

**KDHE Project Code: C6-074-00002: Progress and  
Monitoring Report for the LDB/SVE/AS System at  
the Former CCC/USDA Grain Storage Facility,  
Agra, Kansas, in January-June 2015**

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**Environmental Science Division**



**United States Department of Agriculture**

Work sponsored by Commodity Credit Corporation,  
United States Department of Agriculture

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by  
Applied Geosciences and Environmental Management Section  
Environmental Science Division, Argonne National Laboratory

September 2015



United States Department of Agriculture

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## Notation

AGEM	Applied Geosciences and Environmental Management
AS	air sparge
BGL	below ground level
°C	degree(s) Celsius
CCC	Commodity Credit Corporation
CD	compact disc
COC	chain-of-custody form
1,2-DCA	1,2-dichloroethane
DO	dissolved oxygen
EPA	U.S. Environmental Protection Agency
ft	foot (feet)
hr	hour(s)
IMWP/D	<i>Interim Measure Work Plan/Design</i>
in.	inch(es)
KDHE	Kansas Department of Health and Environment
L	liter(s)
LDB	large-diameter borehole
µg/kg	microgram(s) per kilogram
µg/L	microgram(s) per liter
µg/m <sup>3</sup>	microgram(s) per cubic meter
µS/cm	microsiemen(s) per centimeter
mg/L	milligram(s) per liter
min	minute(s)
mV	millivolt(s)
OMM	operations, maintenance, and monitoring
ppm	part(s) per million
psi	pounds per square inch
PWS	public water supply
scfm	standard cubic feet per minute
SVE	soil vapor extraction
TOC	top of casing
USDA	U.S. Department of Agriculture
VOC	volatile organic compound
WC	water column
yr	year(s)

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## **1 Introduction**

The Commodity Credit Corporation of the U.S. Department of Agriculture (CCC/USDA) operated a grain storage facility at Agra, Kansas, from the 1950s to the early 1970s. No structures remain on the property, and the land is used for agricultural purposes, specifically wheat production. The property is currently owned by the Kyle Railroad Co. and is leased to Mr. Herb VanEaton. The Pro-Ag Marketing grain storage facility is directly south of the former CCC/USDA facility.

In 1985, carbon tetrachloride was detected in groundwater samples collected from Agra public water supply wells PWS-3 and PWS-4, located approximately 2,000 ft south of the former CCC/USDA facility and approximately 1,800 ft south of the Pro-Ag Marketing facility, at levels below the maximum contaminant level of 5.0 µg/L. In 1986, in response to an increase in carbon tetrachloride to 12 µg/L in well PWS-3, the city was required to remove both PWS-3 and PWS-4 from service. The Agra public water supply system is currently served by three other wells (PWS-1, PWS-2, and PWS-5) that are outside the area of contamination.

In 2005, the Environmental Science Division of Argonne National Laboratory conducted a comprehensive investigation of potential contaminant source areas at Agra, on behalf of the CCC/USDA. Data collected during the 2005 investigation identified three primary source areas for the carbon tetrachloride contamination (Argonne 2006). One source is located on the former CCC/USDA property, and the other two sources are on property owned and operated by Pro-Ag Marketing. Detection of nitrate, as nitrogen, in numerous groundwater samples across the Pro-Ag property at concentrations considerably higher than upgradient levels established Pro-Ag as a source of nitrate contamination (KDHE 2008a).

In 2008-2009, to address the carbon tetrachloride contamination detected on its former property, the CCC/USDA implemented a source area cleanup in accord with the document *Interim Measure Work Plan/Design for Agra, Kansas* (IMWP/D; Argonne 2008). The cleanup involves five large-diameter boreholes (LDBs) coupled with soil vapor extraction (SVE) and air

sparge (AS) systems. The work plan was approved by the Kansas Department of Health and Environment (KDHE) in November 2008 (KDHE 2008b), and operation began in May 2009.

Quarterly progress reports for October-December 2008, January-March 2009, and April-June 2009 (Argonne 2009a,b,c) provided detailed information regarding construction and start-up of the cleanup, including the following milestones:

- Construction of the LDB/SVE/AS system, completed on January 7, 2009.
- Pilot testing of the LDB/SVE/AS system on February 11, 2009.
- Start-up of the SVE and AS systems on May 29, 2009.
- Initial operations, maintenance, and monitoring (OMM) sampling event on June 23, 2009.

Previous periodic monitoring reports (Argonne 2010a,b,c,d, 2011a,b,c, 2012, 2013a,b,c, 2014a,b) have tracked the subsequent progress of the cleanup effort. Data for evaluation of system performance are collected primarily by sampling SVE effluents, soil gas monitoring points, and groundwater wells for analysis for volatile organic compounds (VOCs). Table 1.1 provides a detailed chronological summary of activities during implementation of the cleanup.

Monitoring is continuing on the established monthly and quarterly schedule, but reporting is now on a twice yearly schedule (January-June and July-December), as approved by the KDHE (2011).

The current report presents the data generated during OMM activities in January-June 2015.

TABLE 1.1 Activity log for the LDB/SVE/AS system at the former CCC/USDA grain storage facility.

Date	Event	Repair and Maintenance Notes
January 7, 2009	Installation of the five LDBs and associated SVE and AS wells, initiated in December 2008.	-
January 16, 2009	Initial testing of the SVE wells and one AS well to (1) verify installation and operation to design protocols and (2) obtain data for design completion.	-
January 19-27, 2009	Trenching and installation of SVE/AS piping.	-
January 28, 2009	Preliminary sampling of off-gas vapor from LDB1 and LDB5 to verify removal of carbon tetrachloride from the subsurface.	-
February 11, 2009	Pilot testing of the AS wells.	-
February 20-March 2, 2009	Selection and procurement of the equipment and control trailer.	-
March 16, 2009	Completion of the LDB wellhead installations.	-
March 16, 2009	Testing of soils excavated from the LDBs and leveling of the landfarm area.	-
May 9, 2009	Total depth measurement.	12 ft of sediment at base of well AS-5. Attempt to lower video camera into well is stopped at 5 ft BGL because of misalignment of casing connections for air flow lines.
May 13-16, 2009	Installation of five groundwater monitoring wells and three clusters of soil gas monitoring wells (six wells).	-
May 18-19, 2009	Site visit by Argonne.	Trenching repaired to correct subsidence during the winter.
May 19-20, 2009	Installation of groundwater level transducers and soil gas pressure/vacuum sensors, respectively, in the new groundwater and soil gas monitoring wells.	-
May 21, 2009	Baseline sampling of the newly installed monitoring wells.	-
May 27-29, 2009	Installation of the instrumentation trailer and monitoring equipment.	-
May 28, 2009	Initial tilling of the landfarm.	Near-surface connections in SVE and AS lines repaired. Sediment air-lifted from SVE and AS lines. Air flow reestablished.
May 29, 2009	Start-up of the SVE and AS systems.	-

TABLE 1.1 (Cont.)

Date	Event	Repair and Maintenance Notes
June 23, 2009	Initial OMM sampling event by GreenField.	Wellheads painted. SVE-1, SVE-2, SVE-5 ball valves broken; need to be replaced.
July 29-30, 2009	Monthly OMM event by GreenField.	Ball valves replaced.
July 30, 2009	Bi-monthly soil gas sampling by Argonne.	-
August 5, 2009	Issuance of <i>Final Remedial Report</i> by GreenField, for installation of the LDB/SVE/AS system.	-
August 28, 2009	Quarterly OMM event by GreenField.	AS hour meter not working.
August 31, 2009	Telemeter test transmission.	-
September 11, 2009	First daily telemeter transmission.	-
September 18, 2009	Quarterly groundwater sampling and bi-monthly soil gas sampling by Argonne.	-
September 23, 2009	Monthly OMM event by GreenField.	No air flow in AS-5. AS hour meter not working.
October 27, 2009	Servi-Tech installation of groundwater extraction well on Pro-Ag Marketing property.	-
October 27, 2009	Tilling of the landfarm in preparation for closure.	-
October 28, 2009	Monthly OMM event by GreenField.	No air flow in AS-5. AS and SVE hour meters not recording.
November 3, 2009	Quarterly groundwater sampling by Argonne.	-
November 6, 2009	Sampling of the landfarm.	-
November 17, 2009	Argonne observation of Servi-Tech extraction well testing.	-
November 25, 2009	Bi-monthly soil gas sampling by Argonne.	-
November 27, 2009	Quarterly OMM event by GreenField.	AS system deactivated because of worn sparge blower vanes. AS and SVE hour meters not working. No flow in AS-5.
December 13, 2009	Quarterly groundwater sampling by Argonne.	-
December 15, 2009	KDHE approval of landfarm closure.	-
December 18, 2009	Conference call Argonne-GreenField-Geotech regarding overall system performance.	-

TABLE 1.1 (Cont.)

Date	Event	Repair and Maintenance Notes
December 23, 2009	Monthly OMM event by GreenField.	AS blower vanes replaced; operation restored. Timer set for 4 hr on, 4 hr off. Low flow in AS-5.
January 13, 2010	Site visit by GreenField.	SVE and AS hour meters replaced.
January 15, 2010	Six-month system performance review by GreenField.	–
January 28, 2010	Monthly OMM event by GreenField.	No air flow in AS-5.
February 12, 2010	Bi-monthly soil gas sampling by Argonne.	–
February 25, 2010	Quarterly OMM event by GreenField.	No air flow in AS-5.
March 23, 2010	Bi-monthly soil gas sampling and quarterly groundwater sampling by Argonne.	–
March 23, 2010	Monthly OMM event by GreenField.	No air flow in AS-5.
April 28, 2010	Site visit by Argonne and GreenField.	AS-2 and AS-5 wells redeveloped. Video inspection of these wells attempted. Sediment removed by air-lifting.
April 29, 2010	Monthly OMM event by GreenField.	–
May 27, 2010	Quarterly OMM event by GreenField.	No air flow in AS-5.
May 27, 2010	Quarterly soil gas sampling by Argonne.	–
June 16, 2010	Quarterly groundwater sampling by Argonne.	–
June 22, 2010	Monthly OMM event by GreenField.	No air flow in AS-5.
July 28, 2010	Monthly OMM event by GreenField.	No air flow in AS-5.
August 5, 2010	Site visit by Argonne.	AS-5 sparge well inspected to evaluate flow; sediment removed by air-lifting.
August 20, 2010	Telemetry report.	AS system shut down due to blower malfunction.
August 27, 2010	Quarterly OMM event by GreenField.	AS off; vanes broken. Old vanes removed; unit cleaned.
September 16, 2010	Quarterly soil gas and groundwater sampling by Argonne.	–
September 28, 2010	Monthly OMM event by GreenField.	AS off; vanes and filters faulty.
October 6, 2010	Site visit by GreenField.	Rotary vanes in AS blower replaced; AS system reactivated.

TABLE 1.1 (Cont.)

Date	Event	Repair and Maintenance Notes
October 12, 2010	Closure of the landfarm.	–
October 28, 2010	Monthly OMM event by GreenField.	AS-1 wellhead pad hit by farm tractor; line damaged; deactivated. No air flow in AS-5.
November 19, 2010	Quarterly OMM event by GreenField.	AS-1 inactive because of damage. AS vanes replaced. No air flow in AS-5.
December 16, 2010	Quarterly soil gas and groundwater sampling by Argonne.	–
December 16, 2010	Site visit by Argonne.	1-in.-diameter riser and screen inserted inside the 2-in. casing of the AS-5 well to prevent sediment flow into the screen. Air flow restored.
December 27, 2010	Monthly OMM event by GreenField.	AS-1 inactive because of damage. Air flowing in AS-5.
January 13-14, 2011	Site visit by Argonne.	Repair of the AS-1 wellhead (damaged by farm equipment in fall 2010). Air flowing in AS-5 after successful repair.
February 2, 2011	Monthly OMM event by GreenField.	AS-1 wellhead pad under construction.
March 1, 2011	Quarterly OMM event by GreenField.	AS-1 wellhead pad under construction. AS vanes worn; system deactivated. Low pressure in AS-2.
March 16, 2011	Quarterly soil gas and groundwater sampling by Argonne.	Vanes replaced; AS system operation restored.
March 29, 2011	Monthly OMM event by GreenField.	SVE-1 and AS-1 wellheads covered with dirt because of farm activity; no pressure readings. Little to no pressure in AS-2; leak not found.
April 27, 2011	Monthly OMM event by GreenField.	No pressure in AS-2. Line deactivated.
May 25, 2011	Quarterly OMM event by GreenField.	Standing water over AS-1 wellhead; unable to read pressure. Flooding at GW1, GW3, GW4; unable to sample or measure water levels. AS system deactivated.
June 6-7, 2011	Quarterly soil gas and groundwater sampling by Argonne.	–
August 4, 2011	Telemetry report.	Last telemetry report before a lightning strike interrupts transmittals. AS system inactive.
August 30, 2011	Monthly OMM event by GreenField (first monthly event under second contract).	Well pads covered with soil/mud because of farm work and rain. No pressure and vacuum readings or water level measurements. AS system inactive. Flow meter faulty.

