

2010 UPDATE TO AOC-65 SOIL VAPOR EXTRACTION OPERATIONS AND MAINTENANCE ASSESSMENT REPORT



Prepared for:

**Camp Stanley Storage Activity
Boerne, Texas**

JULY 2010

**AOC-65 SOIL VAPOR EXTRACTION
OPERATIONS AND MAINTENANCE
ASSESSMENT REPORT**

**Camp Stanley Storage Activity
Boerne, Texas**

**Contract Number W9126G-07-D-0028
Task Order DO11**

JULY 2010

EXECUTIVE SUMMARY

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

This operations and maintenance (O&M) assessment report reviews the performance of the system for the approximately 2-year period between April 2008 and April 2010. This report presents the data associated with system operation, and presents recommendations to improve system performance and provide more accurate information for mass removal calculations.

Over the two years covered by this O&M period, approximately 122 pounds (lb) (9 gallons) of tetrachloroethene (PCE) have been removed from the underlying limestone at AOC-65. The annualized mass removal rate (assuming the system could run 24 hours/day, 365 days/year) was estimated to be 134.59 lb/year (approximately 10 gallons/year) for the first year (April 2008 to April 2009) and 12.9 lb/year (approximately 1 gallon/year) for the second year (April 2009 to April 2010). Both values are well below the permitted limit of 0.273 lb/hour or 2,395.77 lb/year. The significantly different values between the two 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 2010, weather conditions affected VOC recovery rates. First a drought resulted in much lower groundwater levels and generally lower VOC concentrations. The drought was followed by very wet conditions which caused the VEWs to become flooded, preventing removal of vapor.

Each subsystem contributed the following to the total mass removed:

- Sub-slab VEWs accounted for the removal of 72.38 lb (5.3 gallons);
- AOC-65 Shallow VEWs accounted for the removal of 28.59 lb (2.1 gallons);
- AOC-65 Deep VEWs accounted for the removal of 16.67 lb (1.2 gallons); and
- Exterior Building 90 VEWs accounted for the removal of 4.37 lb (0.32 gallons).

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

- Install in-line flow meters with vortex dampeners for more accurate flow rates;
- Increase vacuum pressure on the more productive VEWs to improve overall subsystem removal rates; and
- Develop a Work Plan for a treatability study which would install a steam injection well near Building 90 to potentially enhance volatilization of contaminants. This plan would also consider installation of dual-phase extraction wells or retrofitting existing VEWs for dual-phase extraction to address the problem of occasional flooding of the VEWs.

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ACRONYMS AND ABBREVIATIONS

AOC	Area of Concern
bgs	below ground surface
CO ₂	Carbon Dioxide
CSSA	Camp Stanley Storage Activity
ft	feet
GAC	Granular activated carbon
lb	pounds
lb/hr	pounds per hour
lb/yr	pounds per year
O&M	operation and maintenance
O ₂	Oxygen
Parsons	Parsons Infrastructure and Technology, Inc.
PBR	permit by rule
PCE	tetrachloroethylene
PID	photoionization detector
ppbV	parts per billion by volume
SVE	Soil Vapor Extraction
TCEQ	Texas Commission on Environmental Quality
TVH	Total Volatile Hydrocarbon
USEPA	U.S. Environmental Protection Agency
VEW	vapor extraction well
VMP	vapor monitoring point
VOC	volatile organic compounds

CHAPTER 1 INTRODUCTION

This report summarizes operations and results for a two-year period of operation and maintenance (O&M) activities following the expansion of the soil vapor extraction (SVE) system at Area of Concern (AOC)-65. The O&M monitoring period described in this document was initiated on April 17, 2008 and performed through April 8, 2010. The monitoring activities performed were intended to maintain the operational status of the system and to collect data for evaluation of the system performance. Secondary objectives of the O&M period monitoring task included repair of any identified defect(s) in the SVE system(s) following the expansion and determination of vapor extraction well (VEW) connectivity to specific AOC-65 blowers. Recommendations for future SVE applications at the AOC-65 site (e.g., steam-enhanced recovery) were developed based on the results of the SVE vacuum testing and from observations made during the O&M activities described in this report.

1.1 PURPOSE

This document was prepared as an assessment of the AOC-65 SVE operations. The purpose of this assessment is to evaluate and assess 24 months of system monitoring.

Activities performed during the operations and monitoring include:

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

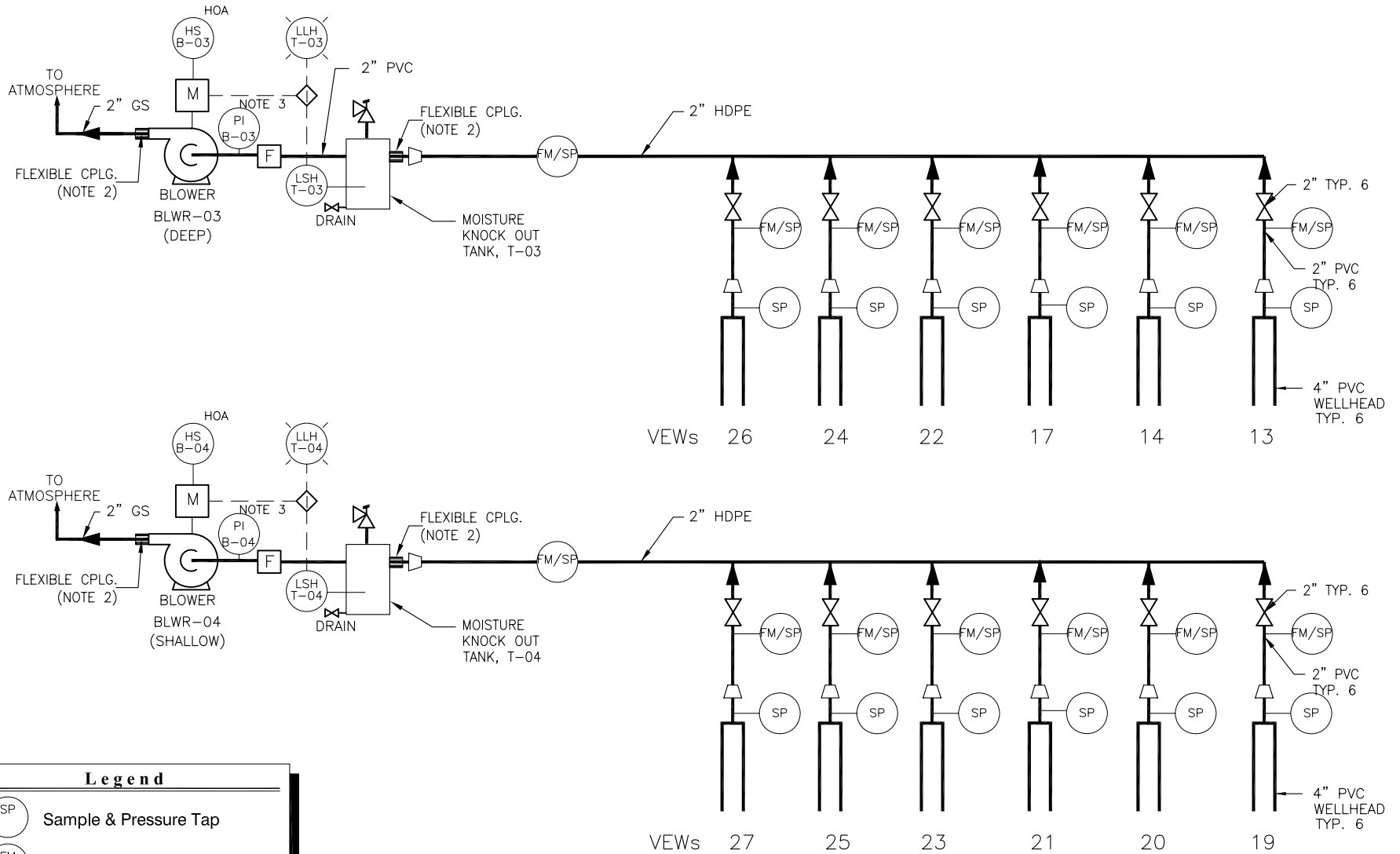
This report is an update to the AOC-65 Soil Vapor Extraction O&M Assessment report completed in July 2009. The July 2009 report covered the period from April 18, 2008 through April 17, 2009. This update adds the period from April 18, 2009 through April 8, 2010.

1.2 BACKGROUND

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

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

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

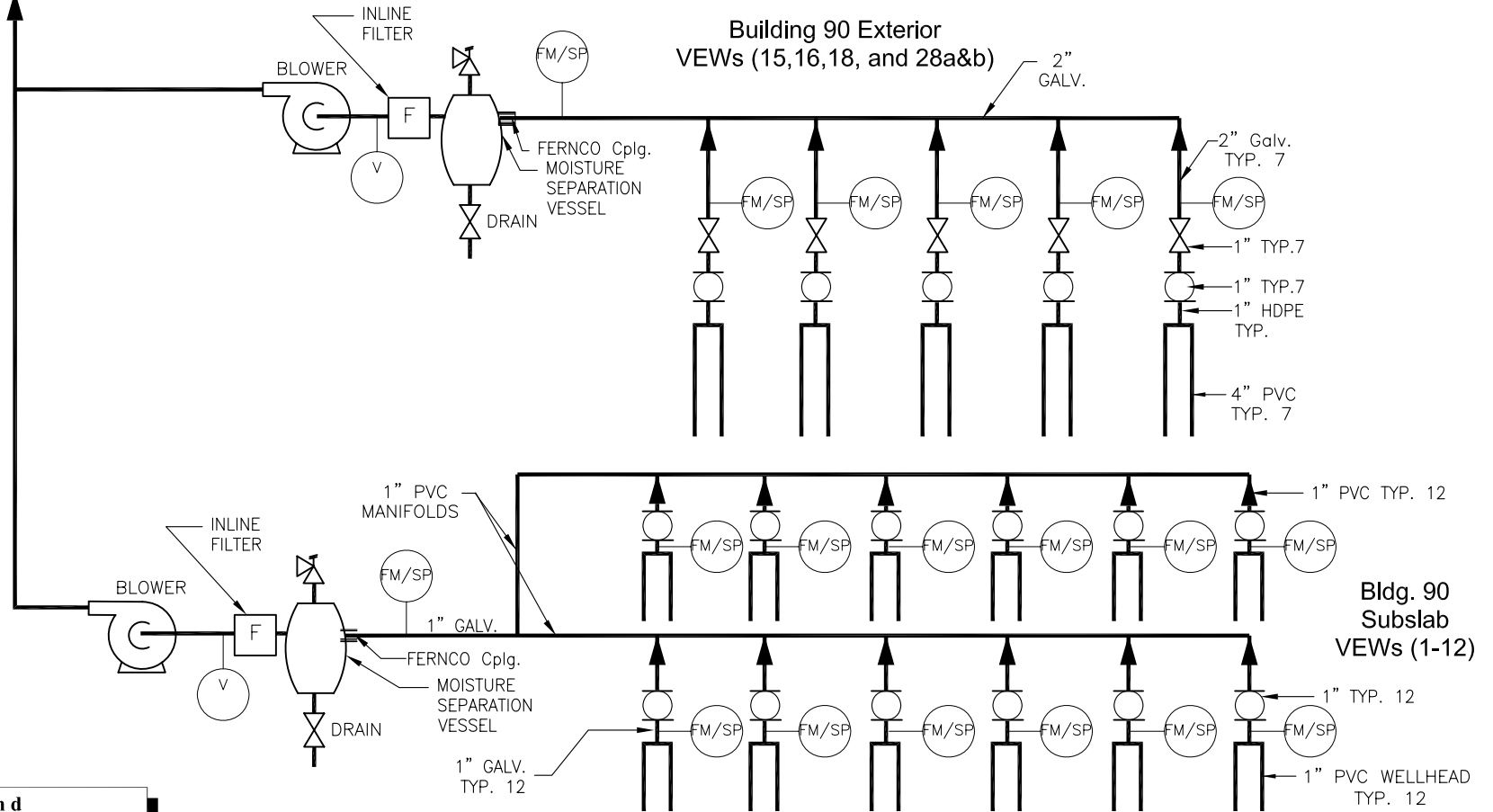


Legend	
	Sample & Pressure Tap
	Flow Measuring Tap
	Pressure/Vacuum Indicator
	Gate Valve
	Ball Valve
	Vacuum Relief Valve
	Inline Filter







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

Not To Scale

TO
ATMOSPHERE



Legend

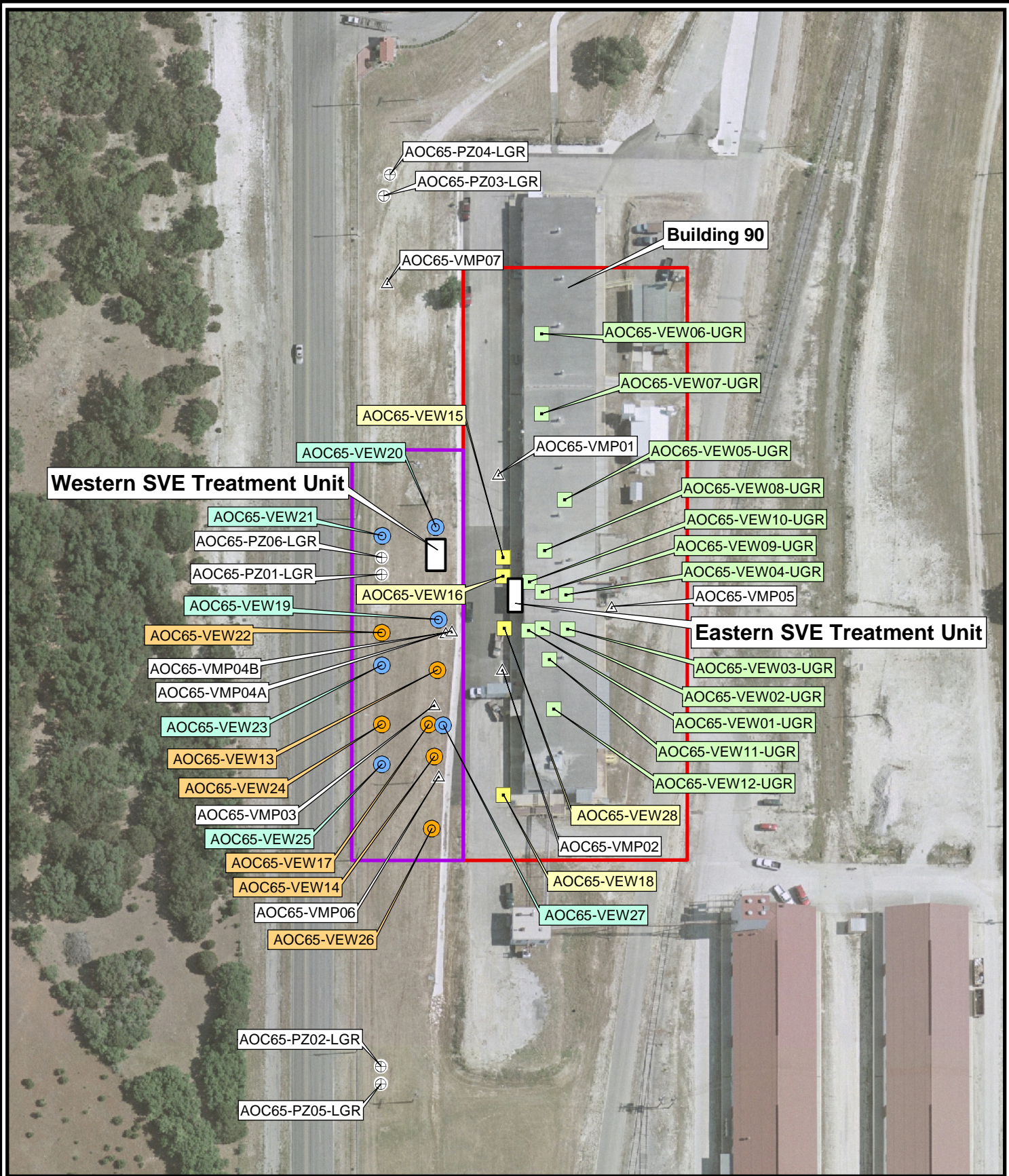
-  Sample Port
-  Flow Measuring Port
-  Pressure/Vacuum Indicator
-  Gate Valve
-  Ball Valve
-  Vacuum Relief/Bleed Valve

Not To Scale

Figure 1.2

AOC-65 Eastern SVE
System Schematic
Camp Stanley Storage Activity

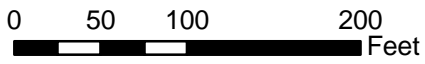




Western SVE Treatment Unit

Eastern SVE Treatment Unit

Building 90



- Eastern SVE - Sub-Slab VEW
- Eastern SVE - Exterior VEW
- Western SVE - Deep VEW
- Western SVE - Shallow VEW
- ⊕ Piezometer Locations
- △ VMP Locations
- AOC 65 Eastern SVE System
- AOC 65 Western SVE System

Figure 1.3

AOC-65 SVE System
 VEW Location Map
 Camp Stanley Storage Activity

Parsons

CHAPTER 2 OPERATIONS AND MAINTENANCE TESTING PROTOCOLS

2.1 OVERVIEW

This chapter summarizes the SVE monitoring activities, following the system expansion in 2007. It covers O&M performed during the 24-month period from April 2008 to April 2010 at AOC-65. The primary activities associated with the O&M included bi-weekly and monthly monitoring of system performance, including system checks and flow adjustments as necessary; collection of emission and soil gas samples during periodic sampling events (baseline and semi annual); semi-annual analysis of extracted soil gas; a vacuum connectivity test; and general system maintenance. Monthly monitoring consisted of field screening of flow and pressure readings to determine if there were significant fluctuations in the key operating parameters and making any needed flow adjustments. Results from monitoring events are presented in Chapter 3. SVE condensate was managed through CSSA's Texas Pollutant Discharge Elimination System, permit number WQ0003849000, at Outfall 002 or as authorized by Texas Commission on Environmental Quality (TCEQ) Underground Injection Control permit, authorization number 5X2600431.

2.2 INITIAL SOIL GAS AND FLOW ADJUSTMENTS

Baseline monitoring was performed on April 17, 2008, prior to start up of the expanded SVE system. The system was shut down in March 2007 for the construction of the upgraded system and soil gas sampling was performed to acquire new baseline data at the beginning of the O&M period. Oxygen (O₂), carbon dioxide (CO₂), and VOCs were measured at each of the sample points. Field screening was performed at all VEWs using a GasTechTor Gas alarm (O₂/CO₂), Photovac 2020 Proplus photoionization detector [PID] (total volatile hydrocarbon [TVH]), Dwyer Series 471 Thermo-Anemometer (temperature and flow), and a Dwyer Series 477A Digital Manometer (vacuum). Samples were collected from the new wells outside Building 90 (VEW-28A and VEW-28B), new deep wells (VEWs 22, 24, 26), new shallow wells (VEWs 20, 21, 23, 25 and 27), and blower intakes for Volatile Organic Carbon (VOC) analysis by U.S. Environmental Protection Agency (USEPA) method TO-15. Monitoring data was used to assess operational performance and estimating emission levels from the SVE system to verify compliance with the associated TCEQ permit by rule (PBR) for regulating air emissions from the SVE blowers.

2.3 MONTHLY MONITORING

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

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

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

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

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

Date	Activity	Samples/Comments
September 11, 2009	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
October 8, 2009	Monthly monitoring, semi-annual sampling	Field readings and soil vapor sampling from VEWs 13-28B and all four intakes
November 3, 2009	Monthly monitoring, System maintenance	Field readings from VEWs 13-28B, and all four intakes; Water levels in VEWs gauged
December 11, 2009	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
January 5, 2010	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
January 12, 2010	Carbon exchange	GAC for the Eastern SVE system recharged
February 9, 2010	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
March 19, 2010	Monthly monitoring	Field readings from VEWs 13-28B, and all four intakes
April 8, 2010	Monthly monitoring, semi-annual sampling	Field readings and soil vapor sampling from VEWs 13-28B and all four intakes

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

2.4 SEMI – ANNUAL MONITORING

During the O&M period, soil gas samples were collected from the system and submitted for laboratory analysis on a semi-annual basis. These events occurred in November 2008, April 2009, October 2009, and April 2010. Samples were collected from the selected sampling points (VEWs 20 through 28B), and all four intakes during each sampling event to allow for direct comparison of results. The baseline-sampling event was performed April 17, 2008. Semi-annual monitoring events were used to assess emissions from the system and to ensure compliance with permitted standards. All emissions and soil gas air samples submitted for analyses were tested for VOCs using USEPA Method TO-15. The CSSA Quality Assurance Project Plan was followed for sample collection and analysis. Field screening was accomplished using a PID and oxygen/carbon dioxide meter. All sampling was done in accordance with the Sampling and Analysis Plan Addendum (Parsons, 2005d). Results from the emissions testing are discussed in Subchapter 3.3. Laboratory data packages are provided in Appendix B.

2.5 VACUUM CONNECTIVITY TEST

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

pressure testing was then repeated for those VEWs. Similarly, VMP pressures were measured for each screened zone for each blower.

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

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

2.6 CARBON EXCHANGE

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

CHAPTER 3 SYSTEM OPERATIONAL MEASUREMENTS

This section summarizes results of 2 years of monthly monitoring and soil gas sampling during the O&M period following the system expansion (April 17, 2008 through April 8, 2010). Results were evaluated along with other periodic sample results from this O&M task, and from results obtained during the baseline activities of the SVE system to assess system performance. A brief evaluation of the O&M data and test results are included in this section.

3.1 SYSTEM OPERATIONAL MEASUREMENTS

Operation of the SVE system for the O&M assessment period began on April 17, 2008, with the baseline soil gas sampling. Airflow measurements and vacuum pressures were obtained at each functional VEW outside Building 90 to ensure that the settings established during the system adjustment were maintained. During the 24 months following system startup, personnel from Parsons performed system checks on an approximate twice-monthly schedule to ensure that continuous air extraction remained relatively uninterrupted, and that blower operating parameters remained stable. If any of the wells were non-functional due to maintenance or system operational issues, appropriate steps were taken to address the situation. Typical problems that render a VEW non-functional include: leaky well-head valves or high groundwater levels in the VEW covering the screened interval. These issues are addressed by replacing the well-head valve, or pumping groundwater from the VEW and managing the extracted groundwater as per CSSA's Texas Pollutant Discharge Elimination System Permit and/or Underground Injection Control Permit, respectively.

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

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

Table 3.1 Extraction Pressure Results from Monthly System Checks at Building 90 and Western AOC-65 SVE Systems (in. H₂O)

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

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

Table 3.1 (cont.) Extraction Pressure Results from Monthly System Checks at Building 90 and Western AOC-65 SVE Systems (in. H₂O)

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

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

Table 3.2 SVE System Air Flow Rates (fpm)

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

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

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

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

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

Table 3.3 System Intake and Exhaust Field Parameter Summary

Date	WESTERN AOC-65 SVE SYSTEM																			
	AOC65-INTAKE-SW							AOC65-INTAKE-DW							AOC65-EXHAUST					
	Vacuum Pump Inlet (in. H ₂ O)	Vac. @ Manifold (in.H ₂ O)	Flow (fpm)	Temp. (deg. F)	TVH (ppm)	O ₂ (%)	C02 (%)	Vacuum Pump Inlet (in. H ₂ O)	Vac. @ Manifold (in.H ₂ O)	Flow (fpm)	Temp. (deg. F)	TVH (ppm)	O ₂ (%)	C02 (%)	Vac. @ Manifold (in.H ₂ O)	Flow (fpm)	Temp. (deg. F)	TVH (ppm)	O ₂ (%)	C02 (%)
4/17/2008	33	-34/-19.5*	1,035	71.4	50.0	18.5	2.0	40	-23.0	5,250	68.3	5.4	15.5	3.5	---	---	---	---	---	---
7/15/2008	33	-32.2	720	85.8	0.0	20.0	0.8	40	-30.6	7,050	86.1	0.0	16.5	3.75	2.5	12,000	152.9	0.0	17.0	3.75
8/5/2008	34	-32.9	600	89.5	0.0	19.5	0.8	40	-30.3	9,500	92.2	0.0	20.0	3.5	2.4	13,800	161.2	0.0	17.0	3.5
9/23/2009	10	-10.0	140	87.9	2.8	20.75	0.8	42	-29.2	4,696	86.8	0.0	18.0	3.0	---	>15000	141.2	0.0	20.0	2.5
10/7/2008	40	-37.2	1,098	74.1	0.0	20.5	0.9	42	-31.9	5,730	80.0	0.0	18.0	3.5	2.3	7,802	139.4	0.0	18.0	3.5
11/11/2008	30	-30.2	1,013	71.5	0.0	21.0	0.3	42	-32.9	5,390	71.7	0.0	18.9	3.25	3.5	11,161	135.3	0.0	19.0	3.0
12/11/2008	35	-32.7	2,532	60.2	0.0	21.0	0.25	50	-38.7	4,884	61.5	0.0	19.0	2.0	3.1	5,231	121.8	0.0	20.0	2.0
1/9/2009	32	-24.3	4,130	69.4	0.0	21.0	0.00	49	-39.1	8,954	69.2	0.0	18.0	2.5	3.5	10,227	135.1	0.0	18.5	2.25
2/4/2009	32	-24.2	2,452	62.5	1.9	21.0	0.00	46	-36.4	4,730	63.1	3.8	20.5	2.5	4.2	10,850	128.2	4.0	20.0	2.0
3/3/2009	24	-22.9	3,290	71.7	2.9	21.0	0.00	24	-37.8	5,842	68.5	3.2	19.25	2.5	3.5	10,571	127.9	3.0	19.9	1.8
4/7/2009	26	-24.3	1,980	70.3	3.1	21.0	0.25	48	-36.8	5,360	69.0	4.3	19.50	2.5	3.9	12,102	138.0	6.7	19.8	2.0
5/7/2009	26	-24.8	2,543	76.6	0.3	20.5	0.25	42	-33.8	6,731	77.5	0.0	19.50	2.5	3.5	11,937	136.5	0.0	19.0	2.0
6/4/2009	32	-32.1	2,317	80.4	0.0	20.0	0.25	44	-33.7	8,519	85.2	0.0	18.00	2.5	3.7	12,700	146.2	2.4	18.5	2.0
7/9/2009	0	-16.9	2,224	82.2	---	20.4	0.10	85	-32.2	6,806	87.6	---	18.20	2.5	4.0	12,106	143.2	---	18.8	2.1
8/12/2009	25	-24.1	2,504	91.3	---	---	---	44	-33.2	7,324	90.6	---	---	---	3.6	11,692	155.4	---	---	---
9/11/2009	34	-33.3	726	75.3	0.0	---	---	45	-35.2	5,140	76.4	0.0	---	---	2.6	8,019	136.9	0.0	---	---
10/8/2009	35	-34.5	479	79.5	539.0	---	---	45	-35.6	6,440	79.3	0.0	---	---	2.7	9,150	131.8	0.0	---	---
12/11/2009	---	---	---	---	---	---	---	55	-44.1	9,073	46.2	---	---	---	86.0	1,788	86.1	---	---	---
1/5/2010	---	---	---	---	---	---	---	57	-42.8	4,682	50.8	16.2	---	---	1.9	5,833	102.9	13.9	---	---
2/9/2010	---	---	---	---	---	---	---	65	-43.9	2,284	44.0	28.2	---	---	1.5	2,078	88.3	36.6	---	---
3/19/2010	---	---	---	---	---	---	---	50	-39.5	4,041	59.7	2.8	---	---	1.9	2,702	99.4	1.4	---	---
4/8/2010	45	-34.5	555.0	67.8	6.6	---	---	50	-38.3	4,347	66.5	0.0	---	---	2.4	1,044	121.2	0.0	---	---

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

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

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

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

3.2 SOIL GAS SCREENING RESULTS

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

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

O₂ and CO₂ levels were obtained as part of the monthly monitoring activities at both Eastern and Western AOC-65 systems. These data are used to assess the potential degradation conditions that may exist within the underlying formation. Oxygen levels remained relatively constant for most VEWs in both systems throughout the O&M period with only minor deviations from atmospheric O₂ (20-21%). Average percent O₂ measured during the O&M period were 20.57, 19.09, 20.32, and 18.37% for the Building 90 sub-slab, Building 90 exterior (Eastern System), Western shallow wells, and Western deep wells, respectively. Carbon dioxide levels were generally low, averaging 1.91, 0.15, 0.56, and 2.88% during the O&M period for the Building 90 sub-slab, Building 90 exterior, Western shallow wells, and Western deep wells, respectively.

Monitoring for O₂ and CO₂ was dropped after no insight to the potential degradation conditions within the underlying formation could be reasonably deduced from the data collected for these parameters. Oxygen and CO₂ field screening results are presented in Table 3.4 and Table 3.5, respectively.

Table 3.4 O₂ Field Screening Summary (% vol.)

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

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

Table 3.5 CO₂ Field Screening Summary (% vol.)

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

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

3.3 SOIL GAS ANALYTICAL RESULTS

3.3.1 Soil Vapor Summary

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

Initial sample results (i.e., baseline) showed higher concentrations of VOC removed from the bedrock due to contaminant rebound during the SVE expansion efforts. During the SVE expansion efforts, the SVE system was not in operation for approximately 1 year (2007) which resulted in VOC accumulation in the underlying bedrock formation. PCE concentrations measured during the O&M period indicate decreasing concentrations at all VEWs and exhausts (blower intakes). AOC-65 shallow VEWs showed the greatest reduction in PCE, most notably VEW25, which had an initial concentration of 33,000 ppbv and only 47 ppbv during the final sample event. Most of the VEWs show an approximate 90% reduction in PCE concentrations from the initial baseline-sampling event to the final sample event. Of the blowers, the AOC-65 shallow blower intake exhibited the greatest reduction (98.7%), with a baseline PCE concentration of 15,000 ppbv and a final concentration of 190 ppbv.

3.3.2 PCE Removal Rates and Quantities

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

The sustainable removal rates for the AOC-65 systems estimated in Table 3.7 are low. These low removal rates may come from a variety of sources, including: long term operational down times, less available exposed screen intervals (due to high groundwater levels in the vadose zone), flow/vacuum data collection errors, uncertainty in system operational run-times, and slow volatilization rates within the bedrock formation. Western system PCE removal rates in shallow wells are estimated at 32.83 lb/yr during the first year and 2.34 lb/yr during the second year of operations indicating diminishing returns. During the second year of operation, the Western system shallow well blower was taken out of service for approximately five months for refurbishment, which detrimentally affects the overall efficiency of the system. Decreases in annualized removal rates are seen in each of the other systems as well. Lower removal rates may

also be attributed to higher than normal groundwater elevations, most notably for systems with shallow VEWs. As water levels rise, VEW screens become submerged, thus reducing the available surface area from which soil vapors may be extracted.

Table 3.6 VOC Concentrations at AOC-65 VEWs and Exhaust

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

* 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

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

		Calculated Annualized Removal Rates per semi-annual event (lb/yr)				Average Annualized Removal Rate (lb/yr)		Mass Removed (lbs)*	
		11/11/08	4/7/09	10/8/09	4/8/2010	Year 1	Year 2	Year 1	Year 2
Eastern AOC-65 System	Exterior								
	Building 90 Intake - EX	5.48	2.83	1.65	0.93	4.16	1.12	3.47	0.90
	Interior								
	Building 90 Intake - SS	146.2	14.9	8.4	2.1	80.58	6.37	67.28	5.10
Western AOC-65 System	Shallow Wells								
	AOC-65-Intake-SW	48.1	3.0	3.4	2.4	32.83	2.34	27.42	1.17
	Deep Wells								
	AOC-65-Intake-DW	24.6	1.9	4.0	3.7	17.02	3.06	14.21	2.45

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

Total lbs removed	112.39	9.62
Total gal removed	8.30	0.71

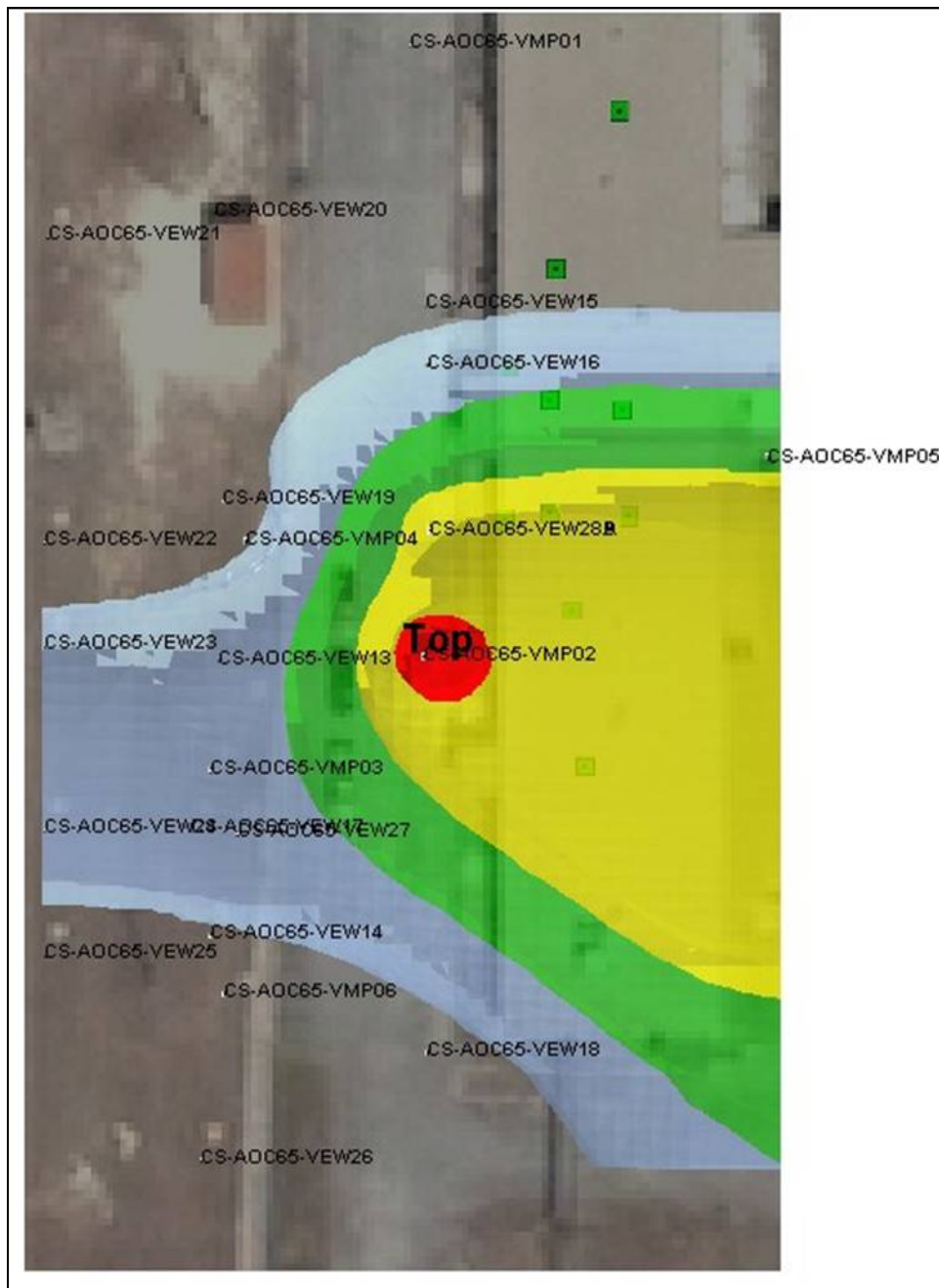
3.3.3 Air Emissions Summary

The total mass of contaminants removed by the SVE system during the O&M period was estimated using the average removal rates from the intakes at each blower (see Table 3.7). The annualized mass removal rate by the AOC-65 SVE system during the O&M period is estimated to be 134.59 lb/year (~10 gallons/yr) for the first year and 12.9 lb/yr (~1 gallon/yr) for the second year, which is well below the permitted limit of 0.268 lb/hr or 2,347.68 lb/year.

3.4 VACUUM CONNECTIVITY TEST RESULTS

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

Figure 3.1 AOC-65 Lateral Connectivity Map



Measured Vacuum Pressure

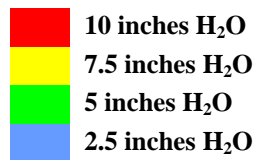
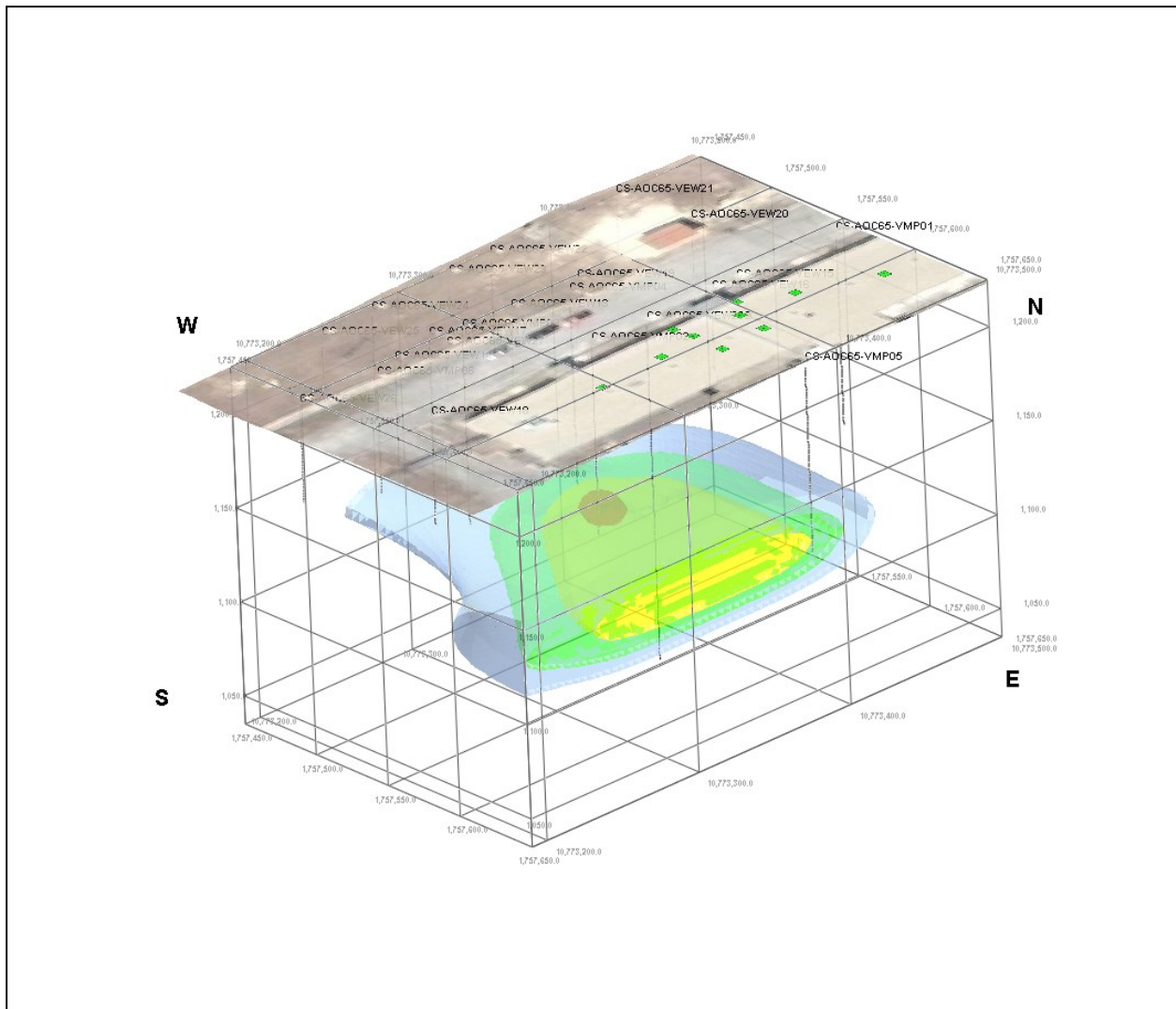


Figure 3.2 AOC-65 Connectivity Model



Measured Vacuum Pressure



CHAPTER 4 CONCLUSIONS AND RECOMMENDATIONS

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

During the 24 months of O&M operation of the SVE system at AOC-65, the removal of approximately 122 pounds (~ 9 gallons) of PCE, based on the yearly average removal rates and operational times for the individual blowers, was achieved. The following recommendations are provided for continuing pilot study activities at AOC-65:

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

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

- Approximately 122 lb (9 gallons) of PCE was removed from underlying limestone at AOC-65;
 - Sub-slab VEWs accounted for 72.38 lb (5.3 gallons) of removed mass;
 - AOC-65 shallow VEWs accounted for 28.59 lb (2.1 gallons) of removed mass;
 - AOC-65 deep VEWs accounted for 16.67 lb (1.2 gallons) of removed mass;
 - Exterior Building 90 VEWs accounted for 4.37 lb (0.32 gallons) of removed mass.
- The Building 90 Sub-slab system was more effective at removing PCE than the associated exterior extraction wells; and
- The Western shallow system was more effective at removing PCE than the Western deep system when groundwater levels were not affecting screen intervals.

CHAPTER 5 REFERENCES

- Parsons, 2005a. Final AOC-65 Soil Vapor Extraction Interim Treatability Test Report. April 2005.
- Parsons, 2005b. AOC-65 SVE Operations and Maintenance Assessment Report. March 2005.
- Parsons, 2005c. Treatment Evaluation Report for AOC-65 SVE. April 2005.
- Parsons, 2005d. Final Sampling and Analysis Plan Addendum. December 2005.
- Parsons, 2008a. Permit By Rule Application for AOC-65 SVE Pilot Study Expansion. January 2008.
- Parsons, 2008b. AOC-65 SVE Operations and Maintenance Plan Update. June 2008.

