not Detected U
Trichloroethene	8.5	62 B	46	330 B
Tetrachloroethene	8.5	2500 B	58	17000 B
trans-1,2-Dichloroethene	8.5	Not Detected U	34	Not Detected U
Benzene	8.5	Not Detected U	27	Not Detected U
Toluene	8.5	2.2 F	32	8.3 F

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

F = The analyte was positively identified but the associated numerical value is below the RL.

**Container Type: 1 Liter Summa Canister**

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	118	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	87	70-130

Client Sample ID: AOC65-VEW27

Lab ID#: 1103303-09A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6031651</b>	<b>Date of Collection:</b> 3/10/11 2:52:00 PM
<b>Dil. Factor:</b>	<b>7.10</b>	<b>Date of Analysis:</b> 3/17/11 09:25 AM

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Vinyl Chloride	3.6	Not Detected U	9.1	Not Detected U
1,2-Dichloroethane	3.6	Not Detected U	14	Not Detected U
1,1-Dichloroethene	3.6	Not Detected U	14	Not Detected U
1,1,1-Trichloroethane	3.6	Not Detected U	19	Not Detected U
cis-1,2-Dichloroethene	3.6	6.8	14	27
Methylene Chloride	3.6	1.5 FB	12	5.1 FB
Trichloroethene	3.6	12 B	19	67 B
Tetrachloroethene	3.6	1100 B	24	7400 B
trans-1,2-Dichloroethene	3.6	Not Detected U	14	Not Detected U
Benzene	3.6	0.88 F	11	2.8 F
Toluene	3.6	1.3 F	13	4.9 F

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

F = The analyte was positively identified but the associated numerical value is below the RL.

**Container Type: 1 Liter Summa Canister**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	121	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	92	70-130

Client Sample ID: AOC65-INTAKE-DW

Lab ID#: 1103303-10A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6031628</b>	<b>Date of Collection:</b> 3/10/11 2:59:00 PM
<b>Dil. Factor:</b>	<b>2.13</b>	<b>Date of Analysis:</b> 3/16/11 08:32 PM

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Vinyl Chloride	1.1	Not Detected U	2.7	Not Detected U
1,2-Dichloroethane	1.1	0.20 FB	4.3	0.82 FB
1,1-Dichloroethene	1.1	Not Detected U	4.2	Not Detected U
1,1,1-Trichloroethane	1.1	0.16 FB	5.8	0.88 FB
cis-1,2-Dichloroethene	1.1	0.51 FB	4.2	2.0 FB
Methylene Chloride	1.1	0.46 FB	3.7	1.6 FB
Trichloroethene	1.1	8.7 B	5.7	47 B
Tetrachloroethene	1.1	37 B	7.2	250 B
trans-1,2-Dichloroethene	1.1	Not Detected U	4.2	Not Detected U
Benzene	1.1	0.55 F	3.4	1.8 F
Toluene	1.1	1.8 B	4.0	6.9 B

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

F = The analyte was positively identified but the associated numerical value is below the RL.

**Container Type: 1 Liter Summa Canister**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	126	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	93	70-130

Client Sample ID: AOC65-VEW13-LGR

Lab ID#: 1103303-11A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6031629</b>	<b>Date of Collection:</b> 3/10/11 3:05:00 PM
<b>Dil. Factor:</b>	<b>2.16</b>	<b>Date of Analysis:</b> 3/16/11 08:59 PM

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Vinyl Chloride	1.1	Not Detected U	2.8	Not Detected U
1,2-Dichloroethane	1.1	0.18 FB	4.4	0.74 FB
1,1-Dichloroethene	1.1	Not Detected U	4.3	Not Detected U
1,1,1-Trichloroethane	1.1	Not Detected U	5.9	Not Detected U
cis-1,2-Dichloroethene	1.1	Not Detected U	4.3	Not Detected U
Methylene Chloride	1.1	0.38 FB	3.8	1.3 FB
Trichloroethene	1.1	3.4 B	5.8	18 B
Tetrachloroethene	1.1	34 B	7.3	230 B
trans-1,2-Dichloroethene	1.1	Not Detected U	4.3	Not Detected U
Benzene	1.1	0.58 F	3.4	1.9 F
Toluene	1.1	1.3 B	4.1	4.8 B

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

F = The analyte was positively identified but the associated numerical value is below the RL.

**Container Type: 1 Liter Summa Canister**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	115	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	95	70-130

Client Sample ID: AOC65-VEW14-LGR

Lab ID#: 1103303-12A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6031630</b>	<b>Date of Collection: 3/10/11 3:10:00 PM</b>
<b>Dil. Factor:</b>	<b>2.16</b>	<b>Date of Analysis: 3/16/11 09:28 PM</b>

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Vinyl Chloride	1.1	Not Detected U	2.8	Not Detected U
1,2-Dichloroethane	1.1	Not Detected U	4.4	Not Detected U
1,1-Dichloroethene	1.1	Not Detected U	4.3	Not Detected U
1,1,1-Trichloroethane	1.1	0.15 FB	5.9	0.82 FB
cis-1,2-Dichloroethene	1.1	Not Detected U	4.3	Not Detected U
Methylene Chloride	1.1	0.44 FB	3.8	1.5 FB
Trichloroethene	1.1	2.9 B	5.8	16 B
Tetrachloroethene	1.1	8.7 B	7.3	59 B
trans-1,2-Dichloroethene	1.1	Not Detected U	4.3	Not Detected U
Benzene	1.1	0.54 F	3.4	1.7 F
Toluene	1.1	1.3 B	4.1	4.9 B

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

F = The analyte was positively identified but the associated numerical value is below the RL.

**Container Type: 1 Liter Summa Canister**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	116	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	91	70-130

Client Sample ID: AOC65-VEW24

Lab ID#: 1103303-13A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6031631</b>	<b>Date of Collection:</b> 3/10/11 3:20:00 PM
<b>Dil. Factor:</b>	<b>2.16</b>	<b>Date of Analysis:</b> 3/16/11 09:49 PM

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Vinyl Chloride	1.1	Not Detected U	2.8	Not Detected U
1,2-Dichloroethane	1.1	Not Detected U	4.4	Not Detected U
1,1-Dichloroethene	1.1	Not Detected U	4.3	Not Detected U
1,1,1-Trichloroethane	1.1	Not Detected U	5.9	Not Detected U
cis-1,2-Dichloroethene	1.1	0.60 FB	4.3	2.4 FB
Methylene Chloride	1.1	0.42 FB	3.8	1.5 FB
Trichloroethene	1.1	11 B	5.8	62 B
Tetrachloroethene	1.1	24 B	7.3	160 B
trans-1,2-Dichloroethene	1.1	Not Detected U	4.3	Not Detected U
Benzene	1.1	0.65 F	3.4	2.1 F
Toluene	1.1	1.4 B	4.1	5.4 B

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

F = The analyte was positively identified but the associated numerical value is below the RL.

**Container Type: 1 Liter Summa Canister**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	116	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	94	70-130

Client Sample ID: AOC65-VEW26

Lab ID#: 1103303-14A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6031652</b>	<b>Date of Collection:</b> 3/10/11 3:26:00 PM
<b>Dil. Factor:</b>	<b>2.13</b>	<b>Date of Analysis:</b> 3/17/11 09:54 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected U	2.7	Not Detected U
1,2-Dichloroethane	1.1	0.24 FB	4.3	0.96 FB
1,1-Dichloroethene	1.1	Not Detected U	4.2	Not Detected U
1,1,1-Trichloroethane	1.1	Not Detected U	5.8	Not Detected U
cis-1,2-Dichloroethene	1.1	0.73 F	4.2	2.9 F
Methylene Chloride	1.1	0.52 FB	3.7	1.8 FB
Trichloroethene	1.1	16 B	5.7	86 B
Tetrachloroethene	1.1	34 B	7.2	230 B
trans-1,2-Dichloroethene	1.1	Not Detected U	4.2	Not Detected U
Benzene	1.1	0.53 F	3.4	1.7 F
Toluene	1.1	1.2	4.0	4.7

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

F = The analyte was positively identified but the associated numerical value is below the RL.

**Container Type: 1 Liter Summa Canister**

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	93	70-130

Client Sample ID: AOC65-VEW28B

Lab ID#: 1103303-15A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6031653</b>	<b>Date of Collection:</b> 3/10/11 3:44:00 PM
<b>Dil. Factor:</b>	<b>2.24</b>	<b>Date of Analysis:</b> 3/17/11 10:27 AM

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Vinyl Chloride	1.1	Not Detected U	2.9	Not Detected U
1,2-Dichloroethane	1.1	0.31 FB	4.5	1.2 FB
1,1-Dichloroethene	1.1	Not Detected U	4.4	Not Detected U
1,1,1-Trichloroethane	1.1	0.13 F	6.1	0.72 F
cis-1,2-Dichloroethene	1.1	Not Detected U	4.4	Not Detected U
Methylene Chloride	1.1	0.46 FB	3.9	1.6 FB
Trichloroethene	1.1	3.5 B	6.0	19 B
Tetrachloroethene	1.1	42 B	7.6	280 B
trans-1,2-Dichloroethene	1.1	Not Detected U	4.4	Not Detected U
Benzene	1.1	0.85 F	3.6	2.7 F
Toluene	1.1	4.4	4.2	16

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

F = The analyte was positively identified but the associated numerical value is below the RL.