TABLE 1.1 (Cont.)

Date	Event	Repair and Maintenance Notes
September 14, 2011	KDHE approval for twice-yearly reporting.	–
September 26, 2011	Monthly OMM event by GreenField.	AS system inactive; vanes and filters faulty.
October 5, 2011	Quarterly soil gas and groundwater sampling by Argonne.	–
October 6, 2011	Site visit by GreenField.	AS vanes replaced; system reactivated.
October 27, 2011	Quarterly OMM event by GreenField (first quarterly event under second contract).	DO meter down; water level probe too large for 1-in. wells; no readings. AS-2 line down; low pressure.
November 11, 2011	Site visit by Argonne and GreenField.	System evaluation and repairs (including AS-2 leaks). Field testing to determine changes in operational strategy for optimization of system performance.
November 28, 2011	Monthly OMM event by GreenField.	No flow in AS-5. Inspection indicates need for high-volume, high-pressure AS compressor.
December 14, 2011	Quarterly soil gas and groundwater sampling by Argonne.	–
December 29, 2011	Monthly OMM event by GreenField.	Air leaks at AS-2 and AS-5 wellheads repaired. No flow in AS-5.
January 26, 2012	Quarterly OMM event by GreenField.	New Sensaphone installed. Low flow in AS-5; ball valve installed. AS vanes replaced.
January 27, 2012	First telemetry report after system replacement.	–
February 21, 2012	Monthly OMM event by GreenField.	Low flow in AS-5.
March 14, 2012	Quarterly soil gas and groundwater sampling by Argonne.	–
March 29, 2012	Monthly OMM event by GreenField.	Low flow in AS-5.
April 26, 2012	Quarterly OMM event by GreenField.	AS vanes replaced. Low flow in AS-5.
April 30, 2012	Telemetry report.	AS system stopped.
May 7-11, 2012	Site visit by GreenField.	System upgrades. Installation of larger AS blower, rewiring. Installation of new valves, relays, timers. AS system restarted.
May 31, 2012	Monthly OMM event by GreenField.	Replaced broken cap on SVE-1. AS-1 and AS-2 set to operate continuously; AS-3, AS-4, AS-5 operate alternately. AS relief valve might need replacement.



TABLE 1.1 (Cont.)

Date	Event	Repair and Maintenance Notes
June 27, 2012	Quarterly soil gas and groundwater sampling by Argonne.	–
June 28, 2012	Monthly OMM event by GreenField.	AS relief valve plumbed shut.
July 31, 2012	Quarterly OMM event by GreenField.	AS-5 female adaptor cracked at the wellhead.
August 31, 2012	Monthly OMM event by GreenField.	–
September 27, 2012	Monthly OMM event by GreenField.	Limited testing of mounding at SVE-3, SVE-4, and SVE-5 due to cyclic operation. AS-5 female adaptor cracked and leaking.
October 18, 2012	Quarterly soil gas and groundwater sampling by Argonne.	–
October 30, 2012	Quarterly OMM event by GreenField.	Replaced faulty ball valve for SVE-5 sampling port on SVE manifold. AS system deactivated; vanes and filters faulty.
December 1, 2012	Monthly OMM event by GreenField.	AS system off; vanes and filters faulty.
December 28, 2012	Monthly OMM event by GreenField.	AS system off; vanes and filters faulty.
January 16, 2013	Quarterly soil gas and groundwater sampling by Argonne (for the October-December 2012 quarter).	AS blower vanes replaced; operation restored.
February 1, 2013	Quarterly OMM event by GreenField.	–
February 20, 2013	Site visit by Argonne.	Leak in AS-5 repaired; returned to service the same day.
February 28, 2013	Monthly OMM event by GreenField.	–
March 26, 2013	Monthly OMM event by GreenField.	–
April 2-3, 2013	Quarterly soil gas and groundwater sampling by Argonne (for the January-March 2013 quarter).	–
April 26, 2013	Quarterly OMM event by GreenField.	Brief shutdown of AS system for servicing recorded by telemetry.
May 30, 2013	Monthly OMM event by GreenField.	–
June 27, 2013	Monthly OMM event by GreenField.	–
July 10-11, 2013	Quarterly soil gas and groundwater sampling by Argonne (for the April-June 2013 quarter).	–

TABLE 1.1 (Cont.)

Date	Event	Repair and Maintenance Notes
August 1, 2013	Quarterly OMM event by GreenField.	AS blower vanes replaced. Cracking noted in AS-5 flow meter adaptor.
August 30, 2013	Monthly OMM event by GreenField.	–
September 16-17, 2013	Quarterly soil gas and groundwater sampling by Argonne.	–
September 27, 2013	Monthly OMM event by GreenField.	–
October 29, 2013	Quarterly OMM event by GreenField.	–
November 20 and 25, 2013	Quarterly soil gas and groundwater sampling by Argonne.	–
December 2, 2013	Monthly OMM event by GreenField.	–
December 28, 2013	Monthly OMM event by GreenField.	Cracking noted in base of AS-1 flow meter.
January 31, 2014	Quarterly OMM event by GreenField.	Brief shutdown of AS and SVE systems for servicing; recorded by telemetry. AS vanes and filters replaced.
February 25-26, 2014	Quarterly soil gas and groundwater sampling by Argonne.	AS-5 well redeveloped; AS-5 well line leak-tested.
February 26, 2014	Monthly OMM event by GreenField.	Flow meters on AS-1 and AS-5 replaced.
March 27, 2014	Monthly OMM event by GreenField.	SVE blower operation evaluated. SVE lines and wellhead leak-tested.
April 30, 2014	Quarterly OMM event by GreenField.	–
May 27, 2014	Monthly OMM event by GreenField.	–
June 25 and 27-28, 2014	Quarterly soil gas and groundwater sampling by Argonne.	Damage noted at monitoring wells KMW02, MW02, and PMW-10.
June 26, 2014	Monthly OMM event by GreenField.	–
August 1, 2014	Quarterly OMM event by GreenField.	AS vanes and filters replaced. Faulty flow meter noted on AS-4.
August 28, 2014	Monthly OMM event by GreenField.	–
September 29, 2014	Monthly OMM event by GreenField.	–
September 30, 2014	Quarterly soil gas and groundwater sampling by Argonne.	–
October 1-2, 2014	Site visit by Argonne.	Damage to monitoring wells MW02 and PMW-10 repaired.

TABLE 1.1 (Cont.)

Date	Event	Repair and Maintenance Notes
October 29, 2014	Quarterly OMM event by GreenField.	Flow meter on AS-4 repaired.
November 26, 2014	Monthly OMM event by GreenField.	-
December 2, 2014	Quarterly soil gas and groundwater sampling by Argonne.	-
December 31, 2014	Monthly OMM event by GreenField.	Brief shutdown of AS and SVE systems for servicing; recorded by telemetry.
January 23, 2015	Quarterly OMM event by GreenField.	AS vanes and filters replaced.
February 27, 2015	Monthly OMM event by GreenField.	-
March 27, 2015	Twice-yearly soil gas and quarterly groundwater sampling by Argonne.	-
April 1, 2015	Monthly OMM event by GreenField.	-
April 30, 2015	Quarterly OMM event by GreenField.	-
May 30, 2015	Monthly OMM event by GreenField.	-
June 29, 2015	Monthly OMM event by GreenField.	-
June 30, 2015	Quarterly groundwater sampling by Argonne.	-

## **2 LDB/SVE/AS System Description and Monitoring Schedule**

### **2.1 LDB/SVE/AS System Description**

To mitigate localized carbon tetrachloride contamination in the vadose zone soils at the former CCC/USDA facility and to eliminate ongoing soil-to-groundwater contamination, a cleanup response consisting of LDBs coupled with AS and SVE was implemented. With the installation of five LDBs, soils impacted with carbon tetrachloride above the KDHE Tier 2 risk-based screening level of 200 µg/kg in effect in 2008-2009 were removed from the contaminant source area and treated via tilling in the associated landfarm. The LDBs were backfilled with sand, creating a relatively porous sump for removal of VOCs, as compared to the native silts and clays.

In each LDB, an AS well and an SVE well were installed in and above the saturated zone, respectively. The AS system injects pressurized air into the groundwater. As VOCs are stripped from the groundwater, they enter the extraction zone and are removed by the SVE system. Figure 2.1 shows the locations of the LDB/SVE/AS installations at the former CCC/USDA grain storage facility, along with the soil gas and groundwater monitoring well network established to provide data for evaluation of the long-term effectiveness of the cleanup measure. Figure 2.2 illustrates the internal construction of the LDB/SVE/AS systems in the LDB wells, along with the designed pattern of air flow in the systems. Figure 2.3 shows the configuration of the compressed air and vacuum lines in the equipment trailer.

### **2.2 LDB/SVE/AS System Monitoring Schedule**

Currently, OMM activities are conducted daily, monthly, and quarterly. Table 2.1 summarizes the OMM and reporting requirements for the SVE/AS system at Agra, as specified in the approved IMWP/D (Appendix F in Argonne 2008).

#### **2.2.1 Daily OMM Activities**

The automated telemetry system, which became operational on August 31, 2009, provides a daily system status summary to the GreenField office (copied to Argonne).

### **2.2.2 Monthly OMM Activities**

Monthly monitoring by GreenField is occurring approximately every 30 days following system start-up on May 29, 2009. Operational parameters such as manifold and wellhead vacuum, pressure and flow readings, and air dilution flow rates are collected. Extracted soil vapor samples are collected with an appropriate sample pump and analyzed with field testing instrumentation for oxygen, carbon dioxide, and VOCs concentrations. Routine maintenance, such as greasing blowers and changing filters, is conducted as necessary.

### **2.2.3 Quarterly OMM Activities**

Quarterly sampling events by GreenField and by Argonne are occurring approximately every 90 days, following system start-up on May 29, 2009. Well completion information for the sampled wells is summarized in Table 2.2.

Each quarter, Argonne samples groundwater monitoring wells GW1, GW2, GW3, GW4, GW5, MW-J, MW-P, and KMW03, as proposed in the IMWP/D (Argonne 2008). The samples are shipped overnight to the Applied Geosciences and Environmental Management (AGEM) Laboratory, Argonne, Illinois, and analyzed for VOCs by using modified U.S. Environmental Protection Agency (EPA) Method 524.2. Three of the groundwater wells (GW1, GW3, and GW4) are also sampled quarterly by GreenField for laboratory analysis. Dissolved oxygen (DO) levels are recorded quarterly in monitoring wells near the LDB installations.

Air samples are collected quarterly by GreenField from the five SVE wells and from the SVE effluent. These samples are submitted to an outside laboratory for analysis for carbon tetrachloride, chloroform, and 1,2-dichloroethane (1,2-DCA) by EPA Method TO-15.

Twice yearly sampling of soil gas monitoring points SG1S, SG1D, SG2S, SG2D, SG3S, and SG3D is conducted by Argonne, with analysis by TestAmerica Laboratories, Inc., South Burlington, Vermont, according to EPA Method TO-15. Prior quarterly sampling was reduced to twice yearly sampling after approval by the KDHE (2015b).

TABLE 2.1 Itemized OMM summary for the SVE/AS system at Agra.