APPENDIX A

MONITORING AND PERFORMANCE FIELD DATA SHEETS

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

Date/Time : 4-17-06/1000

Operator: S. Elliott / K. Rice

Ambient T (°F) _____

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

Monitoring Point	Manifold Readings								Wellhead	Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Vac in. H ₂ O	
							Time	Summa Canister #		
Shallow Wells										
AOC65-VEW19	- 34/17	505	71.5	57.2	18.0	2.6	/	/	- 25	*1st reading was taken when the deep system tripped off, and reading is with deep wells on can hear leaking at wellhead
AOC65-VEW20	- 34	725	71.7	1.5	20.0	0	1405	12379	- 31.0	
AOC65-VEW21	- 34	665	71.9	0.9	20.0	0.5	1400	35596	- 31.8	
AOC65-VEW23	- 34	670	71.7	5.5	20.0	0	1357	34598	- 31.5	
AOC65-VEW25	- 34	725	71.7	89.4	18.5	1.25	1355	31781	- 32	
AOC65-VEW27	- 34	695	72.3	102	15.5	4.0	1347	31785	- 32	
AOC65-INTAKE-SW	- 34/795	1035	71.4	50	18.5	2.0	1410	11830		
Deep Wells										
AOC65-VEW13	-	2100	68.5	5.8	16.0	3.5	/	/	-1.1	
AOC65-VEW14	-	490	72.1	5.3	18.5	0.75	/	/	-27.5	
AOC65-VEW17	-	1470	70.5	11.1	15.5	3.5	/	/	-13.9	
AOC65-VEW22	-	1360	70.5	3.1	15.5	4.0	1422	34104	-25.1	
AOC65-VEW24	- 23	465	70.6	8.2	15.5	3.0	1418	11847	-26.8	
AOC65-VEW26	- 23	1225	70.5	6.2	16.0	3.25	1415	34130	-24.4	
AOC65-INTAKE-DW	-	5250	68.3	5.4	15.5	3.5	1430	25290		intake flow meter = 90 scfm
B90-EXHAUST	+									
Blower Information	System	Blower On	Pre Adjustment Intake Pressure Gauge	Adjusted Pressure	Building 90 VRV			Check	Lube	Hours Meter
	Shallow	(Y) / N	33	/	(Y) / N		(Y) / N	Y / (N)		
	Deep	(Y) / N	40	/	(Y) / N		(Y) / N	Y / (N)		
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:					
	Shallow	(Y) / N	Y / (N)	/						
	Deep	(Y) / N	Y / (N)	/						

in. H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

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

Date/Time: 4.17.08 / 1000		Operator: S. Elliott / K. Rice				Monitoring Event (circle one): Biweekly / Monthly / Quarterly / <u>Other</u> Baseline				Ambient T (°F) _____	
Wellhead Readings											
Monitoring Point	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Comments		
							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	- 36	2200	66.1	22.3	19.5	0	1455	34124			
Exterior Wells											
Manifold Readings									Wellhead		
Monitoring Point	Vac (in. H ₂ O)	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Vac (in. H ₂ O)	Comments	
							Time	Summa Canister #			
AOC65-VEW15	-	250	65.6	2.2	13.5	1.25	/	/	0	wellhead sample port broke	
AOC65-VEW16	-	8250	66.5	3.3	12.5	3.25	/	/	2.0		
AOC65-VEW18	- 17.8	575	68.8	2.3	18.0	2.0	/	/	5.2		
AOC65-VEW28A	-	825	68.5	2.2	14.5	0.8	1440	31766	28.8		
AOC65-VEW28B	- 17.5	235	67.8	4.5	12.5	0	1436	12383	30		
B90-INTAKE-EX	- 18.4	1700	66.5	3.1	14.0	2.5	1450	34100			
B90-EXHAUST	+										
Blower Information	Pre Adjustment				Building 90 VRV						
	System	Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube	Hours Meter				
	Subslab	(Y) / N	55	40	(Y) / N	Y / (N)	63739				
Exterior	(Y) / N	27	no	(Y) / N	Y / (N)	41331					
Moisture Separator Information	Observations/Notes:										
	System	Inspected	Emptied	Amount Xfered (gals)							
	Subslab	(Y) / N	Y / (N)	NA							
Exterior	(Y) / N	Y / (N)	NA								

in H₂O inches of water

fpm feet per minute

ppm parts per million

VRV vacuum relief valve

psi pounds per square inch

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

Date/Time: 5.5-08/0900

Operator: S. Elliott

Ambient T (°F) _____

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

Wellhead Readings										
Monitoring Point	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Comments	
							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	-									
Exterior Wells										
Manifold Readings									Wellhead	Comments
Monitoring Point	Vac (in. H ₂ O)	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Vac (in. H ₂ O)	
							Time	Summa Canister #		
AOC65-VEW15	-									
AOC65-VEW16	-									
AOC65-VEW18	-									
AOC65-VEW28A	-									
AOC65-VEW28B	-									
B90-INTAKE-EX	-									
B90-EXHAUST	+									
Blower Information	System	Pre Adjustment				Building 90 VRV			Hours Meter	
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
	Subslab	Y / N	59	0	Y / N	Y / N	63739			
Exterior	Y / N	40	0	Y / N	Y (N)	41332				
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:					
	Subslab	Y / N	Y / (N)	0						
	Exterior	Y / N	Y / (N)	0						

in. H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch




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

Date/Time: 5/5/08 - 0900

Operator: S. Elliott

Ambient T (°F) _____

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

Monitoring Point	Manifold Readings							Wellhead	Comments	
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected			Vac in. H ₂ O
							Time	Summa Canister #		
Shallow Wells										
AOC65-VEW19	-									
AOC65-VEW20	-									
AOC65-VEW21	-									
AOC65-VEW23	-									
AOC65-VEW25	-									
AOC65-VEW27	-									
AOC65-INTAKE-SW	-									intake flow meter (SCFM)= 0
Deep Wells										
AOC65-VEW13	-									
AOC65-VEW14	-									
AOC65-VEW17	-									
AOC65-VEW22	-									
AOC65-VEW24	-									
AOC65-VEW26	-									
AOC65-INTAKE-DW	-									intake flow meter (SCFM)= 40
B90-EXHAUST	+									
Blower Information	System	Pre Adjustment			- Building 90 VRV		Check	Lube	Hours Meter	
		Blower On	Intake Pressure Gauge	Adjusted Pressure						
	Shallow	Y / N	33	8	Y / N	Y / (N)	—			
Deep	Y / N	43	8	Y / N	Y / (N)	—				
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:					
		Shallow	Y / N	Y / (N)						—
	Deep	Y / N	Y / (N)	—						

in. H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

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

Date/Time: 7/15/08/1015

Operator: S. Elliott

Ambient T (°F) _____

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

Wellhead Readings										
Monitoring Point	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Comments	
							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	-36.5	10,260	94.3	0	20.5	0	/	/		
Exterior Wells										
Manifold Readings									Wellhead	
Monitoring Point	Vac (in. H ₂ O)	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Vac (in. H ₂ O)	Comments
							Time	Summa Canister #		
AOC65-VEW15	-32.7	610	84.9	0	20.0	1.5	/	/	-0.1	
AOC65-VEW16	-32.4	1780	85.0	0	19.0	2.5	/	/	-2.3	
AOC65-VEW18	-32.2	1112	85.8	0	17.0	3.8	/	/	-7.4	
AOC65-VEW28A	-31.5	2120	85.2	0	18.5	2.25	/	/	-31.7	
AOC65-VEW28B	-30.5	625	86.7	0	20.0	1.0	/	/	-33.1	
B90-INTAKE-EX	-35.7	4850	85.8	0	19.0	2.5	/	/		
B90-EXHAUST	+12.6	715,000	149.5	0	20.0	1.5				
Blower Information	System	Pre Adjustment			Vacuum Relief Valve			Hours Meter		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
		Subslab	(Y) / (N)	(0)	00	(Y) / (N)	Y / (N)		69630	
Exterior	Y / (N)	40	00	(Y) / (N)	Y / (N)	45865				
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:					
		Subslab	(Y) / (N)	Y / (N)					empty	
		Exterior	(Y) / (N)	Y / (N)					empty	

in. H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

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

Date/Time: 7/15/08 / 0830

Operator: S. Elliott

Ambient T (°F) _____

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

Monitoring Point	Manifold Readings								Wellhead	Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Vac in. H ₂ O	
							Time	Summa Canister #		
Shallow Wells										
AOC65-VEW19	-32.2	634	91.3	0	20.5	0.8	/	/	-31.4	
AOC65-VEW20	-32.2	533	92.2	0	20.5	0	/	/	-31.3	→ can hear wellhead leaking
AOC65-VEW21	-32.2	480	96.0	0	20	0.5	/	/	-31.9	
AOC65-VEW23	-32.2	543	96.9	0	20.5	0	/	/	-32.1	→ wellhead leaking
AOC65-VEW25	-32.2	534	92.1	0	20	0	/	/	-31.9	→ wellhead leaking
AOC65-VEW27	-32.2	520	95.8	0	18.5	3.5	/	/	-32.1	
AOC65-INTAKE-SW	-32.2	720	85.8	0	20	0.8	/	/		intake flow meter (SCFM)= 0
Deep Wells										
AOC65-VEW13	-26.3	3350	86.8	0	17.0	3.75	/	/	-1.3	→ wellhead leaking
AOC65-VEW14	-26.1	400	90.1	0	19.0	0.75	/	/	-26.1	
AOC65-VEW17	-25.3	2290	89.7	0	17.5	3.5	/	/	-13.6	
AOC65-VEW22	-25.0	1935	89.9	0	16.5	3.75	/	/	-23.5	can hear wellhead leaking
AOC65-VEW24	-24.9	395	93.5	0	14.5	3.75	/	/	-25.1	
AOC65-VEW26	-25.3	1420	90.8	0	16.0	4.0	/	/	-22.6	
AOC65-INTAKE-DW	-30.6	7050	86.1	0	16.5	3.75	/	/		intake flow meter (SCFM)= 90
B90-EXHAUST	+2.5	12,000	152.9	0	17.0	3.75	/	/		
Blower Information	System	Pre Adjustment			Vacuum Relief Valve			Hours Meter		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
	Shallow	<input checked="" type="checkbox"/> / N	33	no	<input checked="" type="checkbox"/> / N	Y / <input checked="" type="checkbox"/> N	NA			
	Deep	<input checked="" type="checkbox"/> / N	40	no	<input checked="" type="checkbox"/> / N	Y / <input checked="" type="checkbox"/> N	NA			
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:					
	Shallow	<input checked="" type="checkbox"/> / N	Y / <input checked="" type="checkbox"/> N							
	Deep	<input checked="" type="checkbox"/> / N	Y / <input checked="" type="checkbox"/> N							

in.H₂O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

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

Date/Time: 8/5/08/1050

Operator: S. Elliott

Ambient T (°F) 75-95

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

Monitoring Point	Wellhead Readings							Analytical Sample Collected		Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ 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	- 37.8	>15,000	95.1	0	20.0	0				
Exterior Wells										
Monitoring Point	Manifold Readings							Wellhead		Comments
	Vac (in. H ₂ O)	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Time	Summa Canister #	Vac (in. H ₂ O)	
	AOC65-VEW15	- 30.0	460	92.2	0	20.5	0.8			
AOC65-VEW16	- 29.4	2200	91.2	0	19.0	2.25			- 2.0	
AOC65-VEW18	- 28.8	900	92.1	0	17.5	3.75			- 6.9	
AOC65-VEW28A	- 27.1	3900	90.4	0	19.0	2.0			- 28.1	
AOC65-VEW28B	- 25.8	470	97.5	6	20.0	1.0			- 30.0	
B90-INTAKE-EX	- 33.4	5900	90.8	0	18.5	2.5				
B90-EXHAUST	+ 23.0 - 24.0	>15,000	156.4	0	20.5	1.5				
Blower Information	System	Pre Adjustment			Vacuum Relief Valve			Hours Meter		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
		Subslab	(Y) N	60		X / N	Y / N		64630	
Exterior	Y / N	40	00	(Y) N	Y (N)	46704				
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:					
		Subslab	(Y) N	(Y) N				0		
		Exterior	(Y) N	(Y) N				0		

in. H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

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

Date/Time: 8/5/08 / 0930

Operator: S. Elliott

Ambient T (°F) 75-95°

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

Monitoring Point	Manifold Readings							Wellhead		Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Vac in. H ₂ O	
							Time	Summa Canister #		
Shallow Wells										
AOC65-VEW19	-32.7	575	97.5	0	19.5	0.8			-31.5	
AOC65-VEW20	-32.6	575	100.2	0	20	0			-31.4	
AOC65-VEW21	-32.6	530	101.2	0	20	0.5			-31.8	
AOC65-VEW23	-32.6	600	101.1	0	20	0			-27.6 31.8	
AOC65-VEW25	-32.6	560	97.5	0	20	0			-31.8	
AOC65-VEW27	-32.6	590	98.4	0	18.5	2.5			-31.4	
AOC65-INTAKE-SW	-600.32	600	89.5	0	19.5	0.8				intake flow meter (SCFM)= 0
Deep Wells										
AOC65-VEW13	-26.2	4100	91.3	0	17.5	3.25			-1.1	
AOC65-VEW14	-26.1	405	98.5	0	19.0	1.5			-26.1	
AOC65-VEW17	-25.3	2500	93.1	0	17.5	3.25			-13.6	
AOC65-VEW22	-25.3	2250	93.9	0	17.0	3.5			-23.6	
AOC65-VEW24	-25.3	410	96.7	0	16.5	3.75			-25.1	
AOC65-VEW26	-25.0	1700	94.6	0	16.0	4.25			-22.7	
AOC65-INTAKE-DW	-30.3	9500	92.2	0	20	3.5				intake flow meter (SCFM)= 90
B90-EXHAUST	+2.4	4500	92.2	0	17.0	3.5				
Blower Information	System	13,500 161.21		Pre Adjustment		Vacuum Relief Valve		Hours Meter		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
	Shallow	(Y) / N	34	no	(Y) / N	Y / N	NA			
Deep	(Y) / N	40	no	(Y) / N	Y / N	NA				
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:					
		Shallow	(Y) / N	(Y) / N				0		
	Deep	(Y) / N	(Y) / N	0						

in. H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

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

Date/Time : 9-23-08/1330

Operator: S. Elliott / A. Lindley / J. Beach

Ambient T (°F) _____

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

Monitoring Point	Manifold Readings								Wellhead	Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Vac in. H ₂ O	
							Time	Summa Canister #		
Shallow Wells										
AOC65-VEW19	- 9.8	280	87.0	0	20.75	0.8	/	/	- 10.0	
AOC65-VEW20	- 9.8	90	87.9	0	21	0.2	/	/	- 9.7	
AOC65-VEW21	- 10.1	130	87.4	0	20.75	0.5	/	/	- 10.0	
AOC65-VEW23	- 10.0	111	87.4	0	21	0.2	/	/	- 10.2	
AOC65-VEW25	- 10.1	160	88.1	0	21	0.2	/	/	- 10.1	
AOC65-VEW27	- 10.0	130	86.8	0	20	2.0	/	/	- 10.0	
AOC65-INTAKE-SW	- 10	140	87.9	2.8	20.75	0.8	/	/		intake flow meter (SCFM)= 0
Deep Wells										
AOC65-VEW13	- 25.7	3780	84.3	0	19.0	3.0	/	/	- 1.2	
AOC65-VEW14	- 25.7	678	86.7	0	20.0	1.0	/	/	- 25.7	
AOC65-VEW17	- 24.9	2088	85.6	0	20.0	3.0	/	/	- 13.6	
AOC65-VEW22	- 24.7	1624	85.6	0	18.5	3.25	/	/	- 23.4	
AOC65-VEW24	- 24.8	568	86.5	0	17.5	4.0	/	/	- 24.8	
AOC65-VEW26	- 24.6	1488	86.1	0	18.0	3.5	/	/	- 22.7	
AOC65-INTAKE-DW	- 24.2	4696	86.8	0	18.0	3.0	/	/		intake flow meter (SCFM)= 90
B90-EXHAUST	+	715,006	141.2	0	20.0	2.5	/	/		
Blower Information	System	Pre Adjustment				Vacuum Relief Valve			Hours Meter	
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
		Shallow	(Y) / N	10	* can't	(Y) / N	(Y) / N	NA		
Deep	(Y) / N	42	no	(Y) / N	(Y) / N	NA				
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes: * VRV on shallow side is stuck open					
		Shallow	(Y) / N	(Y) / N						0-empty
		Deep	(Y) / N	(Y) / N						0-empty

in.H₂O: 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>9.23.08</u> / <u>1509</u>		Operator: <u>S. Elliot / A. Lindley / J. Bouch</u>				Ambient T (°F) _____			
Monitoring Event (circle one): <u>Biweekly</u> / Monthly / Quarterly / Other _____									
Wellhead Readings									
Monitoring Point	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		
							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	-32.8	13938	86.8	0.0	21.0	0.25			
Exterior Wells									
Monitoring Point	Vac (in. H ₂ O)	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected	Wellhead Vac (in. H ₂ O)	Comments
							Time		
AOC65-VEW15	-26.7	580	94.3	0.0	20.5	0.75		-	Broken needle
AOC65-VEW16	-27.7	3222	95.1	0.0	19.5	2.0		-2.1	
AOC65-VEW18	-28.3	1388	94.4	0.0	19.0	3.25		-6.3	
AOC65-VEW28A	-28.1	4080	90.3	0.0	19.0	2.0		-26.4	
AOC65-VEW28B	-28.5	701	91.5	0.0	20.0	1.0		-29.8	
B90-INTAKE-EX	-32.4	3375	89.0	0.0	19.0	2.5			
B90-EXHAUST	+	>15,000	150.7	0.0	20.0	1.25			
Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter	
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube			
		Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	40 0.85	40	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N		6963
Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	40	N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	5134			
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:				
		Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N				<input checked="" type="checkbox"/> / <input type="checkbox"/>	
		Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N				<input checked="" type="checkbox"/> / <input type="checkbox"/>	

in H₂O, 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: <u>10.7.08 / 0845</u>		Operator: <u>S. Elliott, J. Bouch</u>					Ambient T (°F) <u>65-85°</u>			
Monitoring Event (circle one): Biweekly <u>Monthly</u> Quarterly / Other _____										
Monitoring Point	Manifold Readings							Wellhead		Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Vac in. H ₂ O	
							Time	Summa Canister #		
Shallow Wells										
AOC65-VEW19	-35.3	942	76.2	0	21.0	0.8	0925	/	-32.6	
AOC65-VEW20	-34.8	776	78.6	0	21.0	0	0928	/	-32.4	
AOC65-VEW21	-34.8	738	79.8	0	20.5	0.8	0932	/	-32.6	
AOC65-VEW23	-34.4	736	79.8	0	21.0	0.25	0936	/	-33.1	
AOC65-VEW25	-33.8	598	81.6	0	21.0	0.9	0939	/	-33.1	
AOC65-VEW27	-34.0	971	78.9	0	19.5	2.1	0943	/	-33.7	
AOC65-INTAKE-SW	-37.2	1098	74.1	0.0	20.5	0.9	0917	/		intake flow meter (SCFM)= 0
Deep Wells										
AOC65-VEW13	-27.6	2677	80.5	0	18.0	3.5	0952	/	-1.3	
AOC65-VEW14	-27.5	479	81.3	0	18.5	2.25	0956	/	-27.7	
AOC65-VEW17	-27.0	1345	79.6	0	18.5	3.25	1000	/	-14.6	
AOC65-VEW22	-26.8	1208	80.2	0	17.5	3.8	1003	/	-25.3	
AOC65-VEW24	-26.6	644	80.0	0	17.0	4.0	1006	/	-26.6	
AOC65-VEW26	-26.4	1057	79.3	0	17.5	4.0	1011	/	-24.5	
AOC65-INTAKE-DW	-31.9	5730	80.0	0	18.0	3.5	0949	/		intake flow meter (SCFM)= 90
B90-EXHAUST	+2.3	7802	139.4	0	18.0	3.5	1014	/		
Blower Information	System	Pre Adjustment			Vacuum Relief Valve			Hours Meter		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
	Shallow	(Y/N)	40	65	(Y/N)	(Y/N)	N/A			
	Deep	(Y/N)	42	NO	(Y/N)	(Y/N)	N/A			
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes: + fixed vacuum relief valve. It was stuck + rusted - adjusted pressure					
	Shallow	(Y/N)	(X/N)	0						
	Deep	(Y/N)	(Y/N)	0						

in. H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

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

Date/Time: 10.7.08 / 0845

Operator: S. Elliott, J. Bouch

Ambient T (°F) 65-85°

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

Monitoring Point	Wellhead Readings						Analytical Sample Collected		Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Time	Summa Canister #	
AOC65-VEW1									
AOC65-VEW2									OFFLINE
AOC65-VEW3									OFFLINE
AOC65-VEW4									OFFLINE
AOC65-VEW5									OFFLINE
AOC65-VEW6									OFFLINE
AOC65-VEW7									
AOC65-VEW8									
AOC65-VEW9									
AOC65-VEW10									OFFLINE
AOC65-VEW11									
AOC65-VEW12									
B90-INTAKE-SS	38.0	8612	76.2	0	21.0	0.25	1043		

Exterior Wells

Monitoring Point	Manifold Readings							Analytical Sample Collected		Wellhead Vac (in. H ₂ O)	Comments
	Vac (in. H ₂ O)	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Time	Summa Canister #			
AOC65-VEW15	32.7	606	74.2	0	19.5	2.0	1032		0.1		
AOC65-VEW16	32.3	1242	75.3	0	19.5	2.5	1030		2.5		
AOC65-VEW18	32.4	876	75.5	0	18.5	3.25	1027		6.9		
AOC65-VEW28A	31.8	1520	75.3	0	18.25	2.25	1024		28.7		
AOC65-VEW28B	31.8	550	75.7	0	19.0	1.5	1019		32.5		
B90-INTAKE-EX	35.7	3853	76.4	0	18.75	2.5	1036				

B90-EXHAUST	+13	>15,000	129.9	0	21.0	1.75	1038		
Blower Information	System	Pre Adjustment			Vacuum Relief Valve			Hours Meter	
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube			
	Subslab	Y/N	60	N	Y/N	Y/N	69630		
	Exterior	Y/N	44	N	Y/N	Y/N	52457		
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:				
	Subslab	Y/N	Y/N	0					
	Exterior	Y/N	Y/N	0					

in. H₂O: 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>11/11/08 1245</u>		Operator: <u>J. Bouch, A. Lindley</u>						Ambient T (°F) <u>75</u>			
Monitoring Event (circle one): Biweekly <u>Monthly</u> Quarterly / Other											
Monitoring Point	Wellhead Readings							Analytical Sample Collected		Comments	
	Vac in.H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ 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	-43.9	6080	84.9	0.0	20.0 ^(A)	0.25	1333	182	No Summa Pressure.		
Exterior Wells											
Monitoring Point	Manifold Readings							Analytical Sample Collected		Wellhead Vac (in. H ₂ O)	Comments
	Vac (in. H ₂ O)	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Time	Summa Canister #			
AOC65-VEW15	-31.9	590	83.6	0.0	19.5	1.5	-	-	-0.1		
AOC65-VEW16	-31.8	3128	83.6	0.0	19.5	2.0	-	-	-2.4		
AOC65-VEW18	-31.5	1046	84.1	0.0	18.5	3.0	-	-	-7.2		
✓ AOC65-VEW28A	-31.1	3408	79.5	0.0	18.0	2.5	1305	3280	-29.4		
✓ AOC65-VEW28B	-30.3	522	83.2	0.0	19.0	1.25	1258	2091	-31.3		
✓ B90-INTAKE-EX	-35.1	6662	81.4	0.0	18.25	2.5	1322	3397			
B90-EXHAUST	+0.1	9592	108.8	0.0	19.0	1.5	-	-			
Blower Information	System	Pre Adjustment			Vacuum Relief Valve						
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube	Hours Meter				
	Subslab	(Y) N	60	N/A	(Y) N	(Y) N	7012.7				
Exterior	(Y) N	44	N/A	(Y) N	(Y) N	5747.8					
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:						
	Subslab	(Y) N	(Y) N	0							
	Exterior	(Y) N	(Y) N	0							

in H₂O, inches of water fpm, feet per minute ppm, parts per million VRV, vacuum relief valve psi, pounds per square inch

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

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

Date/Time: 11-11-08 0915

Operator: J. Bouch; A. Lindley; S. Elliot #

Ambient T (°F) 75

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

Monitoring Point	Manifold Readings								Wellhead		Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Vac in. H ₂ O		
							Time	Summa Canister #			
Shallow Wells											
AOC65-VEW19	-34.6	16181	67.6	0.0	21.0	0.6	—	—	-14.3		
✓ AOC65-VEW20	-30.7	550	68.5	0.0	21.0	0.1	0937	31792	-28.7		
✓ AOC65-VEW21	-29.4	570	69.9	0.0	21.0	.25	0945	34591	-29.4		
✓ AOC65-VEW23	-30.3	963	70.1	0.0	21.0	.20	0950	24388	-28.5	No pressure in Summa New Summa # 1490	
✓ AOC65-VEW25	-30.1	588	71.2	0.0	21.0	.25	1000	1444	-28.8		
✓ AOC65-VEW27	-30.3	638	71.7	0.0	21.0	1.75	1005	1357	-28.3		
✓ AOC65-INTAKE-SW	-30.2	1013	71.5	0.0	21.0	0.3	0922	31768		intake flow meter (SCFM)= 0	
Deep Wells											
AOC65-VEW13	-28.5	2188	71.7	0.0	18.5	3.5	—	—	-1.2		
AOC65-VEW14	-28.3	530	72.4	0.0	19.0	2.2	—	—	-28.3		
AOC65-VEW17	-27.7	1362	72.3	0.0	19.25	3.0	—	—	-14.4		
✓ AOC65-VEW22	-27.3	1240	72.4	0.0	18.4	3.6	1041	1355	-25.3		
✓ AOC65-VEW24	-24.1	468	73.3	0.0	18.0	3.75	1650	2121	-27.2		
✓ AOC65-VEW26	-26.8	998	73.2	0.0	18.0	3.75	1056	2077	-24.7		
✓ AOC65-INTAKE-DW	-32.9	5390	71.7	0.0	18.9	3.25	1620	12031		intake flow meter (SCFM)= 42	
AOC65-EXHAUST	+3.5	11161	135.3	0.0	19.0	3.0	—	—			
Blower Information	System	Pre Adjustment Intake Pressure				Adjusted Pressure		Vacuum Relief Valve		Hours Meter	
		Blower On	Gauge			Check	Lube				
	Shallow	(Y)/N	(0.25) 30		N/A	(Y)/N	(Y)/N		N/A		
Deep	(Y)/N	(0.5) 42		N/A	(Y)/N	(Y)/N		N/A			
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:						
		Shallow	(Y)/N	(Y)/N						0	
	Deep	(Y)/N	(Y)/N	1 gallon							

in. H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

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

Date/Time: 12-11-08 1048		Operator: J. Bouchard, A. Lindley					Ambient T (°F) 30 60°			
Monitoring Event (circle one): <u>Biweekly</u> / Monthly / Quarterly / Other										
Wellhead Readings										
Monitoring Point	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Comments	
							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	-44.0	3531	65.6	0.0	20.95	0.25	1309			
Exterior Wells										
Monitoring Point	Vac (in. H ₂ O)	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Wellhead Vac (in. H ₂ O)	Comments
							Time	Summa Canister #		
AOC65-VEW15	-55.0	540	55.0	0.0	20.5	1.2	1100		-0.3	
AOC65-VEW16	-31.6	5589	53.4	0.0	20.5	2.0	1102		-2.0	* condensation
AOC65-VEW18	-33.0	2089	50.7	*	*	*	1103		-2.8	* water in line - sucked H ₂ O into bag - no reading
AOC65-VEW28A	-50.5	4398	56.5	*	*	*	1253		-30.2	* sucking water - no reading
AOC65-VEW28B	-31.2	471	59.5	*	*	*	1254		-33.5	* sucking water - no reading
B90-INTAKE-EX	-35.6	5049	64.0	0.0	19.25	2.0	1300			
B90-EXHAUST	+0.0	5576	78.2	0.0	19.00	1.25	1304			
Blower Information	System	Pre Adjustment					Vacuum Relief Valve		Hours Meter	
		Blower On	Intake Pressure Gauge	Adjusted Pressure		Check	Lube			
		Subslab	74	NO		Y/N	Y/N	7012.7		
Exterior	109/40	410	NO		Y/N	Y/N	10245.2			
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)		Observations/Notes:				
		Subslab	Y/N	~1/2 full						
		Exterior	Y/N	~15 gallons						

in H₂O inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

month 7

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

Date/Time: 12.11.09 / 0900

Operator: J. Powell / A. Lindley

Ambient T (°F) 30°-35°

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

Monitoring Point	Manifold Readings							Wellhead		Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Vac in. H ₂ O	
							Time	Summa Canister #		
Shallow Wells										
AOC65-VEW19	-31.9	4411	52.1	0.0	20.0	0.5	0940		-8.2	
AOC65-VEW20	-31.6	1587	58.4	0.0	21.0	0.0	0945		-24.3	
AOC65-VEW21	-31.5	574	60.2	0.0	20.0	0.25	0950		-26.4	
AOC65-VEW23	-31.6	743	66.5	0.0	20.5	0.15	1000		-30.9	
AOC65-VEW25	-31.3	2364	66.9	0.0	20.5	0.0	1005		-26.4	
AOC65-VEW27	-31.1	787	65.1	0.0	19.75	1.0	1010		-29.4	
AOC65-INTAKE-SW	-32.7	2532	60.2	0.0	21.0	0.25	0930			intake flow meter (SCFM)= 30
Deep Wells										
AOC65-VEW13	-34.1	8862	55.2	0.0	19.5	1.75	1015			off on arrival
AOC65-VEW14	-34.4	697	54.4	0.0	19.0	2.0	1020			
AOC65-VEW17	-33.1	4896	51.6	0.0	19.0	2.5	1023			
AOC65-VEW22	-32.9	4374	50.8	0.0	19.25	2.25	1025			
AOC65-VEW24	-32.2	709	53.9	0.0	18.0	3.5	1028			
AOC65-VEW26	-31.5	3101	53.7	0.0	19.0	3.0	1030			
AOC65-INTAKE-DW	-33.7	4884	61.5	0.0	19.0	2.0	1033			intake flow meter (SCFM)=
AOC65-EXHAUST	+3.1	5131	121.8	0.0	20.0	2.0	1034			
Blower Information	System	Pre Adjustment			Vacuum Relief Valve			Hours Meter		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
		Shallow	Y/N	35	NO	Y/N	Y/N			
Deep	Y/N	50	NA	Y/N	Y/N					
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:					
		Shallow	Y/N	Y/N				less than 1		
		Deep	Y/N	Y/N				34 gallons		

* Only running in read mode

in. H₂O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

month 7

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

Date/Time: 1-8-09/0900

Operator: S. Elliott + J. Bosch

Ambient T (°F) 46-77°

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

Monitoring Point	Manifold Readings							Wellhead		Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Vac in. H ₂ O	
							Time	Summa Canister #		
Shallow Wells										
AOC65-VEW19	-24.6	614	70.8	0	20.5	0.25			-18.9	
AOC65-VEW20	-24.8	375	74.1	0	21.0	0			-27.3	
AOC65-VEW21	-24.5	425	74.6	0	20.0	0.25			-23.8	
AOC65-VEW23	-23.4	1119	72.1	0	20.0	0			-23.4	
AOC65-VEW25	-23.8	2308	71.0	0	21.0	0			-20.3	
AOC65-VEW27	-23.5	514	72.4	0	19.5	1.0			-18.3	
AOC65-INTAKE-SW	-24.3	4130	69.4	0	21.0	0				intake flow meter (SCFM) = 0
Deep Wells										
AOC65-VEW13	-33.6	14793	69.7	0	18.0	2.5			-1.4	
AOC65-VEW14	-32.2	1010	75.0	0	19.0	1.5			-3.1	
AOC65-VEW17	-31.8	1902	73.3	0	18.0	2.5			-13.9	
AOC65-VEW22	-32.8	2373	67.4	0	17.5	3.0			-20.8	
AOC65-VEW24	-31.8	606	66.0	0	18.0	3.0			-3.1	
AOC65-VEW26	-34.2	10329	60.6	0	17.0	3.5			-18.8	
AOC65-INTAKE-DW	-34.1	8954	64.2	0	18.0	2.5				intake flow meter (SCFM) = 0
AOC65-EXHAUST	+3.5	10227	135.1	0	18.5	2.25				
Blower Information	System	Pre Adjustment			Vacuum Relief Valve			Hours Meter		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
		Shallow	Y/N	32	—	Y/N	Y/N			
Deep	Y/N*	49	—	Y/N	Y/N					
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes: *won't come on in Auto, something wrong with float, fan in hand for testing * Ken fixed it by kicking it					
		Shallow	Y/N	Y/N				0		
		Deep	Y/N	Y/N				0		

in. H₂O: 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>1-7-09/0430</u>		Operator: <u>S Elliott / J Bach</u>				Ambient T (°F) <u>46.77°</u>				
Monitoring Event (circle one): Biweekly / <u>Monthly</u> / Quarterly / Other										
Monitoring Point	Wellhead Readings						Analytical Sample Collected		Comments	
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ 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	-44.3	6763	72.4	0	21.0	0				
Exterior Wells										
Monitoring Point	Manifold Readings						Analytical Sample Collected		Wellhead	Comments
	Vac (in. H ₂ O)	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Time	Summa Canister #	Vac (in. H ₂ O)	
AOC65-VEW15	-32.9	985	59.5	0	21.0	1.5			-0.5	
AOC65-VEW16	-33.0	2022	60.2	0	19.5	2.0			-2.9	
AOC65-VEW18	-33.3	2637	58.9	0	20.5	2.5			-2.7	
AOC65-VEW28A	-32.5	1987	60.4	0	19.0	2.0			-29.8	
AOC65-VEW28B	-32.4	637	59.3	0	18.5	1.5			-31.2	
B90-INTAKE-EX	-37.1	3337	66.5	0	19.0	2.25				
B90-EXHAUST	+11.3	2322	109.3	0	20.0	1.25				
Blower Information	System	Pre Adjustment				Vacuum Relief Valve			Hours Meter	
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
	Subslab	<input checked="" type="checkbox"/> / N	40 90	N	<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> / N	7012.7			
Exterior	<input checked="" type="checkbox"/> / N	70	N	<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> / N	1164.1				
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:					
	Subslab	<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> / N	N/A						
	Exterior	<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> / N	≈ 30						

in.H₂O inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

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

Date/Time: 2-4-09 / 0845

Operator: S. Elliott + J. Buch

Ambient T (°F) 50°

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

Monitoring Point	Manifold Readings							Wellhead		Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Vac in. H ₂ O	
							Time	Summa Canister #		
Shallow Wells										
AOC65-VEW19	-23.3	1035	65.4	3.8	21.0	0.2	0937		-18.8	
AOC65-VEW20	-22.7	404	65.6	0.1	21.0	0	0940		-22.3	
AOC65-VEW21	-23.1	316	62.5	2.7	21.0	0.4	0943		-22.5	
AOC65-VEW23	-22.6	1144	62.5	1.8	21.0	0	0946		-22.2	
AOC65-VEW25	-22.3	942	61.3	0	21.0	0	0949		-19.2	
AOC65-VEW27	-22.6	384	60.4	8.6	20.5	1	0952		-18	
AOC65-INTAKE-SW	-24.2	2452	62.5	1.9	21.0	0	0933			intake flow meter (SCFM)= 0
Deep Wells										
AOC65-VEW13	-33.1	7453	57.1	3.9	20.0	2.25	0959		-1.3	
AOC65-VEW14	-33.2	594	56.8	2.8	21.0	2.5	1002		-0.2	
AOC65-VEW17	-32.2	1322	56.4	4.0	20.0	2.5	1004		-14.2	
AOC65-VEW22	-31.9	1036	57.3	3.5	20.5	2.5	1007		-26.1	
AOC65-VEW24	-30.9	621	57.9	2.8	19.5	2.5	1010		-0.3	
AOC65-VEW26	-31.0	6619	57.9	4.1	19.5	3.5	1012		-23.7	
AOC65-INTAKE-DW	-36.4	4730	63.1	3.8	20.5	2.5	0956			intake flow meter (SCFM)= 0
AOC65-EXHAUST	+4.2	10850	128.2	4.0	20.0	2.0	1013			
Blower Information	System	Pre Adjustment					Vacuum Relief Valve		Hours Meter	
		Blower On	Intake Pressure		Adjusted Pressure	Check	Lube			
			Gauge							
Shallow	<input checked="" type="checkbox"/> / N	32		NO	<input checked="" type="checkbox"/> / N	Y / <input checked="" type="checkbox"/> N	NA			
Deep	<input checked="" type="checkbox"/> / N	46		NO	<input checked="" type="checkbox"/> / N	Y / <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
		Deep	<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> / N				~ 32		

in. H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

Month 9

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

Date/Time: <u>2-4-09/0845</u>		Operator: <u>S. Elliott + J. Bosch</u>				Ambient T (°F) <u>50°</u>				
Monitoring Event (circle one): Biweekly / <u>(Monthly)</u> / Quarterly / Other										
Wellhead Readings										
Monitoring Point	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Comments	
							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	-44.1	7904	65.4	5.1	20.5	0.05	1105			
Exterior Wells										
Monitoring Point	Vac (in. H ₂ O)	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Wellhead Vac (in. H ₂ O)	Comments
							Time	Summa Canister #		
AOC65-VEW15	-35.3	482	51.9	3.2	21.0	1.0	1046		-0.1	
AOC65-VEW16	-32.2	2272	52.1	3.3	21.0	1.25	1047		-2.7	
AOC65-VEW18	-32.5	602	47.3	3.5	20.5	2.5	1038		-1.8	
AOC65-VEW28A	-31.1	2203	57.3	1.9	21.0	1.0	1054		-30.5	
AOC65-VEW28B	-30.2	619	55.2	0.2	21.0	0.75	1032		-11.9	
B90-INTAKE-EX	-33.7	2314	53.4	4.0	20.5	1.25	1048			
B90-EXHAUST	+11.8	8236	126.6	3.9	21.0	0.75	1058			→ before GAC
Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
		Subslab	Ⓢ / N	38 78	NO	Ⓢ / N	Y / Ⓢ		70127	
Exterior	Ⓢ / N	40	NO	Ⓢ / N	Y / Ⓢ	71857				
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes: outside oil upon arrival					
		Subslab	Ⓢ / N	Ⓢ / N				0.5		
		Exterior	Ⓢ / N	Ⓢ / N				0.5		

in H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

Month 9

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

Date/Time: <u>3/3/09 0945</u>		Operator: <u>A. Lindley WS Pearce</u>				Ambient T (°F) <u>50°</u>				
Monitoring Event (circle one): <u>Biweekly</u> / Monthly / Quarterly / Other										
Wellhead Readings										
Monitoring Point	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Comments	
							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	-44.1	4454	64.3	6.2	21.0	.25				
Exterior Wells										
Manifold Readings										
Monitoring Point	Vac (in. H ₂ O)	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Wellhead Vac (in. H ₂ O)	Comments
							Time	Summa Canister #		
AOC65-VEW15	34.2	488	57.3	2.5	21.0	1.2			0.1	
AOC65-VEW16	33.9	963	58.6	2.9	20.75	1.5			3.0	
AOC65-VEW18	34.0	329	57.0						2.7	Water in VEW
AOC65-VEW28A	33.7	1378	54.8	3.9	19.5	2.5			30.8	
AOC65-VEW28B	34.1	682	53.0	3.8	19.75	1.75			11.2	
B90-INTAKE-EX	37.4	3675	63.4	3.9	19.75	2.0				
Pre GAC										
B90-EXHAUST	+ 10.8	14454	133.8	5.1	20.0	1.5			POST GAC 0.1 17537	94.0 4.9 20.8 .75
Blower Information	System	Pre Adjustment				Vacuum Relief Valve				
	Subslab	Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube	Hours Meter			
	Exterior	<input checked="" type="checkbox"/> / N	78 in H ₂ O		Y / N	Y / <input checked="" type="checkbox"/>	07012.7			
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:					
	Subslab	<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> / N	0	3/2/09					
	Exterior	<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> / N	12						

in H₂O, inches of water

fpm, feet per minute

ppm, parts per million

VRV, vacuum relief valve

psi, pounds per square inch

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

Date/Time: 3/3/09 Operator: A. Lindley, W.S. Pearson Ambient T (°F) 50°
Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other

Monitoring Point	Manifold Readings							Wellhead		Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Vac in. H ₂ O	
							Time	Summa Canister #		
Shallow Wells										
AOC65-VEW19	- 21.8	1254	70.5	3.7	20.7	0.1			- 7.5	
AOC65-VEW20	- 21.6	365	71.5	1.0	20.7	0.1			- 8.1	
AOC65-VEW21	- 21.6	454	71.0	4.1	20.5	0.25			- 8.2	
AOC65-VEW23	- 21.5	865	70.5	2.3	20.6	0.2			- 8.1	
AOC65-VEW25	- 21.4	1524	68.7	0.5	20.2	0.1			- 7.1	
AOC65-VEW27	- 21.5	^{SP} 125510	71.9	8.0	20.1	0.9			- 3.7	
AOC65-INTAKE-SW	- 22.9	3290	71.7	2.9	21.0	0				intake flow meter (SCFM)= 22.5
Deep Wells										
AOC65-VEW13	- 33.7	4468	67.2	2.7	20.1	2.2			- 1.3	
AOC65-VEW14	- 33.4	587	66.7	2.9	19.5	1.7			- 0.1	
AOC65-VEW17	- 33.3	1464	61.1	3.0	20.2	2.0			- 14.3	
AOC65-VEW22 **	- 33.4	^{psi} 11143	58.4	2.7	19.5	2.3			- 23.6	
AOC65-VEW24	- 32.9	585	58.0	2.3	20.0	1.9			- 0.2	
AOC65-VEW26	- 33.0	7474	55.0	3.4	20.0	3.0			- 17.3	
AOC65-INTAKE-DW	- 37.8	5842	69.5	3.2	19.25	2.5				intake flow meter (SCFM)= 0
AOC65-EXHAUST	+ 3.5	10571	127.9	3.0	19.9	1.8				
Blower Information	System	Pre Adjustment				Vacuum Relief Valve			Hours Meter	
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
		Shallow	(Y) / N	46 in. H ₂ O	22.5	(Y) / N	Y / (N)			
Deep	(Y) / N	24 in. H ₂ O	0	(Y) / N	Y / (N)					
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes: ← 3/2/09 Vacuum Relief Valve on shallow side stuck open; deep stuck shut.					
		Shallow	(Y) / N	(Y) / N					0	
		Deep	(Y) / N	(Y) / N					94	

in. H₂O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

Cal: PhotoVac 2020 O=Air 100 ppm Iso butylene * ~~572~~ ¹¹¹⁴ VEW22 Flow
Gas Tech for O=CO₂ 20.8% O₂ ** H₂O in VEW22 line

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

Date/Time: 4/7/09

Operator: J. Bouch, A. Lindly

Ambient T (°F) 55°

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

Wellhead Readings										
Monitoring Point	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Comments	
							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	-44.3	758	65.6	4.3	21.0	0.25	1155	2105		
Exterior Wells										
Manifold Readings									Wellhead	Comments
Monitoring Point	Vac (in. H ₂ O)	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Time	Summa Canister #	Vac (in. H ₂ O)	
AOC65-VEW15	-33.7	466	58.4	4.9	20.75	0.8	1221	34132	0	extra summa used
AOC65-VEW16	-33.7	1466	59.1	5.6	20.75	1.3	1215	-	-3.1	
AOC65-VEW18	-33.2	2516	55.7	5.25 ³	20	2.1	1212	-	-3.8	water in VEW line
AOC65-VEW28A	-33.1	3335	59.1	5.5 ³	19.0	2.5	1200	36458	-29.6	
AOC65-VEW28B	-33.2	546	62.4	4.0	20.0	1.8	1208	25283	-7.1	
B90-INTAKE-EX	-36.7	5182	71.2	5.3	19.5	2.1	1148	20773		Flow 5182 Temp 70.6
Best GAC B90-EXHAUST	-1	5138	91.2	5.6	20.0	1.25	1140	3257	35657	*pre GAC B90 exhaust
Blower Information	Pre Adjustment				Vacuum Relief Valve			Hours Meter	(readings taken) 4-13-09	
	System	Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
	Subslab	⊙/N	72		Y/N	Y/N	70127			
Exterior	⊙/N	46		Y/N	Y/N	84008				
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:					
	Subslab	⊙/N	⊙/N	9	10.9	13953	TEMP	19.75	1.25	0.6
	Exterior	⊙/N	⊙/N		VAC	FLOW	140.1	02	CO ₂	PID

in.H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

Date/Time: 4/7/09 9:45

Operator: J. Bouch, A. Lindly

Ambient T (°F) 45 - 70

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

Monitoring Point	Manifold Readings								Wellhead	Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Vac in. H ₂ O	
							Time	Summa Canister #		
Shallow Wells										
AOC65-VEW19	-23.3	1138	74.6	6.6	19.75	0.25	1000	2489 (AC)	-21.0	Summa # 34165
AOC65-VEW20	-23.7	749	75.5	1.8	21.0	0	1015	33635	-22.7	
AOC65-VEW21	-23.1	534	70.8	2.5	21.0	0.3	1030	3860 (AC)	-21.2	* (reused Tedlar bag) Summa # 36444
AOC65-VEW23	-23.5	649	70.3	3.6	20.75	0.25	1035	36403	-22.8	*
AOC65-VEW25	-23.7	1501	69.6	1.1	20.9	0.1	1040	39247 (AC)	-20.1	* Summa # 36465
AOC65-VEW27	-22.9	449	66.1	9.5 0.0 (AC)	20.0 19.75 (AC)	0.25 0.25 (AC)	1045	2171	-16.2	*
AOC65-INTAKE-SW	-24.3	1980	70.3	3.1 0.0 (AC)	21.0 20.0 (AC)	0.25 0.25 (AC)	9:50	3251		intake flow meter (SCFM) = 0
Deep Wells										
AOC65-VEW13	-32.8	1819	64.9	5.2	19.5	2.5	1057	---	-1.3	*
AOC65-VEW14	-31.5	632	68.8	3.8	19.75	2.0	1100	---	-0.1	* (reused Tedlar bag)
AOC65-VEW17	-32.2	1368	68.5	5.0	19.75	2.1	1103	---	-14.6	*
AOC65-VEW22	-31.5	1428	69.2	5.5	19.25	2.5	1108	2212	-27.8	
AOC65-VEW24	-32.4	694	70.1	4.2	19.75	2.0	1113	2153	-0.1	*
AOC65-VEW26	-32.6	5976	56.6	6.9	19.25	3.25	1121	36381	-18.0	Condensate in line
AOC65-INTAKE-DW	-36.8	5360	69.0	4.3	19.5	2.5	1055	36551		intake flow meter (SCFM) = 0
AOC65-EXHAUST	+3.9	5360 (AC)	69.0	6.7	19.75	2.0	1128	---		
Blower Information	System	Pre Adjustment		Vacuum Relief Valve		Hours Meter				
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check			Lube		
		Shallow	12102	138.0	26			Y/N	Y/N	
Deep	Y/N	48	Y/N	Y/N						
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes: Pressure relief valve on Deep side stuck shut -cont.					
		Shallow	Y/N	0						
		Deep	Y/N	10						

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

Date/Time: 5/7/09 1000

Operator: J. Borch / A. Lindly

Ambient T (°F) 78°

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

Monitoring Point	Wellhead Readings							Analytical Sample Collected		Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ 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	- 44.1	12176	81.1	0.7	19.0	0.1				