**Container Type: 1 Liter Summa Canister**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	122	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	92	70-130

Client Sample ID: B90-INTAKE-SS

Lab ID#: 1103303-16A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6031654</b>	<b>Date of Collection:</b> 3/10/11 3:52:00 PM
<b>Dil. Factor:</b>	<b>2.16</b>	<b>Date of Analysis:</b> 3/17/11 10:46 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected U	2.8	Not Detected U
1,2-Dichloroethane	1.1	Not Detected U	4.4	Not Detected U
1,1-Dichloroethene	1.1	Not Detected U	4.3	Not Detected U
1,1,1-Trichloroethane	1.1	0.16 F	5.9	0.85 F
cis-1,2-Dichloroethene	1.1	0.89 F	4.3	3.5 F
Methylene Chloride	1.1	2.5 B	3.8	8.6 B
Trichloroethene	1.1	1.1 B	5.8	5.8 B
Tetrachloroethene	1.1	180 B	7.3	1200 B
trans-1,2-Dichloroethene	1.1	Not Detected U	4.3	Not Detected U
Benzene	1.1	0.63 F	3.4	2.0 F
Toluene	1.1	2.3	4.1	8.5

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

F = The analyte was positively identified but the associated numerical value is below the RL.

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

**Container Type: 1 Liter Summa Canister**

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	120	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	90	70-130

Client Sample ID: B90-INTAKE-EX

Lab ID#: 1103303-17A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6031657</b>	<b>Date of Collection:</b> 3/10/11 3:58:00 PM
<b>Dil. Factor:</b>	<b>2.16</b>	<b>Date of Analysis:</b> 3/17/11 11:51 AM

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Vinyl Chloride	1.1	Not Detected U	2.8	Not Detected U
1,2-Dichloroethane	1.1	0.25 FB	4.4	1.0 FB
1,1-Dichloroethene	1.1	Not Detected U	4.3	Not Detected U
1,1,1-Trichloroethane	1.1	0.26 F	5.9	1.4 F
cis-1,2-Dichloroethene	1.1	Not Detected U	4.3	Not Detected U
Methylene Chloride	1.1	1.0 FB	3.8	3.6 FB
Trichloroethene	1.1	22 B	5.8	120 B
Tetrachloroethene	1.1	65 B	7.3	440 B
trans-1,2-Dichloroethene	1.1	Not Detected U	4.3	Not Detected U
Benzene	1.1	0.69 F	3.4	2.2 F
Toluene	1.1	1.5	4.1	5.6

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

F = The analyte was positively identified but the associated numerical value is below the RL.

**Container Type: 1 Liter Summa Canister**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	125	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	94	70-130

Client Sample ID: AOC65-VEW15-UGR

Lab ID#: 1103303-18A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6031656</b>	<b>Date of Collection:</b> 3/10/11 4:08:00 PM
<b>Dil. Factor:</b>	<b>2.16</b>	<b>Date of Analysis:</b> 3/17/11 11:30 AM

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Vinyl Chloride	1.1	Not Detected U	2.8	Not Detected U
1,2-Dichloroethane	1.1	0.28 FB	4.4	1.2 FB
1,1-Dichloroethene	1.1	Not Detected U	4.3	Not Detected U
1,1,1-Trichloroethane	1.1	0.18 F	5.9	0.97 F
cis-1,2-Dichloroethene	1.1	Not Detected U	4.3	Not Detected U
Methylene Chloride	1.1	0.92 FB	3.8	3.2 FB
Trichloroethene	1.1	0.88 FB	5.8	4.7 FB
Tetrachloroethene	1.1	2.6 B	7.3	18 B
trans-1,2-Dichloroethene	1.1	Not Detected U	4.3	Not Detected U
Benzene	1.1	0.99 F	3.4	3.2 F
Toluene	1.1	1.9	4.1	7.1

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

F = The analyte was positively identified but the associated numerical value is below the RL.

**Container Type: 1 Liter Summa Canister**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	94	70-130



Client Sample ID: AOC65-VEW16-LGR

Lab ID#: 1103303-19A

EPA METHOD TO-15 GC/MS

File Name:	6031658	Date of Collection:	3/10/11 4:12:00 PM
Dil. Factor:	2.20	Date of Analysis:	3/17/11 12:13 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected U	2.8	Not Detected U
1,2-Dichloroethane	1.1	0.31 FB	4.4	1.3 FB
1,1-Dichloroethene	1.1	Not Detected U	4.4	Not Detected U
1,1,1-Trichloroethane	1.1	0.17 F	6.0	0.94 F
cis-1,2-Dichloroethene	1.1	0.28 F	4.4	1.1 F
Methylene Chloride	1.1	0.28 FB	3.8	0.98 FB
Trichloroethene	1.1	2.6 B	5.9	14 B
Tetrachloroethene	1.1	11 B	7.5	75 B
trans-1,2-Dichloroethene	1.1	Not Detected U	4.4	Not Detected U
Benzene	1.1	0.56 F	3.5	1.8 F
Toluene	1.1	0.66 F	4.1	2.5 F

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

F = The analyte was positively identified but the associated numerical value is below the RL.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	123	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	90	70-130

Client Sample ID: Lab Blank

Lab ID#: 1103303-20A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6031609a</b>	<b>Date of Collection: NA</b>
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis: 3/16/11 11:06 AM</b>

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Vinyl Chloride	0.50	Not Detected U	1.3	Not Detected U
1,2-Dichloroethane	0.50	0.16 F	2.0	0.63 F
1,1-Dichloroethene	0.50	Not Detected U	2.0	Not Detected U
1,1,1-Trichloroethane	0.50	0.086 F	2.7	0.47 F
cis-1,2-Dichloroethene	0.50	0.13 F	2.0	0.51 F
Methylene Chloride	0.50	0.23 F	1.7	0.81 F
Trichloroethene	0.50	0.16 F	2.7	0.88 F
Tetrachloroethene	0.50	0.12 F	3.4	0.85 F
trans-1,2-Dichloroethene	0.50	0.16 F	2.0	0.65 F
Benzene	0.50	Not Detected U	1.6	Not Detected U
Toluene	0.50	0.12 F	1.9	0.46 F

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

F = The analyte was positively identified but the associated numerical value is below the RL.

**Container Type: NA - Not Applicable**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	124	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	89	70-130

Client Sample ID: Lab Blank

Lab ID#: 1103303-20B

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6031642a</b>	<b>Date of Collection: NA</b>
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis: 3/17/11 03:47 AM</b>

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Vinyl Chloride	0.50	0.071 F	1.3	0.18 F
1,2-Dichloroethane	0.50	0.15 F	2.0	0.59 F
1,1-Dichloroethene	0.50	Not Detected U	2.0	Not Detected U
1,1,1-Trichloroethane	0.50	Not Detected U	2.7	Not Detected U
cis-1,2-Dichloroethene	0.50	Not Detected U	2.0	Not Detected U
Methylene Chloride	0.50	0.18 F	1.7	0.64 F
Trichloroethene	0.50	0.18 F	2.7	0.97 F
Tetrachloroethene	0.50	0.10 F	3.4	0.68 F
trans-1,2-Dichloroethene	0.50	Not Detected U	2.0	Not Detected U
Benzene	0.50	Not Detected U	1.6	Not Detected U
Toluene	0.50	Not Detected U	1.9	Not Detected U

F = The analyte was positively identified but the associated numerical value is below the RL.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

Container Type: NA - Not Applicable

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	130	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	90	70-130

Client Sample ID: CCV

Lab ID#: 1103303-21A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6031605</b>	<b>Date of Collection: NA</b>
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis: 3/16/11 09:01 AM</b>

<b>Compound</b>	<b>%Recovery</b>
Vinyl Chloride	103
1,2-Dichloroethane	131 Q
1,1-Dichloroethene	107
1,1,1-Trichloroethane	121
cis-1,2-Dichloroethene	108
Methylene Chloride	110
Trichloroethene	116
Tetrachloroethene	114
trans-1,2-Dichloroethene	106
Benzene	116
Toluene	118

Q = Exceeds Quality Control limits.

**Container Type: NA - Not Applicable**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	95	70-130

Client Sample ID: CCV

Lab ID#: 1103303-21B

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6031638</b>	<b>Date of Collection: NA</b>
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis: 3/17/11 01:40 AM</b>

<b>Compound</b>	<b>%Recovery</b>
Vinyl Chloride	95
1,2-Dichloroethane	137 Q
1,1-Dichloroethene	101
1,1,1-Trichloroethane	121
cis-1,2-Dichloroethene	102
Methylene Chloride	111
Trichloroethene	109
Tetrachloroethene	107
trans-1,2-Dichloroethene	97
Benzene	111
Toluene	108

Q = Exceeds Quality Control limits.