Frequency	Items	Data and Analysis	Conducted by
<i>Preventive OMM and Troubleshooting</i>			
Weekly, as needed	Visit site to identify and solve problems indicated by abnormal operating conditions observed remotely.	As needed.	GreenField
<i>Monthly OMM</i>			
Monthly	(1) Check/repair equipment, gauges, filters, hour meters, record readings.	Collect operation parameters.	GreenField
Monthly	(2) Measure/record wellhead vacuum and pressure readings for all SVE and AS wells.	Record vacuum and pressure readings.	GreenField
Monthly	(3) Record and adjust (if necessary) well flow rates.	Record flow readings.	GreenField
Monthly	(4) Measure water level from SVE and AS wells.	Record water level readings.	GreenField
Monthly	(5) Collect air samples from 5 individual SVE wells.	Field-screen air samples for VOCs (PID or others) and oxygen (oxygen meter).	GreenField
Monthly	(6) Collect air samples from effluent lines.		GreenField
Monthly	(7) Conduct manufacturer-recommended maintenance.	Document maintenance.	GreenField
<i>Quarterly OMM</i>			
Quarterly	(1) Perform monthly OMM shown above.	As above.	GreenField
Quarterly	(2) Measure/record wellhead vacuum and pressure readings for MW-P, GW1, GW2, GW3, GW4, and GW5.	Record all vacuum and pressure readings.	GreenField
Quarterly	(3) Gauge, purge, and sample wells MW-J, MW-P, KMW03, GW1, GW2, GW3, GW4, and GW5.	Field measurement for DO. Lab analysis for VOCs.	Argonne
Quarterly	(4) Collect air effluent samples from 5 SVE wells.	Lab analysis for VOCs.	GreenField
<i>Soil Gas Monitoring</i>			
Baseline Measurement Once	(1) Collect soil gas sample from all probes prior to system start-up.	Lab analysis for VOCs.	Argonne
Continuous Monitoring 1-4 hr Twice yearly	(1) Automatically record pressures at all probes. (2) Collect soil gas from all probes. Change from quarterly reporting was approved by KDHE (2015b).	Record pressure readings. Lab analysis for VOCs.	Argonne Argonne
<i>Soil Verification Sampling</i>			
Once	Collect vertical-profile soil samples adjacent to LDBs to determine whether cleanup standards have been met.	Lab analysis for VOCs.	Argonne

TABLE 2.1 (Cont.)

Frequency	Items	Data and Analysis	Conducted by
<i>Reporting</i>			
Quarterly	Provide a summary of all monthly and quarterly data generated by GreenField.	System parameters and field measurements.	GreenField
Twice yearly	Develop report including GreenField and Argonne data for January-June and for July-December each year. Change from quarterly reporting was approved by the KDHE (2011).	Soil gas field parameters and laboratory results; report production.	Argonne

TABLE 2.2 Construction details for soil gas and groundwater wells sampled to monitor the LDB/SVE/AS system at Agra.

Well	Casing Diameter (in.)	Depth (ft BGL)		
		Screen Interval	Filter Pack Interval	Well Depth
GW1	1	43-53	41-53	53
GW2	1	43-53	41-53	53
GW3	1	43-53	41-53	53
GW4	1	43-53	41-53	53
GW5	1	43-53	41-53	53
SG1S	1	20-21	18-21	21
SG1D	1	29-30	27-30	30
SG2S	1	20-21	18-21	21
SG2D	1	29-30	27-30	30
SG3S	1	20-21	18-21	21
SG3D	1	29-30	27-30	30
KMW03 <sup>a</sup>	2	74-89	NR <sup>b</sup>	89
MW-J <sup>a</sup>	2	54-66	54-66	66
MW-P <sup>a</sup>	2	39.5-59	34-59	59

<sup>a</sup> Information from WWC-5 Water Well Record forms.

<sup>b</sup> NR indicates that information was not recorded.



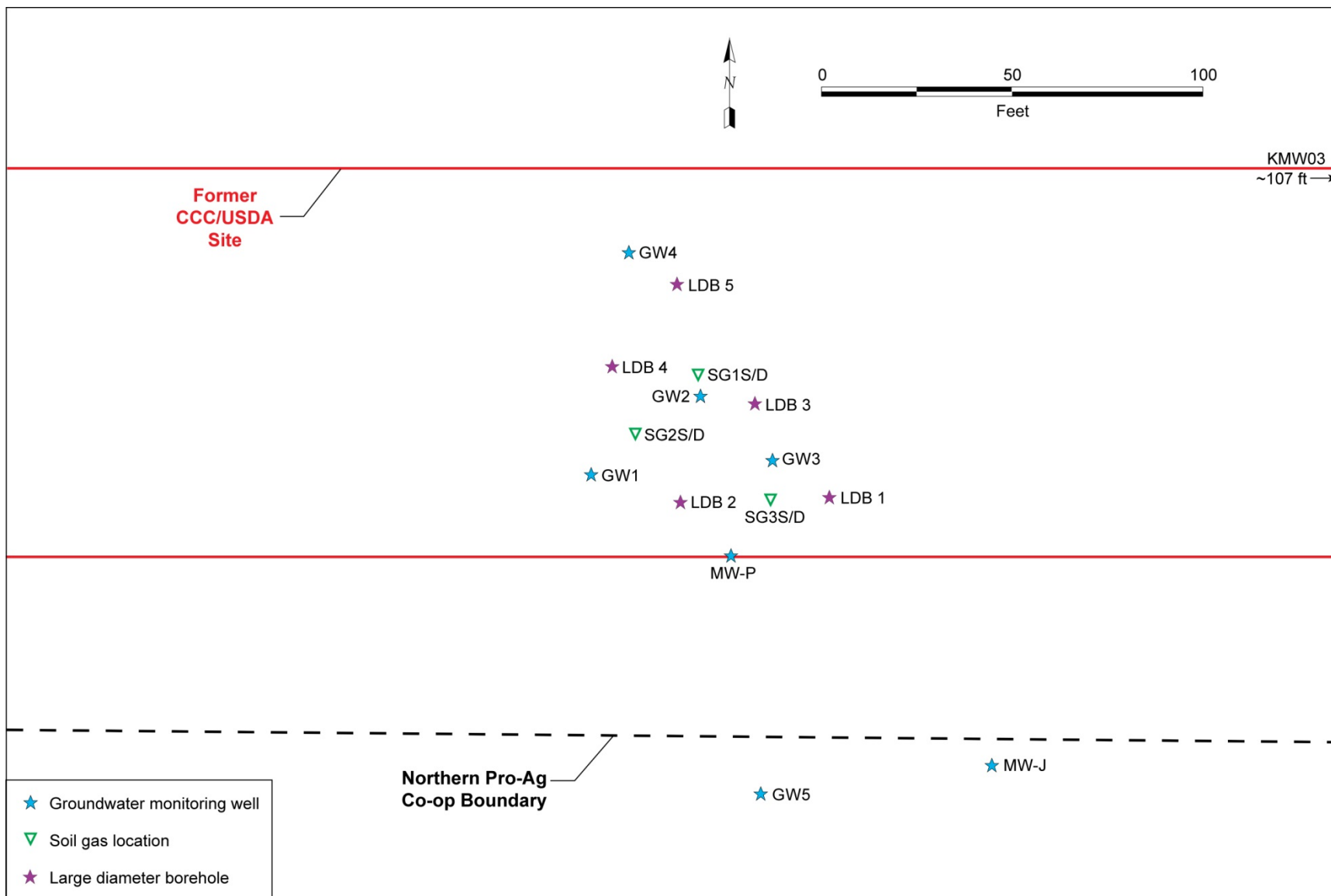


FIGURE 2.1 Locations of the LDB/SVE/AS installations at the former CCC/USDA grain storage facility at Agra, Kansas.

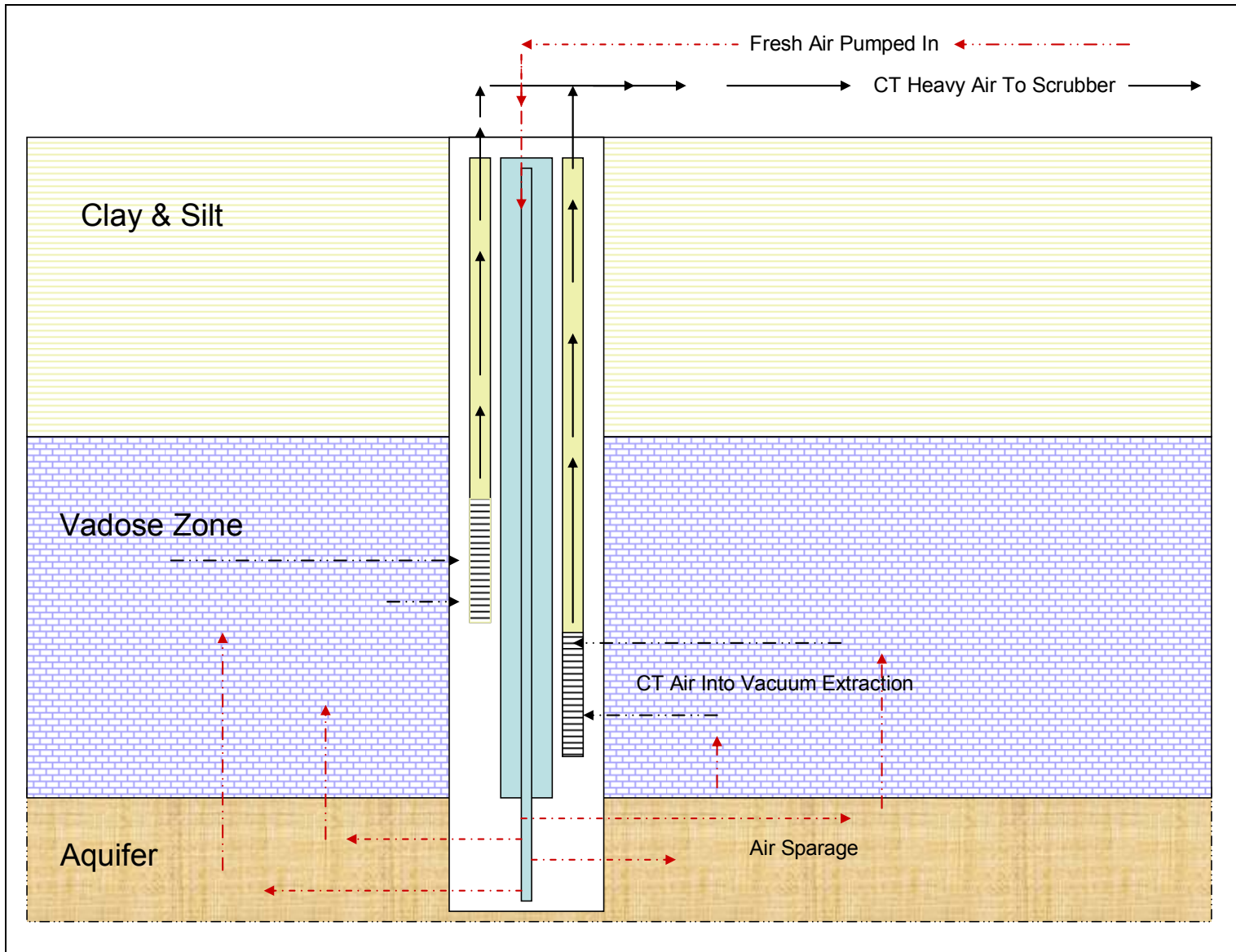


FIGURE 2.2 Internal construction of the LDB/SVE/AS system in each LDB installation, along with the designed pattern of air flow within the system.



FIGURE 2.3 The compressed air and vacuum lines in the SVE/AS equipment trailer.

### **3 OMM Activities in This Reporting Period**

Operation, maintenance, and monitoring activities for the current reporting period included the following:

- January 23, 2015 — Quarterly OMM Event by GreenField
- February 27, 2015 — Monthly OMM Event by GreenField
- March 27, 2015 — Twice-Yearly Soil Gas and Quarterly Groundwater Sampling by Argonne
- April 1, 2015 — Monthly OMM Event by GreenField
- April 30, 2015 — Quarterly OMM Event by GreenField
- May 30, 2015 — Monthly OMM Event by GreenField
- June 29, 2015 — Monthly OMM Event by GreenField
- June 30, 2015 — Quarterly Groundwater Sampling by Argonne

#### **3.1 January 23, 2015 — Quarterly OMM Event by GreenField**

On January 23, 2015, GreenField conducted a quarterly OMM event. During this event, general maintenance was conducted on the SVE and AS systems. In addition, the AS vanes and filters were replaced.