Monitoring Point	Manifold Readings							Analytical Sample Collected		Wellhead	Comments
	Vac (in. H ₂ O)	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Time	Summa Canister #	Vac (in. H ₂ O)		
	Exterior Wells										
AOC65-VEW15	- 32.2	2048	80.4	1.5	19.0	1.5			- 0.0	003	
AOC65-VEW16	- 32.2	2028	80.0	1.6	19.25	1.5			- 3.1		
AOC65-VEW18	- 32.2	971	80.4	2.0	18.75	2.0			- 7.2		
AOC65-VEW28A	- 31.6	2972	79.3	0.0	18	2.5			- 29.2		
AOC65-VEW28B	- 32.0	1673	79.3	0.0	18.5	2.0			- 0.2		
B90-INTAKE-EX	- 35.6	5618	80.2	1.2	19.5	2.0					

B90-EXHAUST	+ 0.1	4093	111.9	4.0	19.0	1.5				
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Blower Information	System	Pre Adjustment			Vacuum Relief Valve		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube	Hours Meter
		Subslab	Y/N	78	N/A	Y/N	Y/N
Exterior	Y/N	44	N/A	Y/N	Y/N	91126	

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

in. H₂O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

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

Date/Time: 5/7/09 0900

Operator: J. Bouch / A. Lindley

Ambient T (°F) 78°

Monitoring Event (circle one): Biweekly Monthly Quarterly Other

Monitoring Point	Manifold Readings							Wellhead	Comments	
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected			Vac in. H ₂ O
							Time	Summa Canister #		
Shallow Wells										
AOC65-VEW19	-24.2	681	77.1	1.1	20.0	0.25			-22.4	O ₂ meter only calibrates to 20.5
AOC65-VEW20	-24.1	511	77.8	0.0	20.0	0.25			-23.7	
AOC65-VEW21	-24.1	384	78.0	0.0	20.0	0.5			-23.8	
AOC65-VEW23	-23.9	456	77.8	0.0	20.0	0.25			-23.4	
AOC65-VEW25	-23.8	1347	77.8	0.0	20.0	0.1			-20.8	
AOC65-VEW27	-23.9	490	78.2	2.9	19.25	1.25			-19.2	
AOC65-INTAKE-SW	-24.8	2543	76.6	0.3	20.5	0.25				intake flow meter (SCFM)= 16 ^{??}
Deep Wells										
AOC65-VEW13	-29.6	2880	77.3	0.0	18.75	2.5			-1.3	
AOC65-VEW14	-29.4	534	78.2	0.0	19.0	2.0			-0.1	
AOC65-VEW17	-28.9	1839	77.7	0.0	19.0	2.25			-15.8	
AOC65-VEW22	-28.7	1281	77.5	0.0	18.5	2.5			-27.2	
AOC65-VEW24	-28.5	536	78.2	0.0	19.0	2.5			-0.1	
AOC65-VEW26	-28.4	1136	78.0	0.0	18.25	3.0			-22.6	
AOC65-INTAKE-DW	-33.8	6731	77.5	0.0	19.5	2.5				intake flow meter (SCFM)= 18 ^{??}
AOC65-EXHAUST	+3.5	11937	136.5	0.0	19.0	2.0				
Blower Information	System	Pre Adjustment				Vacuum Relief Valve		Hours Meter		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
		Shallow	(Y/N)	26	NA	(Y/N)	(Y/N)			
Deep	(Y/N)	42	PTA	(Y/N)	(Y/N)					
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:					
		Shallow	(Y/N)	(Y/N)						
		Deep	(Y/N)	(Y/N)						

in.H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

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

Date/Time: 6/4/09

Operator: J. Bach / A. Lindley

Ambient T (°F) 80

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

Monitoring Point	Manifold Readings							Wellhead		Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Vac in. H ₂ O	
							Time	Summa Canister #		
Shallow Wells										
AOC65-VEW19	-31.5	881	81.4	2.2	20.0	0.5			-22.7	-24.5
AOC65-VEW20	-29.5	486	82.9	0.0	20.0	0.25			-21.6	-23.6
AOC65-VEW21	-30.0	582	87.6	0.0	20.0	0.5			-22.6	-24.4
AOC65-VEW23	-29.8	568	88.5	0.0	19.75	0.25			-22.6	-24.6
AOC65-VEW25	-29.6	2269	84.0	0.0	20.0	0.0			-19.5	-20.8
AOC65-VEW27	-29.5	603	86.5	3.3	19.0	1.5			-16.0	-17.3 the VEW cap was off (AL)
AOC65-INTAKE-SW	-32.1	2317	80.4	0.0	20.0	0.25				intake flow meter (SCFM)=
Deep Wells										
AOC65-VEW13	-29.5	4267	86.1	0.0	18.0	2.5			-1.2	PID after recal = 2.8 (AL)
AOC65-VEW14	-29.4	431	88.1	0.0	19.	2.0			-1.7	
AOC65-VEW17	-28.7	2386	85.8	3.9	18.5	2.0			-15.5	← local PID
AOC65-VEW22	-28.7	1508	86.8	3.0	18	2.5			-27.2	
AOC65-VEW24	-28.7	843	87.4	2.5	19.5	2.1			-0.1	
AOC65-VEW26	-28.5	1849	87.6	3.2	18.	3.0			-26.5	PID after recal = 2.8
AOC65-INTAKE-DW	-33.7	8519	85.2	0.0	18.0	2.5				intake flow meter (SCFM)= 0
AOC65-EXHAUST	+3.7	12700	146.2	2.4	18.5	2.0				
Blower Information	System	Pre Adjustment					Vacuum Relief Valve		Hours Meter	
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
		Shallow	Y / N	37		Y / N	Y / N			
Deep	Y / N	44		Y / N	Y / N					
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes: 3 Empty					
		Shallow	Y / N	Y / N						
		Deep	Y / N	Y / N						

in. H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

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

Date/Time: 6/4 0950 Operator: J. Bouch / A. Lindberg Ambient T (°F) 80
Monitoring Event (circle one): Biweekly / Monthly / Quarterly / Other

Monitoring Point	Wellhead Readings							Analytical Sample Collected		Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ 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	-44.1	9968	79.3	5.9	20.0	0.25				

Monitoring Point	Manifold Readings							Wellhead Vac (in. H ₂ O)	Comments	
	Vac (in. H ₂ O)	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected			
							Time			Summa Canister #
AOC65-VEW15	-32.2	554	74.5	0.7	20.0	1.25			- 0	
AOC65-VEW16	-32.4	1168	76.8	2.2	19.0	1.25			- 0.6	
AOC65-VEW18	-32.0	556	76.8	2.0	19.0	2.0			- 1.1	
AOC65-VEW28A	-31.4	1708	76.4	1.9	18.0	2.0			- 4.4	
AOC65-VEW28B	-31.8	501	78.0	0.3	18.75	1.5			- 0.0	
B90-INTAKE-EX	-35.6	3625	76.9	2.0	19.0	2.0				

B90-EXHAUST	+ 0.0	7571	108.1	5.2	19.5	1.5			
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Blower Information	System	Pre Adjustment			Vacuum Relief Valve		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube	Hours Meter
		Subslab	⊙ / N	76		Y / N	Y / <u>N</u>
Exterior	⊙ / N	44		Y / N	Y / <u>N</u>	97834	

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

in. H₂O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch




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

Date/Time: 7.9.09/745

Operator: S. Elliott / J. Bosch

Ambient T (°F) 80-100°

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

Monitoring Point	Manifold Readings							Wellhead		Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm*	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected Time	Summa Canister #	Vac in. H ₂ O	
Shallow Wells										
AOC65-VEW19	- 16.5	267	83.8	NA	20.2	0.5	0818	/	- 25.8	430 605 filter cap loose when
AOC65-VEW20	- 16.5	253	83.8		20.4	0	0827	/	- 25.1	521 we took the first reading
AOC65-VEW21	- 16.5	315	83.6		20.2	0.3	0831	/	- 25.8	470 ← resample
AOC65-VEW23	- 16.5	288	85.8		20.1	0.3	0836	/	- 26.1	536
AOC65-VEW25	- 16.4	1370	87.6		20.5	0	0837	/	- 27.3	2719
AOC65-VEW27	- 16.3	233	87.4		18.6	2.1	0840	/	- 25.3	538
AOC65-INTAKE-SW	- 16.9	434	82.2	↓	20.4	0.1	0814	/		²²²⁴ intake flow meter (SCFM)= 29
Deep Wells										
AOC65-VEW13	- 28.3	3167	88.6	NA	18.1	2.7	0846	/	- 1.3	
AOC65-VEW14	- 28.3	654	89.9		19.1	1.7	0848	/	- 3.9	
AOC65-VEW17	- 27.5	2465	92.6		18.5	2.4	0850	/	- 15.6	
AOC65-VEW22	- 27.5	1687	91.2		17.8	2.7	0852	/	- 27.2	
AOC65-VEW24	- 27.5	623	92.6		18.4	2.6	0853	/	- 0.2	
AOC65-VEW26	- 27.5	928	92.6		17.8	3.1	0856	/	- 26.6	
AOC65-INTAKE-DW	- 32.3	6806	87.6		18.2	2.5	0844	/		intake flow meter (SCFM)= 43
AOC65-EXHAUST	+ 4	12106	143.2	↓	18.8	2.1	0857	/		
Blower Information	System	Pre Adjustment			Vacuum Relief Valve			Hours Meter		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
	Shallow	(Y) / N	0	no	(Y) / N	Y / (N)	/			
Deep	(Y) / N	85	no	(Y) / N	Y / (N)	/				
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes: *PID not working today CO ₂ /O ₂ meter rental Landtec					
		Shallow	(Y) / N	(Y) / N				0		
	Deep	(Y) / N	(Y) / N	0						

in. H₂O: 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 : 7.19.09/0910

Operator: S. Elliott & J. Bouch

Ambient T (°F) 80-100

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

Monitoring Point	Wellhead Readings							Analytical Sample Collected		Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ 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	- 44.1	>15,000	92.2	/	20.6	0	0931	/		

Monitoring Point	Manifold Readings							Analytical Sample Collected		Wellhead	Comments
	Vac (in. H ₂ O)	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Time	Summa Canister #	Vac (in. H ₂ O)		
	Exterior Wells										
AOC65-VEW15	- 30.0	514	82.3	NA	20.3	0.2	0923	/	- 0		
AOC65-VEW16	- 28.6	1624	83.6		19.4	1.6	0921	/	- 2.4		
AOC65-VEW18	- 30.2	800	84.1		18.4	2.7	0918	/	- 6.3		
AOC65-VEW28A	- 28.9	2336	83.2		17.9	2.3	0914	/	- 27.2		
AOC65-VEW28B	- 28.7	6042	82.3		18.9	1.5	0913	/	- 0		
B90-INTAKE-EX	- 33.4	4984	83.6	Y	18.6	2.1	0926	/			

B90-EXHAUST	+ 10.9	>15,000	146.3	Y	19.3	1.5	0928	/		pre GAC
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Blower Information	Pre Adjustment			Vacuum Relief Valve			
	System	Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube	Hours Meter
	Subslab	(Y) / N	39	-	(Y) / N	Y / (N)	7012.7
Exterior	(Y) / N	72	-	(Y) / N	Y / (N)	10038.8	

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

in. H₂O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

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

Date/Time: 8/12/09/0900

Operator: S. Elliott & J. Borch

Ambient T (°F) 78-102°

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

Monitoring Point	Wellhead Readings						Analytical Sample Collected		Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Time	Summa Canister #	
Subslab Wells									
AOC65-VEW1	-								* O ₂ /CO ₂ + PID meters broken
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	- 44.1	>15,000	90.8				0919		

Monitoring Point	Manifold Readings						Analytical Sample Collected		Wellhead Vac (in. H ₂ O)	Comments
	Vac (in. H ₂ O)	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Time	Summa Canister #		
AOC65-VEW15	- 26.4	392	85.6				0916		- 0.1	
AOC65-VEW16	- 26.3	1246	86.5				0915		- 1.9	
AOC65-VEW18	- 25.4	1062	86.7				0914		- 5.4	
AOC65-VEW28A	- 24.2	3069	87.4				0913		- 23.8	
AOC65-VEW28B	- 24.4	1162	88.6				0912		- 0.7	
B90-INTAKE-EX	- 30.6	5453	87.6				0917			

B90-EXHAUST	+ 12.3	14138	146.4				0918		
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Blower Information	System	Pre Adjustment			Vacuum Relief Valve		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube	Hours Meter
	Subslab	<input checked="" type="checkbox"/> / N	72	NG	<input checked="" type="checkbox"/> / N	Y / <input checked="" type="checkbox"/> (N)	7012
Exterior	Y / <input checked="" type="checkbox"/> (N) <i>off upon arrival</i>	38	NO	<input checked="" type="checkbox"/> / N	Y / <input checked="" type="checkbox"/> (N)	10265	

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:
		Subslab	<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> / N	
	Exterior	<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> / N	0	

in. H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

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

Date/Time: 8/12/09 - 0850

Operator: S Elliott + J. Buch

Ambient T (°F) 78-102°

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

Monitoring Point	Manifold Readings							Wellhead		Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Vac in. H ₂ O	
							Time	Summa Canister #		
Shallow Wells										
AOC65-VEW19	- 23.6	1062	92.6	/	/	/	0855	/	- 20.8	*O ₂ /CO ₂ + PID meters are broken, no readings
AOC65-VEW20	- 23.4	430	95.3	/	/	/	0856	/	- 23.3	
AOC65-VEW21	- 23.4	504	96.2	/	/	/	0857	/	- 23.1	
AOC65-VEW23	- 23.4	466	96.2	/	/	/	0858	/	- 23.3	
AOC65-VEW25	- 23.3	1974	92.8	/	/	/	0858	/	- 19.7	
AOC65-VEW27	- 23.3	478	94.8	/	/	/	0900	/	- 23.1	
AOC65-INTAKE-SW	- 24.1	2504	91.3	/	/	/	0854	/	/	
Deep Wells										
AOC65-VEW13	- 29.1	3543	91.2	/	/	/	0900	/	- 1.2	
AOC65-VEW14	- 29.0	620	95.5	/	/	/	0902	/	- 3.6	
AOC65-VEW17	- 28.5	2353	94.0	/	/	/	0903	/	- 15.6	
AOC65-VEW22	- 28.3	1410	94.6	/	/	/	0904	/	- 27.4	
AOC65-VEW24	- 27.9	513	96.9	/	/	/	0905	/	- 0.1	
AOC65-VEW26	- 28.1	996	96.2	/	/	/	0906	/	- 26.8	
AOC65-INTAKE-DW	- 33.2	7324	90.6	/	/	/	0900	/	/	intake flow meter (SCFM)= 80
AOC65-EXHAUST	+ 3.6	11692	155.4	/	/	/	0906	/	/	
Blower Information	System	Pre Adjustment			Vacuum Relief Valve			Hours Meter		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
		Shallow	<input checked="" type="checkbox"/> / N	25	NO	<input checked="" type="checkbox"/> / N	Y / <input checked="" type="checkbox"/> N		NA	
Deep	<input checked="" type="checkbox"/> / N	44	NO	<input checked="" type="checkbox"/> / N	Y / <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				0 gallons		
		Deep	<input checked="" type="checkbox"/> / N	<input checked="" type="checkbox"/> / N				0		

in.H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

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

Date/Time : 9-11-09/1025

Operator: S. Elliott + J. Bouch

Ambient T (°F) _____

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

Monitoring Point	Wellhead Readings						Analytical Sample Collected		Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ 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	- 44.1	715,000	84.0	0				1040	

Monitoring Point	Manifold Readings						Analytical Sample Collected		Wellhead Vac (in. H ₂ O)	Comments
	Vac (in. H ₂ O)	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Time	Summa Canister #		
AOC65-VEW15	- 29.1	456	74.6	0			1037		- 0.1	
AOC65-VEW16	- 28.7	1378	75.7	0			1031		- 2.1	
AOC65-VEW18	- 28.1	861	75.3	0			1028		- 6.6	
AOC65-VEW28A	- 26.4	2590	75.1	0			1027		- 25.6	
AOC65-VEW28B	- 25.9	423	76.2	0			1023		- 4.6	
B90-INTAKE-EX	- 32.9	5554	77.1	0			1035			

B90-EXHAUST	+ 10.7	12603	140.1	0			1039		
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Blower Information	System	Pre Adjustment			Vacuum Relief Valve		Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube	
	Subslab	Y / N	80	NO	Y / N	Y / (N)	
Exterior	Y / N *	38	NO	Y / N	Y / (N)	107416	

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

in.H₂O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

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

Date/Time: 9.11.09 / 0900

Operator: S. Elliott & J. Bouch

Ambient T (°F) _____

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

Monitoring Point	Manifold Readings							Wellhead		Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Vac in. H ₂ O	
							Time	Summa Canister #		
Shallow Wells										
AOC65-VEW19	-32.2	596	74.8	0			0950		-31.7	
AOC65-VEW20	-32.2	504	73.9	0			0952		-31.8	
AOC65-VEW21	-32.3	535	72.9	0			0954		-32.7	
AOC65-VEW23	-32.3	461	72.9	0			0956		-32.6	
AOC65-VEW25	-32.1	498	73.9	0			0958		-32.6	
AOC65-VEW27	-32.9	450	73.3	5.8			1000		-32.6	
AOC65-INTAKE-SW	-33.3	726	75.3	0			0948			intake flow meter (SCFM)= 0
Deep Wells										
AOC65-VEW13	-31.1	1963	75.5	0			1005		-1.6	
AOC65-VEW14	-31.0	486	75.0	0			1007		-4.4	
AOC65-VEW17	-30.3	1201	75.5	0			1009		-16.5	
AOC65-VEW22	-30.3	822	75.1	0			1011		-28.9	
AOC65-VEW24	-30.0	509	74.6	0			1012		-0.2	
AOC65-VEW26	-30.2	627	75.0	0			1014		-28.5	
AOC65-INTAKE-DW	-35.2	5140	74.4	0			1001			intake flow meter (SCFM)= 80
AOC65-EXHAUST	+2.6	8019	136.9	0			1016			
Blower Information	System	Pre Adjustment			Vacuum Relief Valve			Hours Meter		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
	Shallow	(Y/N)	34	NO	(Y/N)	(Y/N)	—			
Deep	(Y/N)	45	NO	(Y/N)	(Y/N)	—				
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:					
		Shallow	(Y/N)	(Y/N)				0		
	Deep	(Y/N)	(Y/N)	0						

in. H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch




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

Date/Time: 10.8.09

Operator: S. Elliott & J. Bouch

Ambient T (°F) 69-88°

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

Monitoring Point	Manifold Readings							Wellhead		Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Vac in. H ₂ O	
							Time	Summa Canister #		
Shallow Wells										
AOC65-VEW19	-34.2	556	79.1	1555			X 0905	36520	-30.2	
AOC65-VEW20	-32.5	513	80.4	0			X 0909	22964	-32.4	
AOC65-VEW21	-33.8	306	80.2	0			X 0912	12365	-32.9	
AOC65-VEW23	-33.5	641	80.0	0			X 0915	34602	-32.9	
AOC65-VEW25	-33.9	310	80.0	0			X 0918	35630	-33.1	
AOC65-VEW27	-33.7	283	80.0	1310			X 0920	12808	-32.9	
AOC65-INTAKE-SW	-34.5	479	79.5	539			X 0900	36483		intake flow meter (SCFM)= 0
Deep Wells										
AOC65-VEW13	-31.8	2860	79.3	0			0905 1045	34094	-1.5	sampled w/extra SUMMA
AOC65-VEW14	-31.4	476	80.0	0			0932	/	-6.8	
AOC65-VEW17	-30.6	1842	80.2	0			0935	/	-17.9	
AOC65-VEW22	-30.6	1272	80.4	0			X 0937	35640	-29.4	
AOC65-VEW24	-30.6	429	80.2	0			X 0940	36391	-0.2	
AOC65-VEW26	-30.5	1356	81.6	0			X 0953	36570	-29.2	
AOC65-INTAKE-DW	-35.6	6440	79.3	0			X 0925	36469		intake flow meter (SCFM)= 80
AOC65-EXHAUST	+2.7	9150	131.8	0			0951	/		
Blower Information	System	Pre Adjustment			Vacuum Relief Valve			Hours Meter		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
							Shallow		Deep	
(Y) / N	35	NO	(Y) / N	Y / (N)	NA					
(Y) / N	45	NO	(Y) / N	Y / (N)	NA					
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:					
					Shallow	Deep	VEW13 - can hear it leaking at wellhead			
					(Y) / N	(Y) / N			0	
(Y) / N	(Y) / N	0								

in.H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

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



Date/Time: 10.8.09

Operator: S. Elliott + J. Bouch

Ambient T (°F) 69-88°

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

Monitoring Point	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Comments
							Time	Summa Canister #	
Wellhead Readings									
Subslab Wells									
AOC65-VEW1	-								
AOC65-VEW2	-								
AOC65-VEW3	-								OFFLINE
AOC65-VEW4	-								OFFLINE
AOC65-VEW5	-								OFFLINE
AOC65-VEW6	-								OFFLINE
AOC65-VEW7	-								OFFLINE
AOC65-VEW8	-								
AOC65-VEW9	-								
AOC65-VEW10	-								
AOC65-VEW11	-								OFFLINE
AOC65-VEW12	-								
B90-INTAKE-SS	- 44.1	3611	81.1	0			X 1030	22963	

Monitoring Point	Vac (in. H ₂ O)	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Wellhead Vac (in. H ₂ O)	Comments
							Time	Summa Canister #		
Exterior Wells										
Manifold Readings										
AOC65-VEW15	- 28.8	443	81.8	0			X 1018	12038	- 0	
AOC65-VEW16	- 28.7	1856	82.2	0					- 2.6	
AOC65-VEW18	- 28.3	824	82.2	0					- 7.4	
AOC65-VEW28A	- 26.8	3218	81.1	0			X 1010	2187	- 26.9	
AOC65-VEW28B	- 26.1	517	81.4	0			X 1006	36470	- 0	
B90-INTAKE-EX	- 33.1	6074	81.3	0			X 1023	1460		

B90-EXHAUST + 10.7 10685 147.3 0 1034 ~~Sample name AOC65-POST65~~

Blower Information	System	Pre Adjustment			Vacuum Relief Valve		Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube	
	Subslab	Y / N	78	No	Y / N	Y (N)	712
Exterior	Y / N ✗	38	No	Y / N	Y / (N)	11356.7	

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

in. H₂O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

AOC65-Post6AC: +7.2(vac) 7640(fbw) 109.9 (temp) PID=0 Samp time = 1036 summa 12042

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

Date/Time : 11.3.09 / 0900

Operator: S. Elliott + J. Bosch

Ambient T (°F) _____

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

Monitoring Point	Manifold Readings							Wellhead		Comments	
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Vac in. H ₂ O		
							Time	Summa Canister #			
Shallow Wells											
AOC65-VEW19	-									WL=9.85	screens 5-25
AOC65-VEW20	-									WL= 14.55	10-25
AOC65-VEW21	-	* surface	completion damaged,	look	like	someone	ran	into	it	WL= 12.82	12-27
AOC65-VEW23	-									WL= 7.15	6-21
AOC65-VEW25	-									WL= 18.22	6-21
AOC65-VEW27	-									WL= 8.97	6-21
AOC65-INTAKE-SW	-									intake flow meter (SCFM)= 40	
Deep Wells											
AOC65-VEW13	-									WL= 32.05	15-40
AOC65-VEW14	-									WL= 60.1 FA 60	40-60
AOC65-VEW17	-									WL= 47.96	22-52
AOC65-VEW22	-									WL= 47.62	25-50
AOC65-VEW24	-									WL= 49.78	25-50
AOC65-VEW26	-									WL= 41.53, TD= 50'	25-50
AOC65-INTAKE-DW	-									intake flow meter (SCFM)= 20	
AOC65-EXHAUST	+										
Blower Information	System	Pre Adjustment				Vacuum Relief Valve			Hours Meter		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube					
		Shallow	(Y) / N	35	No	(Y) / N	Y / (N)	NA			
Deep	(Y) / N	50	No	(Y) / N	Y / (N)	NA					
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes: * Shallow side would not turn on						
		Shallow	(Y) / N	(Y) / N					~ .25 gallons		
		Deep	(Y) / N	(Y) / N					~ 6 gallons		

in. H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

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

Date/Time : 11-3-09/0900

Operator: S. Elliott + J. Bush

Ambient T (°F) _____

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

Wellhead Readings										
Monitoring Point	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Comments	
							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	-									
Exterior Wells										
Monitoring Point	Vac (in. H ₂ O)	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Vac (in. H ₂ O)	Comments
							Time	Summa Canister #		
AOC65-VEW15	-									WL=7.2, TD=12.5, removed 7.5 gallons, WL=12.4'
AOC65-VEW16	-									WL=29.98, TD=40.7, removed 14 gal, WL=39'
AOC65-VEW18	-									WL=43, TD=61 (?) removed 16 gal, WL=53.14'
AOC65-VEW28A	-									WL=113.15, TD=120.0
AOC65-VEW28B	-									WL=118.49, TD=181.0
B90-INTAKE-EX	-									
B90-EXHAUST	+									
Blower Information	System	Pre Adjustment			Vacuum Relief Valve			Hours Meter		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
	Subslab	<input checked="" type="checkbox"/> / <input type="checkbox"/> N	76	NO	Y / N	Y / N				
Exterior	<input checked="" type="checkbox"/> / <input checked="" type="checkbox"/> N	40	NO	Y / N	Y / N					
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes: - need to replace ball valve at KO pot drain on exterior side - plumb building drains into drain line under dock					
	Subslab	<input checked="" type="checkbox"/> / <input type="checkbox"/> N	<input checked="" type="checkbox"/> / <input type="checkbox"/> N	0						
	Exterior	<input checked="" type="checkbox"/> / <input type="checkbox"/> N	<input checked="" type="checkbox"/> / <input type="checkbox"/> N	6.5 gallons						

in. H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

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

								Borehole Field screening with packer apparatus				
VEW	Completed Date(s) 2007	total depth (fbgs)	screen (fbgs)	sand (fbgs)	bent seal (fbgs)	grout (fbgs)	open hole DTW after drilling (fbgs)	Vacuum Pressure inches H2O (approx. screen interval)	PID VOCs (ppm)	O2 %	CO2 %	
VEW 20	4/10	27	10 - 25	8 - 27	5 - 8	2 - 5	dry	65	>2000	21	0.05	
VEW 21	4/19	27	12 - 27	10 - 27	8 - 10	2 - 8	dry	106	1	18.9	0.3	
VEW 22	4/9	51	25 - 50	23 - 51	20 - 23	2 - 20	dry	62	0	19.5	1.8	
VEW 23	4/10	21	6 - 21	4 - 21	2 - 4	n/a	dry	78	0	21	0.05	
VEW 24	4/11	50	25 - 50	23 - 50	20 - 23	2 - 20	dry	61	0	21	0.05	
VEW 25	4/11	21	6 - 21	4 - 21	2 - 4	n/a	20.5	78	0	21	0.05	
VEW 26	4/12	50	25 - 50	23 - 50	20 - 23	2 - 20	dry	67	0	21	0.05	
VEW 27	4/12-13	21	6 - 21	4 - 21	2 - 4	n/a	dry	71	0	19.8	0.9	
Nested	VEW 28a	4/26	120	80 - 120	78 - 120	75 - 78	2 - 75	106.35	see note *	*	*	*
	VEW 28b	4/27	179.3	139.3 - 179.3	137.3 - 179.3	135.3 - 137.3	120 - 135.3		submerged	no samp.	no samp.	no samp.
								* discrete interval				
								25-37'	60	0	17.5	2.0
								53-65'	124	0	19	1.5
								77-89'	80	0	18.5	2.2
								101-106'	60	0	18.4	2.7

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

NC – Borehole not cored

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

Date/Time : 12-11-09/900

Operator: J. Bouch / K. Rice

Ambient T (°F) 45°-55°

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

Monitoring Point	Manifold Readings							Wellhead		Comments	
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Vac in. H ₂ O		
							Time	Summa Canister #			
Shallow Wells											
AOC65-VEW19	-										* blower has been removed for maintenance *
AOC65-VEW20	-										
AOC65-VEW21	-										
AOC65-VEW23	-										
AOC65-VEW25	-										
AOC65-VEW27	-										
AOC65-INTAKE-SW	-									intake flow meter (SCFM)=	
Deep Wells											
AOC65-VEW13	-39.8	9073	46.2						-1.6		* switched filter from shallow into deep side - filter was wet *
AOC65-VEW14	-39.1	2053	44.0						-21.8		
AOC65-VEW17	-38.4	3199	41.4						-17.1		
AOC65-VEW22	-38.4	3062	48.1						-24.8		
AOC65-VEW24	-39.7	1424	49						-0.2		
AOC65-VEW26	-38.3	905	54.4						-33.1		
AOC65-INTAKE-DW	-44.1	2234	47.8							intake flow meter (SCFM)=	
AOC65-EXHAUST	+ 9.6	1788	86.1								
Blower Information	System	Pre Adjustment				Vacuum Relief Valve			Hours Meter		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube					
		Shallow	Y/N			Y/N	Y/N				
Deep	Y/N	55	NO	Y/N	Y/N						
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes: * pressure relief valve closed in deep side * Ken switched them out						
		Shallow	Y/N	Y/N							
		Deep	Y/N	Y/N				≈ 40 gal.			

in. H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

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

Date/Time: 12-11-09 / 0900

Operator: J. Bouch / A. Bradley K. Rice

Ambient T (°F) 45°-55°

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

Wellhead Readings										
Monitoring Point	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Comments	
							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	-									
Exterior Wells										
Monitoring Point	Vac (in. H ₂ O)	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Vac (in. H ₂ O)	Comments
							Time	Summa Canister #		
AOC65-VEW15	- 0.0	514	43.1						- 33.8	PID is in for maintenance and CO ₂ /O ₂ meter is broken
AOC65-VEW16	- 2.1	1093	48.5						- 33.3	
AOC65-VEW18	- 3.3	1011	47.5						- 33.5	
AOC65-VEW28A	- 30.0	2411	46.3						- 32.0	
AOC65-VEW28B	- 0.1	643	48.0						- 32.7	
B90-INTAKE-EX	- 33.7	2829	48.7							
B90-EXHAUST	+ 10.6	6334	112.4							
Blower Information	System	Pre Adjustment			Vacuum Relief Valve			Hours Meter		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
	Subslab	(Y/N)	78	NO	(Y/N)	(Y/N)	7012.7			
Exterior	(Y/N)	44	NO	(Y/N)	(Y/N)	12070.4				
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes: Water in exterior filter container - emptied water					
	Subslab	(Y/N)	(Y/N)	≈ 2.0						
	Exterior	(Y/N)	(Y/N)	≈ 3740						

in. H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

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

Date/Time: 1.5.10 / 0930

Operator: S. Elliott / J. Bosch

Ambient T (°F) 25-51°

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

Monitoring Point	Manifold Readings							Wellhead	Comments	
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected			Vac in. H ₂ O
							Time	Summa Canister #		
Shallow Wells										
AOC65-VEW19	-									
AOC65-VEW20	-									
AOC65-VEW21	-									
AOC65-VEW23	-									
AOC65-VEW25	-									
AOC65-VEW27	-									
AOC65-INTAKE-SW	-									intake flow meter (SCFM)=
Deep Wells										
AOC65-VEW13	- 38.7	4981	43.6	4.1			0946		- 1.6	
AOC65-VEW14	- 38.9	698	44.2	15.6			0948		- 26.0	
AOC65-VEW17	- 38.0	4852	44.0	39.1			0949		- 16.4	
AOC65-VEW22	- 36.3	462	44.4	water - no samp			0953		- 21.1	can hear water when sample port open
AOC65-VEW24	- 36.3	2988	44.2	3.7			0954		- 0.2	
AOC65-VEW26	- 37.6	645	44.0	6.8			0956		- 33.5	
AOC65-INTAKE-DW	- 50.8	4682	50.8	16.2			0944			intake flow meter (SCFM)=
AOC65-EXHAUST	+ 1.9	5833	102.9	15.9			1000			
Blower Information	System	Pre Adjustment			Vacuum Relief Valve		Hours Meter			
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
		Shallow	Y/N			Y/N		Y/N	NA	
Deep	Y/N	57	NO	Y/N	Y/N	NA				
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes: * blower off upon arrival, KO pot full PID just back from being repaired					
		Shallow	Y/N	Y/N						
		Deep	Y/N	Y/N				~40 gal		

in. H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

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

Date/Time: 1.5.10 / 10/15

Operator: S. Elliott / J. Bouch

Ambient T (°F) 25-51°

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

Monitoring Point	Wellhead Readings							Analytical Sample Collected		Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ 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	- 44.4	3195	51.4	8.7	/	/	1032	/		

Monitoring Point	Manifold Readings							Analytical Sample Collected		Wellhead Vac (in. H ₂ O)	Comments
	Vac (in. H ₂ O)	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Time	Summa Canister #			
							AOC65-VEW15	- 35.6	4276		
AOC65-VEW16	- 34.1	2214	39.5	4.9	/	/	1022	/	- 2.5		
AOC65-VEW18	- 34.6	1083	46.0	water - no samp.	/	/	1020	/	- 3.1	can hear water at samp. port	
AOC65-VEW28A	- 33.3	1498	46.5	4.5	/	/	1019	/	- 29.8		
AOC65-VEW28B	- 33.4	593	41.5	3.9	/	/	1017	/	- 2.9		
B90-INTAKE-EX	- 39.1	1041	50.1	5.3	/	/	1027	/			

B90-EXHAUST	+ 10.2	8917	118.2	7.0	/	/	1024	/	
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Blower Information	System	Pre Adjustment			Vacuum Relief Valve		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube	Hours Meter
		Subslab	⓪ / N	80	NO	⓪ / N	Y / (N)
Exterior	Y / (N) *	47	NO	Y / N	Y / (N)	124580	

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes: * blower off upon arrival, KO pot full	
		Subslab	⓪ / N	⓪ / N		0
		Exterior	Y / N	Y / N		~30

in. H₂O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psi: pounds per square inch

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

Date/Time : 2.9.10/0900

Operator: S. Elliott + J. Borch

Ambient T (°F) 29-47°

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

Monitoring Point	Manifold Readings							Wellhead	Comments	
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected			Vac in. H ₂ O
							Time	Summa Canister #		
Shallow Wells										
AOC65-VEW19	-									
AOC65-VEW20	-									
AOC65-VEW21	-									
AOC65-VEW23	-									
AOC65-VEW25	-									
AOC65-VEW27	-									
AOC65-INTAKE-SW	-									intake flow meter (SCFM)=
Deep Wells										
AOC65-VEW13	-38.6	5231	41.5	10.1					-2.0	
AOC65-VEW14	-40.3	1403	41.8						-12.4	pulling water from part
AOC65-VEW17	-37.1	1821	42.4	98.1					-18.4	
AOC65-VEW22	-37.6	1312	51.9						-22.4	pulling water from part
AOC65-VEW24	-37.5	656	42.2	8.2					-0.4	
AOC65-VEW26	-37.8	754	43.5	16.2					-30.6	
AOC65-INTAKE-DW	-43.9	2284	44.0	28.2						intake flow meter (SCFM)=
AOC65-EXHAUST	+1.5	2078	88.3	36.6						
Blower Information	System	Pre Adjustment				Vacuum Relief Valve			Hours Meter	
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube				
		Shallow	Y / (N)			Y / (N)	Y / (N)			
Deep	Y / (N)	65		(Y) / N	Y / (N)					
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes: off upon arrival					
		Shallow	Y / (N)	Y / (N)						
		Deep	(Y) / N	(Y) / N						40

in.H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

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

Date/Time: 2.9.10 / 0900

Operator: S. Elliott + J. Bach

Ambient T (°F) 29-49°

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

Wellhead Readings

Monitoring Point	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Comments
							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	- 44.3	2501	47.8	5.4					

Exterior Wells

Monitoring Point	Manifold Readings						Analytical Sample Collected		Wellhead	Comments
	Vac (in. H ₂ O)	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Time	Summa Canister #	Vac (in. H ₂ O)	
AOC65-VEW15	- 44.1	710	39.1	3.8					- 0.4	
AOC65-VEW16	- 44.1	925	42.7	5.6					- 3.6	
AOC65-VEW18	- 44.1	610	39.0	4.8					- 0.5	
AOC65-VEW28A	- 43.0	637	46.7	5.1					- 42.6	
AOC65-VEW28B	- 41.9	2021	42.2	2.9					- 4.7	
B90-INTAKE-EX	- 44.3	1108	44.7	6.4						

B90-EXHAUST	+ 8.2	9085	116.7	6.6						
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Blower Information	System	Pre Adjustment			Vacuum Relief Valve		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube	Hours Meter
		Subslab	Y/N	80		Y/N	Y/N
Exterior	Y/N	50		Y/N	Y/N	130165	

Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:					
						Subslab	Y/N	Y/N	1	
						Exterior	Y/N	Y/N	3340	

in. H₂O: inches of water fpm: feet per minute ppm: parts per million VRV: vacuum relief valve psf: Pounds per square inch

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

Date/Time : 3.19.10/0900

Operator: S. Elliott + J. Borch

Ambient T (°F) 54

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

Monitoring Point	Manifold Readings							Wellhead	Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected	Vac in. H ₂ O	
	Time		Summa Canister #						
Shallow Wells									
AOC65-VEW19	-								
AOC65-VEW20	-								
AOC65-VEW21	-								
AOC65-VEW23	-								
AOC65-VEW25	-								
AOC65-VEW27	-								
AOC65-INTAKE-SW	-								intake flow meter (SCFM)=
Deep Wells									
AOC65-VEW13	- 34.9	4824	57.3	2.2	/	/	0905	- 1.5	
AOC65-VEW14	- 34.6	10540	58.0	2.3	/	/	0907	- 0	
AOC65-VEW17	- 33.4	1158	58.8	4.0	/	/	0909	- 15.7	
AOC65-VEW22	- 34.1	8808	57.0	0.9	/	/	0911	- 27.9	
AOC65-VEW24	- 34.6	628	57.0	1.7	/	/	0913	- 0.1	
AOC65-VEW26	- 32.6	4570	57.3	2.3	/	/	0915	- 25.3	
AOC65-INTAKE-DW	- 39.5	4041	59.7	2.8	/	/	0902		intake flow meter (SCFM)=
AOC65-EXHAUST	+ 1.9	2702	99.4	1.4	/	/	0917		
Blower Information	System	Pre Adjustment				Vacuum Relief Valve			Hours Meter
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube			
		Shallow	Y / (N)		(adjust to 75" H ₂ O) Y / N	Y / N	Y / N	NA	
Deep	(Y) / N	50	(adjust to 75" H ₂ O) (Y) / N	(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					see logbook

in.H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

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

Date/Time: 3-19-10 / 0900

Operator: S. Elliott + J. Bach

Ambient T (°F) 54°

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

Wellhead Readings

Monitoring Point	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Comments
							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	-42.3	9544	67.8	0	/	/	0944	/	

Exterior Wells

Monitoring Point	Vac (in. H ₂ O)	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Wellhead Vac (in. H ₂ O)	Comments
							Time	Summa Canister #		
AOC65-VEW15	-44.1	585	59.3	0	/	/	0937	/	-0.1	
AOC65-VEW16	-44.1	1389	60.2	0	/	/	0935	/	-2.5	
AOC65-VEW18	-44.1	617	58.2	0	/	/	0934	/	-0.2	
AOC65-VEW28A	-44.1	690	58.4	0	/	/	0932	/	-39.5	
AOC65-VEW28B	-44.1	663	59.3	0	/	/	0930	/	-0	→ cup may be leaking
B90-INTAKE-EX	-44.1	1510	61.3	0	/	/	0940	/		
B90-EXHAUST	+10.2	10913	126.1	0	/	/	0942	/		

Pre Adjustment

Vacuum Relief Valve

Blower Information	System	Pre Adjustment		Vacuum Relief Valve		Hours Meter	
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check		Lube
	Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	65 65	(adjust to 65" H ₂ 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	70127
	Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	52 52	(adjust to 50" H ₂ 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	134377
Moisture Separator Information	System	Inspected	Emptied	Amount Xfered (gals)	Observations/Notes:		
	Subslab	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N		See logbook		
	Exterior	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N				

in. H₂O inches of water

fpm feet per minute

ppm parts per million

VRV vacuum relief valve

psi pounds per square inch

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

Date/Time: 4/8/10

Operator: S. Elliott + J. Bouch

Ambient T (°F) _____

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

Monitoring Point	Manifold Readings							Wellhead		Comments	
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Analytical Sample Collected		Vac in. H ₂ O		
							Time	Summa Canister #			
Shallow Wells											
AOC65-VEW19	-34.9	780	69.2	4.5			1317	✓ 34204	-30.7		
AOC65-VEW20	-35.9	807	69.2	0			1324	✓ 33322	-36.3		
AOC65-VEW21	-35.4	453	69.7	0			1330	✓ 33652	-34.6		
AOC65-VEW23	-36.1	436	69.2	0			1338	✓ 4182	-36.3		
AOC65-VEW25	-35.6	482	70.3	0			1345	✓ 35161	-36.9		
AOC65-VEW27	-35.4	473	70.1	17.7			1351	✓ 2672	-36.5		
AOC65-INTAKE-SW	-34.5	555	67.8	6.6			1311	✓ 34467		intake flow meter (SCFM)=	
Deep Wells											
AOC65-VEW13	-34.3	5618	67.9	0				X	-1.6		
AOC65-VEW14	-34.6	364	65.6	0				X	-2.1		
AOC65-VEW17	-32.2	1206	67.0	0			1243	✓ 35254	-15.4		
AOC65-VEW22	-34.3	4140	58.9	0			1250	✓ 30851	-29.0		
AOC65-VEW24	-33.7	335	60.6	0				X	-0.2		
AOC65-VEW26	-32.6	1243	60.2	0			1360	✓ 2987	-23.6		
AOC65-INTAKE-DW	-38.3	4347	66.5	0			1233	✓ 12672		intake flow meter (SCFM)=	
AOC65-EXHAUST	+2.4	1044	121.2	0				X			
Blower Information	System	Pre Adjustment				Vacuum Relief Valve			Hours Meter		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube					
							Shallow	Deep			
Shallow	Y/N	45	(adjust to 75" H ₂ O) Y/N	Y/N	Y/N	NA					
Deep	Y/N	50	(adjust to 75" H ₂ O) Y/N	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	

in.H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

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

Date/Time: 4/8/10

Operator: S. Elliott + J. Bouch

Ambient T (°F) _____

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

Monitoring Point	Wellhead Readings						Analytical Sample Collected		Comments
	Vac in. H ₂ O	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ 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	- 37.2	3441	60.2	0			1120	✓ 34423	

Monitoring Point	Manifold Readings						Analytical Sample Collected		Wellhead Vac (in. H ₂ O)	Comments
	Vac (in. H ₂ O)	Flow fpm	Temp °F	VOC ppm	O ₂ vol %	CO ₂ vol %	Time	Summa Canister #		
AOC65-VEW15	- 44.3	775	58.6	0				X	- 0.1	
AOC65-VEW16	- 44.1	1404	59.3	0				MX	- 3.8 3.5	
AOC65-VEW18	- 44.3	710	58.0	0				X	- 0.1 0.2	
AOC65-VEW28A	- 44.1	744	57.9	0			1050	✓ 11879	- 44.1	
AOC65-VEW28B	- 44.3	591	58.9	0			1057	✓ 12938	- 3.8 4.2	
B90-INTAKE-EX	- 43.6	1507	60.9	0			1105	✓ 34348		
B90-EXHAUST	+ 10.2	585	107.8	0				X		
AOC65-POSTGAC	+ 10.2	2133	74.1	0			1113	✓ 12338		

Blower Information	System	Pre Adjustment			Vacuum Relief Valve		
		Blower On	Intake Pressure Gauge	Adjusted Pressure	Check	Lube	Hours Meter
	Subslab	Y / N	50	(adjust to 65" H ₂ O)	Y / N 60	Y / N	Y / N
Exterior	Y / N	55	(adjust to 50" H ₂ O)	Y / N 58	Y / N	Y / N	138296

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

in. H₂O: inches of water

fpm: feet per minute

ppm: parts per million

VRV: vacuum relief valve

psi: pounds per square inch

APPENDIX B

LABORATORY DATA



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

**(916) 985-1000 .FAX (916) 985-1020
Hours 8:00 A.M to 6:00 P.M. Pacific**



AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0804432

Work Order Summary

CLIENT: Ms. Cynthia Clark
APPL, Inc.
4203 W. Swift Avenue
Fresno, CA 93722

BILL TO: Ms. Cynthia Clark
APPL, Inc.
4203 W. Swift Avenue
Fresno, CA 93722

PHONE: 559-275-2175

P.O. #

FAX:

PROJECT # 745953.04000 CSSA DY02

DATE RECEIVED: 04/18/2008

CONTACT: Kyle Vagadori

DATE COMPLETED: 05/01/2008

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	AOC65-VEW27	Modified TO-15 (5&20 ppbv)	1.5 "Hg	15 psi
02A	AOC65-VEW25	Modified TO-15 (5&20 ppbv)	1.0 "Hg	15 psi
02AA	AOC65-VEW25 Lab Duplicate	Modified TO-15 (5&20 ppbv)	1.0 "Hg	15 psi
03A	AOC65-VEW23	Modified TO-15 (5&20 ppbv)	2.0 "Hg	15 psi
04A	AOC65-VEW21	Modified TO-15 (5&20 ppbv)	2.0 "Hg	15 psi
05A	AOC65-VEW20	Modified TO-15 (5&20 ppbv)	0.0 "Hg	15 psi
06A	AOC65-INTAKE-SW	Modified TO-15 (5&20 ppbv)	1.0 "Hg	15 psi
07A	AOC65-VEW26	Modified TO-15 (5&20 ppbv)	2.0 "Hg	15 psi
08A	AOC65-VEW24	Modified TO-15 (5&20 ppbv)	2.0 "Hg	15 psi
09A	AOC65-VEW22	Modified TO-15 (5&20 ppbv)	0.0 "Hg	15 psi
10A	AOC65-INTAKE-DW	Modified TO-15 (5&20 ppbv)	0.0 "Hg	15 psi
11A	AOC65-VEW28B	Modified TO-15 (5&20 ppbv)	2.5 "Hg	15 psi
12A	AOC65-VEW28A	Modified TO-15 (5&20 ppbv)	3.5 "Hg	15 psi
13A	B90-INTAKE-EX	Modified TO-15 (5&20 ppbv)	3.0 "Hg	15 psi
14A	B90-INTAKE-SS	Modified TO-15 (5&20 ppbv)	3.5 "Hg	15 psi
15A	Lab Blank	Modified TO-15 (5&20 ppbv)	NA	NA
15B	Lab Blank	Modified TO-15 (5&20 ppbv)	NA	NA

Continued on next page



AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0804432

Work Order Summary

CLIENT:	Ms. Cynthia Clark APPL, Inc. 4203 W. Swift Avenue Fresno, CA 93722	BILL TO:	Ms. Cynthia Clark APPL, Inc. 4203 W. Swift Avenue Fresno, CA 93722
PHONE:	559-275-2175	P.O. #	
FAX:		PROJECT #	745953.04000 CSSA DY02
DATE RECEIVED:	04/18/2008	CONTACT:	Kyle Vagadori
DATE COMPLETED:	05/01/2008		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
16A	CCV	Modified TO-15 (5&20 ppbv)	NA	NA
16B	CCV	Modified TO-15 (5&20 ppbv)	NA	NA
17A	LCS	Modified TO-15 (5&20 ppbv)	NA	NA
17B	LCS	Modified TO-15 (5&20 ppbv)	NA	NA

CERTIFIED BY:  DATE: 05/01/08

Laboratory Director

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
 NY NELAP - 11291, UT NELAP - 9166389892
 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
 Accreditation number: E87680, Effective date: 07/01/07, Expiration date: 06/30/08
 Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards
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 180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
 (916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-15 Soil Gas
APPL, Inc.
Workorder# 0804432

Fourteen 1 Liter Summa Canister samples were received on April 18, 2008. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 50 mLs of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

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.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

<i>Requirement</i>	<i>TO-15</i>	<i>ATL Modifications</i>
Daily CCV	+/- 30% Difference	<=/= 30% Difference with two allowed out up to <=/=40%.; flag and narrate outliers
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

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

B - Compound present in laboratory blank greater than reporting limit (background subtraction no 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
- 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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: AOC65-VEW27

Lab ID#: 0804432-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	76	140	410	730
Tetrachloroethene	76	35000	520	240000

Client Sample ID: AOC65-VEW25

Lab ID#: 0804432-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
cis-1,2-Dichloroethene	66	110	260	430
Trichloroethene	66	330	350	1800
Tetrachloroethene	66	33000	440	220000

Client Sample ID: AOC65-VEW25 Lab Duplicate

Lab ID#: 0804432-02AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
cis-1,2-Dichloroethene	66	120	260	460
Trichloroethene	66	340	350	1800
Tetrachloroethene	66	30000	440	210000

Client Sample ID: AOC65-VEW23

Lab ID#: 0804432-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Tetrachloroethene	11	1200	73	8400

Client Sample ID: AOC65-VEW21

Lab ID#: 0804432-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	11	18	58	97
Tetrachloroethene	11	420	73	2900



AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: AOC65-VEW20

Lab ID#: 0804432-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	10	10	54	54
Tetrachloroethene	10	180	68	1200

Client Sample ID: AOC65-INTAKE-SW

Lab ID#: 0804432-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
cis-1,2-Dichloroethene	31	280	120	1100
Trichloroethene	31	270	160	1400
Tetrachloroethene	31	15000	210	100000

Client Sample ID: AOC65-VEW26

Lab ID#: 0804432-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
cis-1,2-Dichloroethene	11	15	43	60
Trichloroethene	11	180	58	990
Tetrachloroethene	11	1900	73	13000

Client Sample ID: AOC65-VEW24

Lab ID#: 0804432-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
cis-1,2-Dichloroethene	11	14	43	58
Trichloroethene	11	150	58	790
Tetrachloroethene	11	3000	73	20000

Client Sample ID: AOC65-VEW22

Lab ID#: 0804432-09A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	10	18	54	98
Tetrachloroethene	10	620	68	4200



AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: AOC65-INTAKE-DW

Lab ID#: 0804432-10A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	10	60	54	320
Tetrachloroethene	10	1500	68	10000

Client Sample ID: AOC65-VEW28B

Lab ID#: 0804432-11A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	11	26	59	140
Tetrachloroethene	11	400	75	2700

Client Sample ID: AOC65-VEW28A

Lab ID#: 0804432-12A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	11	62	62	330
Tetrachloroethene	11	380	78	2500

Client Sample ID: B90-INTAKE-EX

Lab ID#: 0804432-13A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	11	44	60	240
Tetrachloroethene	11	690	76	4700

Client Sample ID: B90-INTAKE-SS

Lab ID#: 0804432-14A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
cis-1,2-Dichloroethene	11	37	45	150
Trichloroethene	11	47	62	250
Tetrachloroethene	11	11000	78	77000



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW27

Lab ID#: 0804432-01A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	c042830	Date of Collection: 4/17/08
Dil. Factor:	15.2	Date of Analysis: 4/28/08 06:15 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	76	Not Detected	190	Not Detected
1,1-Dichloroethene	76	Not Detected	300	Not Detected
1,1-Dichloroethane	76	Not Detected	310	Not Detected
cis-1,2-Dichloroethene	76	Not Detected	300	Not Detected
Chloroform	76	Not Detected	370	Not Detected
1,1,1-Trichloroethane	76	Not Detected	410	Not Detected
Benzene	76	Not Detected	240	Not Detected
1,2-Dichloroethane	76	Not Detected	310	Not Detected
Trichloroethene	76	140	410	730
trans-1,2-Dichloroethene	76	Not Detected	300	Not Detected
Tetrachloroethene	76	35000	520	240000

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	90	70-130
4-Bromofluorobenzene	108	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW25

Lab ID#: 0804432-02A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	c042831	Date of Collection: 4/17/08
Dil. Factor:	13.1	Date of Analysis: 4/28/08 07:24 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	66	Not Detected	170	Not Detected
1,1-Dichloroethene	66	Not Detected	260	Not Detected
1,1-Dichloroethane	66	Not Detected	260	Not Detected
cis-1,2-Dichloroethene	66	110	260	430
Chloroform	66	Not Detected	320	Not Detected
1,1,1-Trichloroethane	66	Not Detected	360	Not Detected
Benzene	66	Not Detected	210	Not Detected
1,2-Dichloroethane	66	Not Detected	260	Not Detected
Trichloroethene	66	330	350	1800
trans-1,2-Dichloroethene	66	Not Detected	260	Not Detected
Tetrachloroethene	66	33000	440	220000

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	102	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW25 Lab Duplicate

Lab ID#: 0804432-02AA

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	c042832	Date of Collection: 4/17/08
Dil. Factor:	13.1	Date of Analysis: 4/28/08 07:57 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	66	Not Detected	170	Not Detected
1,1-Dichloroethene	66	Not Detected	260	Not Detected
1,1-Dichloroethane	66	Not Detected	260	Not Detected
cis-1,2-Dichloroethene	66	120	260	460
Chloroform	66	Not Detected	320	Not Detected
1,1,1-Trichloroethane	66	Not Detected	360	Not Detected
Benzene	66	Not Detected	210	Not Detected
1,2-Dichloroethane	66	Not Detected	260	Not Detected
Trichloroethene	66	340	350	1800
trans-1,2-Dichloroethene	66	Not Detected	260	Not Detected
Tetrachloroethene	66	30000	440	210000

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	109	70-130
4-Bromofluorobenzene	95	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW23

Lab ID#: 0804432-03A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	r042509	Date of Collection: 4/17/08
Dil. Factor:	2.16	Date of Analysis: 4/25/08 05:11 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	Not Detected	58	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	1200	73	8400

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	94	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW21

Lab ID#: 0804432-04A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	r042510	Date of Collection: 4/17/08
Dil. Factor:	2.16	Date of Analysis: 4/25/08 05:44 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	18	58	97
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	420	73	2900

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	95	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW20

Lab ID#: 0804432-05A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	r042511	Date of Collection: 4/17/08
Dil. Factor:	2.02	Date of Analysis: 4/25/08 06:16 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	10	Not Detected	26	Not Detected
1,1-Dichloroethene	10	Not Detected	40	Not Detected
1,1-Dichloroethane	10	Not Detected	41	Not Detected
cis-1,2-Dichloroethene	10	Not Detected	40	Not Detected
Chloroform	10	Not Detected	49	Not Detected
1,1,1-Trichloroethane	10	Not Detected	55	Not Detected
Benzene	10	Not Detected	32	Not Detected
1,2-Dichloroethane	10	Not Detected	41	Not Detected
Trichloroethene	10	10	54	54
trans-1,2-Dichloroethene	10	Not Detected	40	Not Detected
Tetrachloroethene	10	180	68	1200

Container Type: 1 Liter Summa Canister

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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-INTAKE-SW

Lab ID#: 0804432-06A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	c042835	Date of Collection: 4/17/08
Dil. Factor:	6.15	Date of Analysis: 4/28/08 09:42 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	31	Not Detected	79	Not Detected
1,1-Dichloroethene	31	Not Detected	120	Not Detected
1,1-Dichloroethane	31	Not Detected	120	Not Detected
cis-1,2-Dichloroethene	31	280	120	1100
Chloroform	31	Not Detected	150	Not Detected
1,1,1-Trichloroethane	31	Not Detected	170	Not Detected
Benzene	31	Not Detected	98	Not Detected
1,2-Dichloroethane	31	Not Detected	120	Not Detected
Trichloroethene	31	270	160	1400
trans-1,2-Dichloroethene	31	Not Detected	120	Not Detected
Tetrachloroethene	31	15000	210	100000

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	91	70-130
4-Bromofluorobenzene	101	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW26

Lab ID#: 0804432-07A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	c042836	Date of Collection:	4/17/08
Dil. Factor:	2.16	Date of Analysis:	4/28/08 10:32 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	15	43	60
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	180	58	990
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	1900	73	13000

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	88	70-130
Toluene-d8	92	70-130
4-Bromofluorobenzene	102	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW24

Lab ID#: 0804432-08A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	r042520	Date of Collection: 4/17/08
Dil. Factor:	2.16	Date of Analysis: 4/25/08 11:11 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	14	43	58
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	150	58	790
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	3000	73	20000

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	95	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW22

Lab ID#: 0804432-09A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	c042833	Date of Collection:	4/17/08
Dil. Factor:	2.02	Date of Analysis:	4/28/08 08:23 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	10	Not Detected	26	Not Detected
1,1-Dichloroethene	10	Not Detected	40	Not Detected
1,1-Dichloroethane	10	Not Detected	41	Not Detected
cis-1,2-Dichloroethene	10	Not Detected	40	Not Detected
Chloroform	10	Not Detected	49	Not Detected
1,1,1-Trichloroethane	10	Not Detected	55	Not Detected
Benzene	10	Not Detected	32	Not Detected
1,2-Dichloroethane	10	Not Detected	41	Not Detected
Trichloroethene	10	18	54	98
trans-1,2-Dichloroethene	10	Not Detected	40	Not Detected
Tetrachloroethene	10	620	68	4200

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	88	70-130
Toluene-d8	92	70-130
4-Bromofluorobenzene	101	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-INTAKE-DW

Lab ID#: 0804432-10A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	r042515	Date of Collection: 4/17/08
Dil. Factor:	2.02	Date of Analysis: 4/25/08 08:27 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	10	Not Detected	26	Not Detected
1,1-Dichloroethene	10	Not Detected	40	Not Detected
1,1-Dichloroethane	10	Not Detected	41	Not Detected
cis-1,2-Dichloroethene	10	Not Detected	40	Not Detected
Chloroform	10	Not Detected	49	Not Detected
1,1,1-Trichloroethane	10	Not Detected	55	Not Detected
Benzene	10	Not Detected	32	Not Detected
1,2-Dichloroethane	10	Not Detected	41	Not Detected
Trichloroethene	10	60	54	320
trans-1,2-Dichloroethene	10	Not Detected	40	Not Detected
Tetrachloroethene	10	1500	68	10000

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	96	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW28B

Lab ID#: 0804432-11A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	r042516	Date of Collection: 4/17/08
Dil. Factor:	2.20	Date of Analysis: 4/25/08 09:00 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	44	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Chloroform	11	Not Detected	54	Not Detected
1,1,1-Trichloroethane	11	Not Detected	60	Not Detected
Benzene	11	Not Detected	35	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	26	59	140
trans-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Tetrachloroethene	11	400	75	2700

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	97	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW28A

Lab ID#: 0804432-12A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	r042517	Date of Collection:	4/17/08
Dil. Factor:	2.29	Date of Analysis:	4/25/08 09:33 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	11	Not Detected	29	Not Detected
1,1-Dichloroethene	11	Not Detected	45	Not Detected
1,1-Dichloroethane	11	Not Detected	46	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	45	Not Detected
Chloroform	11	Not Detected	56	Not Detected
1,1,1-Trichloroethane	11	Not Detected	62	Not Detected
Benzene	11	Not Detected	36	Not Detected
1,2-Dichloroethane	11	Not Detected	46	Not Detected
Trichloroethene	11	62	62	330
trans-1,2-Dichloroethene	11	Not Detected	45	Not Detected
Tetrachloroethene	11	380	78	2500

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	94	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: B90-INTAKE-EX

Lab ID#: 0804432-13A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	r042518	Date of Collection: 4/17/08
Dil. Factor:	2.24	Date of Analysis: 4/25/08 10:06 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	11	Not Detected	29	Not Detected
1,1-Dichloroethene	11	Not Detected	44	Not Detected
1,1-Dichloroethane	11	Not Detected	45	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Chloroform	11	Not Detected	55	Not Detected
1,1,1-Trichloroethane	11	Not Detected	61	Not Detected
Benzene	11	Not Detected	36	Not Detected
1,2-Dichloroethane	11	Not Detected	45	Not Detected
Trichloroethene	11	44	60	240
trans-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Tetrachloroethene	11	690	76	4700

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	94	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: B90-INTAKE-SS

Lab ID#: 0804432-14A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	c042834	Date of Collection: 4/17/08
Dil. Factor:	2.29	Date of Analysis: 4/28/08 09:14 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	11	Not Detected	29	Not Detected
1,1-Dichloroethene	11	Not Detected	45	Not Detected
1,1-Dichloroethane	11	Not Detected	46	Not Detected
cis-1,2-Dichloroethene	11	37	45	150
Chloroform	11	Not Detected	56	Not Detected
1,1,1-Trichloroethane	11	Not Detected	62	Not Detected
Benzene	11	Not Detected	36	Not Detected
1,2-Dichloroethane	11	Not Detected	46	Not Detected
Trichloroethene	11	47	62	250
trans-1,2-Dichloroethene	11	Not Detected	45	Not Detected
Tetrachloroethene	11	11000	78	77000

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	87	70-130
Toluene-d8	91	70-130
4-Bromofluorobenzene	100	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0804432-15A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	r042505	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/25/08 12:07 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	5.0	Not Detected	13	Not Detected
1,1-Dichloroethene	5.0	Not Detected	20	Not Detected
1,1-Dichloroethane	5.0	Not Detected	20	Not Detected
cis-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Chloroform	5.0	Not Detected	24	Not Detected
1,1,1-Trichloroethane	5.0	Not Detected	27	Not Detected
Benzene	5.0	Not Detected	16	Not Detected
1,2-Dichloroethane	5.0	Not Detected	20	Not Detected
Trichloroethene	5.0	Not Detected	27	Not Detected
trans-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Tetrachloroethene	5.0	Not Detected	34	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	95	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0804432-15B

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	c042815	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/28/08 09:57 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	5.0	Not Detected	13	Not Detected
1,1-Dichloroethene	5.0	Not Detected	20	Not Detected
1,1-Dichloroethane	5.0	Not Detected	20	Not Detected
cis-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Chloroform	5.0	Not Detected	24	Not Detected
1,1,1-Trichloroethane	5.0	Not Detected	27	Not Detected
Benzene	5.0	Not Detected	16	Not Detected
1,2-Dichloroethane	5.0	Not Detected	20	Not Detected
Trichloroethene	5.0	Not Detected	27	Not Detected
trans-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Tetrachloroethene	5.0	Not Detected	34	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	101	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0804432-16A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	r042503	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/25/08 10:25 AM

Compound	%Recovery
Vinyl Chloride	82
1,1-Dichloroethene	86
1,1-Dichloroethane	86
cis-1,2-Dichloroethene	84
Chloroform	88
1,1,1-Trichloroethane	92
Benzene	83
1,2-Dichloroethane	90
Trichloroethene	85
trans-1,2-Dichloroethene	84
Tetrachloroethene	91

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	98	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0804432-16B

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	c042812	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/28/08 07:58 AM

Compound	%Recovery
Vinyl Chloride	92
1,1-Dichloroethene	99
1,1-Dichloroethane	97
cis-1,2-Dichloroethene	92
Chloroform	100
1,1,1-Trichloroethane	107
Benzene	92
1,2-Dichloroethane	103
Trichloroethene	93
trans-1,2-Dichloroethene	93
Tetrachloroethene	95

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	112	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0804432-17A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	r042504	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/25/08 10:56 AM

Compound	%Recovery
Vinyl Chloride	78
1,1-Dichloroethene	86
1,1-Dichloroethane	86
cis-1,2-Dichloroethene	86
Chloroform	87
1,1,1-Trichloroethane	90
Benzene	85
1,2-Dichloroethane	88
Trichloroethene	86
trans-1,2-Dichloroethene	85
Tetrachloroethene	92

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	98	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0804432-17B

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	c042813	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/28/08 08:28 AM

Compound	%Recovery
Vinyl Chloride	90
1,1-Dichloroethene	99
1,1-Dichloroethane	97
cis-1,2-Dichloroethene	93
Chloroform	100
1,1,1-Trichloroethane	104
Benzene	92
1,2-Dichloroethane	101
Trichloroethene	94
trans-1,2-Dichloroethene	96
Tetrachloroethene	96

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	103	70-130

Camp Stanley Storage Activity Chain Of Custody

0804432

COC ID: 041708ATLA Relinquish Date: 4/17/2008 Cooler ID: A
 Project Location: CSSA DY02 Relinquished By: se LabCode: ATL
 Job Number: 745953-04000 Relinquish Time: 5:00 PM Gender: FedEx
 Creation Date: 4/17/2008 Collection Team: SE KRR AirBill Carrier: 9629 0112 4321

LOCID: AOC65-VEW27 LOGDATE: 4/17/2008 MATRIX: GS TBLDT: Analysis Required: 1.5^{u/g}
 SBD: 0 LOGTIME: 13:47 SACODE: N SMCODE: SA ABLDT: TO 15 TO 15
 SED: 0 FLDAMPID: AOC65-VEW27_041708_N1347 EBLDT: Containers: 1 TO 15 TO 15
 Remarks: 31785

LOCID: AOC65-VEW25 LOGDATE: 4/17/2008 MATRIX: GS TBLDT: Analysis Required: 1.2^{u/g}
 SBD: 0 LOGTIME: 13:55 SACODE: N SMCODE: SA ABLDT: TO 15 TO 15
 SED: 0 FLDAMPID: AOC65-VEW25_041708_N1355 EBLDT: Containers: 1 TO 15 TO 15
 Remarks: 31781

LOCID: AOC65-VEW23 LOGDATE: 4/17/2008 MATRIX: GS TBLDT: Analysis Required: 2.0^{u/g}
 SBD: 0 LOGTIME: 13:57 SACODE: N SMCODE: SA ABLDT: TO 15 TO 15
 SED: 0 FLDAMPID: AOC65-VEW23_041708_N1357 EBLDT: Containers: 1 TO 15 TO 15
 Remarks: 34598

LOCID: AOC65-VEW21 LOGDATE: 4/17/2008 MATRIX: GS TBLDT: Analysis Required: 2.0^{u/g}
 SBD: 0 LOGTIME: 14:00 SACODE: N SMCODE: SA ABLDT: TO 15 TO 15
 SED: 0 FLDAMPID: AOC65-VEW21_041708_N1400 EBLDT: Containers: 1 TO 15 TO 15
 Remarks: 35596

LOCID: AOC65-VEW20 LOGDATE: 4/17/2008 MATRIX: GS TBLDT: Analysis Required: 0.2^{u/g}
 SBD: 0 LOGTIME: 14:05 SACODE: N SMCODE: SA ABLDT: TO 15 TO 15
 SED: 0 FLDAMPID: AOC65-VEW20_041708_N1405 EBLDT: Containers: 1 TO 15 TO 15
 Remarks: 12379

LOCID: AOC65-INTAKE-SW LOGDATE: 4/17/2008 MATRIX: GS TBLDT: Analysis Required: 1.2^{u/g}
 SBD: 0 LOGTIME: 14:10 SACODE: N SMCODE: SA ABLDT: TO 15 TO 15
 SED: 0 FLDAMPID: AOC65-INTAKE-SW_041708_N1410 EBLDT: Containers: 1 TO 15 TO 15
 Remarks: 11890

LOCID: AOC65-VEW26 LOGDATE: 4/17/2008 MATRIX: GS TBLDT: Analysis Required: 2.0^{u/g}
 SBD: 0 LOGTIME: 14:15 SACODE: N SMCODE: SA ABLDT: TO 15 TO 15
 SED: 0 FLDAMPID: AOC65-VEW26_041708_N1415 EBLDT: Containers: 1 TO 15 TO 15
 Remarks: 34130

LOCID: AOC65-VEW24 LOGDATE: 4/17/2008 MATRIX: GS TBLDT: Analysis Required: 2.0^{u/g}
 SBD: 0 LOGTIME: 14:18 SACODE: N SMCODE: SA ABLDT: TO 15 TO 15
 SED: 0 FLDAMPID: AOC65-VEW24_041708_N1418 FRI DT: Containers: 1 TO 15 TO 15
 Remarks: 11897

LOCID: AOC65-VEW22 LOGDATE: 4/17/2008 MATRIX: GS TBLDT: Analysis Required: 0.0^{u/g}
 SBD: 0 LOGTIME: 14:22 SACODE: N SMCODE: SA ABLDT: TO 15 TO 15
 SED: 0 FLDAMPID: AOC65-VEW22_041708_N1422 EBLDT: Containers: 1 TO 15 TO 15
 Remarks: 34104



Relinquished by: *[Signature]* Date: 4/17/08 Time: 1:00
 Relinquished by: *[Signature]* Date: 4/18/08 Time: 8:45
 Relinquished by: _____ Date: _____ Time: _____
 Relinquished by: _____ Date: _____ Time: _____

Camp Stanley Storage Activity Chain Of Custody

0804432

COC ID: 041708ATLA
 Project Location: C SSA DY02
 Job Number: 745953_04000
 Creation Date: 4/17/2008

Relinquish Date: 4/17/2008
 Relinquish By: se
 Relinquish Time: 5:00 PM
 Collection Team: SE_KBR
 Cooler ID: A
 Lab Code: ATL
 Carrier: FedEx
 Airbill Carrier: 8629 0112 4321
 Sampler(s): Sam ELLIOTT
 SE ELLIOTT
 Ken Reid
 15-005

LOGID: AOC66-INTAKE-DW LOGDATE: 4/17/2008 MATRIX: GS TBLTOT: EBLTOT:
 SBD: 0 LOGTIME: 14:30 SACODE: N SMCODE: SA ABLTOT:
 SED: 0 FLD\$AMPID AOC66-INTAKE-DW_041708_N1430
 Remarks: 25290
 Analysis Required: under 1 hr
 TO 15 TO 15
 0.0 ¹⁴g

LOGID: AOC66-VEW28B LOGDATE: 4/17/2008 MATRIX: GS TBLTOT:
 SBD: 0 LOGTIME: 14:36 SACODE: N SMCODE: SA ABLTOT:
 SED: 0 FLD\$AMPID AOC66-VEW28B_041708_N1436
 Remarks: 12383
 Analysis Required: 2.5 ¹⁴g
 TO 15 TO 15

LOGID: AOC66-VEW28A LOGDATE: 4/17/2008 MATRIX: GS TBLTOT:
 SBD: 0 LOGTIME: 14:40 SACODE: N SMCODE: SA ABLTOT:
 SED: 0 FLD\$AMPID AOC66-VEW28A_041708_N1440
 Remarks: 31766
 Analysis Required: 2.5 ¹⁴g
 TO 15 TO 15

LOGID: B90-INTAKE-EX LOGDATE: 4/17/2008 MATRIX: GS TBLTOT:
 SBD: 0 LOGTIME: 14:50 SACODE: N SMCODE: SA ABLTOT:
 SED: 0 FLD\$AMPID B90-INTAKE-EX_041708_N1450
 Remarks: 34106
 Analysis Required: 8.0 ¹⁴g
 TO 15 TO 15

LOGID: B90-INTAKE-SS LOGDATE: 4/17/2008 MATRIX: GS TBLTOT:
 SBD: 0 LOGTIME: 14:55 SACODE: N SMCODE: SA ABLTOT:
 SED: 0 FLD\$AMPID B90-INTAKE-SS_041708_N1455
 Remarks: 34824
 Analysis Required: 3.5 ¹⁴g
 TO 15 TO 15

*Pass w/ NL
 or 4/23/08*

Relinquished by: [Signature] Date: 4.17.08 Time: 1700
 Received by: [Signature] Date: 4.18.08 Time: 0815
 Relinquished by: _____ Date: _____ Time: _____
 Received by: _____ Date: _____ Time: _____



AN ENVIRONMENTAL ANALYTICAL LABORATORY

DEC 18

WORK ORDER #: 0811257

Work Order Summary

CLIENT: Ms. Cynthia Clark
APPL, Inc.
4203 W. Swift Avenue
Fresno, CA 93722

BILL TO: Ms. Cynthia Clark
APPL, Inc.
4203 W. Swift Avenue
Fresno, CA 93722

DY02 - #101

PHONE: 559-275-2175

P.O. #

FAX:

PROJECT # 745953.04000 CSSA AOC65 SVE

DATE RECEIVED: 11/12/2008

CONTACT: Kyle Vagadori

DATE COMPLETED: 11/25/2008

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	AOC65-INTAKE-SW	Modified TO-15 (5&20 ppbv)	2.0 "Hg	15 psi
01AA	AOC65-INTAKE-SW Lab Duplicate	Modified TO-15 (5&20 ppbv)	2.0 "Hg	15 psi
02A	AOC65-VEW20	Modified TO-15 (5&20 ppbv)	2.5 "Hg	15 psi
03A	AOC65-VEW21	Modified TO-15 (5&20 ppbv)	2.0 "Hg	15 psi
04A	AOC65-VEW23	Modified TO-15 (5&20 ppbv)	2.0 "Hg	15 psi
05A	AOC65-VEW25	Modified TO-15 (5&20 ppbv)	2.0 "Hg	15 psi
06A	AOC65-VEW27	Modified TO-15 (5&20 ppbv)	2.0 "Hg	15 psi
07A	AOC65-INTAKE-DW	Modified TO-15 (5&20 ppbv)	1.5 "Hg	15 psi
08A	AOC65-VEW22	Modified TO-15 (5&20 ppbv)	1.5 "Hg	15 psi
09A	AOC65-VEW24	Modified TO-15 (5&20 ppbv)	1.5 "Hg	15 psi
10A	AOC65-VEW-26	Modified TO-15 (5&20 ppbv)	1.5 "Hg	15 psi
11A	AOC65-VEW28B	Modified TO-15 (5&20 ppbv)	2.0 "Hg	15 psi
12A	AOC65-VEW28A	Modified TO-15 (5&20 ppbv)	2.5 "Hg	15 psi
13A	B90-INTAKE-EX	Modified TO-15 (5&20 ppbv)	3.0 "Hg	15 psi
14A	B90-INTAKE-SS	Modified TO-15 (5&20 ppbv)	0.0 "Hg	15 psi
15A	Lab Blank	Modified TO-15 (5&20 ppbv)	NA	NA
16A	CCV	Modified TO-15 (5&20 ppbv)	NA	NA

Continued on next page



AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0811257

Work Order Summary

CLIENT: Ms. Cynthia Clark
APPL, Inc.
4203 W. Swift Avenue
Fresno, CA 93722

BILL TO: Ms. Cynthia Clark
APPL, Inc.
4203 W. Swift Avenue
Fresno, CA 93722

PHONE: 559-275-2175

P.O. #

FAX:

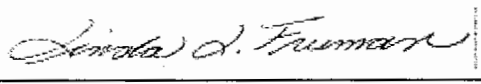
PROJECT # 745953.04000 CSSA AOC65 SVE

DATE RECEIVED: 11/12/2008

CONTACT: Kyle Vagadori

DATE COMPLETED: 11/25/2008

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
17A	LCS	Modified TO-15 (5&20 ppbv)	NA	NA

CERTIFIED BY: 

DATE: 11/25/08

Laboratory Director

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
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: 07/01/08, Expiration date: 06/30/09

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

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

LABORATORY NARRATIVE
Modified TO-15 Soil Gas
APPL, Inc.
Workorder# 0811257

Fourteen 1 Liter Summa Canister samples were received on November 12, 2008. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 50 mLs of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

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.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

<i>Requirement</i>	<i>TO-15</i>	<i>ATL Modifications</i>
Daily CCV	+/- 30% Difference	<= 30% Difference with two allowed out up to <=40%.; flag and narrate outliers
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

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

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

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

- U - Compound analyzed for but not detected above the reporting limit.
- UJ- Non-detected compound associated with low bias in the CCV
- 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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: AOC65-INTAKE-SW

Lab ID#: 0811257-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
cis-1,2-Dichloroethene	11	14	43	58
Trichloroethene	11	16	58	89
Tetrachloroethene	11	600	73	4100

Client Sample ID: AOC65-INTAKE-SW Lab Duplicate

Lab ID#: 0811257-01AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
cis-1,2-Dichloroethene	11	14	43	56
Trichloroethene	11	16	58	88
Tetrachloroethene	11	580	73	3900

Client Sample ID: AOC65-VEW20

Lab ID#: 0811257-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	11	23	59	120

Client Sample ID: AOC65-VEW21

Lab ID#: 0811257-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Tetrachloroethene	11	68	73	460

Client Sample ID: AOC65-VEW23

Lab ID#: 0811257-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Tetrachloroethene	11	18	73	120

Client Sample ID: AOC65-VEW25

Lab ID#: 0811257-05A



AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: AOC65-VEW25

Lab ID#: 0811257-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	11	11	58	59
Tetrachloroethene	11	500	73	3400

Client Sample ID: AOC65-VEW27

Lab ID#: 0811257-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
cis-1,2-Dichloroethene	11	12	43	49
Trichloroethene	11	19	58	100
Tetrachloroethene	11	3100	73	21000

Client Sample ID: AOC65-INTAKE-DW

Lab ID#: 0811257-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Tetrachloroethene	11	60	72	410

Client Sample ID: AOC65-VEW22

Lab ID#: 0811257-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Tetrachloroethene	11	36	72	240

Client Sample ID: AOC65-VEW24

Lab ID#: 0811257-09A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	11	14	57	74
Tetrachloroethene	11	84	72	570

Client Sample ID: AOC65-VEW-26

Lab ID#: 0811257-10A



AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: AOC65-VEW-26

Lab ID#: 0811257-10A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	11	24	57	130
Tetrachloroethene	11	74	72	500

Client Sample ID: AOC65-VEW28B

Lab ID#: 0811257-11A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	11	30	58	160
Tetrachloroethene	11	82	73	560

Client Sample ID: AOC65-VEW28A

Lab ID#: 0811257-12A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	11	69	59	370
Tetrachloroethene	11	200	75	1300

Client Sample ID: B90-INTAKE-EX

Lab ID#: 0811257-13A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	11	36	60	190
Tetrachloroethene	11	100	76	690

Client Sample ID: B90-INTAKE-SS

Lab ID#: 0811257-14A

No Detections Were Found.



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-INTAKE-SW

Lab ID#: 0811257-01A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b111415	Date of Collection:	11/11/08
Dil. Factor:	2.16	Date of Analysis:	11/14/08 03:13 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	14	43	58
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	16	58	89
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	600	73	4100

Container Type: 1 Liter Summa Canister

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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-INTAKE-SW Lab Duplicate

Lab ID#: 0811257-01AA

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b111416	Date of Collection:	11/11/08
Dil. Factor:	2.16	Date of Analysis:	11/14/08 03:49 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	14	43	56
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	16	58	88
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	580	73	3900

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	97	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW20

Lab ID#: 0811257-02A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b111417	Date of Collection:	11/11/08
Dil. Factor:	2.20	Date of Analysis:	11/14/08 04:17 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	44	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Chloroform	11	Not Detected	54	Not Detected
1,1,1-Trichloroethane	11	Not Detected	60	Not Detected
Benzene	11	Not Detected	35	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	23	59	120
trans-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Tetrachloroethene	11	Not Detected	75	Not Detected

Container Type: 1 Liter Summa Canister

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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW21

Lab ID#: 0811257-03A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b111418	Date of Collection:	11/11/08
Dil. Factor:	2.16	Date of Analysis:	11/14/08 04:35 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	Not Detected	58	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	68	73	460

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	96	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW23

Lab ID#: 0811257-04A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b111419	Date of Collection:	11/11/08
Dil. Factor:	2.16	Date of Analysis:	11/14/08 05:05 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	Not Detected	58	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	18	73	120

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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW25

Lab ID#: 0811257-05A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b111420	Date of Collection:	11/11/08
Dil. Factor:	2.16	Date of Analysis:	11/14/08 05:25 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	11	58	59
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	500	73	3400

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	98	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW27

Lab ID#: 0811257-06A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b111421	Date of Collection:	11/11/08
Dil. Factor:	2.16	Date of Analysis:	11/14/08 05:48 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	12	43	49
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	19	58	100
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	3100	73	21000

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	98	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-INTAKE-DW

Lab ID#: 0811257-07A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b111422	Date of Collection:	11/11/08
Dil. Factor:	2.13	Date of Analysis:	11/14/08 06:13 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	11	Not Detected	27	Not Detected
1,1-Dichloroethene	11	Not Detected	42	Not Detected
1,1-Dichloroethane	11	Not Detected	43	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	42	Not Detected
Chloroform	11	Not Detected	52	Not Detected
1,1,1-Trichloroethane	11	Not Detected	58	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	43	Not Detected
Trichloroethene	11	Not Detected	57	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	42	Not Detected
Tetrachloroethene	11	60	72	410

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	96	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW22

Lab ID#: 0811257-08A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b111423	Date of Collection: 11/11/08
Dil. Factor:	2.13	Date of Analysis: 11/14/08 06:46 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	11	Not Detected	27	Not Detected
1,1-Dichloroethene	11	Not Detected	42	Not Detected
1,1-Dichloroethane	11	Not Detected	43	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	42	Not Detected
Chloroform	11	Not Detected	52	Not Detected
1,1,1-Trichloroethane	11	Not Detected	58	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	43	Not Detected
Trichloroethene	11	Not Detected	57	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	42	Not Detected
Tetrachloroethene	11	36	72	240

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	97	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW24

Lab ID#: 0811257-09A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b111424	Date of Collection:	11/11/08
Dil. Factor:	2.13	Date of Analysis:	11/14/08 07:19 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	11	Not Detected	27	Not Detected
1,1-Dichloroethene	11	Not Detected	42	Not Detected
1,1-Dichloroethane	11	Not Detected	43	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	42	Not Detected
Chloroform	11	Not Detected	52	Not Detected
1,1,1-Trichloroethane	11	Not Detected	58	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	43	Not Detected
Trichloroethene	11	14	57	74
trans-1,2-Dichloroethene	11	Not Detected	42	Not Detected
Tetrachloroethene	11	84	72	570

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	97	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW-26

Lab ID#: 0811257-10A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b111425	Date of Collection:	11/11/08
Dil. Factor:	2.13	Date of Analysis:	11/14/08 08:20 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	11	Not Detected	27	Not Detected
1,1-Dichloroethene	11	Not Detected	42	Not Detected
1,1-Dichloroethane	11	Not Detected	43	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	42	Not Detected
Chloroform	11	Not Detected	52	Not Detected
1,1,1-Trichloroethane	11	Not Detected	58	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	43	Not Detected
Trichloroethene	11	24	57	130
trans-1,2-Dichloroethene	11	Not Detected	42	Not Detected
Tetrachloroethene	11	74	72	500

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	96	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW28B

Lab ID#: 0811257-11A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b111427	Date of Collection:	11/11/08
Dil. Factor:	2.16	Date of Analysis:	11/14/08 09:04 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	30	58	160
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	82	73	560

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	97	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW28A

Lab ID#: 0811257-12A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b111428	Date of Collection:	11/11/08
Dil. Factor:	2.20	Date of Analysis:	11/14/08 09:25 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	44	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Chloroform	11	Not Detected	54	Not Detected
1,1,1-Trichloroethane	11	Not Detected	60	Not Detected
Benzene	11	Not Detected	35	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	69	59	370
trans-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Tetrachloroethene	11	200	75	1300

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	97	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: B90-INTAKE-EX

Lab ID#: 0811257-13A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b111429	Date of Collection:	11/11/08
Dil. Factor:	2.24	Date of Analysis:	11/14/08 09:43 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	11	Not Detected	29	Not Detected
1,1-Dichloroethene	11	Not Detected	44	Not Detected
1,1-Dichloroethane	11	Not Detected	45	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Chloroform	11	Not Detected	55	Not Detected
1,1,1-Trichloroethane	11	Not Detected	61	Not Detected
Benzene	11	Not Detected	36	Not Detected
1,2-Dichloroethane	11	Not Detected	45	Not Detected
Trichloroethene	11	36	60	190
trans-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Tetrachloroethene	11	100	76	690

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	98	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: B90-INTAKE-SS

Lab ID#: 0811257-14A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b111426	Date of Collection:	11/11/08
Dil. Factor:	2.02	Date of Analysis:	11/14/08 08:37 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	10	Not Detected	26	Not Detected
1,1-Dichloroethene	10	Not Detected	40	Not Detected
1,1-Dichloroethane	10	Not Detected	41	Not Detected
cis-1,2-Dichloroethene	10	Not Detected	40	Not Detected
Chloroform	10	Not Detected	49	Not Detected
1,1,1-Trichloroethane	10	Not Detected	55	Not Detected
Benzene	10	Not Detected	32	Not Detected
1,2-Dichloroethane	10	Not Detected	41	Not Detected
Trichloroethene	10	Not Detected	54	Not Detected
trans-1,2-Dichloroethene	10	Not Detected	40	Not Detected
Tetrachloroethene	10	Not Detected	68	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	98	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0811257-15A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b111406	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	11/14/08 10:20 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	5.0	Not Detected	13	Not Detected
1,1-Dichloroethene	5.0	Not Detected	20	Not Detected
1,1-Dichloroethane	5.0	Not Detected	20	Not Detected
cis-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Chloroform	5.0	Not Detected	24	Not Detected
1,1,1-Trichloroethane	5.0	Not Detected	27	Not Detected
Benzene	5.0	Not Detected	16	Not Detected
1,2-Dichloroethane	5.0	Not Detected	20	Not Detected
Trichloroethene	5.0	Not Detected	27	Not Detected
trans-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Tetrachloroethene	5.0	Not Detected	34	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	97	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0811257-16A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b111402	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/14/08 08:00 AM

Compound	%Recovery
Vinyl Chloride	89
1,1-Dichloroethene	91
1,1-Dichloroethane	99
cis-1,2-Dichloroethene	94
Chloroform	95
1,1,1-Trichloroethane	103
Benzene	94
1,2-Dichloroethane	94
Trichloroethene	95
trans-1,2-Dichloroethene	95
Tetrachloroethene	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	101	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0811257-17A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b111404	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/14/08 08:51 AM

Compound	%Recovery
Vinyl Chloride	93
1,1-Dichloroethene	94
1,1-Dichloroethane	109
cis-1,2-Dichloroethene	102
Chloroform	102
1,1,1-Trichloroethane	120
Benzene	101
1,2-Dichloroethane	101
Trichloroethene	101
trans-1,2-Dichloroethene	93
Tetrachloroethene	102

Container Type: NA - Not Applicable

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

Camp Stanley Storage Activity Chain Of Custody

0811257

COC ID: 111108ATLA
 Project Location: CSSA AOC65 SVE
 Job Number: 745959_04000
 Creation Date: 11/11/2008

Relinquish Date: 11/11/2008
 Relinquish By: JB
 Relinquish Time: 5:00 PM
 Collection Team: JBAL
 Lab Code: A
 Carrier: FedEx
 Airtel Carrier: 865808348863
 Sample(s): *[Handwritten Signature]*

LOCID: AOC65-INTAKE-SW LOGDATE: 11/11/2008 MATRIX: GS TBLTOT: 1
 SBD: 0 LOGTIME: 9:22 SACODE: N SMCODE: SA ABLTOT: 1
 SED: 0 FLDAMPID AOC65-INTAKE-SW_111108_N0922 EBLTOT: 1
 Remarks: Containers: 1 Analysis Required: TO 15 TO 15

LOCID: AOC65-VEW20 LOGDATE: 11/11/2008 MATRIX: GS TBLTOT: 1
 SBD: 0 LOGTIME: 9:37 SACODE: N SMCODE: SA ABLTOT: 1
 SED: 0 FLDAMPID AOC65-VEW20_111108_N0937 EBLTOT: 1
 Remarks: Containers: 1 Analysis Required: TO 15 TO 15

LOCID: AOC65-VEW21 LOGDATE: 11/11/2008 MATRIX: GS TBLTOT: 1
 SBD: 0 LOGTIME: 9:46 SACODE: N SMCODE: SA ABLTOT: 1
 SED: 0 FLDAMPID AOC65-VEW21_111108_N0946 EBLTOT: 1
 Remarks: Containers: 1 Analysis Required: TO 15 TO 15

LOCID: AOC65-VEW23 LOGDATE: 11/11/2008 MATRIX: GS TBLTOT: 1
 SBD: 0 LOGTIME: 9:50 SACODE: N SMCODE: SA ABLTOT: 1
 SED: 0 FLDAMPID AOC65-VEW23_111108_N0950 EBLTOT: 1
 Remarks: Containers: 1 Analysis Required: TO 15 TO 15

LOCID: AOC65-VEW25 LOGDATE: 11/11/2008 MATRIX: GS TBLTOT: 1
 SBD: 0 LOGTIME: 10:00 SACODE: N SMCODE: SA ABLTOT: 1
 SED: 0 FLDAMPID AOC65-VEW25_111108_N1000 EBLTOT: 1
 Remarks: Containers: 1 Analysis Required: TO 15 TO 15

LOCID: AOC65-VEW27 LOGDATE: 11/11/2008 MATRIX: GS TBLTOT: 1
 SBD: 0 LOGTIME: 10:05 SACODE: N SMCODE: SA ABLTOT: 1
 SED: 0 FLDAMPID AOC65-VEW27_111108_N1005 EBLTOT: 1
 Remarks: Containers: 1 Analysis Required: TO 15 TO 15

LOCID: AOC65-INTAKE-DW LOGDATE: 11/11/2008 MATRIX: GS TBLTOT: 1
 SBD: 0 LOGTIME: 10:20 SACODE: N SMCODE: SA ABLTOT: 1
 SED: 0 FLDAMPID AOC65-INTAKE-DW_111108_N1020 EBLTOT: 1
 Remarks: Containers: 1 Analysis Required: TO 15 TO 15

LOCID: AOC65-VEW22 LOGDATE: 11/11/2008 MATRIX: GS TBLTOT: 1
 SBD: 0 LOGTIME: 10:41 SACODE: N SMCODE: SA ABLTOT: 1
 SED: 0 FLDAMPID AOC65-VEW22_111108_N1041 EBLTOT: 1
 Remarks: Containers: 1 Analysis Required: TO 15 TO 15

LOCID: AOC65-VEW24 LOGDATE: 11/11/2008 MATRIX: GS TBLTOT: 1
 SBD: 0 LOGTIME: 10:50 SACODE: N SMCODE: SA ABLTOT: 1
 SED: 0 FLDAMPID AOC65-VEW24_111108_N1050 EBLTOT: 1
 Remarks: Containers: 1 Analysis Required: TO 15 TO 15

CUSTOMER SEAL INSTRUCTIONS
 W/ # 860421 TEMP 11/11/08
 810540093416065

Relinquished by: *[Handwritten Signature]* Date: 11/10/2008 Time: 17:00
 Received by: *[Handwritten Signature]* Date: 11/11/2008 Time: 09:05

Camp Stanley Storage Activity Chain Of Custody

0811257

COC ID: 111108ATLA Relinquish Date: 11/11/2008 Cooler ID: A
 Project Location: CSSA AOC65 8VE Relinquished By: JB Lab Code: ATL
 Job Number: 748953_04000 Relinquish Time: 5:00 PM Carrier: FedEx
 Creation Date: 11/11/2008 Collection Team: JB-AL Airbill Number: 965949346963

LOCID: AOC65-VEW26 LOGDATE: 11/11/2008 MATRIX: GS TBL: TL
 SBD: 174 LOGTIME: 10:58 SACODE: N SMCODE: SA ABL: TL
 SED: 0 FIDSAMPID AOC65-VEW26_111108_M1056 Containers: 1

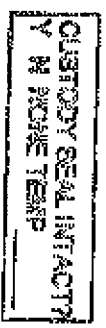
LOCID: AOC65-VEW28B LOGDATE: 11/11/2008 MATRIX: GS TBL: TL
 SBD: 174 LOGTIME: 12:58 SACODE: N SMCODE: SA ABL: TL
 SED: 0 FIDSAMPID AOC65-VEW28B_111108_M1258 Containers: 1

LOCID: AOC65-VEW28A LOGDATE: 11/11/2008 MATRIX: GS TBL: TL
 SBD: 174 LOGTIME: 13:05 SACODE: N SMCODE: SA ABL: TL
 SED: 0 FIDSAMPID AOC65-VEW28A_111108_M1305 Containers: 1

LOCID: B90-INTAKE-EX LOGDATE: 11/11/2008 MATRIX: GS TBL: TL
 SBD: 174 LOGTIME: 13:22 SACODE: N SMCODE: SA ABL: TL
 SED: 0 FIDSAMPID B90-INTAKE-EX_111108_M1322 Containers: 1

LOCID: B90-INTAKE-SS LOGDATE: 11/11/2008 MATRIX: GS TBL: TL
 SBD: 174 LOGTIME: 13:33 SACODE: N SMCODE: SA ABL: TL
 SED: 0 FIDSAMPID B90-INTAKE-SS_111108_M1333 Containers: 1

Since # 24388 no good. Discard.