**Container Type: NA - Not Applicable**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	117	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	98	70-130

Client Sample ID: LCS

Lab ID#: 1103303-22A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6031606a</b>	<b>Date of Collection: NA</b>
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis: 3/16/11 09:38 AM</b>

<b>Compound</b>	<b>%Recovery</b>
Vinyl Chloride	108
1,2-Dichloroethane	129
1,1-Dichloroethene	110
1,1,1-Trichloroethane	123
cis-1,2-Dichloroethene	106
Methylene Chloride	115
Trichloroethene	108
Tetrachloroethene	111
trans-1,2-Dichloroethene	118
Benzene	110
Toluene	103

**Container Type: NA - Not Applicable**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	117	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	99	70-130

Client Sample ID: LCSD

Lab ID#: 1103303-22AA

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6031607a</b>	<b>Date of Collection:</b> NA
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis:</b> 3/16/11 09:57 AM

<b>Compound</b>	<b>%Recovery</b>
Vinyl Chloride	102
1,2-Dichloroethane	133 Q
1,1-Dichloroethene	107
1,1,1-Trichloroethane	119
cis-1,2-Dichloroethene	102
Methylene Chloride	110
Trichloroethene	109
Tetrachloroethene	109
trans-1,2-Dichloroethene	119
Benzene	112
Toluene	107

Q = Exceeds Quality Control limits.

**Container Type: NA - Not Applicable**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	113	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	96	70-130

Client Sample ID: LCS

Lab ID#: 1103303-22B

**EPA METHOD TO-15 GC/MS**

File Name:	6031639a	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/17/11 02:11 AM

Compound	%Recovery
Vinyl Chloride	104
1,2-Dichloroethane	140 Q
1,1-Dichloroethene	111
1,1,1-Trichloroethane	126
cis-1,2-Dichloroethene	103
Methylene Chloride	110
Trichloroethene	112
Tetrachloroethene	106
trans-1,2-Dichloroethene	119
Benzene	108
Toluene	105

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	116	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	98	70-130

Client Sample ID: LCSD

Lab ID#: 1103303-22BB

**EPA METHOD TO-15 GC/MS**

File Name:	6031640a	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/17/11 02:30 AM

Compound	%Recovery
Vinyl Chloride	104
1,2-Dichloroethane	132 Q
1,1-Dichloroethene	111
1,1,1-Trichloroethane	128
cis-1,2-Dichloroethene	108
Methylene Chloride	116
Trichloroethene	109
Tetrachloroethene	103
trans-1,2-Dichloroethene	116
Benzene	110
Toluene	108

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	125	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	95	70-130

8/25/2011  
Ms. Cynthia Clark  
APPL, Inc.  
908 North Temperance Ave

Clovis CA 93611

Project Name:  
Project #: 747781.04000  
Workorder #: 1108285

Dear Ms. Cynthia Clark

The following report includes the data for the above referenced project for sample(s) received on 8/12/2011 at Air Toxics Ltd.

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

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

Regards,



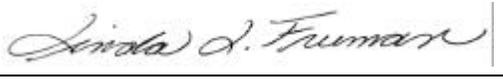
Kyle Vagadori  
Project Manager

**WORK ORDER #: 1108285**

Work Order Summary

<b>CLIENT:</b>	Ms. Cynthia Clark APPL, Inc. 908 North Temperance Ave Clovis, CA 93611	<b>BILL TO:</b>	Ms. Cynthia Clark APPL, Inc. 908 North Temperance Ave Clovis, CA 93611
<b>PHONE:</b>	559-275-2175	<b>P.O. #</b>	
<b>FAX:</b>	559-275-4422	<b>PROJECT #</b>	747781.04000
<b>DATE RECEIVED:</b>	08/12/2011	<b>CONTACT:</b>	Kyle Vagadori
<b>DATE COMPLETED:</b>	08/25/2011		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	B90-INTAKE-EX (11:20)	Modified TO-15	6.0 "Hg	15 psi
02A	B90-INTAKE-SS (11:25)	Modified TO-15	3.0 "Hg	15 psi
03A	AOC65-INTAKE-SW (11:35)	Modified TO-15	4.0 "Hg	15 psi
04A	AOC65-INTAKE-DW (11:40)	Modified TO-15	4.0 "Hg	15 psi
05A	AOC65-INTAKE-DW (10:15)	Modified TO-15	4.0 "Hg	15 psi
06A	AOC65-INTAKE-SW (10:20)	Modified TO-15	4.5 "Hg	15 psi
07A	B90-INTAKE-EX (10:25)	Modified TO-15	3.0 "Hg	15 psi
08A	B90-INTAKE-SS (10:30)	Modified TO-15	3.5 "Hg	15 psi
09A	Lab Blank	Modified TO-15	NA	NA
10A	CCV	Modified TO-15	NA	NA
11A	LCS	Modified TO-15	NA	NA
11AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: 

DATE: 08/25/11

Laboratory Director

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,  
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,  
Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11

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

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630  
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

**LABORATORY NARRATIVE**  
**EPA Method TO-15**  
**APPL, Inc.**  
**Workorder# 1108285**

Eight 1 Liter Summa Canister samples were received on August 15, 2011. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

**Receiving Notes**

Sample identifications on the Chain of Custody (COC) were not unique. The time of collection was added to each of the sample identifications to ensure uniqueness.

**Analytical Notes**

As per project specific client request the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified (0.2 ppbv for compounds reported at 0.5 ppbv) may be false positives.

Dilution was performed on samples B90-INTAKE-EX (11:20), AOC65-INTAKE-SW (11:35), AOC65-INTAKE-SW (10:20), and B90-INTAKE-EX (10:25) due to the presence of high level target species.

**Definition of Data Qualifying Flags**

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

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV and/or LCS.

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds  
EPA METHOD TO-15 GC/MS**

**Client Sample ID: B90-INTAKE-EX (11:20)**

**Lab ID#: 1108285-01A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
cis-1,2-Dichloroethene	4.2	1.8 F	17	7.2 F
Methylene Chloride	4.2	0.67 F	14	2.3 F
Trichloroethene	4.2	9.2 B	22	49 B
Tetrachloroethene	4.2	1100	28	7400
Toluene	4.2	2.2 F	16	8.2 F

**Client Sample ID: B90-INTAKE-SS (11:25)**

**Lab ID#: 1108285-02A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
1,2-Dichloroethane	1.1	0.20 FB	4.5	0.80 FB
1,1,1-Trichloroethane	1.1	0.17 F	6.1	0.90 F
cis-1,2-Dichloroethene	1.1	1.1	4.4	4.4
Methylene Chloride	1.1	1.9	3.9	6.5
Trichloroethene	1.1	1.2 B	6.0	6.5 B
Tetrachloroethene	1.1	400	7.6	2700
Benzene	1.1	0.49 F	3.6	1.6 F
Toluene	1.1	2.9	4.2	11

**Client Sample ID: AOC65-INTAKE-SW (11:35)**

**Lab ID#: 1108285-03A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
cis-1,2-Dichloroethene	2.3	54	9.2	220
Methylene Chloride	2.3	0.65 F	8.1	2.2 F
Trichloroethene	2.3	33 B	12	180 B
Tetrachloroethene	2.3	710	16	4800
Benzene	2.3	0.44 F	7.4	1.4 F
Toluene	2.3	2.1 F	8.8	8.0 F

**Summary of Detected Compounds  
EPA METHOD TO-15 GC/MS**

**Client Sample ID: AOC65-INTAKE-DW (11:40)**

**Lab ID#: 1108285-04A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
1,2-Dichloroethane	1.2	0.24 FB	4.7	0.99 FB
1,1,1-Trichloroethane	1.2	0.17 F	6.4	0.95 F
cis-1,2-Dichloroethene	1.2	1.8	4.6	7.3
Methylene Chloride	1.2	0.47 F	4.0	1.6 F
Trichloroethene	1.2	9.3 B	6.3	50 B
Tetrachloroethene	1.2	73	7.9	500
Benzene	1.2	0.48 F	3.7	1.6 F
Toluene	1.2	2.1	4.4	8.1

**Client Sample ID: AOC65-INTAKE-DW (10:15)**

**Lab ID#: 1108285-05A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
1,2-Dichloroethane	1.2	0.17 FB	4.7	0.67 FB
1,1,1-Trichloroethane	1.2	0.16 F	6.4	0.87 F
cis-1,2-Dichloroethene	1.2	0.36 F	4.6	1.4 F
Methylene Chloride	1.2	0.89 F	4.0	3.1 F
Trichloroethene	1.2	8.2 B	6.3	44 B
Tetrachloroethene	1.2	45	7.9	300
Benzene	1.2	0.56 F	3.7	1.8 F
Toluene	1.2	2.1	4.4	8.0

**Client Sample ID: AOC65-INTAKE-SW (10:20)**

**Lab ID#: 1108285-06A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
cis-1,2-Dichloroethene	2.6	50	10	200
Methylene Chloride	2.6	0.74 F	9.2	2.6 F
Trichloroethene	2.6	31 B	14	170 B
Tetrachloroethene	2.6	790	18	5400
Benzene	2.6	0.80 F	8.4	2.6 F