SVE-1 and SVE-2 now operate continuously, while SVE-3, SVE-4, and SVE-5 are operated on a pulsed schedule, as reported previously (Argonne 2013b). Parameters are collected while SVE-1, SVE-2, and SVE-3 are operating. On January 23, 2015, the SVE system was operating at an average pre-filter vacuum of 43.27 in. of water and an average manifold flow rate of 183 scfm (standard cubic feet per minute) with the air dilution valve closed. Monitoring activities for the SVE vapors included measuring VOCs, carbon dioxide, and oxygen concentrations on the SVE manifold and on each individual well line. Oxygen concentrations were 20.9% of extract air. Carbon dioxide was at non-detectable levels.

On January 23, 2015, the AS system was operating at a pressure of 14.07 psi (pounds per square inch) and a cumulative air flow rate of 14.5 scfm. Pressure in the AS wellheads ranged from 4.17 psi to > 10 psi. Air flow rates in the AS lines at the manifold were 1.8-8.8 scfm.

Groundwater samples collected at treatment area wells GW1, GW3, and GW4 were analyzed for carbon tetrachloride, chloroform, and 1,2-DCA. Carbon tetrachloride was detected in all three samples, at concentrations of 83 µg/L (GW1), 2,270 µg/L (GW3), and 276 µg/L (GW4). The chloroform concentrations were 6.3 µg/L at GW1 and 3.4 µg/L at GW4. Chloroform was not detected at GW3 above the method detection limit; 1,2-DCA was not detected in any of the wells.

Vapor samples were collected from each SVE well line at the SVE manifold and from the SVE effluent stack for laboratory analysis of carbon tetrachloride, chloroform, and 1,2-DCA by EPA Method TO-15. Carbon tetrachloride was detected in five of the six samples, at concentrations of 11 µg/m<sup>3</sup> (SVE-1), 89 µg/m<sup>3</sup> (SVE-3), 12 µg/m<sup>3</sup> (SVE-4), 47 µg/m<sup>3</sup> (SVE-5), and 11 µg/m<sup>3</sup> (SVE effluent). Chloroform and 1,2-DCA were not detected above the method detection limits in any of the vapor samples, with the exception of the sample from SVE-1, which contained 1,2-DCA at a concentration of 8.5 µg/m<sup>3</sup>.

The GreenField report for the quarterly OMM event on January 23, 2015, with associated field notes and field measurements, is in Supplement 1, on the compact disc (CD) inside the back cover of this report.

### **3.2 February 27, 2015 — Monthly OMM Event by GreenField**

On February 27, 2015, GreenField conducted a monthly OMM event. SVE-1, SVE-2, and SVE-3 and AS-1, AS-2, and AS-3 were in operation. The SVE system was operating at a cumulative air flow rate of 180 scfm and at a vacuum of 47.7 in. of water. The SVE wellhead vacuum readings were 2.2-8.9 in. of water. The AS system was operating at a pressure of 16.5 psi and a cumulative air flow rate of 16.9 scfm.

The GreenField report for the monthly OMM event on February 27, 2015, with associated field notes and field measurements, is in Supplement 2 (on CD).

### **3.3 March 27, 2015 — Twice-Yearly Soil Gas and Quarterly Groundwater Sampling by Argonne**

On March 27, 2015, Argonne conducted quarterly soil gas and groundwater sampling for the January-March 2015 quarter.

Soil gas samples were collected in Summa canisters from each of three nested soil gas monitoring wells (SG1S, SG1D, SG2S, SG2D, SG3S, SG3D) for analysis by TestAmerica with EPA Method TO-15. A quality control replicate sample was collected at SG2D. A background vapor sample was also collected. For the samples analyzed, quality control limits were met for the contaminants of concern.

Sampling of groundwater monitoring wells GW1, GW2, GW3, GW4, GW5, MW-J, MW-P, and KMW03 was conducted by using the low-flow procedure. The groundwater samples were shipped overnight to the AGEM Laboratory and analyzed for VOCs. Quality control samples collected to monitor sample handling activities (one equipment rinsate, one field blank, and one trip blank) and method blanks analyzed with the samples to monitor analytical methodologies were all free of carbon tetrachloride and chloroform contamination. Duplicate analysis of one sample (from GW2) and analysis of one field replicate sample (from GW1) by the AGEM Laboratory showed good agreement, with average relative percent difference values of approximately 9% and 4% for carbon tetrachloride and chloroform, respectively, for concentrations above the method detection limits.

Verification analysis of three selected samples (from wells GW2 and KMW-03, plus trip blank AGQCTB-W-37178) by TestAmerica supported the results from the AGEM Laboratory, with average relative percent difference values of approximately 2% and 0% for carbon tetrachloride and chloroform, respectively, between the initial analysis and the associated verification analysis for detections above the respective method detection limits.

The tables in Appendix A summarize the sequence of soil gas and groundwater sampling activities, the analytical results, and the quality control data for the March 27, 2015, quarterly sampling event. The soil gas analytical data provided by TestAmerica as sample delivery group 200-27300 are in Supplement 3 (on CD). The groundwater analytical data provided by TestAmerica as sample delivery group 200-27298 are in Supplement 4 (on CD).

### **3.4 April 1, 2015 — Monthly OMM Event by GreenField**

On April 1, 2015, GreenField conducted a monthly OMM event. SVE-1, SVE-2, and SVE-3 and AS-1, AS-2, and AS-3 were in operation. The SVE system was operating at a cumulative air flow rate of 195 scfm and at a vacuum of 46.2 in. of water. The SVE wellhead vacuum readings were 2.6-6.7 in. of water. The AS system was operating at a pressure of 15.5 psi and a cumulative air flow rate of 14.8 scfm.

The GreenField report for the monthly OMM event on April 1, 2015, with associated field notes and field measurements, is in Supplement 5 (on CD).

### **3.5 April 30, 2015 — Quarterly OMM Event by GreenField**

On April 30, 2015, GreenField conducted a quarterly OMM event. During this event, general maintenance was conducted on the SVE and AS systems.

The SVE system was operating at an average pre-filter vacuum of 46.5 in. of water and an average manifold flow rate of 183.67 scfm with the air dilution valve closed. Monitoring activities for the SVE vapors included measuring VOCs, carbon dioxide, and oxygen concentrations on the SVE manifold and on each individual well line. Oxygen concentrations were 20.9% of extract air. Carbon dioxide was at non-detectable levels.

The AS system was operating at an average pressure of 15.73 psi and an average cumulative air flow rate of 15.37 scfm. Pressure in the AS wellheads ranged from 3.49 psi to > 10 psi. Air flow rates in the AS lines at the manifold were 2-9.9 scfm.

Groundwater samples collected at treatment area wells GW1, GW3, and GW4 were analyzed for carbon tetrachloride, chloroform, and 1,2-DCA. Carbon tetrachloride was detected in all three samples, at concentrations of 48 µg/L (GW1), 1,530 µg/L (GW3), and 191 µg/L (GW4). Chloroform was also detected in two of the three samples, at 4.8 µg/L (GW1) and 3.2 µg/L (GW4). 1,2-DCA was not detected in any sample.

Vapor samples were collected from each SVE well line at the SVE manifold and from the SVE effluent stack for laboratory analysis of carbon tetrachloride, chloroform, and 1,2-DCA by

EPA Method TO-15. Carbon tetrachloride was detected in all six samples, at concentrations of 7.5  $\mu\text{g}/\text{m}^3$  (SVE-1), 2.9  $\mu\text{g}/\text{m}^3$  (SVE-2), 57  $\mu\text{g}/\text{m}^3$  (SVE-3), 20  $\mu\text{g}/\text{m}^3$  (SVE-4), 77  $\mu\text{g}/\text{m}^3$  (SVE-5), and 50  $\mu\text{g}/\text{m}^3$  (SVE effluent). Chloroform and 1,2-DCA were not detected above the method detection limits in any of the vapor samples.

The GreenField report for the quarterly OMM event on April 30, 2015, with associated field notes and field measurements, is in Supplement 6 (on CD).

### **3.6 May 30, 2015 — Monthly OMM Event by GreenField**

On May 30, 2015, GreenField conducted a monthly OMM event. SVE-1, SVE-2, and SVE-3 and AS-1, AS-2, and AS-3 were in operation. The SVE system was operating at a cumulative air flow rate of 175 scfm and at a vacuum of 48.9 in. of water. The SVE wellhead vacuum readings were 4.8-10.9 in. of water. The AS system was operating at a pressure of 15.5 psi and a cumulative air flow rate of 14.3 scfm.

The GreenField report for the monthly OMM event on May 30, 2015, with associated field notes and field measurements, is in Supplement 7 (on CD).

### **3.7 June 29, 2015 — Monthly OMM Event by GreenField**

On June 29, 2015, GreenField conducted a monthly OMM event. SVE-1, SVE-2, and SVE-3 and AS-1, AS-2, and AS-3 were in operation. The SVE system was operating at a cumulative air flow rate of 175 scfm and at a vacuum of 46.1 in. of water. The SVE wellhead vacuum readings were 3.9-8.6 in. of water. The AS system was operating at a pressure of 14.3 psi and a cumulative air flow rate of 13.9 scfm.

The GreenField report for the monthly OMM event on June 29, 2015, with associated field notes and field measurements, is in Supplement 8 (on CD).



### **3.8 June 30, 2015 — Quarterly Groundwater Sampling by Argonne**

On June 30, 2015, Argonne conducted the quarterly soil gas and groundwater sampling for the April-June 2015 quarter.

Soil gas samples were not collected during this monitoring event. Prior quarterly soil gas sampling was reduced to twice-yearly sampling in the present monitoring period following approval by the KDHE (2015b). Soil gas samples for the January-June 2015 period, therefore, were collected during the March 27, 2015, monitoring event discussed in Section 3.3.

Sampling of groundwater monitoring wells GW1, GW2, GW3, GW4, GW5, MW-J, MW-P, and KMW03 was conducted by using the low-flow procedure. The groundwater samples were shipped overnight to the AGEM Laboratory and analyzed for VOCs. Quality control samples collected to monitor sample handling activities (one equipment rinsate, one field blank, and one trip blank) and method blanks analyzed with the samples to monitor analytical methodologies were all free of carbon tetrachloride and chloroform contamination. Duplicate analysis of two samples (from wells GW2 and GW3) and one field replicate (from well GW3) by the AGEM Laboratory showed good agreement, with average relative percent difference values of approximately 2% and 4% for carbon tetrachloride and chloroform, respectively, for concentrations above the method detection limits.

Verification analysis of three selected samples (from wells GW4 and MW-J, plus trip blank AGQCTB-W-37199) by TestAmerica supported the results from the AGEM Laboratory, with average relative percent difference values of approximately 16% and 5% for carbon tetrachloride and chloroform, respectively, between the initial analysis and the associated verification analysis for detections above the respective method detection limit.

The tables in Appendix B summarize the sequence of groundwater sampling activities, the analytical results, and the quality control data for the quarterly sampling event on June 30, 2015. The groundwater analytical data provided by TestAmerica as sample delivery group 200-28712 are in Supplement 9 (on CD).

### **3.9 Daily Telemetry Reports**

The daily reports from the automated telemetry system for January-June 2015 are in Supplement 10 (on CD).

### **3.10 Continuous Soil Gas Pressure Monitoring**

To monitor possible vacuum or pressure levels induced locally in the vadose zone soils, absolute pressure recorders were installed in May 2009 in soil gas monitoring points SG1S,D, SG2S,D, and SG3S,D. In addition, a barometric recorder for measurement of local atmospheric pressure fluctuations was placed in the aboveground well housing of nearby well MW-P. The measurements generated by these recorders in January-June 2015 are in Supplement 11 (on CD).

### **3.11 Continuous Water Level Monitoring**

To monitor the detailed local effects of the treatment on groundwater levels, water level recorder units were installed at monitoring wells GW2, GW4, and GW5 in May 2009. These wells are roughly within, upgradient from, and downgradient from the area targeted for treatment. The measurements generated by this automatic monitoring in January-June 2015 are in Supplement 12 (on CD).