Relinquished by: [Signature] Date: 11/10/08 Time: 13:00
 Received by: _____ Date: _____ Time: _____



AN ENVIRONMENTAL ANALYTICAL LABORATORY

4/21/2009

Ms. Cynthia Clark
APPL, Inc.
908 North Temperance Ave

Clovis CA 93611

Project Name: CSSA
Project #: 745953.04000
Workorder #: 0904166

Dear Ms. Cynthia Clark

The following report includes the data for the above referenced project for sample(s) received on 4/8/2009 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 (5&20 ppbv) 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 you 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,

A handwritten signature in black ink that reads 'Kyle Vagadori'.

Kyle Vagadori
Project Manager



AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0904166

Work Order Summary

CLIENT: Ms. Cynthia Clark
APPL, Inc.
908 North Temperance Ave
Clovis, CA 93611

BILL TO: Ms. Cynthia Clark
APPL, Inc.
908 North Temperance Ave
Clovis, CA 93611

PHONE: 559-275-2175

FAX: 559-275-4422

DATE RECEIVED: 04/08/2009

DATE COMPLETED: 04/21/2009

P.O. #

PROJECT # 745953.04000 CSSA

CONTACT: Kyle Vagadori

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	AOC65-INTAKE-SW	Modified TO-15 (5&20 ppbv)	2.5 "Hg	15 psi
01AA	AOC65-INTAKE-SW Lab Duplicate	Modified TO-15 (5&20 ppbv)	2.5 "Hg	15 psi
02A	AOC65-VEW19-UGR	Modified TO-15 (5&20 ppbv)	3.0 "Hg	15 psi
03A	AOC65-VEW20	Modified TO-15 (5&20 ppbv)	2.0 "Hg	15 psi
04A	AOC65-VEW21	Modified TO-15 (5&20 ppbv)	3.0 "Hg	15 psi
05A	AOC65-VEW23	Modified TO-15 (5&20 ppbv)	2.0 "Hg	15 psi
06A	AOC65-VEW25	Modified TO-15 (5&20 ppbv)	2.5 "Hg	15 psi
07A	AOC65-VEW27	Modified TO-15 (5&20 ppbv)	2.5 "Hg	15 psi
08A	AOC65-INTAKE-DW	Modified TO-15 (5&20 ppbv)	2.5 "Hg	15 psi
09A	AOC65-VEW22	Modified TO-15 (5&20 ppbv)	2.0 "Hg	15 psi
10A	AOC65-VEW24	Modified TO-15 (5&20 ppbv)	2.5 "Hg	15 psi
11A	AOC65-VEW26	Modified TO-15 (5&20 ppbv)	3.5 "Hg	15 psi
12A	AOC65-POSTGAC	Modified TO-15 (5&20 ppbv)	2.0 "Hg	15 psi
13A	B90-INTAKE-EX	Modified TO-15 (5&20 ppbv)	2.0 "Hg	15 psi
14A	B90-INTAKE-SS	Modified TO-15 (5&20 ppbv)	1.5 "Hg	15 psi
15A	AOC65-VEW28A	Modified TO-15 (5&20 ppbv)	2.0 "Hg	15 psi
16A	AOC65-VEW28B	Modified TO-15 (5&20 ppbv)	2.0 "Hg	15 psi

Continued on next page



AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0904166

Work Order Summary

CLIENT:	Ms. Cynthia Clark APPL, Inc. 908 North Temperance Ave Clovis, CA 93611	BILL TO:	Ms. Cynthia Clark APPL, Inc. 908 North Temperance Ave Clovis, CA 93611
PHONE:	559-275-2175	P.O. #	
FAX:	559-275-4422	PROJECT #	745953.04000 CSSA
DATE RECEIVED:	04/08/2009	CONTACT:	Kyle Vagadori
DATE COMPLETED:	04/21/2009		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC/PRES.</u>	<u>FINAL PRESSURE</u>
17A	AOC65-VEW15-UGR	Modified TO-15 (5&20 ppbv)	2.0 "Hg	15 psi
18A	Lab Blank	Modified TO-15 (5&20 ppbv)	NA	NA
19A	CCV	Modified TO-15 (5&20 ppbv)	NA	NA
20A	LCS	Modified TO-15 (5&20 ppbv)	NA	NA

CERTIFIED BY: *Sinda A. Trummer*

Laboratory Director

DATE: 04/21/09

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- A1 30763, NJ NELAP - CA004
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: 07/01/08, Expiration date: 06/30/09

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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

LABORATORY NARRATIVE
Modified TO-15 Soil Gas
APPL, Inc.
Workorder# 0904166

Seventeen 1 Liter Summa Canister samples were received on April 08, 2009. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 50 mLs of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

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.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

<i>Requirement</i>	<i>TO-15</i>	<i>ATL Modifications</i>
Daily CCV	+/- 30% Difference	<= 30% Difference with two allowed out up to <=40%.; flag and narrate outliers
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

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

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

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.



AN ENVIRONMENTAL ANALYTICAL LABORATORY

- U - Compound analyzed for but not detected above the reporting limit.
- UJ- Non-detected compound associated with low bias in the CCV
- 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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: AOC65-INTAKE-SW

Lab ID#: 0904166-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	11	190	75	1300

Client Sample ID: AOC65-INTAKE-SW Lab Duplicate

Lab ID#: 0904166-01AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	11	190	75	1300

Client Sample ID: AOC65-VEW19-UGR

Lab ID#: 0904166-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	11	22	44	88
Trichloroethene	11	20	60	110
Tetrachloroethene	11	510	76	3500

Client Sample ID: AOC65-VEW20

Lab ID#: 0904166-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	11	16	43	62
Trichloroethene	11	31	58	170
Tetrachloroethene	11	24	73	160

Client Sample ID: AOC65-VEW21

Lab ID#: 0904166-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	11	22	76	150

Client Sample ID: AOC65-VEW23

Lab ID#: 0904166-05A



AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: AOC65-VEW23

Lab ID#: 0904166-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	11	22	73	150

Client Sample ID: AOC65-VEW25

Lab ID#: 0904166-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	11	47	75	320

Client Sample ID: AOC65-VEW27

Lab ID#: 0904166-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	11	14	59	73
Tetrachloroethene	11	1800	75	12000

Client Sample ID: AOC65-INTAKE-DW

Lab ID#: 0904166-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	11	58	75	390

Client Sample ID: AOC65-VEW22

Lab ID#: 0904166-09A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	11	29	73	200

Client Sample ID: AOC65-VEW24

Lab ID#: 0904166-10A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	11	18	75	120



AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: AOC65-VEW26

Lab ID#: 0904166-11A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	11	31	62	170
Tetrachloroethene	11	80	78	540

Client Sample ID: AOC65-POSTGAC

Lab ID#: 0904166-12A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	11	600	73	4100

Client Sample ID: B90-INTAKE-EX

Lab ID#: 0904166-13A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	11	18	58	94
Tetrachloroethene	11	48	73	320

Client Sample ID: B90-INTAKE-SS

Lab ID#: 0904166-14A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	11	320	72	2200

Client Sample ID: AOC65-VEW28A

Lab ID#: 0904166-15A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	11	28	58	150
Tetrachloroethene	11	89	73	600

Client Sample ID: AOC65-VEW28B

Lab ID#: 0904166-16A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
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AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: AOC65-VEW28B

Lab ID#: 0904166-16A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	11	12	58	66
Tetrachloroethene	11	39	73	260

Client Sample ID: AOC65-VEW15-UGR

Lab ID#: 0904166-17A

No Detections Were Found.



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-INTAKE-SW

Lab ID#: 0904166-01A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b040807	Date of Collection: 4/7/09 9:50:00 AM
Dil. Factor:	2.20	Date of Analysis: 4/9/09 09:47 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	44	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Chloroform	11	Not Detected	54	Not Detected
1,1,1-Trichloroethane	11	Not Detected	60	Not Detected
Benzene	11	Not Detected	35	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	Not Detected	59	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Tetrachloroethene	11	190	75	1300

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	99	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-INTAKE-SW Lab Duplicate

Lab ID#: 0904166-01AA

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b040808	Date of Collection:	4/7/09 9:50:00 AM
Dil. Factor:	2.20	Date of Analysis:	4/9/09 10:09 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	44	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Chloroform	11	Not Detected	54	Not Detected
1,1,1-Trichloroethane	11	Not Detected	60	Not Detected
Benzene	11	Not Detected	35	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	Not Detected	59	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Tetrachloroethene	11	190	75	1300

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	98	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW19-UGR

Lab ID#: 0904166-02A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b040809	Date of Collection:	4/7/09 10:00:00 AM
Dil. Factor:	2.24	Date of Analysis:	4/9/09 10:32 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	29	Not Detected
1,1-Dichloroethene	11	Not Detected	44	Not Detected
1,1-Dichloroethane	11	Not Detected	45	Not Detected
cis-1,2-Dichloroethene	11	22	44	88
Chloroform	11	Not Detected	55	Not Detected
1,1,1-Trichloroethane	11	Not Detected	61	Not Detected
Benzene	11	Not Detected	36	Not Detected
1,2-Dichloroethane	11	Not Detected	45	Not Detected
Trichloroethene	11	20	60	110
trans-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Tetrachloroethene	11	510	76	3500

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	96	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW20

Lab ID#: 0904166-03A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b040810	Date of Collection:	4/7/09 10:15:00 AM
Dil. Factor:	2.16	Date of Analysis:	4/9/09 10:57 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	16	43	62
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	31	58	170
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	24	73	160

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	96	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW21

Lab ID#: 0904166-04A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b040811	Date of Collection:	4/7/09 10:30:00 AM
Dil. Factor:	2.24	Date of Analysis:	4/9/09 11:22 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	29	Not Detected
1,1-Dichloroethene	11	Not Detected	44	Not Detected
1,1-Dichloroethane	11	Not Detected	45	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Chloroform	11	Not Detected	55	Not Detected
1,1,1-Trichloroethane	11	Not Detected	61	Not Detected
Benzene	11	Not Detected	36	Not Detected
1,2-Dichloroethane	11	Not Detected	45	Not Detected
Trichloroethene	11	Not Detected	60	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Tetrachloroethene	11	22	76	150

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	95	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW23

Lab ID#: 0904166-05A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b040812	Date of Collection:	4/7/09 10:35:00 AM
Dil. Factor:	2.16	Date of Analysis:	4/9/09 11:44 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	Not Detected	58	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	22	73	150

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	95	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW25

Lab ID#: 0904166-06A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b040813	Date of Collection:	4/7/09 10:40:00 AM
Dil. Factor:	2.20	Date of Analysis:	4/9/09 12:04 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	44	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Chloroform	11	Not Detected	54	Not Detected
1,1,1-Trichloroethane	11	Not Detected	60	Not Detected
Benzene	11	Not Detected	35	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	Not Detected	59	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Tetrachloroethene	11	47	75	320

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	94	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW27

Lab ID#: 0904166-07A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b040814	Date of Collection:	4/7/09 10:45:00 AM
Dil. Factor:	2.20	Date of Analysis:	4/9/09 12:25 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	44	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Chloroform	11	Not Detected	54	Not Detected
1,1,1-Trichloroethane	11	Not Detected	60	Not Detected
Benzene	11	Not Detected	35	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	14	59	73
trans-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Tetrachloroethene	11	1800	75	12000

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	95	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-INTAKE-DW

Lab ID#: 0904166-08A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b040815	Date of Collection:	4/7/09 10:55:00 AM
Dil. Factor:	2.20	Date of Analysis:	4/9/09 12:44 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	44	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Chloroform	11	Not Detected	54	Not Detected
1,1,1-Trichloroethane	11	Not Detected	60	Not Detected
Benzene	11	Not Detected	35	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	Not Detected	59	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Tetrachloroethene	11	58	75	390

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	94	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW22

Lab ID#: 0904166-09A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b040816	Date of Collection:	4/7/09 11:08:00 AM
Dil. Factor:	2.16	Date of Analysis:	4/9/09 01:30 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	Not Detected	58	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	29	73	200

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	94	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW24

Lab ID#: 0904166-10A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b040817	Date of Collection:	4/7/09 11:13:00 AM
Dil. Factor:	2.20	Date of Analysis:	4/9/09 01:50 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Chloroform	11	Not Detected	54	Not Detected
1,1,1-Trichloroethane	11	Not Detected	60	Not Detected
Benzene	11	Not Detected	35	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	Not Detected	59	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Tetrachloroethene	11	18	75	120

Container Type: 1 Liter Summa Canister

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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW26

Lab ID#: 0904166-11A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b040818	Date of Collection:	4/7/09 11:21:00 AM
Dil. Factor:	2.29	Date of Analysis:	4/9/09 02:08 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	29	Not Detected
1,1-Dichloroethene	11	Not Detected	45	Not Detected
1,1-Dichloroethane	11	Not Detected	46	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	45	Not Detected
Chloroform	11	Not Detected	56	Not Detected
1,1,1-Trichloroethane	11	Not Detected	62	Not Detected
Benzene	11	Not Detected	36	Not Detected
1,2-Dichloroethane	11	Not Detected	46	Not Detected
Trichloroethene	11	31	62	170
trans-1,2-Dichloroethene	11	Not Detected	45	Not Detected
Tetrachloroethene	11	80	78	540

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	93	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-POSTGAC

Lab ID#: 0904166-12A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b040819	Date of Collection:	4/7/09 11:40:00 AM
Dil. Factor:	2.16	Date of Analysis:	4/9/09 02:27 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	Not Detected	58	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	600	73	4100

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	94	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: B90-INTAKE-EX

Lab ID#: 0904166-13A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b040820	Date of Collection:	4/7/09 11:48:00 AM
Dil. Factor:	2.16	Date of Analysis:	4/9/09 02:46 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	18	58	94
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	48	73	320

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	94	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: B90-INTAKE-SS

Lab ID#: 0904166-14A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b040821	Date of Collection:	4/7/09 11:55:00 AM
Dil. Factor:	2.13	Date of Analysis:	4/9/09 03:07 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	27	Not Detected
1,1-Dichloroethene	11	Not Detected	42	Not Detected
1,1-Dichloroethane	11	Not Detected	43	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	42	Not Detected
Chloroform	11	Not Detected	52	Not Detected
1,1,1-Trichloroethane	11	Not Detected	58	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	43	Not Detected
Trichloroethene	11	Not Detected	57	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	42	Not Detected
Tetrachloroethene	11	320	72	2200

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	93	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW28A

Lab ID#: 0904166-15A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b040822	Date of Collection:	4/7/09 12:00:00 PM
Dil. Factor:	2.16	Date of Analysis:	4/9/09 03:30 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	28	58	150
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	89	73	600

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	92	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW28B

Lab ID#: 0904166-16A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b040823	Date of Collection:	4/7/09 12:08:00 PM
Dil. Factor:	2.16	Date of Analysis:	4/9/09 03:48 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	12	58	66
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	39	73	260

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	92	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AOC65-VEW15-UGR

Lab ID#: 0904166-17A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b040824	Date of Collection:	4/7/09 12:21:00 PM
Dil. Factor:	2.16	Date of Analysis:	4/9/09 04:08 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	Not Detected	58	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	Not Detected	73	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	93	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0904166-18A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b040804	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/8/09 07:16 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	5.0	Not Detected	13	Not Detected
1,1-Dichloroethane	5.0	Not Detected	20	Not Detected
1,1-Dichloroethane	5.0	Not Detected	20	Not Detected
cis-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Chloroform	5.0	Not Detected	24	Not Detected
1,1,1-Trichloroethane	5.0	Not Detected	27	Not Detected
Benzene	5.0	Not Detected	16	Not Detected
1,2-Dichloroethane	5.0	Not Detected	20	Not Detected
Trichloroethene	5.0	Not Detected	27	Not Detected
trans-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Tetrachloroethene	5.0	Not Detected	34	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	97	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0904166-19A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b040802	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/8/09 06:26 PM

Compound	%Recovery
Vinyl Chloride	102
1,1-Dichloroethene	102
1,1-Dichloroethane	100
cis-1,2-Dichloroethene	98
Chloroform	98
1,1,1-Trichloroethane	91
Benzene	101
1,2-Dichloroethane	102
Trichloroethene	100
trans-1,2-Dichloroethene	96
Tetrachloroethene	101

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	98	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0904166-20A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b040803	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/8/09 06:50 PM

Compound	%Recovery
Vinyl Chloride	83
1,1-Dichloroethene	85
1,1-Dichloroethane	84
cis-1,2-Dichloroethene	83
Chloroform	83
1,1,1-Trichloroethane	79
Benzene	84
1,2-Dichloroethane	83
Trichloroethene	82
trans-1,2-Dichloroethene	75
Tetrachloroethene	84

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	99	70-130

WORK ORDER #: 0910261

Work Order Summary

CLIENT:	Ms. Cynthia Clark APPL, Inc. 908 North Temperance Ave Clovis, CA 93611	BILL TO:	Ms. Cynthia Clark APPL, Inc. 908 North Temperance Ave Clovis, CA 93611
PHONE:	559-275-2175	P.O. #	
FAX:	559-275-4422	PROJECT #	746545.02000 CSSA
DATE RECEIVED:	10/09/2009	CONTACT:	Kyle Vagadori
DATE COMPLETED:	10/22/2009		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	AOC65-INTAKE-SW	Modified TO-15 (5&20 ppbv	2.0 "Hg	15 psi
02A	AOC65-VEW19-UGR	Modified TO-15 (5&20 ppbv	2.0 "Hg	15 psi
03A	AOC65-VEW20	Modified TO-15 (5&20 ppbv	1.6 "Hg	15 psi
04A	AOC65-VEW21	Modified TO-15 (5&20 ppbv	2.2 "Hg	15 psi
05A	AOC65-VEW23	Modified TO-15 (5&20 ppbv	2.4 "Hg	15 psi
06A	AOC65-VEW25	Modified TO-15 (5&20 ppbv	2.0 "Hg	15 psi
06AA	AOC65-VEW25 Lab Duplicate	Modified TO-15 (5&20 ppbv	2.0 "Hg	15 psi
07A	AOC65-VEW27	Modified TO-15 (5&20 ppbv	2.2 "Hg	15 psi
08A	AOC65-INTAKE-DW	Modified TO-15 (5&20 ppbv	2.2 "Hg	15 psi
09A	AOC65-VEW22	Modified TO-15 (5&20 ppbv	2.0 "Hg	15 psi
10A	AOC65-VEW24	Modified TO-15 (5&20 ppbv	2.0 "Hg	15 psi
11A	AOC65-VEW26	Modified TO-15 (5&20 ppbv	0.2 "Hg	15 psi
12A	AOC65-VEW28B	Modified TO-15 (5&20 ppbv	2.0 "Hg	15 psi
13A	AOC65-VEW28A	Modified TO-15 (5&20 ppbv	1.0 "Hg	15 psi
14A	AOC65-VEW15-UGR	Modified TO-15 (5&20 ppbv	2.0 "Hg	15 psi
15A	B90-INTAKE-EX	Modified TO-15 (5&20 ppbv	1.8 "Hg	15 psi
16A	B90-INTAKE-SS	Modified TO-15 (5&20 ppbv	2.0 "Hg	15 psi

Continued on next page

WORK ORDER #: 0910261

Work Order Summary

CLIENT:	Ms. Cynthia Clark APPL, Inc. 908 North Temperance Ave Clovis, CA 93611	BILL TO:	Ms. Cynthia Clark APPL, Inc. 908 North Temperance Ave Clovis, CA 93611
PHONE:	559-275-2175	P.O. #	
FAX:	559-275-4422	PROJECT #	746545.02000 CSSA
DATE RECEIVED:	10/09/2009	CONTACT:	Kyle Vagadori
DATE COMPLETED:	10/22/2009		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
17A	AOC65-POSTGAC	Modified TO-15 (5&20 ppbv	1.6 "Hg	15 psi
17AA	AOC65-POSTGAC Lab Duplicate	Modified TO-15 (5&20 ppbv	1.6 "Hg	15 psi
18A	AOC65-VEW13-LGR	Modified TO-15 (5&20 ppbv	1.6 "Hg	15 psi
19A	Lab Blank	Modified TO-15 (5&20 ppbv	NA	NA
20A	CCV	Modified TO-15 (5&20 ppbv	NA	NA
21A	LCS	Modified TO-15 (5&20 ppbv	NA	NA

CERTIFIED BY: *Sandra J. Freeman*

DATE: 10/22/09

Laboratory Director

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
 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: 06/30/10

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
Modified TO-15 Soil Gas
APPL, Inc.
Workorder# 0910261**

Eighteen 1 Liter Summa Canister samples were received on October 09, 2009. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 50 mLs of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

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.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

<i>Requirement</i>	<i>TO-15</i>	<i>ATL Modifications</i>
Daily CCV	+/- 30% Difference	<= 30% Difference with two allowed out up to <=40%.: flag and narrate outliers
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

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

- B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
- J - Estimated value.
- E - Exceeds instrument calibration range.
- S - Saturated peak.
- Q - Exceeds quality control limits.
- U - Compound analyzed for but not detected above the reporting limit.
- UJ- Non-detected compound associated with low bias in the CCV
- 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
MODIFIED EPA METHOD TO-15 GC/MS**

Client Sample ID: AOC65-INTAKE-SW

Lab ID#: 0910261-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	11	52	43	200
Trichloroethene	11	37	58	200
Tetrachloroethene	11	1700	73	12000

Client Sample ID: AOC65-VEW19-UGR

Lab ID#: 0910261-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	27	130	110	510
Trichloroethene	27	84	140	450
Tetrachloroethene	27	4400	180	30000

Client Sample ID: AOC65-VEW20

Lab ID#: 0910261-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	11	16	42	63
Trichloroethene	11	20	57	110
Tetrachloroethene	11	100	72	680

Client Sample ID: AOC65-VEW21

Lab ID#: 0910261-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	11	240	74	1600

Client Sample ID: AOC65-VEW23

Lab ID#: 0910261-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	11	170	75	1100

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

Client Sample ID: AOC65-VEW25

Lab ID#: 0910261-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	11	11	58	61
Tetrachloroethene	11	550	73	3800

Client Sample ID: AOC65-VEW25 Lab Duplicate

Lab ID#: 0910261-06AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	11	550	73	3700

Client Sample ID: AOC65-VEW27

Lab ID#: 0910261-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	22	27	86	110
Trichloroethene	22	28	120	150
Tetrachloroethene	22	4200	150	28000

Client Sample ID: AOC65-INTAKE-DW

Lab ID#: 0910261-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	11	170	74	1100

Client Sample ID: AOC65-VEW22

Lab ID#: 0910261-09A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	11	48	73	330

Client Sample ID: AOC65-VEW24

Lab ID#: 0910261-10A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)



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

Client Sample ID: AOC65-VEW24

Lab ID#: 0910261-10A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	11	16	58	85
Tetrachloroethene	11	66	73	450

Client Sample ID: AOC65-VEW26

Lab ID#: 0910261-11A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	10	29	54	160
Tetrachloroethene	10	130	69	890

Client Sample ID: AOC65-VEW28B

Lab ID#: 0910261-12A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	11	50	73	340

Client Sample ID: AOC65-VEW28A

Lab ID#: 0910261-13A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	10	15	56	83
Tetrachloroethene	10	68	71	460

Client Sample ID: AOC65-VEW15-UGR

Lab ID#: 0910261-14A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	11	35	73	240

Client Sample ID: B90-INTAKE-EX

Lab ID#: 0910261-15A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
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**Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS**

Client Sample ID: B90-INTAKE-EX

Lab ID#: 0910261-15A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	11	17	58	89
Tetrachloroethene	11	53	73	360

Client Sample ID: B90-INTAKE-SS

Lab ID#: 0910261-16A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	11	96	73	650

Client Sample ID: AOC65-POSTGAC

Lab ID#: 0910261-17A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	11	15	57	80
Tetrachloroethene	11	720	72	4900

Client Sample ID: AOC65-POSTGAC Lab Duplicate

Lab ID#: 0910261-17AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	11	15	57	83
Tetrachloroethene	11	720	72	4900

Client Sample ID: AOC65-VEW13-LGR

Lab ID#: 0910261-18A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	11	67	72	450



Client Sample ID: AOC65-INTAKE-SW

Lab ID#: 0910261-01A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b102111	Date of Collection:	10/8/09 9:00:00 AM
Dil. Factor:	2.16	Date of Analysis:	10/21/09 12:45 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	52	43	200
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	37	58	200
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	1700	73	12000

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	85	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	93	70-130



Client Sample ID: AOC65-VEW19-UGR

Lab ID#: 0910261-02A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b102112	Date of Collection:	10/8/09 9:05:00 AM
Dil. Factor:	5.40	Date of Analysis:	10/21/09 01:14 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	27	Not Detected	69	Not Detected
1,1-Dichloroethene	27	Not Detected	110	Not Detected
1,1-Dichloroethane	27	Not Detected	110	Not Detected
cis-1,2-Dichloroethene	27	130	110	510
Chloroform	27	Not Detected	130	Not Detected
1,1,1-Trichloroethane	27	Not Detected	150	Not Detected
Benzene	27	Not Detected	86	Not Detected
1,2-Dichloroethane	27	Not Detected	110	Not Detected
Trichloroethene	27	84	140	450
trans-1,2-Dichloroethene	27	Not Detected	110	Not Detected
Tetrachloroethene	27	4400	180	30000

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	94	70-130



Client Sample ID: AOC65-VEW20

Lab ID#: 0910261-03A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b102115	Date of Collection:	10/8/09 9:09:00 AM
Dil. Factor:	2.13	Date of Analysis:	10/21/09 02:38 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	27	Not Detected
1,1-Dichloroethene	11	Not Detected	42	Not Detected
1,1-Dichloroethane	11	Not Detected	43	Not Detected
cis-1,2-Dichloroethene	11	16	42	63
Chloroform	11	Not Detected	52	Not Detected
1,1,1-Trichloroethane	11	Not Detected	58	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	43	Not Detected
Trichloroethene	11	20	57	110
trans-1,2-Dichloroethene	11	Not Detected	42	Not Detected
Tetrachloroethene	11	100	72	680

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	85	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	93	70-130



Client Sample ID: AOC65-VEW21

Lab ID#: 0910261-04A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b102116	Date of Collection:	10/8/09 9:12:00 AM
Dil. Factor:	2.18	Date of Analysis:	10/21/09 02:56 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	35	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	Not Detected	58	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	240	74	1600

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	92	70-130



Client Sample ID: AOC65-VEW23

Lab ID#: 0910261-05A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b102117	Date of Collection:	10/8/09 9:15:00 AM
Dil. Factor:	2.20	Date of Analysis:	10/21/09 03:18 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	44	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Chloroform	11	Not Detected	54	Not Detected
1,1,1-Trichloroethane	11	Not Detected	60	Not Detected
Benzene	11	Not Detected	35	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	Not Detected	59	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	44	Not Detected
Tetrachloroethene	11	170	75	1100

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	91	70-130



Client Sample ID: AOC65-VEW25

Lab ID#: 0910261-06A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b102107	Date of Collection:	10/8/09 9:18:00 AM
Dil. Factor:	2.16	Date of Analysis:	10/21/09 11:16 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	11	58	61
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	550	73	3800

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	84	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	92	70-130



Client Sample ID: AOC65-VEW25 Lab Duplicate

Lab ID#: 0910261-06AA

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b102108	Date of Collection:	10/8/09 9:18:00 AM
Dil. Factor:	2.16	Date of Analysis:	10/21/09 11:49 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	Not Detected	58	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	550	73	3700

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	84	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	95	70-130



Client Sample ID: AOC65-VEW27

Lab ID#: 0910261-07A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b102114	Date of Collection:	10/8/09 9:20:00 AM
Dil. Factor:	4.36	Date of Analysis:	10/21/09 02:17 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	22	Not Detected	56	Not Detected
1,1-Dichloroethene	22	Not Detected	86	Not Detected
1,1-Dichloroethane	22	Not Detected	88	Not Detected
cis-1,2-Dichloroethene	22	27	86	110
Chloroform	22	Not Detected	110	Not Detected
1,1,1-Trichloroethane	22	Not Detected	120	Not Detected
Benzene	22	Not Detected	70	Not Detected
1,2-Dichloroethane	22	Not Detected	88	Not Detected
Trichloroethene	22	28	120	150
trans-1,2-Dichloroethene	22	Not Detected	86	Not Detected
Tetrachloroethene	22	4200	150	28000

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	85	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	92	70-130



Client Sample ID: AOC65-INTAKE-DW

Lab ID#: 0910261-08A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b102118	Date of Collection:	10/8/09 9:25:00 AM
Dil. Factor:	2.18	Date of Analysis:	10/21/09 03:37 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	35	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	Not Detected	58	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	170	74	1100

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	92	70-130



Client Sample ID: AOC65-VEW22

Lab ID#: 0910261-09A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b102119	Date of Collection:	10/8/09 9:37:00 AM
Dil. Factor:	2.16	Date of Analysis:	10/21/09 03:55 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	Not Detected	58	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	48	73	330

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	92	70-130



Client Sample ID: AOC65-VEW24

Lab ID#: 0910261-10A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b102120	Date of Collection:	10/8/09 9:40:00 AM
Dil. Factor:	2.16	Date of Analysis:	10/21/09 04:13 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	16	58	85
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	66	73	450

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	92	70-130



Client Sample ID: AOC65-VEW26

Lab ID#: 0910261-11A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b102121	Date of Collection:	10/8/09 9:53:00 AM
Dil. Factor:	2.03	Date of Analysis:	10/21/09 04:47 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	10	Not Detected	26	Not Detected
1,1-Dichloroethene	10	Not Detected	40	Not Detected
1,1-Dichloroethane	10	Not Detected	41	Not Detected
cis-1,2-Dichloroethene	10	Not Detected	40	Not Detected
Chloroform	10	Not Detected	50	Not Detected
1,1,1-Trichloroethane	10	Not Detected	55	Not Detected
Benzene	10	Not Detected	32	Not Detected
1,2-Dichloroethane	10	Not Detected	41	Not Detected
Trichloroethene	10	29	54	160
trans-1,2-Dichloroethene	10	Not Detected	40	Not Detected
Tetrachloroethene	10	130	69	890

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	94	70-130



Client Sample ID: AOC65-VEW28B

Lab ID#: 0910261-12A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b102122	Date of Collection:	10/8/09 10:06:00 AM
Dil. Factor:	2.16	Date of Analysis:	10/21/09 05:06 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	Not Detected	58	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	50	73	340

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	87	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	92	70-130



Client Sample ID: AOC65-VEW28A

Lab ID#: 0910261-13A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b102123	Date of Collection:	10/8/09 10:10:00 AM
Dil. Factor:	2.09	Date of Analysis:	10/21/09 05:25 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	10	Not Detected	27	Not Detected
1,1-Dichloroethane	10	Not Detected	41	Not Detected
1,1-Dichloroethane	10	Not Detected	42	Not Detected
cis-1,2-Dichloroethene	10	Not Detected	41	Not Detected
Chloroform	10	Not Detected	51	Not Detected
1,1,1-Trichloroethane	10	Not Detected	57	Not Detected
Benzene	10	Not Detected	33	Not Detected
1,2-Dichloroethane	10	Not Detected	42	Not Detected
Trichloroethene	10	15	56	83
trans-1,2-Dichloroethene	10	Not Detected	41	Not Detected
Tetrachloroethene	10	68	71	460

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	92	70-130



Client Sample ID: AOC65-VEW15-UGR

Lab ID#: 0910261-14A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b102124	Date of Collection:	10/8/09 10:18:00 AM
Dil. Factor:	2.16	Date of Analysis:	10/21/09 05:42 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	Not Detected	58	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	35	73	240

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	87	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	91	70-130



Client Sample ID: B90-INTAKE-EX

Lab ID#: 0910261-15A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b102125	Date of Collection:	10/8/09 10:23:00 AM
Dil. Factor:	2.15	Date of Analysis:	10/21/09 06:05 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	27	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Chloroform	11	Not Detected	52	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	17	58	89
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	53	73	360

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	90	70-130



Client Sample ID: B90-INTAKE-SS

Lab ID#: 0910261-16A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b102126	Date of Collection:	10/8/09 10:30:00 AM
Dil. Factor:	2.16	Date of Analysis:	10/21/09 06:32 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	28	Not Detected
1,1-Dichloroethene	11	Not Detected	43	Not Detected
1,1-Dichloroethane	11	Not Detected	44	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Chloroform	11	Not Detected	53	Not Detected
1,1,1-Trichloroethane	11	Not Detected	59	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	44	Not Detected
Trichloroethene	11	Not Detected	58	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	43	Not Detected
Tetrachloroethene	11	96	73	650

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	92	70-130



Client Sample ID: AOC65-POSTGAC

Lab ID#: 0910261-17A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b102109	Date of Collection:	10/8/09 10:36:00 AM
Dil. Factor:	2.13	Date of Analysis:	10/21/09 12:07 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	27	Not Detected
1,1-Dichloroethene	11	Not Detected	42	Not Detected
1,1-Dichloroethane	11	Not Detected	43	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	42	Not Detected
Chloroform	11	Not Detected	52	Not Detected
1,1,1-Trichloroethane	11	Not Detected	58	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	43	Not Detected
Trichloroethene	11	15	57	80
trans-1,2-Dichloroethene	11	Not Detected	42	Not Detected
Tetrachloroethene	11	720	72	4900

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	93	70-130



Client Sample ID: AOC65-POSTGAC Lab Duplicate

Lab ID#: 0910261-17AA

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b102110	Date of Collection:	10/8/09 10:36:00 AM
Dil. Factor:	2.13	Date of Analysis:	10/21/09 12:28 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	27	Not Detected
1,1-Dichloroethene	11	Not Detected	42	Not Detected
1,1-Dichloroethane	11	Not Detected	43	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	42	Not Detected
Chloroform	11	Not Detected	52	Not Detected
1,1,1-Trichloroethane	11	Not Detected	58	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	43	Not Detected
Trichloroethene	11	15	57	83
trans-1,2-Dichloroethene	11	Not Detected	42	Not Detected
Tetrachloroethene	11	720	72	4900

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	84	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	92	70-130



Client Sample ID: AOC65-VEW13-LGR

Lab ID#: 0910261-18A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b102127	Date of Collection:	10/8/09 10:45:00 AM
Dil. Factor:	2.13	Date of Analysis:	10/21/09 06:51 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	11	Not Detected	27	Not Detected
1,1-Dichloroethene	11	Not Detected	42	Not Detected
1,1-Dichloroethane	11	Not Detected	43	Not Detected
cis-1,2-Dichloroethene	11	Not Detected	42	Not Detected
Chloroform	11	Not Detected	52	Not Detected
1,1,1-Trichloroethane	11	Not Detected	58	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	43	Not Detected
Trichloroethene	11	Not Detected	57	Not Detected
trans-1,2-Dichloroethene	11	Not Detected	42	Not Detected
Tetrachloroethene	11	67	72	450

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	87	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	92	70-130



Client Sample ID: Lab Blank

Lab ID#: 0910261-19A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b102105	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	10/21/09 08:43 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	5.0	Not Detected	13	Not Detected
1,1-Dichloroethene	5.0	Not Detected	20	Not Detected
1,1-Dichloroethane	5.0	Not Detected	20	Not Detected
cis-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Chloroform	5.0	Not Detected	24	Not Detected
1,1,1-Trichloroethane	5.0	Not Detected	27	Not Detected
Benzene	5.0	Not Detected	16	Not Detected
1,2-Dichloroethane	5.0	Not Detected	20	Not Detected
Trichloroethene	5.0	Not Detected	27	Not Detected
trans-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Tetrachloroethene	5.0	Not Detected	34	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	84	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	92	70-130



Client Sample ID: CCV

Lab ID#: 0910261-20A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b102103	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/21/09 07:47 AM

Compound	%Recovery
Vinyl Chloride	104
1,1-Dichloroethene	95
1,1-Dichloroethane	101
cis-1,2-Dichloroethene	98
Chloroform	95
1,1,1-Trichloroethane	91
Benzene	107
1,2-Dichloroethane	90
Trichloroethene	98
trans-1,2-Dichloroethene	104
Tetrachloroethene	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	83	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	95	70-130



Client Sample ID: LCS

Lab ID#: 0910261-21A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	b102104	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/21/09 08:20 AM

Compound	%Recovery
Vinyl Chloride	97
1,1-Dichloroethene	100
1,1-Dichloroethane	99
cis-1,2-Dichloroethene	94
Chloroform	92
1,1,1-Trichloroethane	87
Benzene	103
1,2-Dichloroethane	88
Trichloroethene	94
trans-1,2-Dichloroethene	100
Tetrachloroethene	96

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	82	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	95	70-130

Camp Stanley Storage Activity Chain Of Custody

0910261

COC ID: 100809ATLA Relinquish_Date: 10/8/2009 Cooler ID: A
 Project Location: CSSA Relinquished_By: se LabCode: ATL
 Job Number: 746545.02000 Relinquish_Time: 4:00 PM Carrier: FedEx
 Creation Date: 10/8/2009 Collection Team: JDB_SE Airbill Carrier: 865909346641

Sampler(s): *Sam Elliott* *Julie Bouch*
Sam Elliott *JB*

1) A LOCID: **AOC65-INTAKE-SW** LOGDATE: 10/8/2009 MATRIX: GS TBLot: Analysis Required:
 SBD: 0 LOGTIME: 9:00 SACODE: N SMCODE: SA ABLot:
 SED: 0 FLDSAMPID AOC65-INTAKE-SW_100809_N0900 EBLot: Containers: 1
 Remarks:

2) A LOCID: **AOC65-VEW19-UGR** LOGDATE: 10/8/2009 MATRIX: GS TBLot: Analysis Required:
 SBD: 0 LOGTIME: 9:05 SACODE: N SMCODE: SA ABLot:
 SED: 0 FLDSAMPID AOC65-VEW19-UGR_100809_N0905 EBLot: Containers: 1
 Remarks:

3) A LOCID: **AOC65-VEW20** LOGDATE: 10/8/2009 MATRIX: GS TBLot: Analysis Required:
 SBD: 0 LOGTIME: 9:09 SACODE: N SMCODE: SA ABLot:
 SED: 0 FLDSAMPID AOC65-VEW20_100809_N0909 EBLot: Containers: 1
 Remarks:

4) A LOCID: **AOC65-VEW21** LOGDATE: 10/8/2009 MATRIX: GS TBLot: Analysis Required:
 SBD: 0 LOGTIME: 9:12 SACODE: N SMCODE: SA ABLot:
 SED: 0 FLDSAMPID AOC65-VEW21_100809_N0912 EBLot: Containers: 1
 Remarks:

5) A LOCID: **AOC65-VEW23** LOGDATE: 10/8/2009 MATRIX: GS TBLot: Analysis Required:
 SBD: 0 LOGTIME: 9:15 SACODE: N SMCODE: SA ABLot:
 SED: 0 FLDSAMPID AOC65-VEW23_100809_N0915 EBLot: Containers: 1
 Remarks:

6) A LOCID: **AOC65-VEW25** LOGDATE: 10/8/2009 MATRIX: GS TBLot: Analysis Required:
 SBD: 0 LOGTIME: 9:18 SACODE: N SMCODE: SA ABLot:
 SED: 0 FLDSAMPID AOC65-VEW25_100809_N0918 EBLot: Containers: 1
 Remarks:

7) A LOCID: **AOC65-VEW27** LOGDATE: 10/8/2009 MATRIX: GS TBLot: Analysis Required:
 SBD: 0 LOGTIME: 9:20 SACODE: N SMCODE: SA ABLot:
 SED: 0 FLDSAMPID AOC65-VEW27_100809_N0920 EBLot: Containers: 1
 Remarks:

8) A LOCID: **AOC65-INTAKE-DW** LOGDATE: 10/8/2009 MATRIX: GS TBLot: Analysis Required:
 SBD: 0 LOGTIME: 9:25 SACODE: N SMCODE: SA ABLot:
 SED: 0 FLDSAMPID AOC65-INTAKE-DW_100809_N0925 EBLot: Containers: 1
 Remarks:

9) A LOCID: **AOC65-VEW22** LOGDATE: 10/8/2009 MATRIX: GS TBLot: Analysis Required:
 SBD: 0 LOGTIME: 9:37 SACODE: N SMCODE: SA ABLot:
 SED: 0 FLDSAMPID AOC65-VEW22_100809_N0937 EBLot: Containers: 1
 Remarks:

Relinquished by: *[Signature]* Date: *10.9.09* Time: *1600* Relinquished by: _____ Date: _____ Time: _____

Received by: *Monica* Date: *10/9/09* Time: *9:05* Received by: _____ Date: _____ Time: _____



Monica *10/9/09* *9:05* *AM* *10/9/09* *9:05*

Camp Stanley Storage Activity Chain Of Custody

0910261

COC ID: 100809ATLA Relinquish_Date: 10/8/2009 Cooler ID: A
 Project Location: CSSA Relinquished_By: se LabCode: ATL
 Job Number: 746545.02000 Relinquish_Time: 4:00 PM Carrier: FedEx
 Creation Date: 10/8/2009 Collection Team: JDB_SE Airbill Carrier: 865909346641

Sampler(s): *Sam Elliott Julie Bouch*
SA Elliott JB

1A LOCID: **AOC65-VEW24** LOGDATE: 10/8/2009 MATRIX: GS TBLOT: Analysis Required:
 SBD: 0 LOGTIME: 9:40 SACODE: N SMCODE: SA ABLOT: TO 15 TO 15
 SED: 0 FLDSAMPID AOC65-VEW24_100809_N0940 EBLOT: Containers: 1
 Remarks:

1A LOCID: **AOC65-VEW26** LOGDATE: 10/8/2009 MATRIX: GS TBLOT: Analysis Required:
 SBD: 0 LOGTIME: 9:53 SACODE: N SMCODE: SA ABLOT: TO 15 TO 15
 SED: 0 FLDSAMPID AOC65-VEW26_100809_N0953 EBLOT: Containers: 1
 Remarks:

2A LOCID: **AOC65-VEW28B** LOGDATE: 10/8/2009 MATRIX: GS TBLOT: Analysis Required:
 SBD: 0 LOGTIME: 10:06 SACODE: N SMCODE: SA ABLOT: TO 15 TO 15
 SED: 0 FLDSAMPID AOC65-VEW28B_100809_N1006 EBLOT: Containers: 1
 Remarks:

3A LOCID: **AOC65-VEW28A** LOGDATE: 10/8/2009 MATRIX: GS TBLOT: Analysis Required:
 SBD: 0 LOGTIME: 10:10 SACODE: N SMCODE: SA ABLOT: TO 15 TO 15
 SED: 0 FLDSAMPID AOC65-VEW28A_100809_N1010 EBLOT: Containers: 1
 Remarks:

4A LOCID: **AOC65-VEW15-UGR** LOGDATE: 10/8/2009 MATRIX: GS TBLOT: Analysis Required:
 SBD: 0 LOGTIME: 10:18 SACODE: N SMCODE: SA ABLOT: TO 15 TO 15
 SED: 0 FLDSAMPID AOC65-VEW15-UGR_100809_N1018 EBLOT: Containers: 1
 Remarks:

5A LOCID: **B90-INTAKE-EX** LOGDATE: 10/8/2009 MATRIX: GS TBLOT: Analysis Required:
 SBD: 0 LOGTIME: 10:23 SACODE: N SMCODE: SA ABLOT: TO 15 TO 15
 SED: 0 FLDSAMPID B90-INTAKE-EX_100809_N1023 EBLOT: Containers: 1
 Remarks:

A LOCID: **B90-INTAKE-SS** LOGDATE: 10/8/2009 MATRIX: GS TBLOT: Analysis Required:
 SBD: 0 LOGTIME: 10:30 SACODE: N SMCODE: SA ABLOT: TO 15 TO 15
 SED: 0 FLDSAMPID B90-INTAKE-SS_100809_N1030 EBLOT: Containers: 1
 Remarks:

1A LOCID: **AOC65-POSTGAC** LOGDATE: 10/8/2009 MATRIX: GS TBLOT: Analysis Required:
 SBD: 0 LOGTIME: 10:36 SACODE: N SMCODE: SA ABLOT: TO 15 TO 15
 SED: 0 FLDSAMPID AOC65-POSTGAC_100809_N1036 EBLOT: Containers: 1
 Remarks:

3A LOCID: **AOC65-VEW13-LGR** LOGDATE: 10/8/2009 MATRIX: GS TBLOT: Analysis Required:
 SBD: 0 LOGTIME: 10:45 SACODE: N SMCODE: SA ABLOT: TO 15 TO 15
 SED: 0 FLDSAMPID AOC65-VEW13-LGR_100809_N1045 EBLOT: Containers: 1
 Remarks:

Relinquished by: *SA Elliott* Date: *10/5/09* Time: *1600* Relinquished by: *Fed Ex* Date: _____ Time: _____
 Received by: *Monica Glessen* Date: _____ Time: _____ Received by: _____ Date: _____ Time: _____

ATI - Palma 905

CUSTODY SEAL INTACT
 Y N NONE TEMP *MA*

0011 - # 94

See this is your copy
TC

WORK ORDER #: 1004237

Work Order Summary

CLIENT:	Ms. Cynthia Clark APPL, Inc. 908 North Temperance Ave Clovis, CA 93611	BILL TO:	Ms. Cynthia Clark APPL, Inc. 908 North Temperance Ave Clovis, CA 93611
PHONE:	559-275-2175	P.O. #	
FAX:	559-275-4422	PROJECT #	746545.02000 CSSA
DATE RECEIVED:	04/09/2010	CONTACT:	Kyle Vagadori
DATE COMPLETED:	04/22/2010		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	AOC65-INTAKE-SW	Modified TO-15	1.4 "Hg	5 psi
01AA	AOC65-INTAKE-SW Lab Duplicate	Modified TO-15	1.4 "Hg	5 psi
02A	AOC65-VEW19-UGR	Modified TO-15	1.8 "Hg	5 psi
03A	AOC65-VEW20	Modified TO-15	2.6 "Hg	5 psi
04A	AOC65-VEW21	Modified TO-15	1.6 "Hg	5 psi
05A	AOC65-INTAKE-DW	Modified TO-15	0.6 "Hg	5 psi
06A	AOC65-VEW17-LGR	Modified TO-15	1.4 "Hg	5 psi
07A	AOC65-VEW22	Modified TO-15	1.8 "Hg	5 psi
08A	AOC65-VEW26	Modified TO-15	1.8 "Hg	5 psi
09A	B90-INTAKE-SS	Modified TO-15	2.0 "Hg	5 psi
10A	AOC65-VEW23	Modified TO-15	2.0 "Hg	5 psi
11A	AOC65-VEW25	Modified TO-15	2.0 "Hg	5 psi
12A	AOC65-VEW27	Modified TO-15	1.8 "Hg	5 psi
13A	AOC65-VEW28A	Modified TO-15	2.0 "Hg	5 psi
14A	AOC65-VEW28B	Modified TO-15	1.4 "Hg	5 psi
15A	B90-INTAKE-EX	Modified TO-15	2.0 "Hg	5 psi
16A	AOC65-POSTGAC	Modified TO-15	1.0 "Hg	5 psi

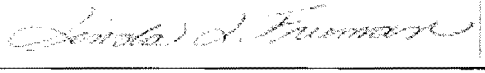
Continued on next page

WORK ORDER #: 1004237

Work Order Summary

CLIENT:	Ms. Cynthia Clark APPL, Inc. 908 North Temperance Ave Clovis, CA 93611	BILL TO:	Ms. Cynthia Clark APPL, Inc. 908 North Temperance Ave Clovis, CA 93611
PHONE:	559-275-2175	P.O. #	
FAX:	559-275-4422	PROJECT #	746545.02000 CSSA
DATE RECEIVED:	04/09/2010	CONTACT:	Kyle Vagadori
DATE COMPLETED:	04/22/2010		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
16AA	AOC65-POSTGAC Lab Duplicate	Modified TO-15	1.0 "Hg	5 psi
17A	Lab Blank	Modified TO-15	NA	NA
17B	Lab Blank	Modified TO-15	NA	NA
17C	Lab Blank	Modified TO-15	NA	NA
18A	CCV	Modified TO-15	NA	NA
18B	CCV	Modified TO-15	NA	NA
18C	CCV	Modified TO-15	NA	NA
19A	LCS	Modified TO-15	NA	NA
19B	LCS	Modified TO-15	NA	NA
19C	LCS	Modified TO-15	NA	NA

CERTIFIED BY: 

DATE: 04/22/10

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: 06/30/10
 Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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

**LABORATORY NARRATIVE
Modified TO-15
APPL, Inc.
Workorder# 1004237**

Sixteen 6 Liter Summa Canister samples were received on April 09, 2010. 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.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

<i>Requirement</i>	<i>TO-15</i>	<i>ATL Modifications</i>
Daily CCV	<= 30% Difference	<= 30% Difference; Compounds exceeding this criterion and associated data are flagged and narrated.
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

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.

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

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
MODIFIED EPA METHOD TO-15 GC/MS**

Client Sample ID: AOC65-INTAKE-SW

Lab ID#: 1004237-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloroethane	0.92	0.46 F	3.7	1.9 F
1,1-Dichloroethene	0.92	0.31 F	3.6	1.2 F
1,1,1-Trichloroethane	0.92	18	5.0	100
cis-1,2-Dichloroethene	0.92	44	3.6	170
Methylene Chloride	0.92	1.3 B	3.2	4.6 B
Trichloroethene	0.92	15	4.9	83
Tetrachloroethene	0.92	96	6.2	650
trans-1,2-Dichloroethene	0.92	0.79 F	3.6	3.1 F
Benzene	0.92	0.098 F	2.9	0.31 F

Client Sample ID: AOC65-INTAKE-SW Lab Duplicate

Lab ID#: 1004237-01AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2-Dichloroethane	0.92	0.45 F	3.7	1.8 F
1,1-Dichloroethene	0.92	0.39 F	3.6	1.6 F
1,1,1-Trichloroethane	0.92	18	5.0	97
cis-1,2-Dichloroethene	0.92	43	3.6	170
Methylene Chloride	0.92	1.4 B	3.2	5.0 B
Trichloroethene	0.92	15	4.9	79
Tetrachloroethene	0.92	87	6.2	590
trans-1,2-Dichloroethene	0.92	0.84 F	3.6	3.3 F
Benzene	0.92	0.084 F	2.9	0.27 F

Client Sample ID: AOC65-VEW19-UGR

Lab ID#: 1004237-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	9.6	93	38	370
Trichloroethene	9.6	84 B	51	450 B
Tetrachloroethene	9.6	2800 B	65	19000 B

Client Sample ID: AOC65-VEW20

Lab ID#: 1004237-03A



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

Client Sample ID: AOC65-VEW20

Lab ID#: 1004237-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.74	50	2.9	200
Methylene Chloride	0.74	0.22 BF	2.6	0.77 BF
Trichloroethene	0.74	78 B	4.0	420 B
Tetrachloroethene	0.74	15 B	5.0	100 B
trans-1,2-Dichloroethene	0.74	2.2	2.9	8.9
Benzene	0.74	0.16 BF	2.3	0.51 BF
Toluene	0.74	0.26 BF	2.8	0.98 BF

Client Sample ID: AOC65-VEW21

Lab ID#: 1004237-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.71	0.85	2.8	3.4
Methylene Chloride	0.71	0.14 BF	2.5	0.49 BF
Trichloroethene	0.71	6.9 B	3.8	37 B
Tetrachloroethene	0.71	6.7 B	4.8	45 B
Benzene	0.71	0.12 BF	2.3	0.37 BF
Toluene	0.71	0.30 BF	2.7	1.1 BF

Client Sample ID: AOC65-INTAKE-DW

Lab ID#: 1004237-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.68	1.1	2.7	4.3
Methylene Chloride	0.68	1.6 B	2.4	5.7 B
Trichloroethene	0.68	9.1 B	3.7	49 B
Tetrachloroethene	0.68	51 B	4.6	350 B
Benzene	0.68	0.16 BF	2.2	0.53 BF
Toluene	0.68	0.47 BF	2.6	1.8 BF

Client Sample ID: AOC65-VEW17-LGR

Lab ID#: 1004237-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.70	1.2	2.8	4.6

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

Client Sample ID: AOC65-VEW17-LGR

Lab ID#: 1004237-06A

Methylene Chloride	0.70	8.3 B	2.4	29 B
Trichloroethene	0.70	9.8 B	3.8	52 B
Tetrachloroethene	0.70	90 B	4.8	610 B
Benzene	0.70	0.48 BF	2.2	1.5 BF
Toluene	0.70	22 B	2.6	84 B

Client Sample ID: AOC65-VEW22

Lab ID#: 1004237-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.72	0.45 F	2.8	1.8 F
Trichloroethene	0.72	3.1 B	3.8	16 B
Tetrachloroethene	0.72	15 B	4.8	100 B
Toluene	0.72	0.21 BF	2.7	0.78 BF

Client Sample ID: AOC65-VEW26

Lab ID#: 1004237-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.72	3.4	2.8	13
Trichloroethene	0.72	36 B	3.8	200 B
Tetrachloroethene	0.72	82 B	4.8	560 B
Toluene	0.72	0.26 BF	2.7	0.98 BF

Client Sample ID: B90-INTAKE-SS

Lab ID#: 1004237-09A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	0.72	0.096 F	3.9	0.52 F
cis-1,2-Dichloroethene	0.72	0.49 F	2.8	1.9 F
Methylene Chloride	0.72	0.30 BF	2.5	1.0 BF
Trichloroethene	0.72	0.53 BF	3.9	2.9 BF
Tetrachloroethene	0.72	120 B	4.9	830 B
Benzene	0.72	0.11 BF	2.3	0.34 BF
Toluene	0.72	5.4 B	2.7	20 B



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

Client Sample ID: AOC65-VEW23

Lab ID#: 1004237-10A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.72	4.6	2.8	18
Methylene Chloride	0.72	0.092 F	2.5	0.32 F
Trichloroethene	0.72	11	3.9	58
Tetrachloroethene	0.72	77 B	4.9	520 B
trans-1,2-Dichloroethene	0.72	0.17 F	2.8	0.68 F
Benzene	0.72	0.075 F	2.3	0.24 F
Toluene	0.72	0.29 BF	2.7	1.1 BF

Client Sample ID: AOC65-VEW25

Lab ID#: 1004237-11A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	5.8	21	23	82
Trichloroethene	5.8	37	31	200
Tetrachloroethene	5.8	1500 B	39	10000 B
Toluene	5.8	0.51 BF	22	1.9 BF

Client Sample ID: AOC65-VEW27

Lab ID#: 1004237-12A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	14	28	57	110
Trichloroethene	14	42	77	220
Tetrachloroethene	14	5700 B	97	39000 B
Toluene	14	0.98 BF	54	3.7 BF

Client Sample ID: AOC65-VEW28A

Lab ID#: 1004237-13A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.72	0.98	2.5	3.4
Trichloroethene	0.72	10	3.9	54
Tetrachloroethene	0.72	61 B	4.9	420 B
Benzene	0.72	0.15 F	2.3	0.47 F
Toluene	0.72	0.70 BF	2.7	2.6 BF



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

Client Sample ID: AOC65-VEW28B

Lab ID#: 1004237-14A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.70	0.29 F	2.4	1.0 F
Trichloroethene	0.70	1.0	3.8	5.4
Tetrachloroethene	0.70	5.7 B	4.8	39 B
Benzene	0.70	0.16 F	2.2	0.53 F
Toluene	0.70	1.1 B	2.6	4.3 B

Client Sample ID: B90-INTAKE-EX

Lab ID#: 1004237-15A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.72	0.25 F	2.8	0.99 F
Trichloroethene	0.72	1.1	3.9	6.0
Tetrachloroethene	0.72	8.9 B	4.9	60 B
Benzene	0.72	0.10 F	2.3	0.34 F
Toluene	0.72	0.21 BF	2.7	0.81 BF

Client Sample ID: AOC65-POSTGAC

Lab ID#: 1004237-16A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.70	0.53 F	2.4	1.8 F
Tetrachloroethene	0.70	0.083 BF	4.7	0.56 BF
Toluene	0.70	0.48 BF	2.6	1.8 BF

Client Sample ID: AOC65-POSTGAC Lab Duplicate

Lab ID#: 1004237-16AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.70	0.46 F	2.4	1.6 F
Tetrachloroethene	0.70	0.074 BF	4.7	0.50 BF
Benzene	0.70	0.070 F	2.2	0.22 F
Toluene	0.70	0.42 BF	2.6	1.6 BF



Client Sample ID: AOC65-INTAKE-SW

Lab ID#: 1004237-01A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	6042009	Date of Collection:	4/8/10 1:11:00 PM
Dil. Factor:	1.83	Date of Analysis:	4/20/10 01:01 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.92	Not Detected U	2.3	Not Detected U
1,2-Dichloroethane	0.92	0.46 F	3.7	1.9 F
1,1-Dichloroethene	0.92	0.31 F	3.6	1.2 F
1,1,1-Trichloroethane	0.92	18	5.0	100
cis-1,2-Dichloroethene	0.92	44	3.6	170
Methylene Chloride	0.92	1.3 B	3.2	4.6 B
Trichloroethene	0.92	15	4.9	83
Tetrachloroethene	0.92	96	6.2	650
trans-1,2-Dichloroethene	0.92	0.79 F	3.6	3.1 F
Benzene	0.92	0.098 F	2.9	0.31 F
Toluene	0.92	Not Detected U	3.4	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.

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

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	101	70-130



Client Sample ID: AOC65-INTAKE-SW Lab Duplicate

Lab ID#: 1004237-01AA

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	6042010	Date of Collection:	4/8/10 1:11:00 PM
Dil. Factor:	1.83	Date of Analysis:	4/20/10 01:51 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.92	Not Detected U	2.3	Not Detected U
1,2-Dichloroethane	0.92	0.45 F	3.7	1.8 F
1,1-Dichloroethene	0.92	0.39 F	3.6	1.6 F
1,1,1-Trichloroethane	0.92	18	5.0	97
cis-1,2-Dichloroethene	0.92	43	3.6	170
Methylene Chloride	0.92	1.4 B	3.2	5.0 B
Trichloroethene	0.92	15	4.9	79
Tetrachloroethene	0.92	87	6.2	590
trans-1,2-Dichloroethene	0.92	0.84 F	3.6	3.3 F
Benzene	0.92	0.084 F	2.9	0.27 F
Toluene	0.92	Not Detected U	3.4	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.
 B = The analyte was found in an associated blank above the MDL, as well as in the sample.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	99	70-130



Client Sample ID: AOC65-VEW19-UGR

Lab ID#: 1004237-02A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	3041607	Date of Collection:	4/8/10 1:17:00 PM
Dil. Factor:	19.1	Date of Analysis:	4/16/10 05:24 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	9.6	Not Detected U	24	Not Detected U
1,2-Dichloroethane	9.6	Not Detected U	39	Not Detected U
1,1-Dichloroethene	9.6	Not Detected U	38	Not Detected U
1,1,1-Trichloroethane	9.6	Not Detected U	52	Not Detected U
cis-1,2-Dichloroethene	9.6	93	38	370
Methylene Chloride	9.6	Not Detected U	33	Not Detected U
Trichloroethene	9.6	84 B	51	450 B
Tetrachloroethene	9.6	2800 B	65	19000 B
trans-1,2-Dichloroethene	9.6	Not Detected U	38	Not Detected U
Benzene	9.6	Not Detected U	30	Not Detected U
Toluene	9.6	Not Detected U	36	Not Detected U

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.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	105	70-130



Client Sample ID: AOC65-VEW20

Lab ID#: 1004237-03A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	3041611	Date of Collection:	4/8/10 1:24:00 PM
Dil. Factor:	1.47	Date of Analysis:	4/16/10 07:38 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.74	Not Detected U	1.9	Not Detected U
1,2-Dichloroethane	0.74	Not Detected U	3.0	Not Detected U
1,1-Dichloroethene	0.74	Not Detected U	2.9	Not Detected U
1,1,1-Trichloroethane	0.74	Not Detected U	4.0	Not Detected U
cis-1,2-Dichloroethene	0.74	50	2.9	200
Methylene Chloride	0.74	0.22 BF	2.6	0.77 BF
Trichloroethene	0.74	78 B	4.0	420 B
Tetrachloroethene	0.74	15 B	5.0	100 B
trans-1,2-Dichloroethene	0.74	2.2	2.9	8.9
Benzene	0.74	0.16 BF	2.3	0.51 BF
Toluene	0.74	0.26 BF	2.8	0.98 BF

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: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	114	70-130



Client Sample ID: AOC65-VEW21

Lab ID#: 1004237-04A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	3041612	Date of Collection:	4/8/10 1:30:00 PM
Dil. Factor:	1.42	Date of Analysis:	4/16/10 08:18 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.71	Not Detected U	1.8	Not Detected U
1,2-Dichloroethane	0.71	Not Detected U	2.9	Not Detected U
1,1-Dichloroethene	0.71	Not Detected U	2.8	Not Detected U
1,1,1-Trichloroethane	0.71	Not Detected U	3.9	Not Detected U
cis-1,2-Dichloroethene	0.71	0.85	2.8	3.4
Methylene Chloride	0.71	0.14 BF	2.5	0.49 BF
Trichloroethene	0.71	6.9 B	3.8	37 B
Tetrachloroethene	0.71	6.7 B	4.8	45 B
trans-1,2-Dichloroethene	0.71	Not Detected U	2.8	Not Detected U
Benzene	0.71	0.12 BF	2.3	0.37 BF
Toluene	0.71	0.30 BF	2.7	1.1 BF

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: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	112	70-130



Client Sample ID: AOC65-INTAKE-DW

Lab ID#: 1004237-05A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	3041613	Date of Collection:	4/8/10 12:33:00 PM
Dil. Factor:	1.37	Date of Analysis:	4/16/10 09:13 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.68	Not Detected U	1.8	Not Detected U
1,2-Dichloroethane	0.68	Not Detected U	2.8	Not Detected U
1,1-Dichloroethene	0.68	Not Detected U	2.7	Not Detected U
1,1,1-Trichloroethane	0.68	Not Detected U	3.7	Not Detected U
cis-1,2-Dichloroethene	0.68	1.1	2.7	4.3
Methylene Chloride	0.68	1.6 B	2.4	5.7 B
Trichloroethene	0.68	9.1 B	3.7	49 B
Tetrachloroethene	0.68	51 B	4.6	350 B
trans-1,2-Dichloroethene	0.68	Not Detected U	2.7	Not Detected U
Benzene	0.68	0.16 BF	2.2	0.53 BF
Toluene	0.68	0.47 BF	2.6	1.8 BF

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: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	111	70-130



Client Sample ID: AOC65-VEW17-LGR

Lab ID#: 1004237-06A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	3041614	Date of Collection:	4/8/10 12:43:00 PM
Dil. Factor:	1.41	Date of Analysis:	4/16/10 09:38 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.70	Not Detected U	1.8	Not Detected U
1,2-Dichloroethane	0.70	Not Detected U	2.8	Not Detected U
1,1-Dichloroethene	0.70	Not Detected U	2.8	Not Detected U
1,1,1-Trichloroethane	0.70	Not Detected U	3.8	Not Detected U
cis-1,2-Dichloroethene	0.70	1.2	2.8	4.6
Methylene Chloride	0.70	8.3 B	2.4	29 B
Trichloroethene	0.70	9.8 B	3.8	52 B
Tetrachloroethene	0.70	90 B	4.8	610 B
trans-1,2-Dichloroethene	0.70	Not Detected U	2.8	Not Detected U
Benzene	0.70	0.48 BF	2.2	1.5 BF
Toluene	0.70	22 B	2.6	84 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: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	119	70-130



Client Sample ID: AOC65-VEW22

Lab ID#: 1004237-07A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	3041615	Date of Collection:	4/8/10 12:50:00 PM
Dil. Factor:	1.43	Date of Analysis:	4/16/10 10:02 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.72	Not Detected U	1.8	Not Detected U
1,2-Dichloroethane	0.72	Not Detected U	2.9	Not Detected U
1,1-Dichloroethene	0.72	Not Detected U	2.8	Not Detected U
1,1,1-Trichloroethane	0.72	Not Detected U	3.9	Not Detected U
cis-1,2-Dichloroethene	0.72	0.45 F	2.8	1.8 F
Methylene Chloride	0.72	Not Detected U	2.5	Not Detected U
Trichloroethene	0.72	3.1 B	3.8	16 B
Tetrachloroethene	0.72	15 B	4.8	100 B
trans-1,2-Dichloroethene	0.72	Not Detected U	2.8	Not Detected U
Benzene	0.72	Not Detected U	2.3	Not Detected U
Toluene	0.72	0.21 BF	2.7	0.78 BF

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: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	113	70-130



Client Sample ID: AOC65-VEW26

Lab ID#: 1004237-08A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	3041617	Date of Collection:	4/8/10 1:00:00 PM
Dil. Factor:	1.43	Date of Analysis:	4/16/10 10:51 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.72	Not Detected U	1.8	Not Detected U
1,2-Dichloroethane	0.72	Not Detected U	2.9	Not Detected U
1,1-Dichloroethene	0.72	Not Detected U	2.8	Not Detected U
1,1,1-Trichloroethane	0.72	Not Detected U	3.9	Not Detected U
cis-1,2-Dichloroethene	0.72	3.4	2.8	13
Methylene Chloride	0.72	Not Detected U	2.5	Not Detected U
Trichloroethene	0.72	36 B	3.8	200 B
Tetrachloroethene	0.72	82 B	4.8	560 B
trans-1,2-Dichloroethene	0.72	Not Detected U	2.8	Not Detected U
Benzene	0.72	Not Detected U	2.3	Not Detected U
Toluene	0.72	0.26 BF	2.7	0.98 BF

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: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	109	70-130



Client Sample ID: B90-INTAKE-SS

Lab ID#: 1004237-09A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	3041618	Date of Collection:	4/8/10 11:20:00 AM
Dil. Factor:	1.44	Date of Analysis:	4/16/10 11:36 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.72	Not Detected U	1.8	Not Detected U
1,2-Dichloroethane	0.72	Not Detected U	2.9	Not Detected U
1,1-Dichloroethene	0.72	Not Detected U	2.8	Not Detected U
1,1,1-Trichloroethane	0.72	0.096 F	3.9	0.52 F
cis-1,2-Dichloroethene	0.72	0.49 F	2.8	1.9 F
Methylene Chloride	0.72	0.30 BF	2.5	1.0 BF
Trichloroethene	0.72	0.53 BF	3.9	2.9 BF
Tetrachloroethene	0.72	120 B	4.9	830 B
trans-1,2-Dichloroethene	0.72	Not Detected U	2.8	Not Detected U
Benzene	0.72	0.11 BF	2.3	0.34 BF
Toluene	0.72	5.4 B	2.7	20 B

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: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	93	70-130
4-Bromofluorobenzene	108	70-130



Client Sample ID: AOC65-VEW23

Lab ID#: 1004237-10A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	3041910	Date of Collection:	4/8/10 1:38:00 PM
Dil. Factor:	1.44	Date of Analysis:	4/19/10 01:53 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.72	Not Detected U	1.8	Not Detected U
1,2-Dichloroethane	0.72	Not Detected U	2.9	Not Detected U
1,1-Dichloroethene	0.72	Not Detected U	2.8	Not Detected U
1,1,1-Trichloroethane	0.72	Not Detected U	3.9	Not Detected U
cis-1,2-Dichloroethene	0.72	4.6	2.8	18
Methylene Chloride	0.72	0.092 F	2.5	0.32 F
Trichloroethene	0.72	11	3.9	58
Tetrachloroethene	0.72	77 B	4.9	520 B
trans-1,2-Dichloroethene	0.72	0.17 F	2.8	0.68 F
Benzene	0.72	0.075 F	2.3	0.24 F
Toluene	0.72	0.29 BF	2.7	1.1 BF

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: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	89	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	113	70-130



Client Sample ID: AOC65-VEW25

Lab ID#: 1004237-11A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	3041911	Date of Collection:	4/8/10 1:45:00 PM
Dil. Factor:	11.5	Date of Analysis:	4/19/10 02:22 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	5.8	Not Detected U	15	Not Detected U
1,2-Dichloroethane	5.8	Not Detected U	23	Not Detected U
1,1-Dichloroethene	5.8	Not Detected U	23	Not Detected U
1,1,1-Trichloroethane	5.8	Not Detected U	31	Not Detected U
cis-1,2-Dichloroethene	5.8	21	23	82
Methylene Chloride	5.8	Not Detected U	20	Not Detected U
Trichloroethene	5.8	37	31	200
Tetrachloroethene	5.8	1500 B	39	10000 B
trans-1,2-Dichloroethene	5.8	Not Detected U	23	Not Detected U
Benzene	5.8	Not Detected U	18	Not Detected U
Toluene	5.8	0.51 BF	22	1.9 BF

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: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	91	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	110	70-130



Client Sample ID: AOC65-VEW27

Lab ID#: 1004237-12A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	3041919	Date of Collection:	4/8/10 1:51:00 PM
Dil. Factor:	28.6	Date of Analysis:	4/19/10 06:07 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	14	Not Detected U	36	Not Detected U
1,2-Dichloroethane	14	Not Detected U	58	Not Detected U
1,1-Dichloroethene	14	Not Detected U	57	Not Detected U
1,1,1-Trichloroethane	14	Not Detected U	78	Not Detected U
cis-1,2-Dichloroethene	14	28	57	110
Methylene Chloride	14	Not Detected U	50	Not Detected U
Trichloroethene	14	42	77	220
Tetrachloroethene	14	5700 B	97	39000 B
trans-1,2-Dichloroethene	14	Not Detected U	57	Not Detected U
Benzene	14	Not Detected U	46	Not Detected U
Toluene	14	0.98 BF	54	3.7 BF

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: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	110	70-130



Client Sample ID: AOC65-VEW28A

Lab ID#: 1004237-13A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	3041913	Date of Collection:	4/8/10 10:50:00 AM
Dil. Factor:	1.44	Date of Analysis:	4/19/10 03:27 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.72	Not Detected U	1.8	Not Detected U
1,2-Dichloroethane	0.72	Not Detected U	2.9	Not Detected U
1,1-Dichloroethene	0.72	Not Detected U	2.8	Not Detected U
1,1,1-Trichloroethane	0.72	Not Detected U	3.9	Not Detected U
cis-1,2-Dichloroethene	0.72	Not Detected U	2.8	Not Detected U
Methylene Chloride	0.72	0.98	2.5	3.4
Trichloroethene	0.72	10	3.9	54
Tetrachloroethene	0.72	61 B	4.9	420 B
trans-1,2-Dichloroethene	0.72	Not Detected U	2.8	Not Detected U
Benzene	0.72	0.15 F	2.3	0.47 F
Toluene	0.72	0.70 BF	2.7	2.6 BF

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: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	89	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	111	70-130



Client Sample ID: AOC65-VEW28B

Lab ID#: 1004237-14A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	3041914	Date of Collection:	4/8/10 10:57:00 AM
Dil. Factor:	1.41	Date of Analysis:	4/19/10 03:58 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.70	Not Detected U	1.8	Not Detected U
1,2-Dichloroethane	0.70	Not Detected U	2.8	Not Detected U
1,1-Dichloroethene	0.70	Not Detected U	2.8	Not Detected U
1,1,1-Trichloroethane	0.70	Not Detected U	3.8	Not Detected U
cis-1,2-Dichloroethene	0.70	Not Detected U	2.8	Not Detected U
Methylene Chloride	0.70	0.29 F	2.4	1.0 F
Trichloroethene	0.70	1.0	3.8	5.4
Tetrachloroethene	0.70	5.7 B	4.8	39 B
trans-1,2-Dichloroethene	0.70	Not Detected U	2.8	Not Detected U
Benzene	0.70	0.16 F	2.2	0.53 F
Toluene	0.70	1.1 B	2.6	4.3 B

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: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	89	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	110	70-130



Client Sample ID: B90-INTAKE-EX

Lab ID#: 1004237-15A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	3041915	Date of Collection:	4/8/10 11:05:00 AM
Dil. Factor:	1.44	Date of Analysis:	4/19/10 04:30 PM

Compound	Rot. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.72	Not Detected U	1.8	Not Detected U
1,2-Dichloroethane	0.72	Not Detected U	2.9	Not Detected U
1,1-Dichloroethene	0.72	Not Detected U	2.8	Not Detected U
1,1,1-Trichloroethane	0.72	Not Detected U	3.9	Not Detected U
cis-1,2-Dichloroethene	0.72	0.25 F	2.8	0.99 F
Methylene Chloride	0.72	Not Detected U	2.5	Not Detected U
Trichloroethene	0.72	1.1	3.9	6.0
Tetrachloroethene	0.72	8.9 B	4.9	60 B
trans-1,2-Dichloroethene	0.72	Not Detected U	2.8	Not Detected U
Benzene	0.72	0.10 F	2.3	0.34 F
Toluene	0.72	0.21 BF	2.7	0.81 BF

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: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	113	70-130



Client Sample ID: AOC65-POSTGAC

Lab ID#: 1004237-16A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	3041916	Date of Collection:	4/8/10 11:13:00 AM
Dil. Factor:	1.39	Date of Analysis:	4/19/10 04:54 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.70	Not Detected U	1.8	Not Detected U
1,2-Dichloroethane	0.70	Not Detected U	2.8	Not Detected U
1,1-Dichloroethene	0.70	Not Detected U	2.8	Not Detected U
1,1,1-Trichloroethane	0.70	Not Detected U	3.8	Not Detected U
cis-1,2-Dichloroethene	0.70	Not Detected U	2.8	Not Detected U
Methylene Chloride	0.70	0.53 F	2.4	1.8 F
Trichloroethene	0.70	Not Detected U	3.7	Not Detected U
Tetrachloroethene	0.70	0.083 BF	4.7	0.56 BF
trans-1,2-Dichloroethene	0.70	Not Detected U	2.8	Not Detected U
Benzene	0.70	Not Detected U	2.2	Not Detected U
Toluene	0.70	0.48 BF	2.6	1.8 BF

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: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	110	70-130



Client Sample ID: AOC65-POSTGAC Lab Duplicate

Lab ID#: 1004237-16AA

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	3041917	Date of Collection:	4/8/10 11:13:00 AM
Dil. Factor:	1.39	Date of Analysis:	4/19/10 05:18 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.70	Not Detected U	1.8	Not Detected U
1,2-Dichloroethane	0.70	Not Detected U	2.8	Not Detected U
1,1-Dichloroethene	0.70	Not Detected U	2.8	Not Detected U
1,1,1-Trichloroethane	0.70	Not Detected U	3.8	Not Detected U
cis-1,2-Dichloroethene	0.70	Not Detected U	2.8	Not Detected U
Methylene Chloride	0.70	0.46 F	2.4	1.6 F
Trichloroethene	0.70	Not Detected U	3.7	Not Detected U
Tetrachloroethene	0.70	0.074 BF	4.7	0.50 BF
trans-1,2-Dichloroethene	0.70	Not Detected U	2.8	Not Detected U
Benzene	0.70	0.070 F	2.2	0.22 F
Toluene	0.70	0.42 BF	2.6	1.6 BF

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: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	109	70-130



Client Sample ID: Lab Blank

Lab ID#: 1004237-17A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	3041604	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	4/16/10 03:14 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected U	1.3	Not Detected U
1,2-Dichloroethane	0.50	Not Detected U	2.0	Not Detected U
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	0.076 F	1.7	0.26 F
Trichloroethene	0.50	0.067 F	2.7	0.36 F
Tetrachloroethene	0.50	0.11 F	3.4	0.72 F
trans-1,2-Dichloroethene	0.50	Not Detected U	2.0	Not Detected U
Benzene	0.50	0.090 F	1.6	0.29 F
Toluene	0.50	0.079 F	1.9	0.30 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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	108	70-130



Client Sample ID: Lab Blank

Lab ID#: 1004237-17B

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	3041907A	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	4/19/10 12:15 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected U	1.3	Not Detected U
1,2-Dichloroethane	0.50	Not Detected U	2.0	Not Detected U
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	Not Detected U	1.7	Not Detected U
Trichloroethene	0.50	Not Detected U	2.7	Not Detected U
Tetrachloroethene	0.50	0.074 F	3.4	0.50 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	0.038 F	1.9	0.14 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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	110	70-130



Client Sample ID: Lab Blank

Lab ID#: 1004237-17C

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	6042008a	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	4/20/10 12:04 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected U	1.3	Not Detected U
1,2-Dichloroethane	0.50	Not Detected U	2.0	Not Detected U
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	0.12 F	1.7	0.41 F
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.

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

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	100	70-130



Client Sample ID: CCV

Lab ID#: 1004237-18A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	3041602	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/16/10 12:41 PM

Compound	%Recovery
Vinyl Chloride	107
1,2-Dichloroethane	100
1,1-Dichloroethene	110
1,1,1-Trichloroethane	97
cis-1,2-Dichloroethene	103
Methylene Chloride	96
Trichloroethene	101
Tetrachloroethene	105
trans-1,2-Dichloroethene	110
Benzene	102
Toluene	101

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	111	70-130



Client Sample ID: CCV

Lab ID#: 1004237-18B

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	3041902	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	4/19/10 09:23 AM

Compound	%Recovery
Vinyl Chloride	123
1,2-Dichloroethane	108
1,1-Dichloroethene	110
1,1,1-Trichloroethane	99
cis-1,2-Dichloroethene	100
Methylene Chloride	102
Trichloroethene	103
Tetrachloroethene	101
trans-1,2-Dichloroethene	110
Benzene	102
Toluene	103

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	112	70-130



Client Sample ID: CCV

Lab ID#: 1004237-18C

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	6042002	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/20/10 07:18 AM

Compound	%Recovery
Vinyl Chloride	107
1,2-Dichloroethane	95
1,1-Dichloroethene	78
1,1,1-Trichloroethane	94
cis-1,2-Dichloroethene	100
Methylene Chloride	93
Trichloroethene	101
Tetrachloroethene	103
trans-1,2-Dichloroethene	100
Benzene	107
Toluene	106

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	104	70-130



Client Sample ID: LCS

Lab ID#: 1004237-19A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	3041603	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/16/10 02:27 PM

Compound	%Recovery
Vinyl Chloride	115
1,2-Dichloroethane	94
1,1-Dichloroethene	100
1,1,1-Trichloroethane	103
cis-1,2-Dichloroethene	102
Methylene Chloride	85
Trichloroethene	99
Tetrachloroethene	101
trans-1,2-Dichloroethene	110
Benzene	99
Toluene	96

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	110	70-130



Client Sample ID: LCS

Lab ID#: 1004237-19B

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	3041905	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/19/10 10:56 AM

Compound	%Recovery
Vinyl Chloride	129
1,2-Dichloroethane	97
1,1-Dichloroethene	105
1,1,1-Trichloroethane	92
cis-1,2-Dichloroethene	105
Methylene Chloride	91
Trichloroethene	100
Tetrachloroethene	101
trans-1,2-Dichloroethene	116
Benzene	99
Toluene	95

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	89	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	111	70-130



Client Sample ID: LCS

Lab ID#: 1004237-19C

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	6042003	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/20/10 07:43 AM

Compound	%Recovery
Vinyl Chloride	104
1,2-Dichloroethane	84
1,1-Dichloroethene	80
1,1,1-Trichloroethane	88
cis-1,2-Dichloroethene	94
Methylene Chloride	80
Trichloroethene	92
Tetrachloroethene	95
trans-1,2-Dichloroethene	95
Benzene	97
Toluene	92

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	104	70-130

Camp Stanley Storage Activity Chain Of Custody

1004287

COC ID: 040810ATLC	Relinquish Date: 4/8/2010	Cooker ID: C
Project Location: CSSA	Relinquished By: SE	Lab Code: ATL
Job Number: 746545.02000	Relinquish Time: 4:30 PM	Carrier: FedEx
Creation Date: 4/8/2010	Collection Team: JDB_SE	Airbill Carrier: 865909346582
Task Manager: Ken Rice	Sample Data Type	TAT: Standard TAT

Samplers: Julie Boyer Sam Elliott
g.b. Sam Elliott

- | | | | | |
|------------------------|---|------------|---------------|--------------------|
| LOCID: AOC65-INTAKE-SW | LOGDATE: 4/8/2010 | MATRIX: GS | TBLLOT: | Analysis Required: |
| SBD: 0 | LOGTIME: 13:11 | SACODE: N | ABLLOT: | TO 15 TO 15 |
| SED: 0 | FLDSAMPID: AOC65-INTAKE-SW_040810_N1311 | EBLLOT: | Containers: 1 | |
| Remarks: | | | | |
| LOCID: AOC65-VEW19-UGR | LOGDATE: 4/8/2010 | MATRIX: GS | TBLLOT: | Analysis Required: |
| SBD: 0 | LOGTIME: 13:17 | SACODE: N | ABLLOT: | TO 15 TO 15 |
| SED: 0 | FLDSAMPID: AOC65-VEW19-UGR_040810_N1317 | EBLLOT: | Containers: 1 | |
| Remarks: | | | | |
| LOCID: AOC65-VEW20 | LOGDATE: 4/8/2010 | MATRIX: GS | TBLLOT: | Analysis Required: |
| SBD: 0 | LOGTIME: 13:24 | SACODE: N | ABLLOT: | TO 15 TO 15 |
| SED: 0 | FLDSAMPID: AOC65-VEW20_040810_N1324 | EBLLOT: | Containers: 1 | |
| Remarks: | | | | |
| LOCID: AOC65-VEW21 | LOGDATE: 4/8/2010 | MATRIX: GS | TBLLOT: | Analysis Required: |
| SBD: 0 | LOGTIME: 13:30 | SACODE: N | ABLLOT: | TO 15 TO 15 |
| SED: 0 | FLDSAMPID: AOC65-VEW21_040810_N1330 | EBLLOT: | Containers: 1 | |
| Remarks: | | | | |

CUSTODY SEAL INTACT?
Y N NONE TEMP N/A

Relinquished by: <u>Sam Elliott</u> Date: <u>4/8/10</u> Time: <u>1630</u>	Relinquished by: _____ Date _____ Time _____
Received by: <u>Ken Rice</u> Date: <u>4/8/10</u> Time: <u>9:25</u>	Received by: _____ Date _____ Time _____

ATL

File # 81-99 0A34 1007

1004237

Camp Stanley Storage Activity Chain Of Custody

OOC ID: 040810ATLA Relinquish Date: 4/8/2010 Cooler ID: A
 Project Location: CSSA Relinquished By: SE Lab Code: ATL Sampler(s): Julie Bouch Sam Elliot
 Job Number: 746545.02000 Relinquish Time: 4:30 PM Carrier: FedEx
 Creation Date: 4/8/2010 Collection Team: JDB SE Airbill Carrier: 855909340934660
 Task Manager: Ken Rice Sample Data Type: TAT Standard TAT

- LOCID: AOC65-INTAKE-DW LOGDATE: 4/8/2010 MATRIX: GS TBLLOT: Analysis Required: _____
 SBD: 0 LOGTIME: 12:33 SACODE: N SMCODE: SA ABLLOT: TO 15 TO 15
 SED: 0 FLDSAMPID AOC65-INTAKE-DW_040810_N1233 EBLLOT: Containers: 1
 Remarks:
- LOCID: AOC65-VEW17-LGR LOGDATE: 4/8/2010 MATRIX: GS TBLLOT: Analysis Required: _____
 SBD: 0 LOGTIME: 12:45 SACODE: N SMCODE: SA ABLLOT: TO 15 TO 15
 SED: 0 FLDSAMPID AOC65-VEW17-LGR_040810_N1243 EBLLOT: Containers: 1
 Remarks:
- LOCID: AOC65-VEW22 LOGDATE: 4/8/2010 MATRIX: GS TBLLOT: Analysis Required: _____
 SBD: 0 LOGTIME: 12:50 SACODE: N SMCODE: SA ABLLOT: TO 15 TO 15
 PED: 0 FLDSAMPID AOC65-VEW22_040810_N1250 EBLLOT: Containers: 1
 Remarks:
- LOCID: AOC65-VEW26 LOGDATE: 4/8/2010 MATRIX: GS TBLLOT: Analysis Required: _____
 SBD: 0 LOGTIME: 13:00 SACODE: N SMCODE: SA ABLLOT: TO 15 TO 15
 SED: 0 FLDSAMPID AOC65-VEW26_040810_N1300 EBLLOT: Containers: 1
 Remarks:

CUSTODY SEAL INTACT?
 Y N NONE TEMP NA

Relinquished by: S. Elliot Date 4-8-10 Time 16:30
 Received by: K. McInerney Date 4/9/10 Time 01:25
 ATL

Relinquished by: _____ Date _____ Time _____
 Received by: _____ Date _____ Time _____

FedEx RLSA 040810

Camp Stanley Storage Activity Chain Of Custody

1004237

COG ID: 040810ATLD	Relinquish Date: 4/8/2010	Cooper ID: D
Project Location: GSSA	Relinquished By: SE	Lab Code: ATL
Job Number: 746545.02000	Relinquish Time: 4:30 PM	Carrier: FedEx
Creation Date: 4/8/2010	Collection Team: JDB_SE	Airbill Carrier: 865909046671
Task Manager: Ken Rice	Sample Data Type:	TAT: Standard TAT

Sampler(s): Julie Bouch Sam Elliott
JDB Sam Elliott

LOCID: B90-INTAKE-SS	LOGDATE: 4/8/2010	MATRIX: GS	TBLT:	Analysis Required:
SBD: 0	LOGTIME: 11:20	SACODE: N	ABLBT:	TO 15 TO 15
SED: 0	FLDSAMPID B90-INTAKE-SS_040810_N1120	SMCODE: SA	EBLOT:	Containers: 1
Remarks:				
LOCID: AOC65-VEW23	LOGDATE: 4/8/2010	MATRIX: GS	TBLT:	Analysis Required:
SBD: 0	LOGTIME: 13:38	SACODE: N	ABLBT:	TO 15 TO 15
SED: 0	FLDSAMPID AOC65-VEW23_040810_N1338	SMCODE: SA	EBLOT:	Containers: 1
Remarks:				
LOCID: AOC65-VEW25	LOGDATE: 4/8/2010	MATRIX: GS	TBLT:	Analysis Required:
SBD: 0	LOGTIME: 13:45	SACODE: N	ABLBT:	TO 15 TO 15
SED: 0	FLDSAMPID AOC65-VEW25_040810_N1345	SMCODE: SA	EBLOT:	Containers: 1
Remarks:				
LOCID: AOC65-VEW27	LOGDATE: 4/8/2010	MATRIX: GS	TBLT:	Analysis Required:
SBD: 0	LOGTIME: 13:51	SACODE: N	ABLBT:	TO 15 TO 15
SED: 0	FLDSAMPID AOC65-VEW27_040810_N1351	SMCODE: SA	EBLOT:	Containers: 1
Remarks:				