**Summary of Detected Compounds  
EPA METHOD TO-15 GC/MS**

**Client Sample ID: AOC65-INTAKE-SW (10:20)**

**Lab ID#: 1108285-06A**

Toluene	2.6	2.2 F	10	8.1 F
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**Client Sample ID: B90-INTAKE-EX (10:25)**

**Lab ID#: 1108285-07A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
cis-1,2-Dichloroethene	2.2	1.1 F	8.9	4.4 F
Methylene Chloride	2.2	0.55 F	7.8	1.9 F
Trichloroethene	2.2	5.8 B	12	31 B
Tetrachloroethene	2.2	670	15	4500
Benzene	2.2	0.40 F	7.2	1.3 F
Toluene	2.2	1.5 F	8.4	5.6 F

**Client Sample ID: B90-INTAKE-SS (10:30)**

**Lab ID#: 1108285-08A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
1,2-Dichloroethane	1.1	0.26 FB	4.6	1.0 FB
1,1,1-Trichloroethane	1.1	0.29 F	6.2	1.6 F
cis-1,2-Dichloroethene	1.1	1.1	4.5	4.3
Methylene Chloride	1.1	0.65 F	4.0	2.2 F
Trichloroethene	1.1	9.8 B	6.2	53 B
Tetrachloroethene	1.1	340	7.8	2300
Benzene	1.1	4.4	3.6	14
Toluene	1.1	37	4.3	140

Client Sample ID: B90-INTAKE-EX (11:20)

Lab ID#: 1108285-01A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6081723</b>	<b>Date of Collection:</b> 8/10/11 11:20:00 AM
<b>Dil. Factor:</b>	<b>8.40</b>	<b>Date of Analysis:</b> 8/17/11 08:47 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloroethane	4.2	Not Detected U	17	Not Detected U
1,1,1-Trichloroethane	4.2	Not Detected U	23	Not Detected U
cis-1,2-Dichloroethene	4.2	1.8 F	17	7.2 F
Methylene Chloride	4.2	0.67 F	14	2.3 F
Trichloroethene	4.2	9.2 B	22	49 B
Tetrachloroethene	4.2	1100	28	7400
trans-1,2-Dichloroethene	4.2	Not Detected U	17	Not Detected U
Benzene	4.2	Not Detected U	13	Not Detected U
Toluene	4.2	2.2 F	16	8.2 F

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

F = The analyte was positively identified but the associated numerical value is below the RL.

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

**Container Type: 1 Liter Summa Canister**

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	93	70-130

Client Sample ID: B90-INTAKE-SS (11:25)

Lab ID#: 1108285-02A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6081724</b>	<b>Date of Collection:</b> 8/10/11 11:25:00 AM
<b>Dil. Factor:</b>	<b>2.24</b>	<b>Date of Analysis:</b> 8/17/11 09:27 PM

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
1,2-Dichloroethane	1.1	0.20 FB	4.5	0.80 FB
1,1,1-Trichloroethane	1.1	0.17 F	6.1	0.90 F
cis-1,2-Dichloroethene	1.1	1.1	4.4	4.4
Methylene Chloride	1.1	1.9	3.9	6.5
Trichloroethene	1.1	1.2 B	6.0	6.5 B
Tetrachloroethene	1.1	400	7.6	2700
trans-1,2-Dichloroethene	1.1	Not Detected U	4.4	Not Detected U
Benzene	1.1	0.49 F	3.6	1.6 F
Toluene	1.1	2.9	4.2	11

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

F = The analyte was positively identified but the associated numerical value is below the RL.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

**Container Type: 1 Liter Summa Canister**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	92	70-130

Client Sample ID: AOC65-INTAKE-SW (11:35)

Lab ID#: 1108285-03A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6081725</b>	<b>Date of Collection:</b> 8/10/11 11:35:00 AM
<b>Dil. Factor:</b>	<b>4.66</b>	<b>Date of Analysis:</b> 8/17/11 10:01 PM

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
1,2-Dichloroethane	2.3	Not Detected U	9.4	Not Detected U
1,1,1-Trichloroethane	2.3	Not Detected U	13	Not Detected U
cis-1,2-Dichloroethene	2.3	54	9.2	220
Methylene Chloride	2.3	0.65 F	8.1	2.2 F
Trichloroethene	2.3	33 B	12	180 B
Tetrachloroethene	2.3	710	16	4800
trans-1,2-Dichloroethene	2.3	Not Detected U	9.2	Not Detected U
Benzene	2.3	0.44 F	7.4	1.4 F
Toluene	2.3	2.1 F	8.8	8.0 F

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

F = The analyte was positively identified but the associated numerical value is below the RL.

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

**Container Type: 1 Liter Summa Canister**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	96	70-130

Client Sample ID: AOC65-INTAKE-DW (11:40)

Lab ID#: 1108285-04A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6081726</b>	<b>Date of Collection:</b> 8/10/11 11:40:00 AM
<b>Dil. Factor:</b>	<b>2.33</b>	<b>Date of Analysis:</b> 8/17/11 10:27 PM

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
1,2-Dichloroethane	1.2	0.24 FB	4.7	0.99 FB
1,1,1-Trichloroethane	1.2	0.17 F	6.4	0.95 F
cis-1,2-Dichloroethene	1.2	1.8	4.6	7.3
Methylene Chloride	1.2	0.47 F	4.0	1.6 F
Trichloroethene	1.2	9.3 B	6.3	50 B
Tetrachloroethene	1.2	73	7.9	500
trans-1,2-Dichloroethene	1.2	Not Detected U	4.6	Not Detected U
Benzene	1.2	0.48 F	3.7	1.6 F
Toluene	1.2	2.1	4.4	8.1

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

F = The analyte was positively identified but the associated numerical value is below the RL.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

**Container Type: 1 Liter Summa Canister**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	97	70-130

Client Sample ID: AOC65-INTAKE-DW (10:15)

Lab ID#: 1108285-05A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6081727</b>	<b>Date of Collection:</b> 8/11/11 10:15:00 AM
<b>Dil. Factor:</b>	<b>2.33</b>	<b>Date of Analysis:</b> 8/17/11 10:53 PM

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
1,2-Dichloroethane	1.2	0.17 FB	4.7	0.67 FB
1,1,1-Trichloroethane	1.2	0.16 F	6.4	0.87 F
cis-1,2-Dichloroethene	1.2	0.36 F	4.6	1.4 F
Methylene Chloride	1.2	0.89 F	4.0	3.1 F
Trichloroethene	1.2	8.2 B	6.3	44 B
Tetrachloroethene	1.2	45	7.9	300
trans-1,2-Dichloroethene	1.2	Not Detected U	4.6	Not Detected U
Benzene	1.2	0.56 F	3.7	1.8 F
Toluene	1.2	2.1	4.4	8.0

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

F = The analyte was positively identified but the associated numerical value is below the RL.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

**Container Type: 1 Liter Summa Canister**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	97	70-130

Client Sample ID: AOC65-INTAKE-SW (10:20)

Lab ID#: 1108285-06A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6081728</b>	<b>Date of Collection:</b> 8/11/11 10:20:00 AM
<b>Dil. Factor:</b>	<b>5.29</b>	<b>Date of Analysis:</b> 8/18/11 06:56 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloroethane	2.6	Not Detected U	11	Not Detected U
1,1,1-Trichloroethane	2.6	Not Detected U	14	Not Detected U
cis-1,2-Dichloroethene	2.6	50	10	200
Methylene Chloride	2.6	0.74 F	9.2	2.6 F
Trichloroethene	2.6	31 B	14	170 B
Tetrachloroethene	2.6	790	18	5400
trans-1,2-Dichloroethene	2.6	Not Detected U	10	Not Detected U
Benzene	2.6	0.80 F	8.4	2.6 F
Toluene	2.6	2.2 F	10	8.1 F

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

F = The analyte was positively identified but the associated numerical value is below the RL.

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

**Container Type: 1 Liter Summa Canister**

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	96	70-130

Client Sample ID: B90-INTAKE-EX (10:25)

Lab ID#: 1108285-07A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6081729</b>	<b>Date of Collection:</b> 8/11/11 10:25:00 AM
<b>Dil. Factor:</b>	<b>4.48</b>	<b>Date of Analysis:</b> 8/18/11 07:19 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloroethane	2.2	Not Detected U	9.1	Not Detected U
1,1,1-Trichloroethane	2.2	Not Detected U	12	Not Detected U
cis-1,2-Dichloroethene	2.2	1.1 F	8.9	4.4 F
Methylene Chloride	2.2	0.55 F	7.8	1.9 F
Trichloroethene	2.2	5.8 B	12	31 B
Tetrachloroethene	2.2	670	15	4500
trans-1,2-Dichloroethene	2.2	Not Detected U	8.9	Not Detected U
Benzene	2.2	0.40 F	7.2	1.3 F
Toluene	2.2	1.5 F	8.4	5.6 F

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

F = The analyte was positively identified but the associated numerical value is below the RL.