## 4 OMM Results in This Reporting Period

### 4.1 LDB/SVE/AS System Status

To address a point source of carbon tetrachloride contamination in soil and groundwater at the former CCC/USDA grain storage facility, an LDB/SVE/AS system was implemented in May 2009. Five LDBs (6 ft in diameter) were installed at the identified source area near the SB46 and SB49 locations investigated in 2005 (Argonne 2006). Each of the LDBs was extended to bedrock (approximately 60 ft BGL [below ground level]). A total of approximately 300 cubic yards of contaminated soil was removed from the areas of highest soil impacts. The five LDBs were completed as SVE wells by placing well screens within the permeable backfill. In addition, AS wells were completed to depths of approximately 55 ft BGL in the backfill of each LDB. The SVE/AS system was started in May 2009 and was operated continuously, with some interruptions of the AS system, throughout the initial 2-yr OMM contract with GreenField, from June 2009 to June 2011. The OMM contract with GreenField was extended in 2011 and again in 2013. Operation of the SVE/AS system and monitoring are continuing.

A review of system air flow rates (Table 4.1) and operating pressures (Table 4.2) shows that the system has operated generally within design specifications. Although favorable progress toward effective cleanup has been made, some operational difficulties have occurred, as noted in Table 1.1. The following issues have been discussed previously in greater detail:

- Persistent low flow at AS-5. Well AS-5 was repaired in late 2010 (Argonne 2011c) and again in February 2013 (Argonne 2013c).
- Damage to AS-1 resulting in well line deactivation in fall 2010. Well AS-1 was reconstructed in early 2011 (Argonne 2011c).
- Leaks in the AS-2 line. The leaks were addressed in November 2011 (Argonne 2012), when the lines were excavated and re-sealed. Field tests were also conducted to identify potential changes to optimize system effectiveness (Argonne 2013a,b). System evaluations are discussed in Section 5.

- Periodic shutdown of the AS system due to vane degradation and necessary replacement. A larger AS blower was installed in May 2012 to address this issue (Argonne 2013a,b), and increased oversight has improved the reliability of operation.
- In March 2014, the operation of the SVE blower was tested (Argonne 2014b). The SVE blower was determined to be operating correctly and to be capable of achieving a higher vacuum than the recorded operating levels.

Operation continued uninterrupted during the January-June 2015 monitoring period. Operation has now been continuous since January 16, 2013.

## 4.2 LDB/SVE/AS System Performance Data

Data for evaluation of treatment system performance are collected primarily by sampling SVE effluents, soil gas monitoring points, and groundwater monitoring wells for VOCs analyses. The baseline data collected from soil gas and groundwater monitoring wells before system start-up showed a localized area of contamination, in which the concentrations of carbon tetrachloride ranged from 6,393  $\mu\text{g/L}$  (GW2) to 9,198  $\mu\text{g/L}$  (GW3) in groundwater and from 19,000  $\mu\text{g/m}^3$  (SG1D) to 6,900  $\mu\text{g/m}^3$  (SG3D) in soil gas. This localized hot-spot area is less than 30 ft in radius, near the center of the system of five AS/SVE installations, as illustrated in Figure 4.1.

The analytical data for the SVE effluent, soil gas, and groundwater samples collected since system start-up in May 2009 show that the initial high concentrations of carbon tetrachloride have moderated and declined significantly, although elevated concentrations (primarily in the SVE effluent concentrations) were again detected briefly following the unexpected shutdown of the AS system due to equipment malfunction from August 20, 2010, to October 6, 2010 (Argonne 2011a). Other AS system shutdowns occurred on May 25, 2011, to October 6, 2011, and on October 30, 2012, to January 16, 2013, with little clear impact on the observed concentrations. The SVE, soil gas, and groundwater VOCs data are summarized in Tables 4.3-4.5. Dissolved oxygen levels in groundwater are reported in Table 4.6. The groundwater analytical data for the current reporting period are illustrated in Figure 4.1.

### **4.3 Groundwater Level Data**

Maps of the sitewide potentiometric surface, as interpreted from manual measurements made on February 6, 2015, and May 12, 2015, are shown in Figure 4.2a and Figure 4.2b, respectively. Maps of the treatment area potentiometric surface on the same dates are shown in Figures 4.3a and 4.3b. For consistency, the contours in the treatment area maps were created by taking into account data for all of the sitewide wells in Figure 4.2a,b. Location coordinates for the wells shown are in Appendix C, Table C.1. Selected sitewide manual water level measurements since 2009 are in Table C.2.

TABLE 4.1 Operating flow rates for the SVE and AS systems.

Monitoring Date	SVE Vacuum (in. water)	Air Flow Rate (scfm)					SVE Cumulative
		SVE-1	SVE-2	SVE-3	SVE-4	SVE-5	
Design Values	51						160
05/29/09	46.0	40	40	40	50	40	210
06/23/09	42.9	66	59	77	47	63	312
07/29/09	40.5	36	37	45	48	33	199
08/28/09	39.4	30	40	40	50	30	190
09/23/09	38.9	60	62	61	45	40	268
10/28/09	38.4	40	23	27	42	44	176
11/27/09	38.9	35	78	89	43	42	287
12/23/09	36.0	38	30	38	45	41	192
01/28/10	39.8	56	21	19	44	14	154
02/25/10	45.0	39	45	36	47	31	198
03/23/10	40.1	47	58	42	42	40	229
04/29/10	41.4	51	71	35	35	35	227
05/27/10	43.4	20	20	40	40	35	155
06/22/10	43.8	59	73	41	40	35	248
07/28/10	38.9	44	69	39	38	44	234
08/27/10	39.1	35	49	35	35	50	204
09/28/10	35.5	43	44	56	52	52	247
10/28/10	26.4	31	55	28	26	54	194
11/19/10	23.6	39	56	37	34	53	219
12/27/10	22.4	44	62	40	38	60	244
02/02/11	26.7	30	51	52	35	45	213
03/01/11	27.8	40	44	42	42	60	228
03/29/11	27.3	40	40	40	40	40	200
04/27/11	28.0	45	40	48	38	38	209
05/25/11	43.8	30	35	45	45	30	185
08/30/11	35.6	<40	<40	<40	42	42	<207
09/26/11	27.7	35	48	42	35	50	210
10/27/11	26.7	38	47	42	40	50	217
11/28/11	33.7	35	50	50	35	40	210
12/29/11	28.3	46	40	40	40	46	248
01/26/12	31.0	40	50	42	40	40	212
02/21/12	32.8	35	40	40	35	35	185
03/29/12	32.1	35	45	40	40	40	200
04/26/12	31.6	40	45	40	45	40	210
05/31/12	40.5	40	40	100	a	a	240
06/28/12	41.3	40	40	95	a	a	175
07/31/12	45.5	40	40	95	95	95	175
08/31/12	44.5	40	45	90	a	a	175
09/27/12	43.8	45	45	90	a	a	180
10/30/12	41.3	50	50	90	90	90	190
12/01/12	39.7	47	50	96	a	a	193
12/28/12	40.6	45	47	107	a	a	199
02/01/13	39.0	48	47	105	67	70	200
02/28/13	36.7	50	40	105	a	a	195
03/26/13	38.0	50	40	120	a	a	210
04/26/13	26.9	40	40	40	40	40	200
05/30/13	35.9	60	65	60	a	a	185
06/27/13	32.2	60	60	85	a	a	205
08/01/13	35.0	50	50	80	80	80	180
08/30/13	35.6	50	50	85	a	a	185

TABLE 4.1 (Cont.)

Monitoring Date	SVE Vacuum (in. water)	Air Flow Rate (scfm)					SVE Cumulative
		SVE-1	SVE-2	SVE-3	SVE-4	SVE-5	
09/27/13	60.7	40	40	40	40	39	151
10/29/13	22.2	44	41	40	40	40	180
12/02/13	41.5	40	40	100	a	a	180
12/28/13	41.5	45	45	100	a	a	190
01/31/14	40.3	45	45	106	77	105	196
02/26/14	40.2	45	45	105	a	a	195
03/27/14	42.4	50	50	85	a	a	185
04/30/14	41.7	50	50	85	a	a	185
05/27/14	39.4	50	50	83	a	a	183
06/26/14	41.1	50	50	81	a	a	181
08/01/14	41.7	50	50	78	90	91	178
08/28/14	44.8	50	50	75	a	a	175
09/29/14	43.1	50	50	77	a	a	177
10/29/14	43.1	50	50	81	95	95	181
11/26/14	44.7	50	50	80	a	a	180
12/31/14	43.2	50	50	83	a	a	183
01/23/15	41.9	53	53	80	100	100	186
02/27/15	47.7	50	50	80	a	a	180
04/01/15	46.2	50	50	95	a	a	195
04/30/15	45.6	50	50	76	105	103	176
05/30/15	48.9	50	50	75	a	a	175
06/29/15	46.1	50	50	75	a	a	175

	AS Operating Pressure (psi)	Air Flow Rate (scfm)					AS Cumulative
		AS-1	AS-2	AS-3	AS-4	AS-5	
Design Values	12						25
05/29/09	8.0	5.0	5.0	5.0	5.0	5.0	25.0
06/23/09	10.8	3.5	4.0	4.0	3.7	3.0	18.2
07/29/09	11.4	6.0	1.5	5.0	1.5	3.2	17.2
08/28/09	11.0	6.0	2.0	7.0	3.0	2.0	20.0
09/23/09	11.3	6.9	1.1	5.0	1.5	0.0	14.5
10/28/09	11.4	9.0	0.5	3.2	1.0	0.0	13.7
11/27/09	12.0	3.6	3.5	2.2	3.6	0.0	12.9
12/23/09	14.0	4.0	4.0	4.0	4.0	1.5	17.5
01/28/10	12.7	5.0	3.7	4.7	5.0	0.0	18.4
02/25/10	12.0	4.9	3.0	4.8	4.5	0.0	17.2
03/23/10	11.6	4.8	2.0	5.0	4.5	0.0	16.3
04/29/10	12.7	3.0	3.0	3.0	3.0	3.0	15.0
05/27/10	11.4	4.2	3.7	4.9	1.8	0.0	14.6
06/22/10	11.4	5.0	2.4	4.0	3.0	0.0	14.4
07/28/10	11.1	4.8	2.8	4.0	2.2	0.0	13.8
08/27/10	b	b	b	b	b	b	b
09/28/10	b	b	b	b	b	b	b
10/28/10	10.8	5.9	3.7	5.0	3.6	0.0	18.2
11/19/10	10.4	b	4.0	6.8	4.6	0.0	15.4
12/27/10	11.0	b	5.0	3.5	4.0	3.0	15.5
02/02/11	10.8	3.0	3.7	2.0	2.0	3.3	14.0

TABLE 4.1 (Cont.)

	AS Operating Pressure (psi)	Air Flow Rate (scfm)					AS Cumulative
		AS-1	AS-2	AS-3	AS-4	AS-5	
03/01/11	10.0	3.0	3.0	3.0	3.0	2.5	14.5
03/29/11	11.1	4.0	4.0	4.0	1.0	4.0	17.0
04/27/11	11.1	3.3	b	3.0	2.0	3.5	11.8
05/25/11	11.9	3.5	b	2.8	2.5	4.5	13.3
08/30/11	b	b	b	b	b	b	b
09/26/11	b	b	b	b	b	b	b
10/27/11	13.0	4.0	b	5.0	4.0	3.0	16.0
11/28/11	13.5	4.0	4.0	4.0	4.0	0.0	16.0
12/29/11	11.0	4.0	4.0	4.0	4.0	0.0	16.0
01/26/12	14.0	3.0	3.0	3.0	3.0	0.5	12.5
02/21/12	14.0	2.8	2.8	1.3	2.8	0.5	10.2
03/29/12	13.0	3.0	3.0	1.5	3.0	0.5	11.0
04/26/12	13.0	2.5	3.0	3.0	3.0	1.0	12.5
05/31/12	16.0	2.0	2.0	3.0	a	a	7.0
06/28/12	18.0	4.0	5.0	6.0	a	a	15.0
07/31/12	16.0	4.0	5.0	2.0	5.0	7.0	23.0
08/31/12	19.9	6.0	6.0	1.0	a	a	13.0
09/27/12	20.0	5.0	5.0	1.5	a	a	11.5
10/30/12	20.0	4.0	4.0	2.0	7.8	2.5	10.0
12/01/12	b	b	b	b	b	b	b
12/28/12	b	b	b	b	b	b	b
02/01/13	13.5	3.0	3.7	3.2	8.2	2.0	20.4
02/28/13	20.0	5.0	5.0	4.0	a	a	14.0
03/26/13	21.0	4.0	4.0	2.0	a	a	10.0
04/26/13	21.0	3.0	3.0	0.5	2.5	0.5	6.0
05/30/13	21.5	3.5	2.5	1.5	a	a	7.5
06/27/13	19.0	4.0	4.0	0.0	a	a	8.0
08/01/13	19.0	3.5	4.0	<0.5	7.0	c	8.0
08/30/13	20.0	4.0	4.0	1.0	a	a	9.0
09/27/13	21.0	3.8	4.0	0.5	3.5	c	7.8
10/29/13	18.5	3.5	3.7	0.5	3.7	0.5	11.9
12/02/13	15.0	6.0	6.0	0.0	a	a	12.0
12/28/13	18.5	3.5	3.5	0.5	a	a	7.5
01/31/14	19.0	3.5	3.5	1.0	4.5	6.3	17.0
02/26/14	17.0	5.0	5.0	7.0	a	a	17.0
03/27/14	17.9	5.0	5.0	3.0	a	a	13.0
04/30/14	18.2	5.3	2.0	2.0	9.0	10.0	13.1
05/27/14	18.5	5.2	5.2	1.5	a	a	11.9
06/26/14	17.0	4.9	5.1	1.7	a	a	11.7
08/01/14	16.1	5.0	5.0	1.7	c	8.0	11.7
08/28/14	16.7	5.5	8.5	2.0	a	a	16.0
09/29/14	16.0	6.0	8.0	2.0	a	a	16.0
10/29/14	16.2	6.7	7.7	1.7	10.1	9.4	16.1
11/26/14	14.4	7.0	7.0	2.0	a	a	16.0
12/31/14	14.3	6.8	5.5	1.8	a	a	14.1
01/23/15	13.5	6.6	5.0	1.8	8.8	8.0	13.4
02/27/15	16.5	7.9	7.0	2.0	a	a	16.9
04/01/15	15.5	6.5	6.5	1.8	a	a	14.8
04/30/15	15.2	6.2	6.2	2.0	9.9	9.3	14.4
05/30/15	15.5	6.3	6.0	2.0	a	a	14.3
06/29/15	14.3	6.1	5.8	2.0	a	a	13.9