CUSTODY SEAL INTACT?
 Y N NONE TEMP NA

Relinquished by: <u>S. Elliott</u> Date <u>4.8.10</u> Time <u>1630</u>	Relinquished by: _____ Date _____ Time _____	Relinquished by: _____ Date _____ Time _____
Received by: <u>K. M. ...</u> Date <u>4/9/10</u> Time <u>0825</u>	Received by: _____ Date _____ Time _____	Received by: _____ Date _____ Time _____

ATL

Camp Stanley Storage Activity Chain Of Custody

1004237

CCC ID: 040310ATLB Relinquish Date: 4/8/2010 Cooler ID: B
 Project Location: CSSA Relinquished By: SE Lab Code: ATL
 Job Number: 746545.02000 Relinquish Time: 4:30 PM Carrier: FedEx
 Creator Date: 4/8/2010 Collection Team: JDB_SE Air/IL Carrier: 865909346593
 Task Manager: Ken Rice Sample Data Type: TAT: Standard TAT

Sampler(s): Julie Goulet Sam Elliott
g. Goulet Sam Elliott

LOCID: AOC65-VEW28A LOGDATE: 4/8/2010 MATRIX: GS TBLOT: Analysis Required: _____
 SBD: 0 LOGTIME: 10:50 SACODE: N SMCODE: SA ABLOT: TO 15 TO 15
 SED: 0 FLDSAMPID AOC65-VEW28A_040810_N1050 EBLOT: Containers: 1

Remarks:

LOCID: AOC65-VEW28B LOGDATE: 4/8/2010 MATRIX: GS TBLOT: Analysis Required: _____
 SBD: 0 LOGTIME: 10:57 SACODE: N SMCODE: SA ABLOT: TO 15 TO 15
 SED: 0 FLDSAMPID AOC65-VEW28B_040810_M1057 EBLOT: Containers: 1

Remarks:

LOCID: B90-INTAKE-EX LOGDATE: 4/8/2010 MATRIX: GS TBLOT: Analysis Required: _____
 SBD: 0 LOGTIME: 11:05 SACODE: N SMCODE: SA ABLOT: TO 15 TO 15
 SED: 0 FLDSAMPID B90-INTAKE-EX_040810_N1105 EBLOT: Containers: 1

Remarks:

LOCID: AOC65-POSTGAC LOGDATE: 4/8/2010 MATRIX: GS TBLOT: Analysis Required: _____
 SBD: 0 LOGTIME: 11:13 SACODE: N SMCODE: SA ABLOT: TO 15 TO 15
 SED: 0 FLDSAMPID AOC65-POSTGAC_040810_N1113 EBLOT: Containers: 1

Remarks:



Relinquished by: S. Goulet Date: 4/8/10 Time: 1630 Relinquished by: _____ Date: _____ Time: _____
 Received by: K. McKinnon Date: 4/8/10 Time: 9:25 Received by: _____ Date: _____ Time: _____

ATL

FedEx 8639 09124 6862

APPENDIX C

GRANULAR ACTIVATED CARBON EXCHANGE DATA

Spent Media Profile Sheet

1. Customer Information

Customer Name Camp Stanley Storage Activity	EPA ID Number:
Generator Facility Address: 25800 Ralph Fair Road Boerne, TX 78015-4800	Facility contact: Glare Sanchez Phone: (210) 698-5208 Fax: (210) 295-7386
	Technical Contact: Samantha Elliott Phone: (210) 347-6012 Fax:
Mailing or Billing Address: 25800 Ralph Fair Road Boerne, TX 78015-4800	Purchasing Contact: Parsons – Ellen Felfe Phone: (512) 719-6000 Fax: (512) 719-6099

2. Spent Media (SM) Generation Information

Describe your treatment process using the filter media (attach additional sheet if necessary)	
The carbon is used to filter the VOCs (tetrachloroethene-PCE, trichloroethene-TCE, cis-1,2-dichloroethene-DCE) from a Soil Vapor Extraction (SVE) system before exiting the system. SVE is the forced evacuation of vapor from the subsurface using vacuum equipment. Vacuum blowers connected to vapor extraction wells (VEWs) with pipe are used to evacuate volatile organic compounds (VOC), water vapor, and any air from the subsurface through the carbon filter media then into the air.	
SM type, mesh size, and amount:	
<input checked="" type="checkbox"/> Activated Carbon	Brand Name <u>Carbonair</u> Mesh Size <u>4X10</u> Amount (dry basis) <u>1000</u> lbs.
<input type="checkbox"/> Zeolite/Organoclay	Brand Name _____ Mesh Size _____ Amount (dry basis) _____ lbs.
<input type="checkbox"/> Activated Alumina	Brand Name _____ Mesh Size _____ Amount (dry basis) _____ lbs.
<input type="checkbox"/> Sand	Brand Name _____ Mesh Size _____ Amount (dry basis) _____ lbs.
<input type="checkbox"/> Ion Exchange Resin	Brand Name _____ Mesh Size _____ Amount (dry basis) _____ lbs.
<input type="checkbox"/> Other (specify): _____	Mesh Size _____ Amount (dry basis) _____ lbs.
Estimated Volume of treatment stream treated: <u>N/A</u> gallons	Certification for potable water treatment. I certify that this carbon has been used to purify water from a public water supply meeting the requirements of the Safe Drinking Water Act and it is not a RCRA hazardous waste per 40 CFR 261. <input type="checkbox"/> Yes <input type="checkbox"/> No
Is this SM a RCRA Hazardous waste per 40CFR261? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Sludge Determination (40CFR261.23(c)(3)) Was this SM used in water supply or wastewater treatment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Has this SM been used to treat a RCRA Hazardous Waste? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Was the SM used for Air Pollution Control? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Has this SM been used at a CERCLA site? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Is this SM a Characteristic Hazardous Waste (40CFR261 Subpart D)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is the SM generated from a Petroleum UST site? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Is the SM generated from a Medical or Veterinary facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Was this SM used to treat PCB contaminated waste? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

3. Characteristics and Properties of SM

Physical Properties: (Check if applicable)

pH Range: 2 2.1-4 4.1-10 10.1-12.4 12.5

SM Characteristics:

Radioactive Infectious Shock Sensitive Explosive Putrescible Strong Odor Flash Point <140F None of the Above

SM Contains:

Asbestos Benzene Cyanide Compounds DBCP Dioxins Fluorides Halogenated Organics Oxidizers PCBs Sulfides
 Vinyl Chloride Reactives Foreign Support Media High Level of Inorganic Salts Metals None of the Above

4. SM Components

Do you have a Laboratory Analysis for the influent concentrations to media of the waste stream treated? Yes No

*Please enclose if available. Carbonair maintains the right to require a current analysis prior to accepting spent media.

Do you have a Laboratory Analysis for this SM? Yes No If Yes: Total Basis TCLP

*Please enclose if available. Carbonair maintains the right to require a current analysis prior to accepting spent media.

5. Shipping Information

Proper DOT Shipping Name (per 40 CFR 172.101):

Method of shipment:

Bulk Trailer Bulk Bags Tote Bins 55-gallon drums Other (specify) _____

Special Handling, Safety, or Other information (attach MSDS, if available):

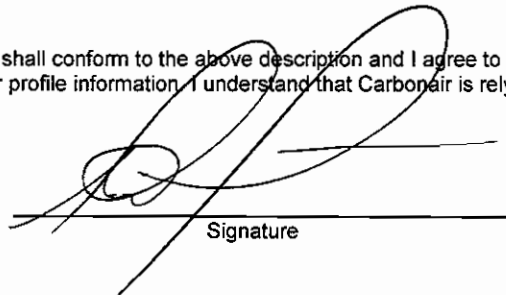
6. Certification

I certify that the information presented on this form and in all attached documentation is true and accurate and that all known or suspected hazards have been disclosed. The SM has been characterized according to 40 CFR 262.11, and, a representative sample of this SM has been provided to Carbonair Environmental Systems, Inc. (unless exempted). I am authorized by the above listed company or agency to make this certification.

I further certify that SM shipped to Carbonair, both current and future, shall conform to the above description and I agree to inform Carbonair immediately, in writing, of any non-conformity or changes to the SM or profile information. I understand that Carbonair is relying on the continuing nature of this certification.

Glare Sanchez

Name (Type or Print)



Signature

Environmental Manager

Title (Type or Print)

01-06-2010

Date

**AOC-65/B-90 Soil Vapor Extraction System
Camp Stanley Storage Activity**

	Sample ID:	SVE-CARBON	B90-INTAKE-EX	B90-INTAKE-SS
	Sample Date:	11-May-09	8-Oct-09	8-Oct-09
	SDG:	58917	910261	910261
	Lab ID:	AX97010	0910261-15A	0910261-16A
	Lab:	APPL	Air Toxics	Air Toxics
	Dilution Factor:	1; PCE=10	2.15	2.16
	Units			
Volatile Organic Compounds - TO15				
1,1,1-Trichloroethane	ppbv		1.8 U	1.8 U
1,1-Dichloroethane	ppbv		1.3 U	1.3 U
1,1-Dichloroethene	ppbv		1.0 U	1.0 U
1,2-Dichloroethane	ppbv		1.0 U	1.0 U
Benzene	ppbv		1.3 U	1.3 U
Chloroform	ppbv		1.3 U	1.3 U
cis-1,2-Dichloroethylene	ppbv		1.5 U	1.5 U
Tetrachloroethene	ppbv		53	96
trans-1,2-Dichloroethene	ppbv		1.9 U	1.9 U
Trichloroethene	ppbv		17	1.0 U
Vinyl chloride	ppbv		2.4 U	2.4 U
Volatile Organic Compounds - SW8260B TCLP				
1,1-Dichloroethene	ug/L	0.30	U	
1,2-Dichloroethane	ug/L	0.14	U	
1,4-Dichlorobenzene	ug/L	0.19	U	
2-Butanone (MEK)	ug/L	0.60	U	
Benzene	ug/L	0.16	U	
Carbon tetrachloride	ug/L	0.10	U	
Chlorobenzene	ug/L	0.21	U	
Chloroform	ug/L	0.16	U	
Tetrachloroethene	ug/L	210		
Trichloroethene	ug/L	1.5	F	
Vinyl chloride	ug/L	0.23	U	

Data Qualifiers:

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.
 Detections are bolded.

Sample Explanation:

SVE-CARBON is a sample of the carbon from the tank.
 B90-INTAKE-EX & B90-INTAKE-SS are the 2 lines going into the carbon unit.

Laboratory Report

Parsons

D011 - #42

CSSA

Subcontract #: 746545.70000.7051.61 WBS 02000

ARF: 58917

rec. on 6/15/09

Sample collected: May 11, 2009

APPL, Inc.

EPA METHOD 8260B

**TCLP
Volatile Organic Compounds**

APPL, INC.

Data Validation Package
for
EPA METHOD 8260B
TCLP
Volatile Organic Compounds

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EPA METHOD 8260B

**TCLP
Volatile Organic Compounds
Case Narrative**

APPL, INC.



EPA Method 8260B TCLP Volatile Organic Compounds Case Narrative

ARF: 58917

Project: 746545.02000 CSSA

State Certification Number: CA1312 (DW & WW)

NELAP Certification number: 05233CA (HW)

Results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Sample Receipt Information:

The sample group was received May 20, 2009, at 2.5°C. The samples was assigned Analytical Request Form (ARF) number 58917. The sample number and requested analyses were compared to the chain of custody. No exception was noted.

Sample Table

CLIENT ID	APPL ID	Matrix	Date Sampled	Date Received
SVE-CARBON	AX97010	MISC	05/11/09	05/20/09

Sample Preparation:

For the TCLP analysis, the sample was leached according to EPA method 1311, and the leachate was purged according to EPA method 5030B.

Sample Analysis Information:

The sample was analyzed according to EPA method 8260B using a Hewlett Packard Gas Chromatograph with a mass spectrometer detector. All other holding times were met.

Quality Control/Assurance

Spike Recovery

Laboratory Control Spikes (LCS) were used for quality assurance. All recoveries were acceptable.

No sample was designated by the client for a MS/MSD analysis.

Surrogates

All surrogate recoveries met acceptance criteria.

Method blanks

No target analyte was detected above the reporting limit.

Calibration

Initial and continuing calibrations were analyzed according to the method. All SPCC and CCC calibration criteria were met.

Tuning:

The instrument was tuned using BFB. All method criteria were met.

Internal Standards

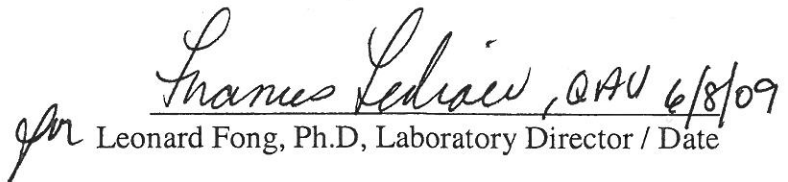
The internal standard area counts were compared to the mid-point of the initial calibration according to method 8260. All acceptance criteria were met.

Summary:

No other analytical exception is noted.

CERTIFICATION

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. These test results meet all requirements of NELAC. Release of the hard copy has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

 Leonard Fong, Ph.D, Laboratory Director / Date 6/8/09

EPA METHOD 8260B

**TCLP
Volatile Organic Compounds
Chain of Custody and ARF**

APPL, INC.

APPL - Analysis Request Form

58917

Client: Parsons
Address: 8000 Centre Park Drive Ste 200
Austin, TX 78754
Attn: Tammy Chang
Phone: 512-719-6092 Fax: 512-719-6099
Job: 746545.02000 CSSA
PO #: 746545.70000.7051.61 WBS 02000
Chain of Custody (Y/N): Y # 051909APPFA
RAD Screen (Y/N): Y pH (Y/N): N
Turn Around Type: STD

Received by: TBV
Date Received: 05/20/09 Time: 10:00
Delivered by: FED EX
Shuttle Custody Seals (Y/N): Y
Chest Temp(s): 2.5°C
Color: A-MOIST
Samples Chilled until Placed in Refrig/Freezer: Y
Project Manager: Diane Anderson
QC Report Type: DVP3/ERPIMS/TX
Due Date: 06/01/09



Comments:

pdf ARF to Tammy & Pam; send 2 copies of report to Tammy.
Data screening project: analyze samples ONCE; report deficiencies; do NOT re-analyze! ✓
Case Narrative. CSSA + AFCEE 3.1 QAPP ✓
Report J values to MDL; standard RLs and control limits. Standard Lab QC. ✓

5-22 POP-d ARF

Sample Distribution:

VOA: 1-\$TCLPV

Charges:

Invoice To:

8000 Centre Park Drive Ste 200
Austin, TX 78754-5140
Attn: Ellen Felfe

Client ID APPL ID Sampled Analyses Requested

1. SVE-CARBON DFU NS/27 NS/22 (AX97010S 05/11/09 10:45 \$TCLPV

Initials _____ Date _____

APPL Sample Receipt Form

ARF# 58917

<u>Sample</u>	<u>Container Type</u>	<u>Count</u>	<u>pH</u>
AX97010	²¹ 8oz Jar	1	NA

<u>Sample</u>	<u>Container Type</u>	<u>Count</u>	<u>pH</u>
---------------	-----------------------	--------------	-----------

Camp Stanley Storage Activity Chain Of Custody

COC ID: 051909APPFA	Relinquish Date: 5/19/2009	Cooler ID: A
Project Location: CSSA	Relinquished By: JDB	LabCode: APPF
Job Number: 746545.02000	Relinquish Time: 5:00 PM	Carrier: FedEx
Creation Date: 5/19/2009	Collection Team: JDB_SE	Airbill Carrier: 869060387787
LOCID: SVE-Carbon	LOGDATE: 5/19/2009	MATRIX: ST
SBD: 0	LOGTIME: 10:45	SACODE: N
SED: 0	FLDSAMPID: SVE-Carbon_051109_N1045	SMCODE: G
Remarks:	ABLLOT:	ABLLOT:
	EBLOT:	EBLOT:
	Containers: 1	Containers: 1
	Analysis Required:	Analysis Required:
	BENZENE	BENZENE
	TETRACHLOROETHYLE	TETRACHLOROETHYLE
		DICHLOROETHYLENES
		TRICHLOROETHYLENE

Sampler(s): J. Bowlin
[Signature]

S. E. Hoff
[Signature]

TCLP - VOC
 TC
 5/20/09

Relinquished by: A. Lindby Date 5/19 Time 1:30
 Received by: _____ Date _____ Time _____

Relinquished by: _____ Date _____ Time _____
 Received by: _____ Date _____ Time _____

Relinquished by: _____ Date _____ Time _____
 Received by: _____ Date 5/20/09 Time 10:00

Camp Stanley Storage Activity Chain Of Custody

COC ID: 051909APPFA
 Project Location: CSSA
 Job Number: 746545.02000
 Creation Date: 5/19/2009
 Relinquish Date: 5/19/2009
 Relinquish By: JDB
 Relinquish Time: 5:00 PM
 Collection Team: JDB, SE
 Cooler ID: A
 LabCode: APPF
 Carrier: FedEx
 Airtail Carrier: 869060387787
 SBD: 0 LOGTIME: 10:45 SACODE: N SMCODE: G
 SED: 0 FLDSAMPID SVE-Carbon_051109_N1045
 Matrix: ST TBLLOT: ABLLOT: EBLLOT:

Sampler(s): J. Brown Sam E 11:04
 Analysis Required:
 BENZENE
 TETRACHLOROETHYLENE
 DICHLOROETHYLENES
 TRICHLOROETHYLENE

Changed to TAP VOCs per TC's email
 5-20-09 mp

Relinquished by: A. Lindby Date 5/19 Time 17:00
 Received by: _____ Date _____ Time _____

Relinquished by: _____ Date _____ Time _____
 Received by: _____ Date _____ Time _____

Relinquished by: _____ Date _____ Time _____
 Received by: _____ Date 5/20/09 Time 10:00

COOLER RECEIPT FORM

- 1) Project: 746545.02000 CSSA Date Received: 5/20/09
2) Coolers: Number of Coolers: 1
3) YES NO Were coolers and samples screened for radioactivity?
4) YES NO Were custody seals on outside of cooler? How many? 1 Date on seal? 5/11/09
5) Name on seal? See ARF 58914 CRF
6) YES NO NA Were custody seals unbroken and intact at the time of arrival?
7) YES NO Did the cooler come with a shipping slip (air bill, etc.)? Carrier name: Fed Ex
8) Shipping slip numbers: 1) 8690 6038 7787 2) 3)
9) YES NO NA Was the shipping slip scanned into the database?
10) YES NO NA If cooler belongs to APPL, has it been logged into the ice chest database?
11) Describe type of packing in cooler (bubble wrap, popcorn, type of ice, etc.): bubble wrap, in wet

- 12) YES NO NA For hand delivered samples was sufficient ice present to start the cooling process?
13) YES NO Was a temperature blank included in the cooler?
14) Serial number of certified NIST thermometer used: A39267 Correction factor: 0
15) Cooler temp(s): 1) 2.5 (2) 3) 4) 5) 6) 7) 8)

Chain of custody:

- 16) YES NO Was a chain of custody received?
17) YES NO Were the custody papers signed in the appropriate places?
18) YES NO Was the project identifiable from custody papers?
19) YES NO Did the chain of custody include date and time of sampling?
20) YES NO Is location where sample was taken listed on the chain of custody?

Sample Labels:

- 21) YES NO Were container labels in good condition?
22) YES NO Was the client ID on the label?
23) YES NO Was the date of sampling on the label?
24) YES NO Was the time of sampling on the label?
25) YES NO Did all container labels agree with custody papers?

Sample Containers:

- 26) YES NO Were all containers sealed in separate bags?
27) YES NO Did all containers arrive unbroken?
28) YES NO Was there any leakage from samples?
29) YES NO Were any of the lids cracked or broken?
30) YES NO Were correct containers used for the tests indicated?
31) YES NO Was a sufficient amount of sample sent for tests indicated?

- 32) YES NO NA Were bubbles present in volatile samples? If yes, the following were received with air bubbles:
Larger than a pea:
Smaller than a pea:

Preservation & Hold time:

- 33) YES NO NA Was a sufficient amount of holding time remaining to analyze the samples?
34) YES NO NA Do the sample containers contain the same preservative as what is stated on the COC?
35) YES NO NA Was the pH taken of all non-VOA preserved samples and written on the sample container?
36) YES NO NA Was the pH of acid preserved non-VOA samples < 2 & sodium hydroxide preserved samples > 10?
Lab notified if pH was not adequate:

Deficiencies:

Signature of personnel receiving samples: Yang Second reviewer:
Signature of project manager notified: Date and Time of notification:
Name of client notified: Date and Time of notification:
Information given to client:
by whom (Initials):

EPA METHOD 8260B

**TCLP
Volatile Organic Compounds
QC Summary**

APPL, INC.

Method Blank
TCLP Volatile 8260B

Blank Name/QCG: **090526S-97010 - 133120**
Batch ID: \$TCLPV-090526AN

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Sample Type	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
BLANK	1,1-Dichloroethene	Not detected	10.0	0.30	ug/L	5/25/2009	5/25/2009
BLANK	1,2-Dichloroethane	Not detected	10.0	0.14	ug/L	5/25/2009	5/25/2009
BLANK	1,4-Dichlorobenzene	Not detected	10.0	0.19	ug/L	5/25/2009	5/25/2009
BLANK	2-Butanone (MEK)	Not detected	10.0	0.60	ug/L	5/25/2009	5/25/2009
BLANK	Benzene	Not detected	10.0	0.16	ug/L	5/25/2009	5/25/2009
BLANK	Carbon tetrachloride	Not detected	10.0	0.10	ug/L	5/25/2009	5/25/2009
BLANK	Chlorobenzene	Not detected	10.0	0.21	ug/L	5/25/2009	5/25/2009
BLANK	Chloroform	Not detected	10.0	0.16	ug/L	5/25/2009	5/25/2009
BLANK	Tetrachloroethene	Not detected	10.0	0.15	ug/L	5/25/2009	5/25/2009
BLANK	Trichloroethene	Not detected	10.0	0.16	ug/L	5/25/2009	5/25/2009
BLANK	Vinyl chloride	Not detected	10.0	0.23	ug/L	5/25/2009	5/25/2009
BLANK	Surrogate: 1,2-Dichloroethane-d4 (S)	111	75-125		%	5/25/2009	5/25/2009
BLANK	Surrogate: 4-Bromofluorobenzene (S)	99.2	75-125		%	5/25/2009	5/25/2009
BLANK	Surrogate: Toluene-D8 (S)	94.7	75-125		%	5/25/2009	5/25/2009

Quant Method: N8260M.M
Run #: 0526N06
Instrument: Neo
Sequence: N090521
Initials: GM

GC SC-Blank-REG MDLs
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Method Blank
TCLP Volatile 8260B Dilution

Blank Name/QCG: **090527S-97010 - 133155**
Batch ID: \$TCLPV-090527AN

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Sample Type	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
BLANK	Tetrachloroethene	Not detected	10.0	0.15	ug/L	5/27/2009	5/27/2009
BLANK	Surrogate: 1,2-Dichloroethane-d4 (S)	110	75-125		%	5/27/2009	5/27/2009
BLANK	Surrogate: 4-Bromofluorobenzene (S)	97.4	75-125		%	5/27/2009	5/27/2009
BLANK	Surrogate: Toluene-D8 (S)	91.1	75-125		%	5/27/2009	5/27/2009

Quant Method: N8260M.M
Run #: 0527N06
Instrument: Neo
Sequence: N090521
Initials: GM

GC SC-Blank-REG MDLs
Printed: 6/3/2009 1:52:56 PM

Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 58917

Case No: 58917

Date Analyzed: 5/25/2009

Matrix: SOIL

Instrument: Neo

APPL ID.	Client Sample No.	Surrogate: 1,2-Dichloroethane-d4	Surrogate: 4-Bromofluorobenzene
090526AN-LCS	Lab Control Spike	104	101
090526AN-BLK	Blank	111	99.2
AX97010	SVE-CARBON	120	90.6

Comments: Batch: \$TCLPV-090526AN

Surrogate Recovery

Lab Name: APPL, Inc.

SDG No: 58917

Case No: 58917

Date Analyzed: 5/25/2009

Matrix: SOIL

Instrument: Neo

APPL ID.	Client Sample No.	Surrogate: Toluene-D8 (S)
090526AN-LCS	Lab Control Spike	102
090526AN-BLK	Blank	94.7
AX97010	SVE-CARBON	102

Comments: Batch: \$TCLPV-090526AN

Surrogate Recovery

Lab Name: APPL, Inc.
Case No: 58917
Matrix: SOIL

SDG No: 58917
Date Analyzed: 5/27/2009
Instrument: Neo

APPL ID.	Client Sample No.	Surrogate: 1,2-Dichloroethane-d4	Surrogate: 4-Bromofluorobenzene
090527AN-LCS	Lab Control Spike	117	99.5
090527AN-BLK	Blank	110	97.4
AX97010	SVE-CARBON	108	96.2

Comments: Batch: \$TCLPV-090527AN

Surrogate Recovery

Lab Name: APPL, Inc.
Case No: 58917
Matrix: SOIL

SDG No: 58917
Date Analyzed: 5/27/2009
Instrument: Neo

APPL ID.	Client Sample No.	Surrogate: Toluene-D8 (S)
090527AN-LCS	Lab Control Spike	91.6
090527AN-BLK	Blank	91.1
AX97010	SVE-CARBON	96.5

Comments: Batch: \$TCLPV-090527AN

Laboratory Control Spike Recovery

TCLP Volatile 8260B

APPL ID: 090525S-97010 LCS - 133120

Batch ID: \$TCLPV-090526AN

APPL Inc.

908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
1,1-Dichloroethene	10.00	9.28	92.8	75-125
1,2-Dichloroethane	10.00	9.38	93.8	75-125
1,4-Dichlorobenzene	10.00	9.57	95.7	75-125
2-Butanone (MEK)	10.00	8.82	88.2	75-125
Benzene	10.00	9.00	90.0	75-125
Carbon tetrachloride	10.00	10.0	100	75-125
Chlorobenzene	10.00	9.60	96.0	75-125
Chloroform	10.00	8.70	87.0	75-125
Tetrachloroethene	10.00	9.99	99.9	75-125
Trichloroethene	10.00	9.47	94.7	75-125
Vinyl chloride	10.00	8.10	81.0	75-125
<hr style="border-top: 1px dashed black;"/>				
Surrogate: 1,2-Dichloroethane-d4 (S)	19.3	20.1	104	75-125
Surrogate: 4-Bromofluorobenzene (S)	20.6	20.9	101	75-125
Surrogate: Toluene-D8 (S)	21.5	22.0	102	75-125

Comments: _____

<u>Primary</u>	<u>SPK</u>
Quant Method :	N8260M.M
Extraction Date :	5/25/2009
Analysis Date :	5/25/2009
Instrument :	Neo
Run :	0526N05
Initials :	GM

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APPL Standard LCS

Laboratory Control Spike Recovery

TCLP Volatile 8260B Dilution

APPL ID: 090527S-97010 LCS - 133155
 Batch ID: \$TCLPV-090527AN

APPL Inc.
 908 North Temperance Avenue
 Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
Tetrachloroethene	10.00	8.03	80.3	75-125
Surrogate: 1,2-Dichloroethane-d4 (S)	19.3	22.6	117	75-125
Surrogate: 4-Bromofluorobenzene (S)	20.6	20.5	99.5	75-125
Surrogate: Toluene-D8 (S)	21.5	19.7	91.6	75-125

Comments: _____

<u>Primary</u>	<u>SPK</u>
Quant Method :	N8260M.M
Extraction Date :	5/27/2009
Analysis Date :	5/27/2009
Instrument :	Neo
Run :	0527N05
Initials :	GM

Printed: 6/3/2009 1:53:12 PM

APPL Standard LCS

EPA 8260B/TC

Form 4

Blank Summary

Lab Name: APPL, Inc.

SDG No: 58917

Case No: 58917

Date Analyzed: 5/25/2009

Matrix: SOIL

Instrument: Neo

Blank ID: 090526AN-BLK

Time Analyzed: 2049

APPL ID.	Client Sample No.	File ID.	Date Analyzed
090526AN-LCS	Lab Control Spike	0526N05	5/25/2009 2014
090526AN-BLK	Blank	0526N06	5/25/2009 2049
AX97010	SVE-CARBON	0526N20	5/26/2009 0502

Comments: Batch: \$TCLPV-090526AN

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Form 4, Blank Summary

EPA 8260B/TC

Form 4

Blank Summary

Lab Name: APPL, Inc.

SDG No: 58917

Case No: 58917

Date Analyzed: 5/27/2009

Matrix: SOIL

Instrument: Neo

Blank ID: 090527AN-BLK

Time Analyzed: 1310

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
090527AN-LCS	Lab Control Spike	0527N05	5/27/2009 1235
090527AN-BLK	Blank	0527N06	5/27/2009 1310
AX97010	SVE-CARBON	0527N11	5/27/2009 1743

Comments: Batch: \$TCLPV-090527AN

Printed: 6/3/2009 1:42:22 PM
Form 4, Blank Summary

Form 5
Tune Summary

Lab Name: APPL Inc.

SDG No: 58917

Case No: 58917

Date Analyzed: 05/25/09

Matrix: Water

Instrument: Neo

ID: 20ug/L BFB Std 2-24-09K

Time Analyzed: 17:19

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	Lab Control Spike	090526A LCS-1WN (TCL	0526N05W.D	05/25/09 20:14
2	Blank	090526A BLK-1WN (TCL	0526N06W.D	05/25/09 20:49
3	SVE-CARBON	AX97010S01 (TCLP)	0526N20W.D	05/26/09 5:02
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e

50 15 - 40% of mass 95	<u>36.5</u>
75 30 - 60% of mass 95	<u>53.4</u>
95 100 - 100% of mass 95	<u>100.0</u>
96 5 - 9% of mass 95	<u>7.5</u>
173 0 - 2% of mass 174	<u>0.0</u>
174 50 - 100% of mass 95	<u>87.3</u>
175 5 - 9.4% of mass 174	<u>7.9</u>
176 95 - 101% of mass 174	<u>96.8</u>
177 5 - 9% of mass 176	<u>6.6</u>

Form 5
Tune Summary

Lab Name: APPL Inc.

SDG No: 58917

Case No: 58917

Date Analyzed: 5/27/2009

Matrix: Water

Instrument: Neo

ID: 20ug/L BFB Std 2-24-09K

Time Analyzed: 9:07

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	Lab Control Spike	090527A LCS-1WN(TCLP	0527N05W.D	5/27/2009 12:35
2	Blank	090527A BLK-1WN(TCLP	0527N06W.D	5/27/2009 13:10
3	SVE-CARBON	AX97010S01 DF10 (TCL	0527N11W.D	5/27/2009 17:43
4				
5				
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10				
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12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e

50 15 - 40% of mass 95	<u>30.8</u>
75 30 - 60% of mass 95	<u>52.1</u>
95 100 - 100% of mass 95	<u>100.0</u>
96 5 - 9% of mass 95	<u>6.6</u>
173 0 - 2% of mass 174	<u>0.0</u>
174 50 - 100% of mass 95	<u>97.4</u>
175 5 - 9.4% of mass 174	<u>7.9</u>
176 95 - 101% of mass 174	<u>96.1</u>
177 5 - 9% of mass 176	<u>6.7</u>

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: W9126G07D00280011
 Lab Code: _____ SDG No.: 58917
 Lab File ID (Standard): 0521N06W.D Date Analyzed: 05/21/09
 Instrument ID: Neo Time Analyzed: 8:00
 GC Column: _____ ID: Heated Purge: (Y/N) _____

	Fluorobenzene (IS)		Chlorobenzene-D5 (IS)		4-Dichlorobenzene-D (IS)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	174144	9.20	134656	14.22	75008	18.29
UPPER LIMIT	348288	9.70	269312	14.72	150016	18.79
LOWER LIMIT	87072	8.70	67328	13.72	37504	17.79
SAMPLE NO.						
01 090526A LCS-1WN (TCLP)	194688	9.19	155328	14.21	83208	18.28
02 090526A BLK-1WN (TCLP)	195264	9.20	159488	14.21	81224	18.28
03 AX97010S01 (TCLP)	178688	9.21	134400	14.22	53288	18.29
04 090527A LCS-1WN(TCLP)	204352	9.20	171584	14.21	85360	18.29
05 090527A BLK-1WN(TCLP)	193408	9.20	157760	14.22	79352	18.28
06 AX97010S01 DF10 (TCLP)	196352	9.21	157440	14.23	84544	18.29
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

AREA UPPER LIMIT = +100% of internal standard area.
 AREA LOWER LIMIT = -50% of internal standard area.
 RT UPPER LIMIT = +0.50 minutes of internal standard RT
 RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

EPA METHOD 8260B

**TCLP
Volatile Organic Compounds
Sample Data**

APPL, INC.

TCLP Volatile 8260B

Parsons Engineering Science, Inc.
8000 Centre Park Drive Ste 200
Austin, TX 78754

Attn: Tammy Chang

Project: 746545.02000 CSSA

Sample ID: SVE-CARBON

Sample Collection Date: 5/11/2009

APPL Inc.

908 North Temperance Avenue
Clovis, CA 93611

ARF: 58917

APPL ID: AX97010

QCG: \$TCLPV-090526AN-133120

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B/	1,1-Dichloroethene	Not detected	10.0	0.30	ug/L	5/26/2009	5/26/2009
EPA 8260B/	1,2-Dichloroethane	Not detected	10.0	0.14	ug/L	5/26/2009	5/26/2009
EPA 8260B/	1,4-Dichlorobenzene	Not detected	10.0	0.19	ug/L	5/26/2009	5/26/2009
EPA 8260B/	2-Butanone (MEK)	Not detected	10.0	0.60	ug/L	5/26/2009	5/26/2009
EPA 8260B/	Benzene	Not detected	10.0	0.16	ug/L	5/26/2009	5/26/2009
EPA 8260B/	Carbon tetrachloride	Not detected	10.0	0.10	ug/L	5/26/2009	5/26/2009
EPA 8260B/	Chlorobenzene	Not detected	10.0	0.21	ug/L	5/26/2009	5/26/2009
EPA 8260B/	Chloroform	Not detected	10.0	0.16	ug/L	5/26/2009	5/26/2009
EPA 8260B/	Tetrachloroethene	240 E	10.0	0.15	ug/L	5/26/2009	5/26/2009
EPA 8260B/	Trichloroethene	1.5 J	10.0	0.16	ug/L	5/26/2009	5/26/2009
EPA 8260B/	Vinyl chloride	Not detected	10.0	0.23	ug/L	5/26/2009	5/26/2009
EPA 8260B/	Surrogate: 1,2-Dichloroethane-d4 (S)	120	75-125		%	5/26/2009	5/26/2009
EPA 8260B/	Surrogate: 4-Bromofluorobenzene (S)	90.6	75-125		%	5/26/2009	5/26/2009
EPA 8260B/	Surrogate: Toluene-D8 (S)	102	75-125		%	5/26/2009	5/26/2009

J = Estimated value.

E = The reported value exceeds linear range.

Quant Method: N8260M.M
Run #: 0526N20
Instrument: Neo
Sequence: N090521
Dilution Factor: 1
Initials: GM

Printed: 6/3/2009 1:42:33 PM
APPL-F1-SC-MCRes/MCPQL-REG MDLs

TCLP Volatile 8260B Dilution

Parsons Engineering Science, Inc.
8000 Centre Park Drive Ste 200
Austin, TX 78754

Attn: Tammy Chang
Project: 746545.02000 CSSA

Sample ID: SVE-CARBON
Sample Collection Date: 5/11/2009

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

ARF: 58917
APPL ID: AX97010
QCG: \$TCLPV-090527AN-133155

Method	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
EPA 8260B/	Tetrachloroethene	210	100.0	1.50	ug/L	5/27/2009	5/27/2009
EPA 8260B/	Surrogate: 1,2-Dichloroethane-d4 (S)	108	75-125		%	5/27/2009	5/27/2009
EPA 8260B/	Surrogate: 4-Bromofluorobenzene (S)	96.2	75-125		%	5/27/2009	5/27/2009
EPA 8260B/	Surrogate: Toluene-D8 (S)	96.5	75-125		%	5/27/2009	5/27/2009

Quant Method: N8260M.M
Run #: 0527N11
Instrument: Neo
Sequence: N090521
Dilution Factor: 10
Initials: GM

Printed: 6/3/2009 1:53:24 PM

APPL-F1-SC-MCRes/MCPQL-REG MDLs

EPA METHOD 8260B

**TCLP
Volatile Organic Compounds
Calibration Data**

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc.
Case No: _____
Matrix: _____

SDG No: 58917
Initial Cal. Date: 5/21/2009
Instrument: Neo

Initials: _____

0521N02W.D 0521N03W.D 0521N04W.D 0521N05W.D 0521N06W.D 0521N07W.D 0521N08W.D 0521N09W.D

	Compound	0.3	0.5	1	5	10	40	100	200		Avg	%RSD		
1	I Fluorobenzene (IS)	ISTD												
2	TML Dichlorodifluoromethane	0.6053	0.4290	0.5430	0.3846	0.3934	0.4569	0.5035	0.5334		0.48	16	TML	0.999
3	TM** Chloromethane	1.223	1.172	1.167	1.079	0.9471	0.8592	0.9535	0.8926		1.0	14	TM**	
4	TM* Vinyl chloride	0.7085	0.5470	0.5143	0.5725	0.5474	0.4492	0.4413	0.3191		0.51	22	TM*	
5	TML Bromomethane	0.5687	0.4633	0.3878	0.3580	0.4813	0.6055	0.6527	0.7412		0.53	25	TML	0.996
6	TML Chloroethane	2.067	1.180	1.552	0.9048	0.8601	0.8369	0.7845	0.7514		1.1	42	TML	0.999
7	TM Trichlorofluoromethane	0.3527	0.2661	0.2888	0.2459	0.2375	0.2508	0.2623	0.2627		0.27	13	TM	
8	TM Freon-113		0.1274	0.1301	0.1084	0.1009	0.1032	0.1033	0.1029		0.11	11	TM	
9	TM* 1,1-DCE	1.206	1.140	1.241	0.9126	0.8408	0.8775	0.8659	0.8955		1.00	17	TM*	
10	TML Methylene chloride	3.330	2.512	1.825	1.358	1.161	1.187	1.315	1.421		1.8	44	TML	0.998
11	TMQ Methyl t-butyl ether (MtBE)	2.847	2.108	1.834	1.690	1.374	1.193	0.9850	0.8827		1.6	40	TMQ	0.999
12	TML Trans-1,2-DCE	0.8284	1.309	1.251	0.9928	0.9412	0.9443	0.9701	0.9754		1.0	16	TML	1.000
13	TM** 1,1-DCA	2.540	2.784	2.422	2.483	2.266	2.179	2.272	2.327		2.4	8.0	TM**	
14	TML MEK (2-Butanone)	0.9245	0.4578	0.4202	0.2392	0.2289	0.2189	0.2046	0.1947		0.36	69	TML	0.999
15	TML Cis-1,2-DCE	0.4361	0.3896	0.3399	0.3053	0.3011	0.2856	0.2883	0.3102		0.33	16	TML	0.999
16	TM* Chloroform	2.997	2.276	2.265	2.174	2.028	1.955	1.977	1.990		2.2	16	TM*	
17	S Dibromofluoromethane(S)			1.190	1.155	1.091	1.094	1.069	1.041		1.1	5.0	S	
18	TM 1,1,1-TCA	1.586	1.400	1.380	1.381	1.389	1.463	1.480	1.545		1.5	5.5	TM	
19	SL 1,2-DCA-D4(S)	1.469	2.244	1.248	1.123	1.038	0.9114				1.3	36	SL	0.998
20	TM Carbon Tetrachloride	0.7019	0.5091	0.6093	0.7241	0.7298	0.7476	0.6947	0.7151		0.68	12	TM	
21	TM 1,2-DCA		0.5391	0.4509	0.4846	0.4247	0.4317	0.4334	0.3852		0.45	11	TM	
22	TM Benzene	4.473	4.515	4.331	4.292	4.052	4.013	4.215	4.644		4.3	5.1	TM	
23	TM TCE	1.270	1.121	1.136	1.051	1.034	1.021	1.066	1.082		1.1	7.3	TM	
24	TM* 1,2-Dichloropropane	1.519	1.561	1.517	1.364	1.240	1.255	1.273	1.278		1.4	9.8	TM*	
25	TM Bromodichloromethane	1.676	1.298	1.358	1.446	1.333	1.309	1.244	1.224		1.4	11	TM	
26	TMQ Dibromomethane	0.8259	0.7473	0.6549	0.5773	0.4911	0.4389	0.3117	0.2252		0.53	39	TMQ	0.997
27	TML Cis-1,3-Dichloropropene	0.6800	0.6101	0.4897	0.5229	0.5010	0.4999	0.4463	0.4401		0.52	16	TML	0.999
28	TM* Toluene	4.412	4.073	4.087	3.904	3.764	3.904	4.012	4.357		4.1	5.5	TM*	
29	TM Trans-1,3-Dichloropropene	1.242	1.146	1.031	1.092	1.058	1.114	1.132	1.159		1.1	5.8	TM	
30	TM 1,1,2-TCA	0.9473	0.7585	0.7197	0.7252	0.6483	0.6807	0.6793	0.6708		0.73	13	TM	
31	I Chlorobenzene-D5 (IS)	ISTD												
32	S Toluene-D8(S)			3.747	3.762	3.928	3.931	3.984	4.045		3.9	3.1	S	
33	TM 1,2-EDB	1.255	1.054	0.9231	1.103	0.9584	0.9799	0.9287	0.8721		1.0	12	TM	
34	TM Tetrachloroethene	1.129	1.029	0.9908	1.071	1.051	1.052	1.095	1.176		1.1	5.4	TM	
35	TM 1,1,1,2-Tetrachloroethane	1.468	1.324	1.229	1.387	1.289	1.260	1.291	1.347		1.3	5.8	TM	

23

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. _____
Case No: _____
Matrix: _____

SDG No: 58917 _____
Initial Cal. Date: 5/21/2009 _____
Instrument: Neo _____

Initials: _____

		Compound	0.3	0.5	1	5	10	40	100	200			Avg	%RSD	
36	TM	m&p-Xylene	1.892	1.963	1.792	2.077	1.960	1.998	2.191	2.480			2.0	10	TM
37	TM	o-Xylene	2.095	1.995	1.792	1.948	1.974	1.929	2.132	2.369			2.0	8.5	TM
38	S	4-Bromofluorobenzene(S)			1.460	1.385	1.407	1.386	1.427	1.446			1.4	2.2	S
39	TM	Dibromochloromethane	1.300	1.266	1.270	1.385	1.309	1.287	1.262	1.287			1.3	3.1	TM
40	TM**	Chlorobenzene	3.409	3.498	3.027	3.351	3.230	3.263	3.422	3.588			3.3	5.2	TM**
41	TM*	Ethylbenzene	5.618	5.902	4.995	5.756	5.405	5.442	5.781	6.355			5.7	7.1	TM*
42	TM**	Bromoform	0.9736	0.8700	0.8048	0.9093	0.8499	0.8625	0.8605	0.8879			0.88	5.6	TM**
43	I	1,4-Dichlorobenzene-D (IS)	ISTD												
44	TM**	1,1,2,2-Tetrachloroethane	2.693	2.456	2.230	2.384	1.990	1.920	1.950	1.836			2.2	14	TM**
45	TM	Bromobenzene	3.085	2.974	2.612	2.979	2.559	2.488	2.740	2.708			2.8	7.9	TM
46	TM	1,3-DCB	4.757	4.601	4.716	4.983	4.571	4.527	4.865	5.064			4.8	4.1	TM
47	TM	1,4-DCB	5.205	4.705	4.483	4.965	4.537	4.467	4.862	4.921			4.8	5.6	TM
48	TM	1,2-DCB	4.371	4.234	4.116	4.677	4.107	4.075	4.336	4.399			4.3	4.7	TM
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32

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No: _____
Matrix: _____

SDG No: 58917
Date Analyzed: 5/21/2009
Instrument: Neo
Initial Cal. Date: 5/21/2009
Data File: 0521N13W.D