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

**Container Type: 1 Liter Summa Canister**

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	95	70-130

Client Sample ID: B90-INTAKE-SS (10:30)

Lab ID#: 1108285-08A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6081730</b>	<b>Date of Collection:</b> 8/11/11 10:30:00 AM
<b>Dil. Factor:</b>	<b>2.29</b>	<b>Date of Analysis:</b> 8/18/11 07:43 AM

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
1,2-Dichloroethane	1.1	0.26 FB	4.6	1.0 FB
1,1,1-Trichloroethane	1.1	0.29 F	6.2	1.6 F
cis-1,2-Dichloroethene	1.1	1.1	4.5	4.3
Methylene Chloride	1.1	0.65 F	4.0	2.2 F
Trichloroethene	1.1	9.8 B	6.2	53 B
Tetrachloroethene	1.1	340	7.8	2300
trans-1,2-Dichloroethene	1.1	Not Detected U	4.5	Not Detected U
Benzene	1.1	4.4	3.6	14
Toluene	1.1	37	4.3	140

B = The analyte was found in an associated blank above the MDL, as well as in the sample.

F = The analyte was positively identified but the associated numerical value is below the RL.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

**Container Type: 1 Liter Summa Canister**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	99	70-130

Client Sample ID: Lab Blank

Lab ID#: 1108285-09A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6081722c</b>	<b>Date of Collection: NA</b>
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis: 8/17/11 07:45 PM</b>

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
1,2-Dichloroethane	0.50	0.067 F	2.0	0.27 F
1,1,1-Trichloroethane	0.50	Not Detected U	2.7	Not Detected U
cis-1,2-Dichloroethene	0.50	Not Detected U	2.0	Not Detected U
Methylene Chloride	0.50	Not Detected U	1.7	Not Detected U
Trichloroethene	0.50	0.10 F	2.7	0.55 F
Tetrachloroethene	0.50	Not Detected U	3.4	Not Detected U
trans-1,2-Dichloroethene	0.50	Not Detected U	2.0	Not Detected U
Benzene	0.50	Not Detected U	1.6	Not Detected U
Toluene	0.50	Not Detected U	1.9	Not Detected U

F = The analyte was positively identified but the associated numerical value is below the RL.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

**Container Type: NA - Not Applicable**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	94	70-130

Client Sample ID: CCV

Lab ID#: 1108285-10A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6081707a</b>	<b>Date of Collection: NA</b>
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis: 8/17/11 11:09 AM</b>

<b>Compound</b>	<b>%Recovery</b>
1,2-Dichloroethane	102
1,1,1-Trichloroethane	100
cis-1,2-Dichloroethene	104
Methylene Chloride	103
Trichloroethene	100
Tetrachloroethene	101
trans-1,2-Dichloroethene	106
Benzene	102
Toluene	102

**Container Type: NA - Not Applicable**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	100	70-130

Client Sample ID: LCS

Lab ID#: 1108285-11A

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6081712a</b>	<b>Date of Collection:</b> NA
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis:</b> 8/17/11 01:52 PM

<b>Compound</b>	<b>%Recovery</b>
1,2-Dichloroethane	100
1,1,1-Trichloroethane	101
cis-1,2-Dichloroethene	101
Methylene Chloride	104
Trichloroethene	97
Tetrachloroethene	96
trans-1,2-Dichloroethene	116
Benzene	100
Toluene	98

**Container Type: NA - Not Applicable**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	102	70-130

Client Sample ID: LCSD

Lab ID#: 1108285-11AA

**EPA METHOD TO-15 GC/MS**

<b>File Name:</b>	<b>6081713a</b>	<b>Date of Collection: NA</b>
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis: 8/17/11 02:13 PM</b>

<b>Compound</b>	<b>%Recovery</b>
1,2-Dichloroethane	102
1,1,1-Trichloroethane	102
cis-1,2-Dichloroethene	107
Methylene Chloride	104
Trichloroethene	98
Tetrachloroethene	98
trans-1,2-Dichloroethene	118
Benzene	101
Toluene	98

**Container Type: NA - Not Applicable**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	101	70-130

4/18/2012  
Ms. Cynthia Clark  
APPL, Inc.  
908 North Temperance Ave

Clovis CA 93619

Project Name:  
Project #: 748350.01000  
Workorder #: 1204120

Dear Ms. Cynthia Clark

The following report includes the data for the above referenced project for sample(s) received on 4/5/2012 at Air Toxics Ltd.

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

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

Regards,



Kyle Vagadori  
Project Manager

**WORK ORDER #: 1204120**

Work Order Summary

<b>CLIENT:</b>	Ms. Cynthia Clark APPL, Inc. 908 North Temperance Ave Clovis, CA 93619	<b>BILL TO:</b>	Ms. Cynthia Clark APPL, Inc. 908 North Temperance Ave Clovis, CA 93619
<b>PHONE:</b>	559-275-2175	<b>P.O. #</b>	
<b>FAX:</b>	559-275-4422	<b>PROJECT #</b>	748350.01000
<b>DATE RECEIVED:</b>	04/05/2012	<b>CONTACT:</b>	Kyle Vagadori
<b>DATE COMPLETED:</b>	04/18/2012		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	AOC65-VEW28B	Modified TO-15	2.2 "Hg	5 psi
02A	AOC65-VEW16-LGR	Modified TO-15	2.2 "Hg	5 psi
03A	AOC65-VEW15-UGR	Modified TO-15	2.2 "Hg	5 psi
04A	AOC65-VEW31	Modified TO-15	2.6 "Hg	5 psi
05A	AOC65-VEW32	Modified TO-15	2.0 "Hg	5 psi
06A	AOC65-VEW33	Modified TO-15	2.4 "Hg	5 psi
07A	AOC65-VEW30	Modified TO-15	2.2 "Hg	5 psi
08A	AOC65-VEW29	Modified TO-15	2.2 "Hg	5 psi
09A	B90-INTAKE-EX	Modified TO-15	2.6 "Hg	5 psi
10A	B90-INTAKE-SS	Modified TO-15	2.0 "Hg	5 psi
11A	AOC65-INTAKE-SW	Modified TO-15	2.6 "Hg	5 psi
12A	AOC65-VEW19-UGR	Modified TO-15	2.2 "Hg	5 psi
13A	AOC65-VEW20	Modified TO-15	3.4 "Hg	5 psi
14A	AOC65-VEW23	Modified TO-15	3.0 "Hg	5 psi
15A	AOC65-VEW25	Modified TO-15	2.8 "Hg	5 psi
16A	AOC65-VEW27	Modified TO-15	2.4 "Hg	5 psi
17A	AOC65-VEW21	Modified TO-15	5.6 "Hg	5 psi
18A	AOC65-VEW18-LGR	Modified TO-15	4.4 "Hg	5 psi
19A	Lab Blank	Modified TO-15	NA	NA
20A	CCV	Modified TO-15	NA	NA
21A	LCS	Modified TO-15	NA	NA
21AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: 

Laboratory Director

DATE: 04/18/12

Certification numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935  
 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,  
 Accreditation number: E87680, Effective date: 07/01/11 , Expiration date: 06/30/12.

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

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**LABORATORY NARRATIVE  
EPA Method TO-15  
APPL, Inc.  
Workorder# 1204120**

Eighteen 1 Liter Summa Canister samples were received on April 05, 2012. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

**Receiving Notes**

There were no receiving discrepancies.

**Analytical Notes**

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified (0.2 ppbv for compounds reported at 0.5 ppbv and 0.8 ppbv for compounds reported at 2.0 ppbv) may be false positives.

Dilution was performed on samples AOC65-VEW32, AOC65-VEW33, AOC65-VEW30, B90-INTAKE-EX, AOC65-INTAKE-SW, AOC65-VEW19-UGR, AOC65-VEW25 and AOC65-VEW27 due to the presence of high level target species.