See next page for footnotes.



TABLE 4.1 (Cont.)

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- <sup>a</sup> Line deactivated.
- <sup>b</sup> Blower faulty; system deactivated.
- <sup>c</sup> Flow meter faulty.

TABLE 4.2 Operating pressures for the SVE and AS systems.

Monitoring Date	SVE Vacuum (in. water)	SVE Vacuum (in. water) at Manifold						SVE Vacuum (in. water) at Wellhead					
		SVE-1	SVE-2	SVE-3	SVE-4	SVE-5	Manifold Average	SVE-1	SVE-2	SVE-3	SVE-4	SVE-5	Wellhead Average
Design Value	51												
05/29/09	46.0	34.6	32.8	31.5	29.2	34.8	32.6	34.6	31.1	29.7	28.5	34.4	31.7
06/23/09	42.9	34.0	34.6	31.6	29.1	33.5	32.6	31.6	32.9	28.9	25.6	31.3	30.1
07/29/09	40.5	30.2	31.8	28.2	26.9	29.4	29.3	28.2	29.3	24.7	23.1	26.9	26.4
08/28/09	39.4	29.0	30.7	26.6	26.6	28.7	28.3	26.0	27.5	23.8	21.6	25.1	24.8
09/23/09	38.9	27.0	29.2	26.1	24.6	26.1	26.6	24.6	26.7	23.1	21.4	23.4	23.8
10/28/09	38.4	25.7	29.1	26.9	24.9	26.0	26.5	22.9	25.4	24.0	21.5	23.4	23.4
11/27/09	38.9	26.3	29.6	28.3	25.5	25.8	27.1	24.0	27.9	26.0	22.7	22.7	24.7
12/23/09	36.0	18.2	26.1	24.4	22.2	19.2	22.0	16.0	22.5	19.0	18.3	17.5	18.7
01/28/10	39.8	27.0	30.1	29.5	26.8	28.9	28.5	24.3	29.8	27.9	21.8	26.5	26.1
02/25/10	40.3	30.7	34.9	34.2	31.9	33.6	33.1	23.2	31.8	26.6	27.8	30.6	28.0
03/23/10	40.1	29.5	31.3	25.7	24.2	27.0	27.5	28.4	28.9	23.4	20.2	22.4	24.7
04/29/10	41.4	32.3	31.1	28.9	19.7	20.8	26.6	30.6	29.4	25.9	17.3	19.7	24.6
05/27/10	43.4	35.7	33.8	30.6	21.6	30.5	30.4	33.5	30.8	26.9	19.1	28.5	27.8
06/22/10	43.8	36.7	34.9	31.0	22.4	30.9	31.2	35.2	33.0	27.7	19.9	28.3	28.8
07/28/10	38.9	32.0	29.0	26.1	18.6	25.9	26.3	30.7	26.8	23.1	16.0	22.3	23.8
08/27/10	39.1	31.5	29.0	28.0	19.3	26.1	26.8	30.0	26.5	25.1	16.9	21.4	24.0
09/28/10	35.5	28.1	22.9	25.8	17.8	22.5	23.4	26.6	19.4	23.3	16.0	18.1	20.7
10/28/10	26.4	16.0	13.7	18.2	14.2	13.4	15.1	14.4	9.3	15.2	12.8	8.6	12.1
11/19/10	23.6	10.9	10.9	15.2	12.8	10.6	12.1	8.5	6.1	13.4	10.9	5.9	9.0
12/27/10	22.4	11.6	11.8	16.2	18.5	10.0	13.6	4.0	4.2	10.5	7.2	5.9	6.4
02/02/11	26.7	15.3	11.0	3.2	13.3	6.4	9.8	13.6	-	-	-	-	-
03/01/11	27.8	17.3	12.4	4.5	16.2	11.3	12.3	-	8.3	4.3	10.0	7.2	7.5
03/29/11	27.3	11.3	9.5	2.6	13.7	8.0	9.0	-	6.8	1.3	11.0	5.0	6.0
04/27/11	28.0	11.7	11.9	3.3	14.7	9.9	10.3	10.3	9.3	2.3	12.8	7.9	8.5
05/25/11	43.8	38.3	32.9	6.1	29.6	31.8	27.7	-	-	-	-	-	-
08/30/11	35.6	26.2	25.9	18.1	22.1	20.5	22.6	-	-	-	-	-	-
09/26/11	27.7	14.9	15.7	11.5	14.9	8.4	13.1	11.4	13.2	8.2	13.3	3.9	10.0
10/27/11	26.7	8.1	10.8	9.7	12.7	7.2	9.7	7.3	4.5	5.9	10.5	2.7	-
11/28/11	33.7	24.3	14.3	11.3	10.0	15.1	15.0	22.1	11.7	8.6	7.9	14.6	13.0
12/29/11	28.3	15.9	10.2	8.3	10.0	12.1	11.3	13.7	7.8	5.1	8.6	9.4	8.9
01/26/12	31.0	19.1	18.1	12.7	6.7	12.9	13.9	12.1	6.4	2.9	2.9	7.2	6.3
02/21/12	32.8	16.5	13.2	8.6	7.7	12.6	11.7	13.6	7.9	6.8	4.7	8.0	8.2
03/29/12	32.1	17.5	13.2	10.0	10.2	14.1	13.0	14.3	8.9	6.7	7.2	10.5	9.5

TABLE 4.2 (Cont.)

Monitoring Date	SVE Vacuum (in. water)	SVE Vacuum (in. water) at Manifold						SVE Vacuum (in. water) at Wellhead					
		SVE-1	SVE-2	SVE-3	SVE-4	SVE-5	Manifold Average	SVE-1	SVE-2	SVE-3	SVE-4	SVE-5	Wellhead Average
04/26/12	31.6	19.1	13.7	9.4	10.0	14.8	13.4	14.8	9.7	5.1	7.2	10.2	9.4
05/31/12	40.5	13.6	18.0	25.9	a	a	19.2	13.5	17.0	12.1	a	a	14.2
06/28/12	41.3	12.7	12.9	26.4	a	a	17.3	10.2	9.4	12.7	a	a	10.8
07/31/12	45.5	20.6	12.6	31.4	32.0	31.6	25.6	18.2	9.8	20.2	20.8	18.0	17.4
08/31/12	44.5	17.6	10.5	30.3	a	a	19.5	14.8	7.2	18.0	a	a	13.3
09/27/12	43.8	14.5	7.6	29.0	a	a	17.0	11.3	4.1	16.3	a	a	10.6
10/30/12	41.3	6.0	9.5	26.1	25.5	26.6	18.7	5.8	7.9	12.2	12.0	12.4	10.1
12/01/12	39.7	7.8	7.2	24.8	a	a	13.3	3.5	2.4	7.8	a	a	4.6
12/28/12	40.6	8.2	7.4	24.9	a	a	13.5	3.5	2.6	7.1	a	a	4.4
02/01/13	39.0	8.8	6.9	24.1	14.4	15.2	13.9	3.1	2.2	7.3	8.2	9.5	6.1
02/28/13	36.7	7.8	5.7	21.5	a	a	11.7	2.7	2.0	6.8	a	a	3.8
03/26/13	38.0	9.7	7.3	25.8	a	a	14.3	4.2	3.5	24.2	a	a	10.6
04/26/13	26.9	8.7	10.3	8.6	8.2	10.0	9.2	4.3	5.3	8.2	6.2	7.3	6.3
05/30/13	35.9	11.1	12.7	11.3	a	a	11.7	5.5	6.4	5.1	a	a	5.7
06/27/13	32.2	10.4	9.2	18.1	a	a	12.6	5.6	4.3	6.8	a	a	5.6
08/01/13	35.0	11.4	9.3	19.4	18.0	19.3	15.5	6.7	4.5	9.3	9.6	10.0	8.0
08/30/13	35.6	11.3	8.5	21.6	a	a	13.8	6.8	4.3	10.7	a	a	7.3
09/27/13	60.7	19.3	6.3	8.6	7.6	8.9	10.1	4.2	3.3	5.4	5.2	6.0	4.8
10/29/13	22.2	6.4	5.7	8.2	7.2	8.5	7.2	3.1	2.7	4.8	4.4	5.4	4.1
12/02/13	41.5	5.3	5.3	27.0	a	a	12.5	2.2	2.2	9.8	a	a	4.7
12/28/13	41.5	6.8	6.5	26.8	a	a	13.4	2.6	2.6	7.6	a	a	4.3
01/31/14	40.3	6.1	6.5	25.6	17.8	26.7	16.5	2.2	2.2	14.7	a	a	6.4
02/26/14	40.2	6.8	6.8	25.5	a	a	13.0	2.8	3.0	14.5	a	a	6.8
03/27/14	42.4	7.1	7.0	17.9	a	a	10.7	3.4	3.4	5.9	a	a	4.2
04/30/14	41.7	7.3	7.8	17.4	6.8	a	9.8	3.5	3.8	6.4	a	a	4.6
05/27/14	39.4	6.9	7.0	16.8	a	a	10.2	3.1	3.2	5.9	a	a	4.1
06/26/14	41.1	8.1	8.2	18.9	a	a	11.7	4.0	4.1	8.2	a	a	5.4
08/01/14	41.7	8.5	8.3	20.1	24.8	24.0	17.1	4.5	4.2	10.1	13.4	11.5	8.7
08/28/14	44.8	11.3	9.5	24.3	a	a	15.0	6.6	5.5	15.1	a	a	9.1
09/29/14	43.1	7.7	9.0	22.2	a	a	13.0	4.8	3.7	12.5	a	a	7.0
10/29/14	43.1	7.8	7.3	21.4	25.5	24.8	17.4	3.6	3.1	10.6	13.5	11.1	8.4
11/26/14	44.7	8.1	8.4	20.4	a	a	12.3	2.9	2.9	7.3	a	a	4.4
12/31/14	43.2	8.4	7.8	19.7	a	a	12.0	2.5	2.7	5.5	a	a	3.6
01/23/15	41.9	9.1	8.8	18.4	23.4	22.9	16.5	3.0	2.6	6.9	7.1	7.2	5.4
02/27/15	47.7	8.0	6.8	17.8	a	a	10.9	2.5	2.2	8.9	a	a	4.5
04/01/15	46.2	7.4	6.6	18.0	a	a	10.7	3.2	2.6	6.7	a	a	4.2

TABLE 4.2 (Cont.)