		Compound	MEAN	CCRF	%D	%Drift	
1	I	Fluorobenzene (IS)	ISTD			I	
2	TML	Dichlorodifluoromethane	0.4811	0.4851	0.83	TML	8.9
3	TM**	Chloromethane	1.037	0.9376	9.6	TM**	
4	TM*	Vinyl chloride	0.5124	0.6093	19	TM*	
5	TML	Bromomethane	0.5323	0.6331	19	TML	15
6	TML	Chloroethane	1.117	0.7862	30	TML	11
7	TM	Trichlorofluoromethane	0.2709	0.2950	8.9	TM	
8	TM	Freon-113	0.1109	0.1317	19	TM	
9	TM*	1,1-DCE	0.9973	0.9962	0.10	TM*	
10	TML	Methylene chloride	1.764	1.132	36	TML	5.1
11	TMQ	Methyl t-butyl ether (MtBE)	1.614	1.076	33	TMQ	18
12	TML	Trans-1,2-DCE	1.027	1.041	1.4	TML	8.5
13	TM**	1,1-DCA	2.409	2.391	0.76	TM**	
14	TML	MEK (2-Butanone)	0.3611	0.2469	32	TML	7.1
15	TML	Cis-1,2-DCE	0.3320	0.3055	8.0	TML	7.7
16	TM*	Chloroform	2.208	2.042	7.5	TM*	
17	S	Dibromofluoromethane(S)	1.107	1.199	8.3	S	
18	TM	1,1,1-TCA	1.453	1.472	1.3	TM	
19	SL	1,2-DCA-D4(S)	1.339	0.8767	35	SL	11
20	TM	Carbon Tetrachloride	0.6789	0.7648	13	TM	
21	TM	1,2-DCA	0.4499	0.3611	20	TM	
22	TM	Benzene	4.317	4.196	2.8	TM	
23	TM	TCE	1.098	1.098	0.07	TM	
24	TM*	1,2-Dichloropropane	1.376	1.290	6.2	TM*	
25	TM	Bromodichloromethane	1.361	1.352	0.63	TM	
26	TMQ	Dibromomethane	0.5340	0.3986	25	TMQ	17
27	TML	Cis-1,3-Dichloropropene	0.5238	0.3939	25	TML	11
28	TM*	Toluene	4.064	3.906	3.9	TM*	
29	TM	Trans-1,3-Dichloropropene	1.122	0.9375	16	TM	
30	TM	1,1,2-TCA	0.7287	0.7168	1.6	TM	
31	I	Chlorobenzene-D5 (IS)	ISTD			I	
32	S	Toluene-D8(S)	3.900	3.595	7.8	S	
33	TM	1,2-EDB	1.009	0.9160	9.2	TM	
34	TM	Tetrachloroethene	1.074	1.075	0.09	TM	
35	TM	1,1,1,2-Tetrachloroethane	1.324	1.223	7.6	TM	
36	TM	m&p-Xylene	2.044	1.912	6.5	TM	
37	TM	o-Xylene	2.029	1.917	5.5	TM	
38	S	4-Bromofluorobenzene(S)	1.418	1.410	0.58	S	
39	TM	Dibromochloromethane	1.296	1.221	5.8	TM	
40	TM**	Chlorobenzene	3.349	3.179	5.1	TM**	

Average

11.4

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No: _____
Matrix: 0

SDG No: 58917
Date Analyzed: 5/21/2009
Instrument: Neo
Cal. Date: 5/21/2009
Data File: 0521N13W.D

		Compound	MEAN	CCRF	%D	%Drift
41	TM*	Ethylbenzene	5.657	5.265	6.9	TM*
42	TM**	Bromoform	0.8773	0.8197	6.6	TM**
43	I	1,4-Dichlorobenzene-D (IS)	ISTD			I
44	TM**	1,1,2,2-Tetrachloroethane	2.182	1.872	14	TM**
45	TM	Bromobenzene	2.768	2.560	7.5	TM
46	TM	1,3-DCB	4.760	4.481	5.9	TM
47	TM	1,4-DCB	4.768	4.499	5.7	TM
48	TM	1,2-DCB	4.289	3.949	7.9	TM
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80		Average			7.8	

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No: _____
Matrix: _____

SDG No: 58917
Date Analyzed: 5/25/2009
Instrument: Neo
Initial Cal. Date: 5/21/2009
Data File: 0526N02W.D

		Compound	MEAN	CCRF	%D	%Drift	
1	I	Fluorobenzene (IS)	ISTD			I	
2	TML	Dichlorodifluoromethane	0.4811	0.5228	8.7	TML	16
3	TM**	Chloromethane	1.037	0.9485	8.5	TM**	
4	TM*	Vinyl chloride	0.5124	0.5393	5.3	TM*	
5	TML	Bromomethane	0.5323	0.3594	32	TML	23
6	TML	Chloroethane	1.117	0.8374	25	TML	4.7
7	TM	Trichlorofluoromethane	0.2709	0.3000	11	TM	
8	TM	Freon-113	0.1109	0.1528	38	TM	
9	TM*	1,1-DCE	0.9973	0.9716	2.6	TM*	
10	TML	Methylene chloride	1.764	1.206	32	TML	0.17
11	TMQ	Methyl t-butyl ether (MtBE)	1.614	0.9319	42	TMQ	32
12	TML	Trans-1,2-DCE	1.027	1.013	1.3	TML	5.6
13	TM**	1,1-DCA	2.409	2.268	5.8	TM**	
14	TML	MEK (2-Butanone)	0.3611	0.2165	40	TML	8.5
15	TML	Cis-1,2-DCE	0.3320	0.3379	1.8	TML	18
16	TM*	Chloroform	2.208	2.066	6.4	TM*	
17	S	Dibromofluoromethane(S)	1.107	1.199	8.3	S	
18	TM	1,1,1-TCA	1.453	1.477	1.7	TM	
19	SL	1,2-DCA-D4(S)	1.339	1.116	17	SL	15
20	TM	Carbon Tetrachloride	0.6789	0.7712	14	TM	
21	TM	1,2-DCA	0.4499	0.4304	4.4	TM	
22	TM	Benzene	4.317	4.073	5.6	TM	
23	TM	TCE	1.098	1.049	4.4	TM	
24	TM*	1,2-Dichloropropane	1.376	1.261	8.4	TM*	
25	TM	Bromodichloromethane	1.361	1.400	2.9	TM	
26	TMQ	Dibromomethane	0.5340	0.4356	18	TMQ	8.0
27	TML	Cis-1,3-Dichloropropene	0.5238	0.4868	7.1	TML	9.8
28	TM*	Toluene	4.064	3.819	6.0	TM*	
29	TM	Trans-1,3-Dichloropropene	1.122	1.029	8.3	TM	
30	TM	1,1,2-TCA	0.7287	0.6850	6.0	TM	
31	I	Chlorobenzene-D5 (IS)	ISTD			I	
32	S	Toluene-D8(S)	3.900	3.747	3.9	S	
33	TM	1,2-EDB	1.009	0.9234	8.5	TM	
34	TM	Tetrachloroethene	1.074	0.9823	8.6	TM	
35	TM	1,1,1,2-Tetrachloroethane	1.324	1.180	11	TM	
36	TM	m&p-Xylene	2.044	1.877	8.2	TM	
37	TM	o-Xylene	2.029	1.752	14	TM	
38	S	4-Bromofluorobenzene(S)	1.418	1.405	0.96	S	
39	TM	Dibromochloromethane	1.296	1.164	10	TM	
40	TM**	Chlorobenzene	3.349	3.038	9.3	TM**	

Average

11.8

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No: _____
Matrix: 0

SDG No: 58917
Date Analyzed: 5/25/2009
Instrument: Neo
Cal. Date: 5/21/2009
Data File: 0526N02W.D

		Compound	MEAN	CCRF	%D	%Drift
41	TM*	Ethylbenzene	5.657	5.043	11	TM*
42	TM**	Bromoform	0.8773	0.7974	9.1	TM**
43	I	1,4-Dichlorobenzene-D (IS)	ISTD			I
44	TM**	1,1,2,2-Tetrachloroethane	2.182	1.996	8.5	TM**
45	TM	Bromobenzene	2.768	2.460	11	TM
46	TM	1,3-DCB	4.760	4.273	10	TM
47	TM	1,4-DCB	4.768	4.434	7.0	TM
48	TM	1,2-DCB	4.289	3.779	12	TM
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80		Average			9.8	

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No: _____
Matrix: _____

SDG No: 58917
Date Analyzed: 5/27/2009
Instrument: Neo
Initial Cal. Date: 5/21/2009
Data File: 0527N01W.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Fluorobenzene (IS)	ISTD			I
2	TML	Dichlorodifluoromethane	0.4811	0.3909	19	TML 8.8
3	TM**	Chloromethane	1.037	0.7813	25	TM**
4	TM*	Vinyl chloride	0.5124	0.4232	17	TM*
5	TML	Bromomethane	0.5323	0.3087	42	TML 30 NT
6	TML	Chloroethane	1.117	0.8509	24	TML 2.9
7	TM	Trichlorofluoromethane	0.2709	0.2611	3.6	TM
8	TM	Freon-113	0.1109	0.1126	1.6	TM
9	TM*	1,1-DCE	0.9973	0.9129	8.5	TM*
10	TML	Methylene chloride	1.764	1.063	40	TML 10
11	TMQ	Methyl t-butyl ether (MtBE)	1.614	0.2547	84	TMQ 93 NT
12	TML	Trans-1,2-DCE	1.027	0.9153	11	TML 4.4
13	TM**	1,1-DCA	2.409	2.117	12	TM**
14	TML	MEK (2-Butanone)	0.3611	0.1834	49	TML 25
15	TML	Cis-1,2-DCE	0.3320	0.2878	13	TML 2.0
16	TM*	Chloroform	2.208	1.917	13	TM*
17	S	Dibromofluoromethane(S)	1.107	1.218	10	S
18	TM	1,1,1-TCA	1.453	1.292	11	TM
19	SL	1,2-DCA-D4(S)	1.339	1.115	17	SL 15
20	TM	Carbon Tetrachloride	0.6789	0.6564	3.3	TM
21	TM	1,2-DCA	0.4499	0.3734	17	TM
22	TM	Benzene	4.317	3.912	9.4	TM
23	TM	TCE	1.098	0.9844	10	TM
24	TM*	1,2-Dichloropropane	1.376	1.181	14	TM*
25	TM	Bromodichloromethane	1.361	1.214	11	TM
26	TMQ	Dibromomethane	0.5340	0.4154	22	TMQ 13
27	TML	Cis-1,3-Dichloropropene	0.5238	0.3383	35	TML 24 NT
28	TM*	Toluene	4.064	3.653	10	TM*
29	TM	Trans-1,3-Dichloropropene	1.122	0.6552	42	TM
30	TM	1,1,2-TCA	0.7287	0.5636	23	TM
31	I	Chlorobenzene-D5 (IS)	ISTD			I
32	S	Toluene-D8(S)	3.900	4.247	8.9	S
33	TM	1,2-EDB	1.009	0.8372	17	TM
34	TM	Tetrachloroethene	1.074	1.235	15	TM
35	TM	1,1,1,2-Tetrachloroethane	1.324	1.156	13	TM
36	TM	m&p-Xylene	2.044	1.898	7.2	TM
37	TM	o-Xylene	2.029	1.830	9.8	TM
38	S	4-Bromofluorobenzene(S)	1.418	1.542	8.7	S
39	TM	Dibromochloromethane	1.296	1.071	17	TM
40	TM**	Chlorobenzene	3.349	3.164	5.5	TM**

Average

18.4

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No: _____
Matrix: 0

SDG No: 58917
Date Analyzed: 5/27/2009
Instrument: Neo
Cal. Date: 5/21/2009
Data File: 0527N01W.D

		Compound	MEAN	CCRF	%D	%Drift
41	TM*	Ethylbenzene	5.657	5.152	8.9	TM*
42	TM**	Bromoform	0.8773	0.7469	15	TM**
43	I	1,4-Dichlorobenzene-D (IS)	ISTD			I
44	TM**	1,1,2,2-Tetrachloroethane	2.182	1.562	28	TM**
45	TM	Bromobenzene	2.768	2.379	14	TM
46	TM	1,3-DCB	4.760	4.075	14	TM
47	TM	1,4-DCB	4.768	4.014	16	TM
48	TM	1,2-DCB	4.289	3.403	21	TM
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80		Average			16.7	

EPA METHOD 8260B

**TCLP
Volatile Organic Compounds
Raw Data**

Method Blank
TCLP Volatile 8260B

Blank Name/QCG: 090526S-97010 - 133120
Batch ID: \$TCLPV-090526AN

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Sample Type	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
BLANK	1,1-Dichloroethene	Not detected	10.0	0.30	ug/L	5/25/2009	5/25/2009
BLANK	1,2-Dichloroethane	Not detected	10.0	0.14	ug/L	5/25/2009	5/25/2009
BLANK	1,4-Dichlorobenzene	Not detected	10.0	0.19	ug/L	5/25/2009	5/25/2009
BLANK	2-Butanone (MEK)	Not detected	10.0	0.60	ug/L	5/25/2009	5/25/2009
BLANK	Benzene	Not detected	10.0	0.16	ug/L	5/25/2009	5/25/2009
BLANK	Carbon tetrachloride	Not detected	10.0	0.10	ug/L	5/25/2009	5/25/2009
BLANK	Chlorobenzene	Not detected	10.0	0.21	ug/L	5/25/2009	5/25/2009
BLANK	Chloroform	Not detected	10.0	0.16	ug/L	5/25/2009	5/25/2009
BLANK	Tetrachloroethene	Not detected	10.0	0.15	ug/L	5/25/2009	5/25/2009
BLANK	Trichloroethene	Not detected	10.0	0.16	ug/L	5/25/2009	5/25/2009
BLANK	Vinyl chloride	Not detected	10.0	0.23	ug/L	5/25/2009	5/25/2009
BLANK	Surrogate: 1,2-Dichloroethane-d4 (S)	111	75-125		%	5/25/2009	5/25/2009
BLANK	Surrogate: 4-Bromofluorobenzene (S)	99.2	75-125		%	5/25/2009	5/25/2009
BLANK	Surrogate: Toluene-D8 (S)	94.7	75-125		%	5/25/2009	5/25/2009

Quant Method: N8260M.M
Run #: 0526N06
Instrument: Neo
Sequence: N090521
Initials: GM

GC SC-Blank-REG MDLs
Printed: 6/3/2009 1:41:42 PM

Method Blank
TCLP Volatile 8260B Dilution

Blank Name/QCG: **090527S-97010 - 133155**
Batch ID: \$TCLPV-090527AN

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Sample Type	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
BLANK	Tetrachloroethene	Not detected	10.0	0.15	ug/L	5/27/2009	5/27/2009
BLANK	Surrogate: 1,2-Dichloroethane-d4 (S)	110	75-125		%	5/27/2009	5/27/2009
BLANK	Surrogate: 4-Bromofluorobenzene (S)	97.4	75-125		%	5/27/2009	5/27/2009
BLANK	Surrogate: Toluene-D8 (S)	91.1	75-125		%	5/27/2009	5/27/2009

Quant Method: N8260M.M
Run #: 0527N06
Instrument: Neo
Sequence: N090521
Initials: GM

GC SC-Blank-REG MDLs
Printed: 6/3/2009 1:53:31 PM

Laboratory Control Spike Recovery
TCLP Volatile 8260B

APPL ID: 090525S-97010 LCS - 133120
 Batch ID: \$TCLPV-090526AN

APPL Inc.
 908 North Temperance Avenue
 Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
1,1-Dichloroethene	10.00	9.28	92.8	75-125
1,2-Dichloroethane	10.00	9.38	93.8	75-125
1,4-Dichlorobenzene	10.00	9.57	95.7	75-125
2-Butanone (MEK)	10.00	8.82	88.2	75-125
Benzene	10.00	9.00	90.0	75-125
Carbon tetrachloride	10.00	10.0	100	75-125
Chlorobenzene	10.00	9.60	96.0	75-125
Chloroform	10.00	8.70	87.0	75-125
Tetrachloroethene	10.00	9.99	99.9	75-125
Trichloroethene	10.00	9.47	94.7	75-125
Vinyl chloride	10.00	8.10	81.0	75-125

Surrogate: 1,2-Dichloroethane-d4 (S)	19.3	20.1	104	75-125
Surrogate: 4-Bromofluorobenzene (S)	20.6	20.9	101	75-125
Surrogate: Toluene-D8 (S)	21.5	22.0	102	75-125

Comments:

<u>Primary</u>	<u>SPK</u>
Quant Method :	N8260M.M
Extraction Date :	5/25/2009
Analysis Date :	5/25/2009
Instrument :	Neo
Run :	0526N05
Initials :	GM

Printed: 6/3/2009 1:42:06 PM

APPL Standard LCS

Laboratory Control Spike Recovery

TCLP Volatile 8260B Dilution

APPL ID: 090527S-97010 LCS - 133155
 Batch ID: \$TCLPV-090527AN

APPL Inc.
 908 North Temperance Avenue
 Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
Tetrachloroethene	10.00	8.03	80.3	75-125
Surrogate: 1,2-Dichloroethane-d4 (S)	19.3	22.6	117	75-125
Surrogate: 4-Bromofluorobenzene (S)	20.6	20.5	99.5	75-125
Surrogate: Toluene-D8 (S)	21.5	19.7	91.6	75-125

Comments: _____

<u>Primary</u>	<u>SPK</u>
Quant Method :	N8260M.M
Extraction Date :	5/27/2009
Analysis Date :	5/27/2009
Instrument :	Neo
Run :	0527N05
Initials :	GM

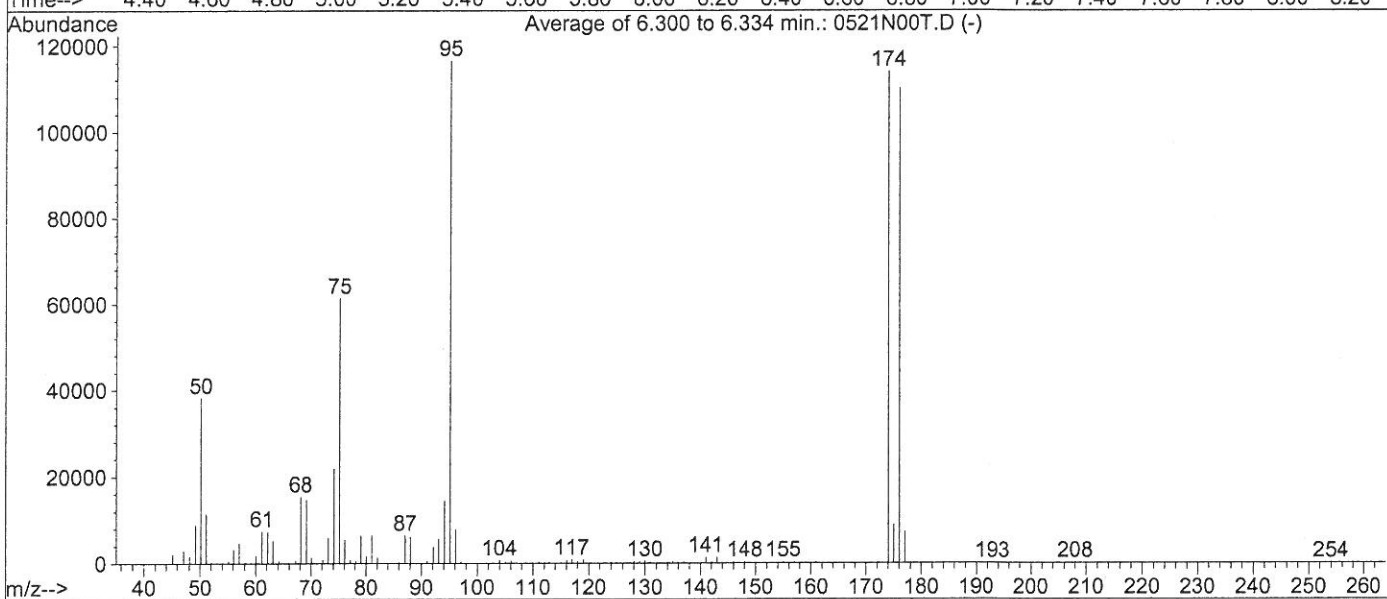
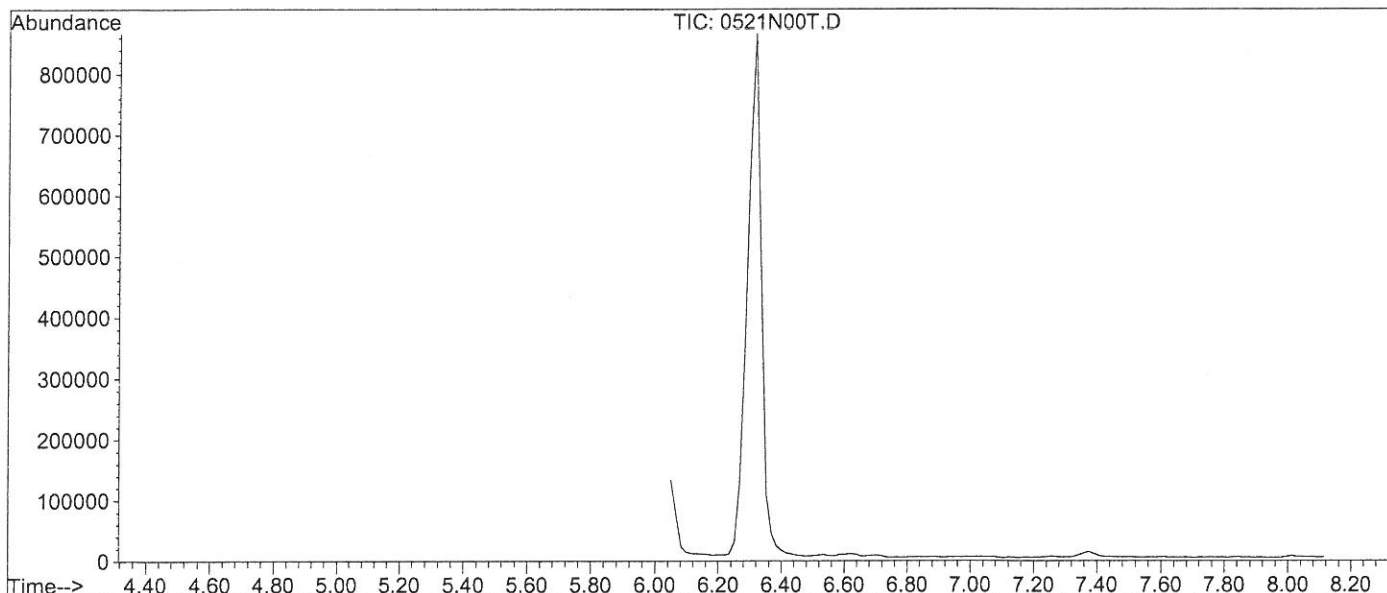
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APPL Standard LCS

Data File : M:\NEO\DATA\N090521\0521N00T.D
 Acq On : 21 May 09 4:27
 Sample : 20ug/L BFB Std 2-24-09K
 Misc : 2ul

Vial: 1
 Operator: NR
 Inst : Neo
 Multiplr: 1.00

Method : M:\NEO\DATA\N090521\N8260M.M (RTE Integrator)
 Title : METHOD 8260B



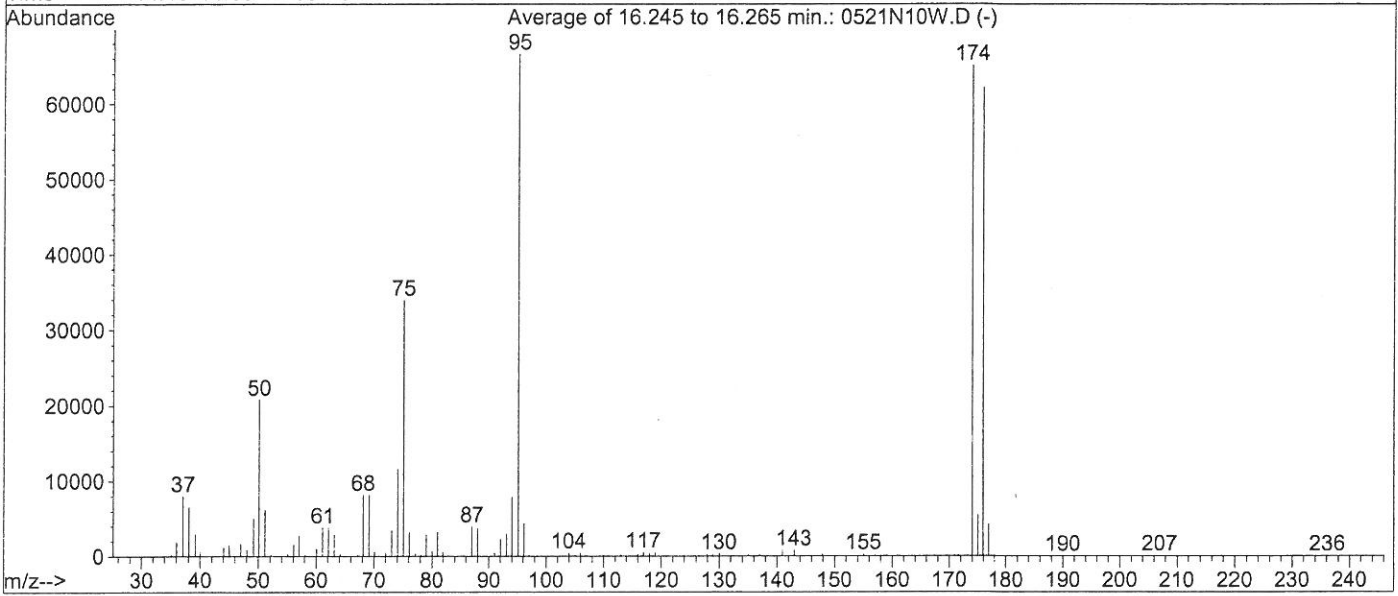
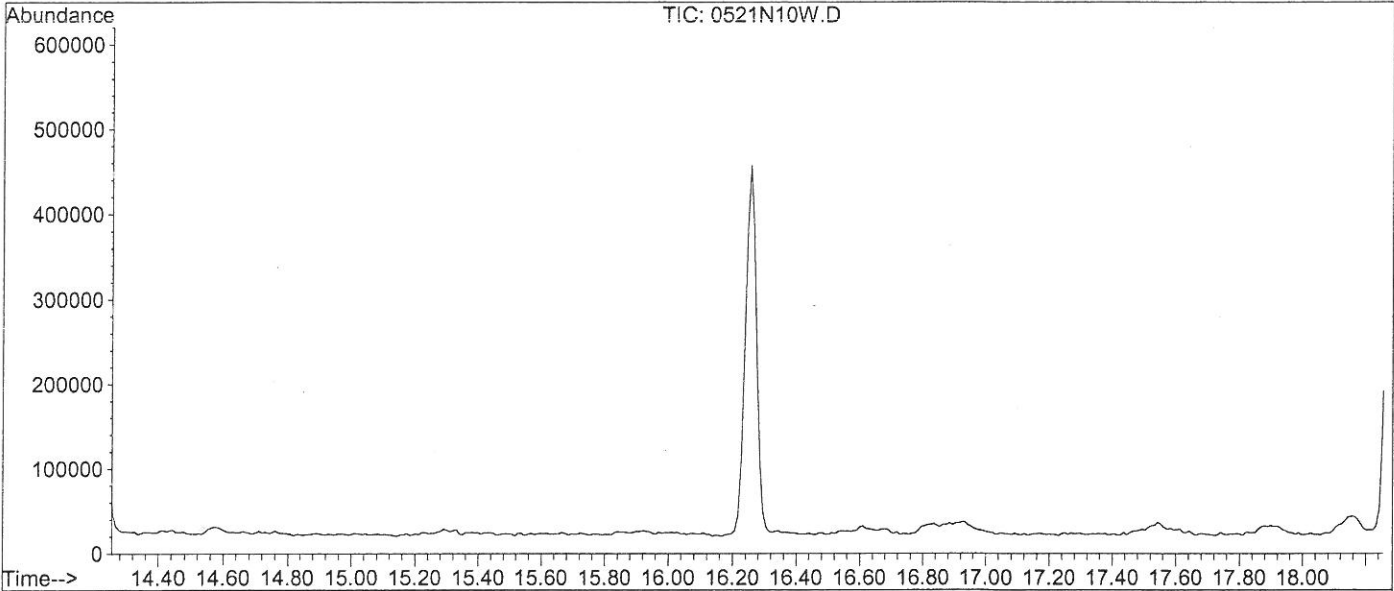
Spectrum Information: Average of 6.300 to 6.334 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	32.8	38169	PASS
75	95	30	60	52.7	61371	PASS
95	95	100	100	100.0	116531	PASS
96	95	5	9	6.7	7817	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	97.8	113984	PASS
175	174	5	9	7.7	8734	PASS
176	174	95	101	96.6	110109	PASS
177	176	5	9	6.6	7294	PASS

Data File : M:\NEO\DATA\N090521\0521N10W.D
 Acq On : 21 May 09 10:21
 Sample : 20ug/L BFB Std 2-24-09K
 Misc : 2ul

Vial: 1
 Operator: NR
 Inst : Neo
 Multiplr: 1.00

Method : M:\NEO\DATA\N090521\N8260M.M (RTE Integrator)
 Title : METHOD 8260B



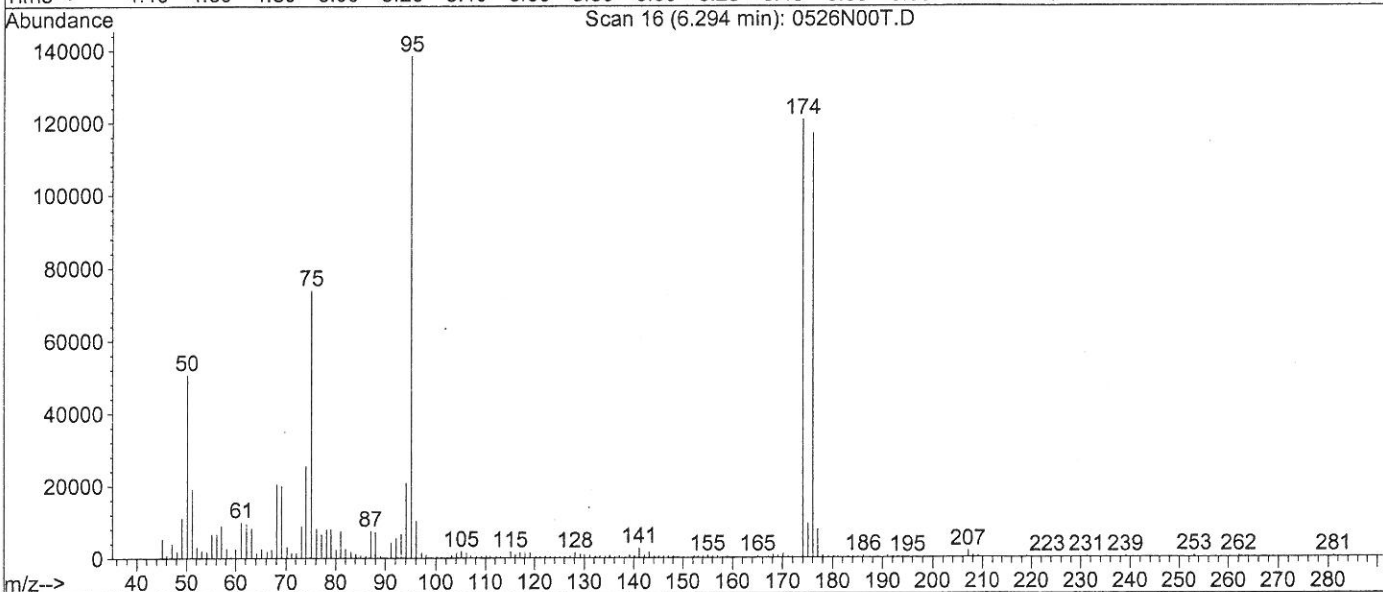
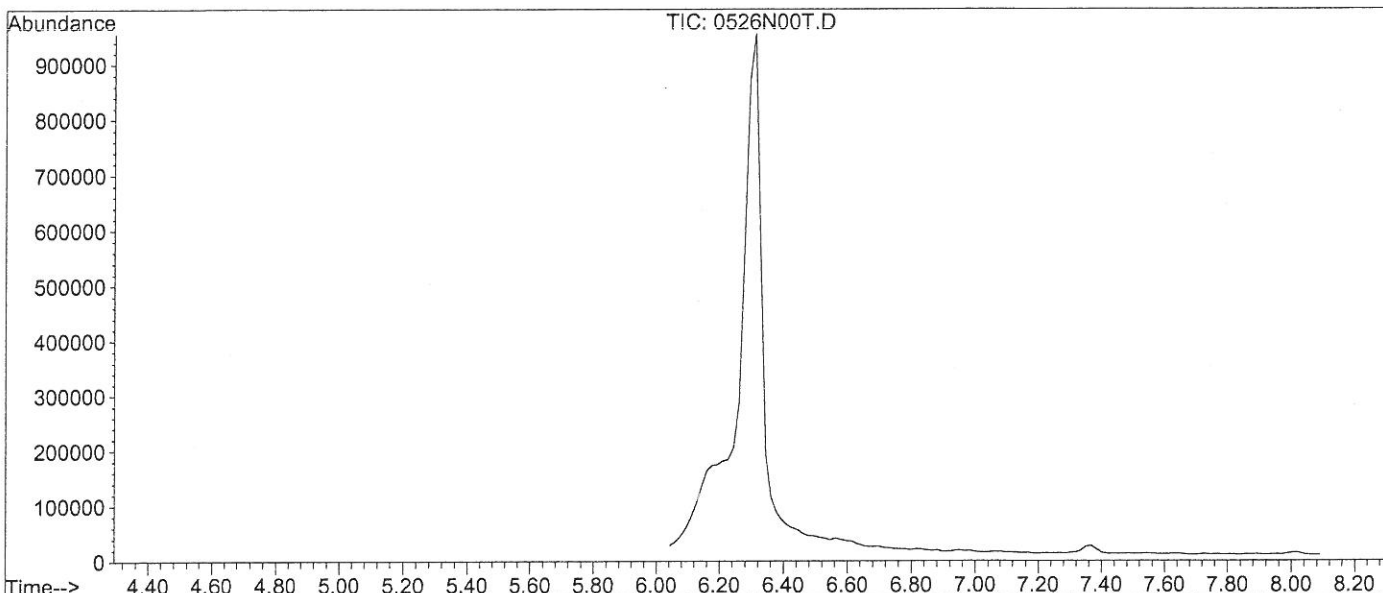
Spectrum Information: Average of 16.245 to 16.265 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	31.2	20755	PASS
75	95	30	60	50.9	33883	PASS
95	95	100	100	100.0	66563	PASS
96	95	5	9	6.6	4366	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	97.8	65091	PASS
175	174	5	9	8.3	5424	PASS
176	174	95	101	95.5	62144	PASS
177	176	5	9	6.8	4204	PASS

Data File : M:\NEO\DATA\N090521\0526N00T.D
 Acq On : 25 May 09 17:19
 Sample : 20ug/L BFB Std 2-24-09K
 Misc : 2ul

Vial: 1
 Operator: NR
 Inst : Neo
 Multiplr: 1.00

Method : M:\NEO\DATA\N090521\N8260M.M (RTE Integrator)
 Title : METHOD 8260B



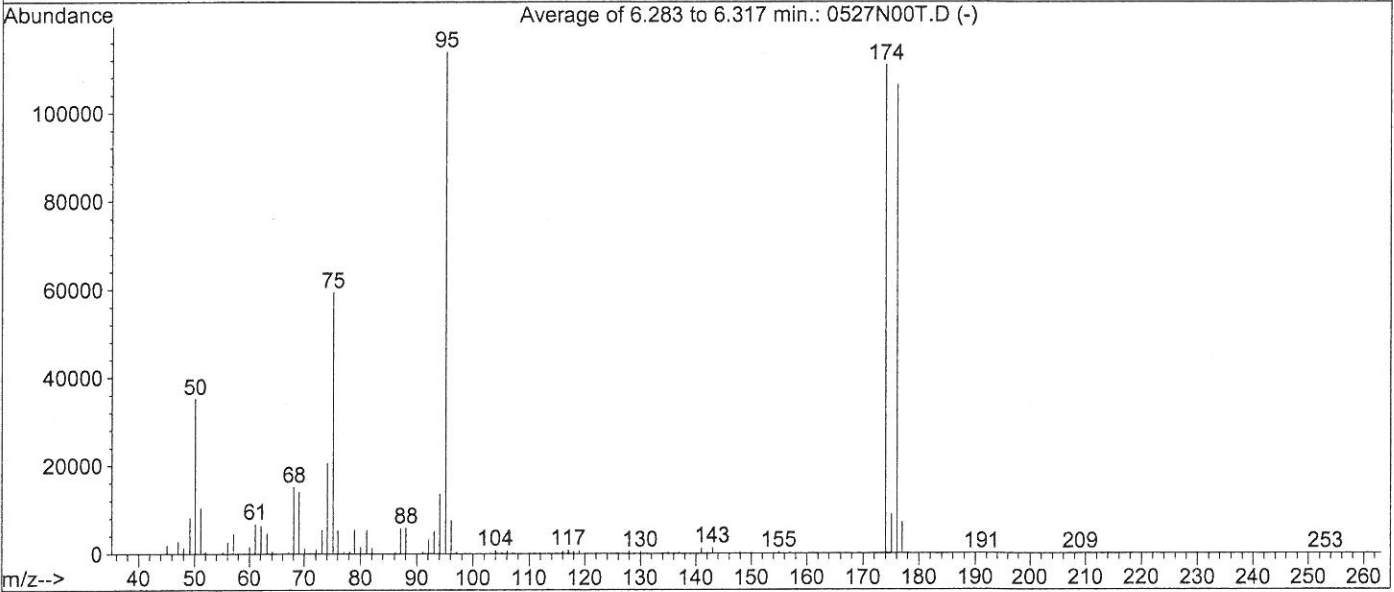
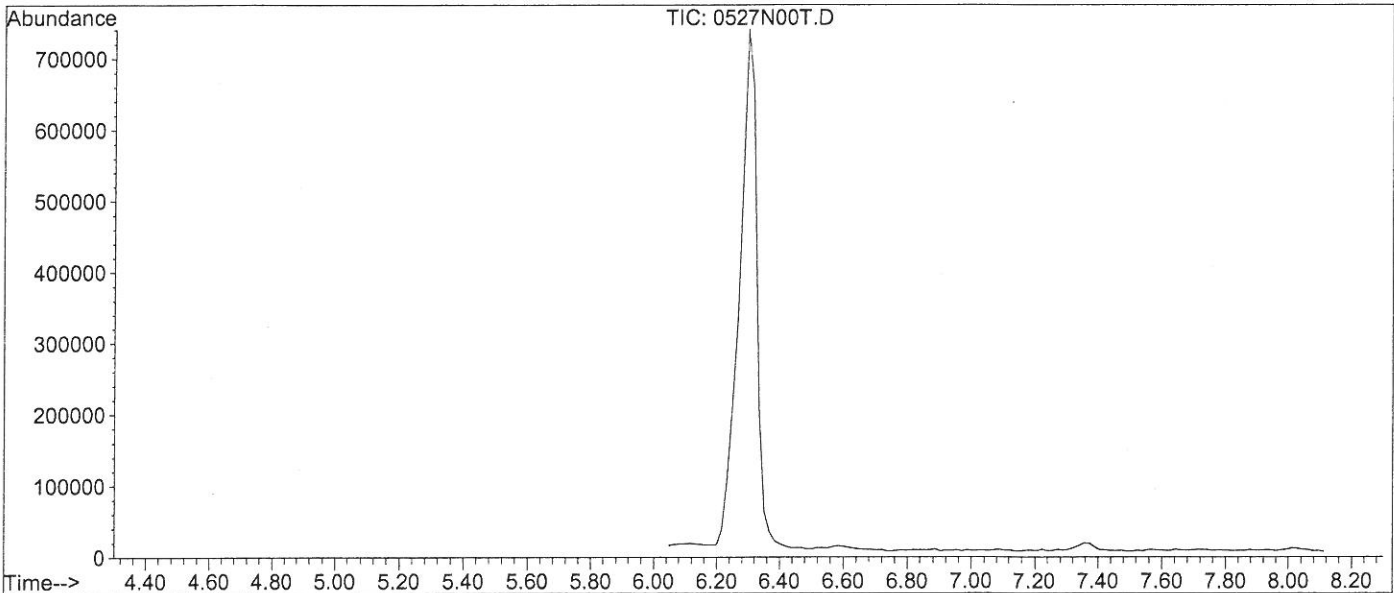
Spectrum Information: Scan 16

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	36.5	50592	PASS
75	95	30	60	53.4	73856	PASS
95	95	100	100	100.0	138432	PASS
96	95	5	9	7.5	10332	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	87.3	120848	PASS
175	174	5	9	7.9	9495	PASS
176	174	95	101	96.8	116936	PASS
177	176	5	9	6.6	7762	PASS

Data File : M:\NEO\DATA\N090521\0527N00T.D
 Acq On : 27 May 09 9:07
 Sample : 20ug/L BFB Std 2-24-09K
 Misc : 2ul

Vial: 1
 Operator: NR
 Inst : Neo
 Multiplr: 1.00

Method : M:\NEO\DATA\N090521\N8260M.M (RTE Integrator)
 Title : METHOD 8260B



Spectrum Information: Average of 6.283 to 6.317 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	30.8	35155	PASS
75	95	30	60	52.1	59366	PASS
95	95	100	100	100.0	113968	PASS
96	95	5	9	6.6	7467	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	97.4	110955	PASS
175	174	5	9	7.9	8785	PASS
176	174	95	101	96.1	106629	PASS
177	176	5	9	6.7	7103	PASS

Injection Log

Directory: M:\NEO\DATA\N090521\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0521N00T.D	1	20ug/L BFB Std 2-24-09K	2ul	21 May 09 4:27
2	1	0521N02W.D	1	Vol Std 05-21-09N@0.3ug/L	Water 10mL w/IS:5-09F	21 May 09 5:38
3	1	0521N03W.D	1	Vol Std 05-21-09O@0.5ug/L	Water 10mL w/IS:5-09F	21 May 09 6:14
4	1	0521N04W.D	1	Vol Std 05-21-09P@1.0ug/L	Water 10mL w/IS:5-09F	21 May 09 6:50
5	1	0521N05W.D	1	Vol Std 05-21-09Q@5.0ug/L	Water 10mL w/IS:5-09F	21 May 09 7:25
6	1	0521N06W.D	1	Vol Std 05-21-09R@10ug/L	Water 10mL w/IS:5-09F	21 May 09 8:00
7	1	0521N07W.D	1	Vol Std 05-21-09S@40ug/L	Water 10mL w/IS:5-09F	21 May 09 8:36
8	1	0521N08W.D	1	Vol Std 05-21-09T@100ug/L	Water 10mL w/IS:5-09F	21 May 09 9:11
9	1	0521N09W.D	1	Vol Std 05-21-09U@200ug/L	Water 10mL w/IS:5-09F	21 May 09 9:46
10	1	0521N10W.D	1	20ug/L BFB Std 2-24-09K	2ul	21 May 09 10:21
11	1	0521N13W.D	1	090521A LCS-1WN (SS)	Water 10mL w/IS&S:5-09F&G	21 May 09 12:06
12	1	0526N00T.D	1	20ug/L BFB Std 2-24-09K	2ul	25 May 09 17:19
13	1	0526N02W.D	1	090526A LCS-1WN	Water 10mL w/IS&S:5-09F&G	25 May 09 18:27
14	1	0526N05W.D	1	090526A LCS-1WN (TCLP)	Water 10mL w/IS&S:5-09F&G	25 May 09 20:14
15	1	0526N06W.D	1	090526A BLK-1WN (TCLP)	Water 10mL w/IS&S:5-09F&G	25 May 09 20:49
16	1	0526N20W.D	1	AX97010S01 (TCLP)	Water 10mL w/IS&S:5-09F&G	26 May 09 5:02
17	1	0527N00T.D	1	20ug/L BFB Std 2-24-09K	2ul	27 May 09 9:07
18	1	0527N01W.D	1	090527A LCS-1WN	Water 10mL w/IS&S:5-09F&G	27 May 09 9:35
19	1	0527N05W.D	1	090527A LCS-1WN(TCLP)	Water 10mL w/IS&S:5-09F&G	27 May 09 12:35
20	1	0527N06W.D	1	090527A BLK-1WN(TCLP)	Water 10mL w/IS&S:5-09F&G	27 May 09 13:10
21	1	0527N11W.D	10	AX97010S01 DF10 (TCLP)	Water 10mL w/IS&S:5-09F&G	27 May 09 17:43