**Definition of Data Qualifying Flags**

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

- B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
- J - Estimated value.
- E - Exceeds instrument calibration range.
- S - Saturated peak.
- Q - Exceeds quality control limits.
- U - Compound analyzed for but not detected above the reporting limit.
- UJ- Non-detected compound associated with low bias in the CCV and/or LCS.
- N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector
- r1-File was requantified for the purpose of reissue

### Summary of Detected Compounds EPA METHOD TO-15 GC/MS

**Client Sample ID: AOC65-VEW28B**

**Lab ID#: 1204120-01A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.72	0.85	2.9	3.4
Methylene Chloride	7.2	0.24 F	25	0.85 F
Trichloroethene	0.72	12	3.9	67
Tetrachloroethene	0.72	240	4.9	1600
Benzene	0.72	0.20 F	2.3	0.63 F
Toluene	0.72	0.81	2.7	3.0

**Client Sample ID: AOC65-VEW16-LGR**

**Lab ID#: 1204120-02A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.72	1.5	2.9	5.8
Methylene Chloride	7.2	0.25 F	25	0.88 F
Trichloroethene	0.72	6.3	3.9	34
Tetrachloroethene	0.72	220	4.9	1500
Benzene	0.72	0.16 F	2.3	0.52 F
Toluene	0.72	0.76	2.7	2.9

**Client Sample ID: AOC65-VEW15-UGR**

**Lab ID#: 1204120-03A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.72	1.3	2.9	5.3
Methylene Chloride	7.2	0.23 F	25	0.81 F
Trichloroethene	0.72	5.7	3.9	31
Tetrachloroethene	0.72	180	4.9	1200
Benzene	0.72	0.17 F	2.3	0.55 F
Toluene	0.72	0.74	2.7	2.8

**Client Sample ID: AOC65-VEW31**

**Lab ID#: 1204120-04A**

## Summary of Detected Compounds EPA METHOD TO-15 GC/MS

**Client Sample ID: AOC65-VEW31**

**Lab ID#: 1204120-04A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.74	2.2	2.9	8.9
Methylene Chloride	7.4	0.36 F	26	1.2 F
Trichloroethene	0.74	9.3	4.0	50
Tetrachloroethene	0.74	170	5.0	1200
Benzene	0.74	0.15 F	2.3	0.47 F
Toluene	0.74	0.63 F	2.8	2.4 F

**Client Sample ID: AOC65-VEW32**

**Lab ID#: 1204120-05A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	7.2	12	39	66
Tetrachloroethene	7.2	2200	49	15000

**Client Sample ID: AOC65-VEW33**

**Lab ID#: 1204120-06A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	1.8	3.2	7.2	13
Trichloroethene	1.8	24	9.8	130
Tetrachloroethene	1.8	530	12	3600
Benzene	1.8	0.26 F	5.8	0.83 F
Toluene	1.8	1.6 F	6.9	5.9 F

**Client Sample ID: AOC65-VEW30**

**Lab ID#: 1204120-07A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	7.2	5.9 F	29	24 F
Trichloroethene	7.2	11	39	57
Tetrachloroethene	7.2	2900	49	20000

### Summary of Detected Compounds EPA METHOD TO-15 GC/MS

Client Sample ID: AOC65-VEW29

Lab ID#: 1204120-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.72	1.0	2.9	4.0
Trichloroethene	0.72	2.1	3.9	11
Tetrachloroethene	0.72	22	4.9	150
Benzene	0.72	0.14 F	2.3	0.43 F
Toluene	0.72	0.47 F	2.7	1.8 F

Client Sample ID: B90-INTAKE-EX

Lab ID#: 1204120-09A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.84	2.4	3.3	9.5
Methylene Chloride	8.4	0.30 F	29	1.0 F
Trichloroethene	0.84	9.2	4.5	50
Tetrachloroethene	0.84	310	5.7	2100
Benzene	0.84	0.17 F	2.7	0.54 F
Toluene	0.84	0.82 F	3.2	3.1 F

Client Sample ID: B90-INTAKE-SS

Lab ID#: 1204120-10A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	0.72	0.044 F	3.9	0.24 F
cis-1,2-Dichloroethene	0.72	0.70 F	2.8	2.8 F
Methylene Chloride	7.2	0.18 F	25	0.63 F
Trichloroethene	0.72	0.49 F	3.9	2.6 F
Tetrachloroethene	0.72	86	4.9	580
Benzene	0.72	0.34 F	2.3	1.1 F
Toluene	0.72	1.1	2.7	4.3

Client Sample ID: AOC65-INTAKE-SW

Lab ID#: 1204120-11A

## Summary of Detected Compounds EPA METHOD TO-15 GC/MS

**Client Sample ID: AOC65-INTAKE-SW**

**Lab ID#: 1204120-11A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	1.6	23	6.5	90
Trichloroethene	1.6	24	8.8	130
Tetrachloroethene	1.6	520	11	3500
Benzene	1.6	0.26 F	5.2	0.82 F
Toluene	1.6	0.85 F	6.2	3.2 F

**Client Sample ID: AOC65-VEW19-UGR**

**Lab ID#: 1204120-12A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	0.90	0.072 F	4.9	0.40 F
cis-1,2-Dichloroethene	0.90	46	3.6	180
Trichloroethene	0.90	44	4.9	240
Tetrachloroethene	0.90	330	6.1	2200
trans-1,2-Dichloroethene	0.90	1.0	3.6	4.1
Benzene	0.90	0.27 F	2.9	0.86 F
Toluene	0.90	0.87 F	3.4	3.3 F

**Client Sample ID: AOC65-VEW20**

**Lab ID#: 1204120-13A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	0.76	0.060 F	4.1	0.33 F
cis-1,2-Dichloroethene	0.76	0.81	3.0	3.2
Methylene Chloride	7.6	0.21 F	26	0.74 F
Trichloroethene	0.76	1.2	4.0	6.7
Tetrachloroethene	0.76	87	5.1	590
Benzene	0.76	0.36 F	2.4	1.1 F
Toluene	0.76	1.0	2.8	3.8

**Client Sample ID: AOC65-VEW23**

**Lab ID#: 1204120-14A**

## Summary of Detected Compounds EPA METHOD TO-15 GC/MS

**Client Sample ID: AOC65-VEW23**

**Lab ID#: 1204120-14A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.74	1.8	3.0	7.3
Trichloroethene	0.74	3.8	4.0	20
Tetrachloroethene	0.74	23	5.0	160
Benzene	0.74	0.30 F	2.4	0.94 F
Toluene	0.74	0.73 F	2.8	2.8 F

**Client Sample ID: AOC65-VEW25**

**Lab ID#: 1204120-15A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	2.5	0.12 F	13	0.64 F
cis-1,2-Dichloroethene	2.5	8.9	9.8	35
Trichloroethene	2.5	21	13	120
Tetrachloroethene	2.5	690	17	4700
Benzene	2.5	0.27 F	7.9	0.88 F
Toluene	2.5	0.87 F	9.3	3.3 F

**Client Sample ID: AOC65-VEW27**

**Lab ID#: 1204120-16A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	2.9	3.4	12	14
Trichloroethene	2.9	6.1	16	32
Tetrachloroethene	2.9	1000	20	6900
Toluene	2.9	0.77 F	11	2.9 F

**Client Sample ID: AOC65-VEW21**

**Lab ID#: 1204120-17A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.82	1.8	3.3	7.1
Trichloroethene	0.82	5.0	4.4	27

**Summary of Detected Compounds  
EPA METHOD TO-15 GC/MS**

**Client Sample ID: AOC65-VEW21**

**Lab ID#: 1204120-17A**

Tetrachloroethene	0.82	16	5.6	110
Benzene	0.82	0.14 F	2.6	0.46 F
Toluene	0.82	0.81 F	3.1	3.0 F

**Client Sample ID: AOC65-VEW18-LGR**

**Lab ID#: 1204120-18A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	7.8	0.27 F	27	0.95 F
Trichloroethene	0.78	1.2	4.2	6.4
Tetrachloroethene	0.78	23	5.3	160
Benzene	0.78	0.20 F	2.5	0.63 F
Toluene	0.78	0.51 F	3.0	1.9 F

Client Sample ID: AOC65-VEW28B

Lab ID#: 1204120-01A

EPA METHOD TO-15 GC/MS

File Name:	p040611	Date of Collection:	4/3/12 9:29:00 AM
Dil. Factor:	1.45	Date of Analysis:	4/6/12 05:49 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloroethane	0.72	Not Detected U	2.9	Not Detected U
1,1,1-Trichloroethane	0.72	Not Detected U	4.0	Not Detected U
cis-1,2-Dichloroethene	0.72	0.85	2.9	3.4
Methylene Chloride	7.2	0.24 F	25	0.85 F
Trichloroethene	0.72	12	3.9	67
Tetrachloroethene	0.72	240	4.9	1600
trans-1,2-Dichloroethene	0.72	Not Detected U	2.9	Not Detected U
Benzene	0.72	0.20 F	2.3	0.63 F
Toluene	0.72	0.81	2.7	3.0

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

F = The analyte was positively identified but the associated numerical value is below the RL.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	90	70-130



Air Toxics

Client Sample ID: AOC65-VEW16-LGR

Lab ID#: 1204120-02A

EPA METHOD TO-15 GC/MS

File Name:	p040612	Date of Collection:	4/3/12 9:35:00 AM
Dil. Factor:	1.45	Date of Analysis:	4/6/12 06:14 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloroethane	0.72	Not Detected U	2.9	Not Detected U
1,1,1-Trichloroethane	0.72	Not Detected U	4.0	Not Detected U
cis-1,2-Dichloroethene	0.72	1.5	2.9	5.8
Methylene Chloride	7.2	0.25 F	25	0.88 F
Trichloroethene	0.72	6.3	3.9	34
Tetrachloroethene	0.72	220	4.9	1500
trans-1,2-Dichloroethene	0.72	Not Detected U	2.9	Not Detected U
Benzene	0.72	0.16 F	2.3	0.52 F
Toluene	0.72	0.76	2.7	2.9

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

F = The analyte was positively identified but the associated numerical value is below the RL.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	90	70-130