Monitoring Date	SVE Vacuum (in. water)	SVE Vacuum (in. water) at Manifold						SVE Vacuum (in. water) at Wellhead					
		SVE-1	SVE-2	SVE-3	SVE-4	SVE-5	Manifold Average	SVE-1	SVE-2	SVE-3	SVE-4	SVE-5	Wellhead Average
04/30/15	45.6	7.1	7.3	16.7	23.5	23.5	15.6	2.9	3.3	7.5	9.5	8.3	6.3
05/30/15	48.9	9.3	10.2	20.2	a	a	13.2	4.8	5.4	10.9	a	a	7.0
06/29/15	46.1	7.8	7.7	17.6	a	a	11.0	4.0	3.9	8.6	a	a	5.5
AS Operating Pressure (psi)	AS Operating Pressure (psi)	AS Pressure (psi) at Manifold						AS Pressure (psi) at Wellhead					
		AS-1	AS-2	AS-3	AS-4	AS-5	Manifold Average	AS-1	AS-2	AS-3	AS-4	AS-5	Wellhead Average
Design Value	12												
05/29/09	8.0	5.5	8.0	8.0	9.0	8.0	7.7	5.0	7.5	7.2	8.6	7.9	7.2
06/23/09	10.8	5.9	8.8	7.8	8.4	8.9	8.0	5.3	8.3	7.0	8.2	8.4	7.4
07/29/09	11.4	6.1	8.3	8.9	8.2	8.9	8.1	5.3	8.2	8.1	8.0	8.7	7.7
08/28/09	11.0	5.9	8.3	8.5	8.4	8.7	7.9	4.1	8.1	8.1	8.1	8.5	7.4
09/23/09	11.3	5.9	8.2	8.3	8.1	8.5	7.8	5.0	8.1	7.8	8.0	8.4	7.5
10/28/09	11.4	5.5	8.2	8.2	8.2	8.3	7.7	4.0	8.0	7.9	8.0	8.2	7.2
11/27/09	12.0	6.0	8.7	8.9	8.7	9.0	8.2	5.8	8.6	8.8	8.5	8.9	8.1
12/23/09	14.0	5.0	8.5	7.4	8.3	10.0	7.8	4.3	8.1	7.3	8.2	8.3	7.2
01/28/10	12.7	4.8	8.3	7.2	8.3	8.5	7.4	4.6	8.1	6.7	7.8	8.4	7.1
02/25/10	12.9	5.0	8.4	7.2	8.4	8.5	7.5	4.7	8.2	6.8	8.0	8.5	7.2
03/23/10	11.6	4.8	8.5	6.9	8.4	8.6	7.4	4.5	8.4	6.6	8.1	8.6	7.2
04/29/10	12.7	5.5	8.6	7.4	8.5	10.0	8.0	5.3	8.4	7.2	8.3	9.6	7.8
05/27/10	11.4	5.7	8.9	7.8	8.3	9.0	7.9	5.1	8.5	7.5	8.3	8.8	7.6
06/22/10	11.4	6.2	8.7	8.7	8.4	8.8	8.2	5.5	8.5	8.3	8.1	8.8	7.9
07/28/10	11.1	1.1	8.9	9.0	8.6	10.0	7.5	0.6	8.5	8.3	7.9	8.8	6.8
08/27/10	b	b	b	b	b	b	b	b	b	b	b	b	B
09/28/10	b	b	b	b	b	b	b	b	b	b	b	b	B
10/28/10	10.8	0.9	8.4	8.4	8.5	8.6	6.9	0.3	8.3	7.7	8.3	8.4	6.6
11/19/10	10.4	a	8.9	8.8	8.9	10.0	7.3	–	8.6	8.1	8.5	8.9	6.8
12/27/10	11.0	a	9.1	9.2	8.5	9.3	7.2	–	8.7	8.7	8.4	9.0	7.0
02/02/11	10.8	5.4	8.8	8.7	8.5	10.0	8.3	4.9	8.4	8.4	8.4	9.0	7.8
03/01/11	10.0	5.3	2.0	8.0	8.7	9.0	6.6	–	0.5	7.6	8.5	8.1	6.2

TABLE 4.2 (Cont.)

	AS Operating Pressure (psi)	AS Pressure (psi) at Manifold						AS Pressure (psi) at Wellhead					
		AS-1	AS-2	AS-3	AS-4	AS-5	Manifold Average	AS-1	AS-2	AS-3	AS-4	AS-5	Wellhead Average
03/29/11	11.1	4.6	0.4	7.8	10.0	10.0	6.6	—	0.1	7.5	7.9	9.0	6.1
04/27/11	11.1	5.5	a	8.2	8.6	10.0	8.1	5.0	a	8.1	8.3	8.8	7.5
05/25/11	11.9	5.7	a	10.0	8.7	10.0	8.6	—	a	c	c	c	C
08/30/11	b	b	b	b	b	b	b	b	b	b	b	b	B
09/26/11	b	b	b	b	b	b	b	b	b	b	b	b	B
10/27/11	13.0	5.8	a	8.0	8.7	11.6	8.5	5.5	a	7.7	8.5	11.3	8.2
11/28/11	13.5	5.7	9.0	8.3	8.8	10.0	8.4	5.1	9.0	8.0	8.6	10.0	8.1
12/29/11	11.0	5.3	9.0	10.6	8.6	11.1	8.9	5.3	9.0	10.2	8.4	11.1	8.8
01/26/12	14.0	5.5	8.7	12.5	9.0	12.5	9.6	5.3	8.7	12.4	8.8	12.5	9.5
02/21/12	14.0	5.7	9.0	10.0	10.0	10.0	8.9	5.2	8.6	10.0	8.3	10.0	8.4
03/29/12	13.0	5.9	9.2	11.7	8.9	11.8	9.5	5.4	8.7	10.7	8.1	11.3	8.8
04/26/12	13.0	5.6	9.0	11.1	8.7	11.6	9.2	5.2	8.7	11.0	8.2	11.6	8.9
05/31/12	16.0	5.4	8.6	14.0	a	a	9.3	5.2	8.4	13.8	a	a	9.1
06/28/12	18.0	5.3	8.7	15.7	a	a	9.9	5.2	8.1	15.1	a	a	9.5
07/31/12	16.0	5.3	8.4	10+	8.3	10+	8.4	5.0	8.2	10+	7.8	10+	8.2
08/31/12	19.9	5.4	8.8	7.7	a	a	7.3	4.9	8.3	7.7	a	a	6.9
09/27/12	20.0	5.3	8.5	10+	a	a	7.9	4.9	8.1	10+	a	a	7.7
10/30/12	20.0	5.3	8.3	10+	8.9	10+	8.5	5.0	8.0	10+	8.1	10+	8.2
12/01/12	b	b	b	b	b	b	b	b	b	b	b	b	b
12/28/12	b	b	b	b	b	b	b	b	b	b	b	b	b
02/01/13	13.5	5.1	8.4	10+	10+	10+	8.7	4.9	8.1	10+	8.2	10+	8.2
02/28/13	20.0	4.7	8.0	10+	a	a	7.6	4.4	7.6	10+	a	a	7.3
03/26/13	21.0	4.6	7.7	10+	a	a	7.4	4.4	7.3	10+	a	a	7.2
04/26/13	21.0	4.9	8.0	10+	7.9	10+	8.2	4.8	7.8	10+	7.9	10+	8.1
05/30/13	21.5	4.9	7.9	10+	a	a	7.6	4.6	7.5	10+	a	a	7.3
06/27/13	19.0	4.9	8.4	10+	a	a	7.8	4.5	7.9	10+	a	a	7.5
08/01/13	19.0	4.7	7.6	10+	8.8	10+	8.2	4.4	7.3	10+	7.2	10+	7.8
08/30/13	20.0	4.7	7.8	10+	a	a	7.5	4.2	7.3	10+	a	a	7.2
09/27/13	21.0	4.5	7.8	10+	7.5	10+	8.0	4.3	7.6	10+	7.4	10+	7.8
10/29/13	18.5	4.7	7.9	10+	7.7	10+	8.1	4.5	7.6	10+	7.5	10+	7.9
12/02/13	15.0	4.4	7.8	10+	a	a	7.4	4.0	7.4	10+	a	a	7.1
12/28/13	18.5	4.7	7.9	10+	a	a	7.5	4.6	7.8	10+	a	a	7.4
01/31/14	19.0	4.3	7.7	6.4	7.6	10+	7.2	4.1	7.4	5.3	a	a	5.6
02/26/14	17.0	4.2	7.7	10+	a	8.3	7.5	3.8	7.3	10+	a	7.7	7.0
03/27/14	17.9	4.4	7.9	10+	a	a	7.4	3.9	7.5	10+	a	a	7.1
04/30/14	18.2	4.3	7.9	15.8	8.4	9.0	9.1	3.9	7.4	15.7	7.2	7.6	8.3

TABLE 4.2 (Cont.)

	AS Operating Pressure (psi)	AS Pressure (psi) at Manifold						AS Pressure (psi) at Wellhead					
		AS-1	AS-2	AS-3	AS-4	AS-5	Manifold Average	AS-1	AS-2	AS-3	AS-4	AS-5	Wellhead Average
05/27/14	18.5	4.6	8.1	16.1	a	a	9.6	4.0	7.4	15.9	a	a	9.1
06/26/14	17.0	4.5	8.0	14.3	a	a	8.9	3.9	7.4	14.2	a	a	8.5
08/01/14	16.1	4.3	7.9	10+	8.0	8.2	7.1	3.9	7.3	10+	7.0	7.3	6.4
08/28/14	16.7	4.4	8.6	10+	a	a	6.5	3.9	7.4	10+	a	a	5.6
09/29/14	16.0	4.4	8.3	10+	a	a	6.4	3.8	7.3	10+	a	a	5.5
10/29/14	16.2	4.4	8.0	10+	8.2	8.5	7.3	3.7	7.2	10+	6.9	7.3	6.2
11/26/14	14.4	4.4	7.8	10+	a	a	6.1	3.6	7.1	10+	a	a	5.4
12/31/14	14.3	4.3	7.4	10+	a	a	5.8	3.3	6.8	10+	a	a	5.1
01/23/15	13.5	4.2	7.3	10+	7.6	7.9	6.7	3.6	6.9	10+	6.7	7.0	6.0
02/27/15	16.5	4.3	7.6	10+	a	a	7.3	3.5	6.8	10+	a	a	6.8
04/01/15	15.5	4.3	7.6	10+	a	a	7.3	3.7	7.1	10+	a	a	6.9
04/30/15	15.2	4.2	7.5	10+	8.3	8.3	7.0	3.6	7.0	10+	6.7	7.1	6.1
05/30/15	15.5	4.3	7.7	10+	a	a	7.3	3.6	7.0	10+	a	a	6.9
06/29/15	14.3	3.9	7.5	10+	a	a	7.1	3.4	7.0	10+	a	a	6.8

<sup>a</sup> Line deactivated.

<sup>b</sup> Blower faulty; system deactivated.

<sup>c</sup> Standing water prevented reading of wellhead pressure.

TABLE 4.3 Analytical results from GreenField for SVE wells.<sup>a</sup>

Location	Sample Date	Carbon Tetrachloride	Chloroform	1,2-DCA	Units	Sampled by	Analyzed by
SVE-1	05/29/09	5,900	710	ND <sup>b</sup> (31)	µg/m <sup>3</sup>	GeoCore	Columbia
SVE-1	06/23/09	150	11	ND (2.6)	µg/m <sup>3</sup>	GeoCore	Columbia
SVE-1	07/30/09	21	5.1	ND (2.4)	µg/m <sup>3</sup>	GeoCore	Columbia
SVE-1	08/28/09	20	4.8	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-1	11/27/09	16	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-1	02/25/10	62	2.0	ND (0.81)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-1	05/27/10	23	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-1	08/27/10	7.5	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-1	11/19/10	138	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-1	03/01/11	42	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-1	05/25/11	95	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-1	10/27/11	5.6	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-1	01/26/12	9.4	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-1	04/26/12	15	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-1	07/31/12	c	c	c	c	GeoCore	c
SVE-1	10/30/12	15	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-1	02/01/13	23	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-1	04/26/13	11	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-1	08/01/13	13	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-1	10/29/13	1.1	ND (0.98)	ND (0.81)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-1	01/31/14	8.2	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-1	04/30/14	18	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-1	08/01/14	13	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-1	10/29/14	10	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-1	01/23/15	11	ND (3.9)	8.5	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-1	04/30/15	7.5	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-2	05/29/09	8,800	480	ND (48)	µg/m <sup>3</sup>	GeoCore	Columbia
SVE-2	06/23/09	49	17	ND (2.5)	µg/m <sup>3</sup>	GeoCore	Columbia
SVE-2	07/30/09	26	5.2	ND (2.4)	µg/m <sup>3</sup>	GeoCore	Columbia
SVE-2	08/28/09	33	5.9	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-2	11/27/09	23	2.1 J <sup>d</sup>	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-2	02/25/10	12	1.6	ND (0.81)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-2	05/27/10	6.3	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-2	08/27/10	3.8	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-2	11/19/10	12,000	56	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-2	03/01/11	5.4	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-2	05/25/11	23	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-2	10/27/11	3.5	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-2	01/26/12	6.9	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-2	04/26/12	13	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-2	07/31/12	7.5	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-2	10/30/12	3.7	2.3	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-2	02/01/13	3.7	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-2	04/26/13	5.9	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-2	08/01/13	4.3	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-2	10/29/13	0.8	ND (0.98)	ND (0.81)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-2	01/31/14	3.3	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-2	04/30/14	6.3	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-2	08/01/14	5.3	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest

TABLE 4.3 (Cont.)