Client Sample ID: AOC65-VEW15-UGR

Lab ID#: 1204120-03A

EPA METHOD TO-15 GC/MS

File Name:	p040613	Date of Collection:	4/3/12 9:41:00 AM
Dil. Factor:	1.45	Date of Analysis:	4/6/12 06:36 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloroethane	0.72	Not Detected U	2.9	Not Detected U
1,1,1-Trichloroethane	0.72	Not Detected U	4.0	Not Detected U
cis-1,2-Dichloroethene	0.72	1.3	2.9	5.3
Methylene Chloride	7.2	0.23 F	25	0.81 F
Trichloroethene	0.72	5.7	3.9	31
Tetrachloroethene	0.72	180	4.9	1200
trans-1,2-Dichloroethene	0.72	Not Detected U	2.9	Not Detected U
Benzene	0.72	0.17 F	2.3	0.55 F
Toluene	0.72	0.74	2.7	2.8

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

F = The analyte was positively identified but the associated numerical value is below the RL.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	91	70-130

Client Sample ID: AOC65-VEW31

Lab ID#: 1204120-04A

EPA METHOD TO-15 GC/MS

File Name:	p040615	Date of Collection:	4/3/12 9:51:00 AM
Dil. Factor:	1.47	Date of Analysis:	4/6/12 07:40 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloroethane	0.74	Not Detected U	3.0	Not Detected U
1,1,1-Trichloroethane	0.74	Not Detected U	4.0	Not Detected U
cis-1,2-Dichloroethene	0.74	2.2	2.9	8.9
Methylene Chloride	7.4	0.36 F	26	1.2 F
Trichloroethene	0.74	9.3	4.0	50
Tetrachloroethene	0.74	170	5.0	1200
trans-1,2-Dichloroethene	0.74	Not Detected U	2.9	Not Detected U
Benzene	0.74	0.15 F	2.3	0.47 F
Toluene	0.74	0.63 F	2.8	2.4 F

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

F = The analyte was positively identified but the associated numerical value is below the RL.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	92	70-130



Client Sample ID: AOC65-VEW32

Lab ID#: 1204120-05A

EPA METHOD TO-15 GC/MS

File Name:	p040628	Date of Collection:	4/3/12 9:57:00 AM
Dil. Factor:	14.4	Date of Analysis:	4/7/12 10:05 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloroethane	7.2	Not Detected U	29	Not Detected U
1,1,1-Trichloroethane	7.2	Not Detected U	39	Not Detected U
cis-1,2-Dichloroethene	7.2	Not Detected U	28	Not Detected U
Methylene Chloride	72	Not Detected U	250	Not Detected U
Trichloroethene	7.2	12	39	66
Tetrachloroethene	7.2	2200	49	15000
trans-1,2-Dichloroethene	7.2	Not Detected U	28	Not Detected U
Benzene	7.2	Not Detected U	23	Not Detected U
Toluene	7.2	Not Detected U	27	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	88	70-130



Client Sample ID: AOC65-VEW33

Lab ID#: 1204120-06A

EPA METHOD TO-15 GC/MS

File Name:	p040614	Date of Collection:	4/3/12 10:04:00 AM
Dil. Factor:	3.65	Date of Analysis:	4/6/12 07:02 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloroethane	1.8	Not Detected U	7.4	Not Detected U
1,1,1-Trichloroethane	1.8	Not Detected U	10	Not Detected U
cis-1,2-Dichloroethene	1.8	3.2	7.2	13
Methylene Chloride	18	Not Detected U	63	Not Detected U
Trichloroethene	1.8	24	9.8	130
Tetrachloroethene	1.8	530	12	3600
trans-1,2-Dichloroethene	1.8	Not Detected U	7.2	Not Detected U
Benzene	1.8	0.26 F	5.8	0.83 F
Toluene	1.8	1.6 F	6.9	5.9 F

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

F = The analyte was positively identified but the associated numerical value is below the RL.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	91	70-130

Client Sample ID: AOC65-VEW30

Lab ID#: 1204120-07A

EPA METHOD TO-15 GC/MS

File Name:	p040627	Date of Collection:	4/3/12 10:10:00 AM
Dil. Factor:	14.5	Date of Analysis:	4/7/12 09:24 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloroethane	7.2	Not Detected U	29	Not Detected U
1,1,1-Trichloroethane	7.2	Not Detected U	40	Not Detected U
cis-1,2-Dichloroethene	7.2	5.9 F	29	24 F
Methylene Chloride	72	Not Detected U	250	Not Detected U
Trichloroethene	7.2	11	39	57
Tetrachloroethene	7.2	2900	49	20000
trans-1,2-Dichloroethene	7.2	Not Detected U	29	Not Detected U
Benzene	7.2	Not Detected U	23	Not Detected U
Toluene	7.2	Not Detected U	27	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

F = The analyte was positively identified but the associated numerical value is below the RL.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	91	70-130

Client Sample ID: AOC65-VEW29

Lab ID#: 1204120-08A

EPA METHOD TO-15 GC/MS

File Name:	p040616	Date of Collection:	4/3/12 10:17:00 AM
Dil. Factor:	1.45	Date of Analysis:	4/6/12 07:58 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloroethane	0.72	Not Detected U	2.9	Not Detected U
1,1,1-Trichloroethane	0.72	Not Detected U	4.0	Not Detected U
cis-1,2-Dichloroethene	0.72	1.0	2.9	4.0
Methylene Chloride	7.2	Not Detected U	25	Not Detected U
Trichloroethene	0.72	2.1	3.9	11
Tetrachloroethene	0.72	22	4.9	150
trans-1,2-Dichloroethene	0.72	Not Detected U	2.9	Not Detected U
Benzene	0.72	0.14 F	2.3	0.43 F
Toluene	0.72	0.47 F	2.7	1.8 F

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

F = The analyte was positively identified but the associated numerical value is below the RL.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	92	70-130



Client Sample ID: B90-INTAKE-EX

Lab ID#: 1204120-09A

EPA METHOD TO-15 GC/MS

File Name:	p040617	Date of Collection:	4/3/12 10:24:00 AM
Dil. Factor:	1.68	Date of Analysis:	4/6/12 08:16 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloroethane	0.84	Not Detected U	3.4	Not Detected U
1,1,1-Trichloroethane	0.84	Not Detected U	4.6	Not Detected U
cis-1,2-Dichloroethane	0.84	2.4	3.3	9.5
Methylene Chloride	8.4	0.30 F	29	1.0 F
Trichloroethene	0.84	9.2	4.5	50
Tetrachloroethene	0.84	310	5.7	2100
trans-1,2-Dichloroethene	0.84	Not Detected U	3.3	Not Detected U
Benzene	0.84	0.17 F	2.7	0.54 F
Toluene	0.84	0.82 F	3.2	3.1 F

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

F = The analyte was positively identified but the associated numerical value is below the RL.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	92	70-130



Client Sample ID: B90-INTAKE-SS

Lab ID#: 1204120-10A

EPA METHOD TO-15 GC/MS

File Name:	p040618	Date of Collection:	4/3/12 10:35:00 AM
Dil. Factor:	1.44	Date of Analysis:	4/6/12 08:39 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloroethane	0.72	Not Detected U	2.9	Not Detected U
1,1,1-Trichloroethane	0.72	0.044 F	3.9	0.24 F
cis-1,2-Dichloroethane	0.72	0.70 F	2.8	2.8 F
Methylene Chloride	7.2	0.18 F	25	0.63 F
Trichloroethene	0.72	0.49 F	3.9	2.6 F
Tetrachloroethene	0.72	86	4.9	580
trans-1,2-Dichloroethene	0.72	Not Detected U	2.8	Not Detected U
Benzene	0.72	0.34 F	2.3	1.1 F
Toluene	0.72	1.1	2.7	4.3

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

F = The analyte was positively identified but the associated numerical value is below the RL.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	93	70-130



Client Sample ID: AOC65-INTAKE-SW

Lab ID#: 1204120-11A

EPA METHOD TO-15 GC/MS

File Name:	p040619	Date of Collection:	4/3/12 10:57:00 AM
Dil. Factor:	3.27	Date of Analysis:	4/6/12 08:56 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloroethane	1.6	Not Detected U	6.6	Not Detected U
1,1,1-Trichloroethane	1.6	Not Detected U	8.9	Not Detected U
cis-1,2-Dichloroethene	1.6	23	6.5	90
Methylene Chloride	16	Not Detected U	57	Not Detected U
Trichloroethene	1.6	24	8.8	130
Tetrachloroethene	1.6	520	11	3500
trans-1,2-Dichloroethene	1.6	Not Detected U	6.5	Not Detected U
Benzene	1.6	0.26 F	5.2	0.82 F
Toluene	1.6	0.85 F	6.2	3.2 F

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

F = The analyte was positively identified but the associated numerical value is below the RL.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	95	70-130



Client Sample ID: AOC65-VEW19-UGR

Lab ID#: 1204120-12A

EPA METHOD TO-15 GC/MS

File Name:	p040620	Date of Collection:	4/3/12 11:02:00 AM
Dil. Factor:	1.81	Date of Analysis:	4/6/12 09:13 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloroethane	0.90	Not Detected U	3.7	Not Detected U
1,1,1-Trichloroethane	0.90	0.072 F	4.9	0.40 F
cis-1,2-Dichloroethane	0.90	46	3.6	180
Methylene Chloride	9.0	Not Detected U	31	Not Detected U
Trichloroethene	0.90	44	4.9	240
Tetrachloroethene	0.90	330	6.1	2200
trans-1,2-Dichloroethene	0.90	1.0	3.6	4.1
Benzene	0.90	0.27 F	2.9	0.86 F
Toluene	0.90	0.87 F	3.4	3.3 F

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

F = The analyte was positively identified but the associated numerical value is below the RL.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	98	70-130



Client Sample ID: AOC65-VEW20

Lab ID#: 1204120-13A

EPA METHOD TO-15 GC/MS

File Name:	p040621	Date of Collection:	4/3/12 11:08:00 AM
Dil. Factor:	1.51	Date of Analysis:	4/6/12 09:31 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloroethane	0.76	Not Detected U	3.0	Not Detected U
1,1,1-Trichloroethane	0.76	0.060 F	4.1	0.33 F
cis-1,2-Dichloroethene	0.76	0.81	3.0	3.2
Methylene Chloride	7.6	0.21 F	26	0.74 F
Trichloroethene	0.76	1.2	4.0	6.7
Tetrachloroethene	0.76	87	5.1	590
trans-1,2-Dichloroethene	0.76	Not Detected U	3.0	Not Detected U
Benzene	0.76	0.36 F	2.4	1.1 F
Toluene	0.76	1.0	2.8	3.8

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

F = The analyte was positively identified but the associated numerical value is below the RL.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	93	70-130

Client Sample ID: AOC65-VEW23

Lab ID#: 1204120-14A

EPA METHOD TO-15 GC/MS

File Name:	p040622	Date of Collection:	4/3/12 11:15:00 AM
Dil. Factor:	1.49	Date of Analysis:	4/6/12 10:02 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloroethane	0.74	Not Detected U	3.0	Not Detected U
1,1,1-Trichloroethane	0.74	Not Detected U	4.1	Not Detected U
cis-1,2-Dichloroethene	0.74	1.8	3.0	7.3
Methylene Chloride	7.4	Not Detected U	26	Not Detected U
Trichloroethene	0.74	3.8	4.0	20
Tetrachloroethene	0.74	23	5.0	160
trans-1,2-Dichloroethene	0.74	Not Detected U	3.0	Not Detected U
Benzene	0.74	0.30 F	2.4	0.94 F
Toluene	0.74	0.73 F	2.8	2.8 F

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

F = The analyte was positively identified but the associated numerical value is below the RL.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	91	70-130



Client Sample ID: AOC65-VEW25

Lab ID#: 1204120-15A

EPA METHOD TO-15 GC/MS

File Name:	p040623	Date of Collection:	4/3/12 11:21:00 AM
Dil. Factor:	4.93	Date of Analysis:	4/6/12 10:19 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloroethane	2.5	Not Detected U	10	Not Detected U
1,1,1-Trichloroethane	2.5	0.12 F	13	0.64 F
cis-1,2-Dichloroethane	2.5	8.9	9.8	35
Methylene Chloride	25	Not Detected U	86	Not Detected U
Trichloroethene	2.5	21	13	120
Tetrachloroethene	2.5	690	17	4700
trans-1,2-Dichloroethene	2.5	Not Detected U	9.8	Not Detected U
Benzene	2.5	0.27 F	7.9	0.88 F
Toluene	2.5	0.87 F	9.3	3.3 F

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

F = The analyte was positively identified but the associated numerical value is below the RL.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	93	70-130

Client Sample ID: AOC65-VEW27

Lab ID#: 1204120-16A

EPA METHOD TO-15 GC/MS

File Name:	p040626	Date of Collection:	4/3/12 11:26:00 AM
Dil. Factor:	5.84	Date of Analysis:	4/7/12 08:50 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloroethane	2.9	Not Detected U	12	Not Detected U
1,1,1-Trichloroethane	2.9	Not Detected U	16	Not Detected U
cis-1,2-Dichloroethene	2.9	3.4	12	14
Methylene Chloride	29	Not Detected U	100	Not Detected U
Trichloroethene	2.9	6.1	16	32
Tetrachloroethene	2.9	1000	20	6900
trans-1,2-Dichloroethene	2.9	Not Detected U	12	Not Detected U
Benzene	2.9	Not Detected U	9.3	Not Detected U
Toluene	2.9	0.77 F	11	2.9 F

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

F = The analyte was positively identified but the associated numerical value is below the RL.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	91	70-130

Client Sample ID: AOC65-VEW21

Lab ID#: 1204120-17A

EPA METHOD TO-15 GC/MS

File Name:	p040624	Date of Collection:	4/3/12 1:55:00 PM
Dil. Factor:	1.65	Date of Analysis:	4/6/12 10:51 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloroethane	0.82	Not Detected U	3.3	Not Detected U
1,1,1-Trichloroethane	0.82	Not Detected U	4.5	Not Detected U
cis-1,2-Dichloroethene	0.82	1.8	3.3	7.1
Methylene Chloride	8.2	Not Detected U	29	Not Detected U
Trichloroethene	0.82	5.0	4.4	27
Tetrachloroethene	0.82	16	5.6	110
trans-1,2-Dichloroethene	0.82	Not Detected U	3.3	Not Detected U
Benzene	0.82	0.14 F	2.6	0.46 F
Toluene	0.82	0.81 F	3.1	3.0 F

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

F = The analyte was positively identified but the associated numerical value is below the RL.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	92	70-130



Air Toxics

Client Sample ID: AOC65-VEW18-LGR

Lab ID#: 1204120-18A

EPA METHOD TO-15 GC/MS

File Name:	p040625	Date of Collection:	4/3/12 2:00:00 PM
Dil. Factor:	1.57	Date of Analysis:	4/7/12 08:13 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloroethane	0.78	Not Detected U	3.2	Not Detected U
1,1,1-Trichloroethane	0.78	Not Detected U	4.3	Not Detected U
cis-1,2-Dichloroethene	0.78	Not Detected U	3.1	Not Detected U
Methylene Chloride	7.8	0.27 F	27	0.95 F
Trichloroethene	0.78	1.2	4.2	6.4
Tetrachloroethene	0.78	23	5.3	160
trans-1,2-Dichloroethene	0.78	Not Detected U	3.1	Not Detected U
Benzene	0.78	0.20 F	2.5	0.63 F
Toluene	0.78	0.51 F	3.0	1.9 F

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

F = The analyte was positively identified but the associated numerical value is below the RL.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	87	70-130



Client Sample ID: Lab Blank

Lab ID#: 1204120-19A

EPA METHOD TO-15 GC/MS

File Name:	p040606	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/6/12 12:45 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloroethane	0.50	Not Detected U	2.0	Not Detected U
1,1,1-Trichloroethane	0.50	Not Detected U	2.7	Not Detected U
cis-1,2-Dichloroethene	0.50	Not Detected U	2.0	Not Detected U
Methylene Chloride	5.0	Not Detected U	17	Not Detected U
Trichloroethene	0.50	Not Detected U	2.7	Not Detected U
Tetrachloroethene	0.50	Not Detected U	3.4	Not Detected U
trans-1,2-Dichloroethene	0.50	Not Detected U	2.0	Not Detected U
Benzene	0.50	Not Detected U	1.6	Not Detected U
Toluene	0.50	Not Detected U	1.9	Not Detected U

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	95	70-130

Client Sample ID: CCV

Lab ID#: 1204120-20A

EPA METHOD TO-15 GC/MS

File Name:	p040602	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/6/12 10:58 AM

Compound	%Recovery
1,2-Dichloroethane	95
1,1,1-Trichloroethane	93
cis-1,2-Dichloroethene	93
Methylene Chloride	98
Trichloroethene	89
Tetrachloroethene	94
trans-1,2-Dichloroethene	95
Benzene	92
Toluene	89

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	96	70-130

Client Sample ID: LCS

Lab ID#: 1204120-21A

EPA METHOD TO-15 GC/MS

File Name:	p040603	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/6/12 11:33 AM

Compound	%Recovery
1,2-Dichloroethane	104
1,1,1-Trichloroethane	101
cis-1,2-Dichloroethene	100
Methylene Chloride	103
Trichloroethene	99
Tetrachloroethene	100
trans-1,2-Dichloroethene	114
Benzene	100
Toluene	96

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	94	70-130

Client Sample ID: LCSD

Lab ID#: 1204120-21AA

EPA METHOD TO-15 GC/MS

File Name:	p040604	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/6/12 11:51 AM

Compound	%Recovery
1,2-Dichloroethane	102
1,1,1-Trichloroethane	99
cis-1,2-Dichloroethene	99
Methylene Chloride	102
Trichloroethene	98
Tetrachloroethene	98
trans-1,2-Dichloroethene	114
Benzene	99
Toluene	94

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	95	70-130