Location	Sample Date	Carbon Tetrachloride	Chloroform	1,2-DCA	Units	Sampled by	Analyzed by
SVE-2	10/29/14	ND(5)	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-2	01/23/15	ND (5)	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-2	04/30/15	2.9	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-3	05/29/09	60,000	2,600	ND (310)	µg/m <sup>3</sup>	GeoCore	Columbia
SVE-3	06/23/09	2,000	190	ND (2.5)	µg/m <sup>3</sup>	GeoCore	Columbia
SVE-3	07/30/09	950	54	ND (2.4)	µg/m <sup>3</sup>	GeoCore	Columbia
SVE-3	08/28/09	502	37	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-3	11/27/09	528	21	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-3	02/25/10	238	28	ND (1.6)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-3	05/27/10	345	15	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-3	08/27/10	113	9.3	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-3	11/19/10	7,110	47	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-3	03/01/11	96	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-3	05/25/11	5.0	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-3	10/27/11	165	3.0	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-3	01/26/12	46	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-3	04/26/12	45	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-3	07/31/12	82	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-3	10/30/12	47	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-3	02/01/13	19	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-3	04/26/13	39	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-3	08/01/13	86	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-3	10/29/13	91	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-3	01/31/14	47	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-3	04/30/14	60	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-3	08/01/14	150	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-3	10/29/14	83	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-3	01/23/15	89	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-3	04/30/15	57	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-4	05/29/09	29,000	1,800	ND (160)	µg/m <sup>3</sup>	GeoCore	Columbia
SVE-4	06/23/09	400	51	ND (2.5)	µg/m <sup>3</sup>	GeoCore	Columbia
SVE-4	07/30/09	130	12	ND (2.3)	µg/m <sup>3</sup>	GeoCore	Columbia
SVE-4	08/28/09	84	8.3	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-4	11/27/09	110	7.3	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-4	02/25/10	59	6.8	ND (0.81)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-4	08/27/10	17	3.0	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-4	11/19/10	34,300	90.3	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-4	03/01/11	25	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-4	05/25/11	23	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-4	10/27/11	17	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-4	01/26/12	8.8	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-4	04/26/12	8.2	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-4	07/31/12	18	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-4	10/30/12	8.2	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-4	02/01/13	8.2	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-4	04/26/13	4.4	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-4	08/01/13	18	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-4	10/29/13	14	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-4	01/31/14	13	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest



TABLE 4.3 (Cont.)

Location	Sample Date	Carbon Tetrachloride	Chloroform	1,2-DCA	Units	Sampled by	Analyzed by
SVE-4	04/30/14	20	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-4	08/01/14	28	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-4	10/29/14	13	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-4	01/23/15	12	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-4	04/30/15	20	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-5	05/29/09	13,000	310	ND (64)	µg/m <sup>3</sup>	GeoCore	Columbia
SVE-5	06/23/09	1,900	160	ND (2.4)	µg/m <sup>3</sup>	GeoCore	Columbia
SVE-5	07/30/09	760	39	ND (2.4)	µg/m <sup>3</sup>	GeoCore	Columbia
SVE-5	11/27/09	188	6.8	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-5	02/25/10	174	18	ND (0.81)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-5	05/27/10	130	5.9	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-5	08/27/10	55	2.9	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-5	11/19/10	4,940	31	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-5	03/01/11	129	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-5	05/25/11	125	3.2	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-5	10/27/11	18	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-5	01/26/12	18	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-5	04/26/12	36	2.4	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-5	07/31/12	40	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-5	10/30/12	23	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-5	02/01/13	18	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-5	04/26/13	4.6	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-5	08/01/13	49	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-5	10/29/13 <sup>e</sup>	45	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-5	01/31/14	162	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-5	04/30/14	65	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-5	08/01/14	96	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-5	10/29/14	45	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-5	01/23/15	47	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-5	04/30/15	77	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-Effluent	05/29/09	46,000	2,000	ND (64)	µg/m <sup>3</sup>	GeoCore	Columbia
SVE-Effluent	06/23/09	1,100	99	ND (2.2)	µg/m <sup>3</sup>	GeoCore	Columbia
SVE-Effluent	07/30/09	460	26	ND (2.5)	µg/m <sup>3</sup>	GeoCore	Columbia
SVE-Effluent	08/28/09	40	ND (14)	ND (11)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-Effluent	11/27/09	182	8.8	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-Effluent	02/25/10	115	12	ND (0.81)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-Effluent	05/27/10	143	6.8	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-Effluent	08/27/10	34	2.9	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-Effluent	11/19/10	13,000	97	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-Effluent	05/25/11	49	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-Effluent	10/27/11	33	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-Effluent	01/26/12	21	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-Effluent	04/26/12	25	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-Effluent	07/31/12	52	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-Effluent	10/30/12	27	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-Effluent	02/01/13	9.4	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-Effluent	04/26/13	20	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-Effluent	08/01/13	48	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest

TABLE 4.3 (Cont.)

Location	Sample Date	Carbon Tetrachloride	Chloroform	1,2-DCA	Units	Sampled by	Analyzed by
SVE-Effluent	10/29/13	38	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-Effluent	01/31/14	9.4	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-Effluent	04/30/14	15	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-Effluent	08/01/14	64	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-Effluent	10/29/14	41	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-Effluent	01/23/15	11	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest
SVE-Effluent	04/30/15	50	ND (3.9)	ND (3.2)	µg/m <sup>3</sup>	GeoCore	Accutest

<sup>a</sup> Data are from GreenField start-up report and from monthly and quarterly OMM reports.

<sup>b</sup> ND, compound analyzed for but not detected at a level greater than or equal to the indicated method detection limit.

<sup>c</sup> Sampling error. The canister received at the laboratory was out of the vacuum range and was not suitable for analysis.

<sup>d</sup> J, compound identified with an estimated concentration between the instrument detection limit and the method detection limit.

<sup>e</sup> GreenField quarterly report gives date as 10/25/13.

TABLE 4.4 Analytical results for soil gas samples.

Location	Sample	Sample Date	Concentration ( $\mu\text{g}/\text{m}^3$ )			
			Carbon Tetrachloride	Chloroform	Methylene Chloride	1,2-Dichloroethane
SG1S	AGSG1S-G-17934	05/26/09	1,100	380	170 U <sup>a</sup>	81 U
SG1S	AGSG1S-G-17960	07/30/09	24,000	1,700	210 U	97 U
SG1S	AGSG1S-G-17977	09/18/09	36,000	3,700	1800 U	810 U
SG1S	AGSG1S-G-17991	11/25/09	13 U	9.8 U	17 U	8.1 U
SG1S	AGSG1S-G-30130	02/12/10	13 U	9.8 U	17 U	8.1 U
SG1S	AGSG1S-G-30131 <sup>b</sup>	02/12/10	13 U	9.8 U	17 U	8.1 U
SG1S	AGSG1S-G-30138	03/23/10	13 U	9.8 U	17 U	8.1 U
SG1S	AGSG1S-G-30156	05/27/10	37 U	29 U	52 U	24 U
SG1S	AGSG1S-G-30237	09/16/10	32 U	25 U	44 U	20 U
SG1S	AGSG1S-G-30256	12/16/10	80	9.8 U	17 U	8.1 U
SG1S	AGSG1S-G-30275	03/16/11	13 U	9.8 U	17 U	8.1 U
SG1S	AGSG1S-G-30307	06/07/11	13 U	9.8 U	17 U	8.1 U
SG1S	AGSG1S-G-30330	10/05/11	25 U	20 U	35 U	16 U
SG1S	AGSG1S-G-30350	12/14/11	21	9.8 U	17 U	8.1 U
SG1S	AGSG1SDUP-G-30356 <sup>b</sup>	12/14/11	14	9.8 U	17 U	8.1 U
SG1S	AGSG1S-G-30371	03/14/12	28	9.8 U	17 U	8.1 U
SG1S	AGSG1S-G-30392	06/27/12	35 U	27 U	49 U	23 U
SG1S	AGSG1SDUP-G-30398 <sup>b</sup>	06/27/12	63 U	49 U	87 U	41 U
SG1S	AGSG1S-G-30453	10/18/12	36	14 U	25 U	12 U
SG1S	AGSG1S-G-30473	01/16/13	60	9.8 U	17 U	8.1 U
SG1S	AGSG1S-G-30493	04/02/13	41	9.8 U	17 U	8.1 U
SG1S	AGSG1S-G-30525	07/11/13	18	9.8 U	17 U	8.1 U
SG1S	AGSG1S-G-35716	09/17/13	16	9.8 U	17 U	8.1 U
SG1S	AGSG1S-G-35736	11/20/13	35	9.8 U	17 U	8.1 U
SG1S	AGSG1SDUP-35742 <sup>b</sup>	11/20/13	44	9.8 U	17 U	8.1 U
SG1S	AGSG1S-G-35756	02/26/14	14	9.8 U	17 U	8.1 U
SG1S	AGSG1S-G-36604	06/25/14	13 U	9.8 U <sup>c</sup>	17 U <sup>c</sup>	8.1 U
SG1S	AGSG1S-G-36816	09/30/14	13 U	9.8 U	17 U	8.1 U
SG1S	AGSG1S-G-36838	12/02/14	13 U	9.8 U	17 U	8.1 U
SG1S	AGSG1S-G-37180	03/27/15	13 U	9.8 U	17 U	8.1 U
SG1D	AGSG1D-G-17928	05/20/09	19,000	1,700	17 U	8.1 U
SG1D	AGSG1D-G-17935	05/26/09	16,000	930	180 U	85 U
SG1D	AGSG1D-G-17961	07/30/09	540	32	17 U	8.1 U
SG1D	AGSG1D-G-17978	09/18/09	13,000	3,600	110 U	48 U
SG1D	AGSG1D-G-17979 <sup>b</sup>	09/18/09	13,000	4,100	100 U	49 U
SG1D	AGSG1D-G-17992	11/25/09	1,400	470	17 U	8.1 U
SG1D	AGSG1D-G-30132	02/12/10	2,000	490	17 U	8.1 U
SG1D	AGSG1D-G-30139	03/23/10	570	150	17 U	8.1 U
SG1D	AGSG1D-G-30157	05/27/10	18	9.8 U	17 U	8.1 U
SG1D	AGSG1DDUP-G-30162 <sup>b</sup>	05/27/10	13 U	9.8 U	17 U	8.1 U
SG1D	AGSG1D-G-30238	09/16/10	19	9.8 U	17 U	8.1 U
SG1D	AGSG1D-G-30257	12/16/10	63	9.7	17 U	8.1 U
SG1D	AGSG1D-G-30276	03/16/11	52	20	17 U	8.1 U
SG1D	AGSG1D-G-30308	06/07/11	91	19	17 U	8.1 U
SG1D	AGSG1DDUP-G-30313 <sup>b</sup>	06/07/11	96	19	17 U	8.1 U
SG1D	AGSG1D-G-30331	10/05/11	34	9.8 U	17 U	8.1 U
SG1D	AGSG1D-G-30351	12/14/11	13 U	9.8 U	17 U	8.1 U
SG1D	AGSG1D-G-30372	03/14/12	37	11	17 U	8.1 U
SG1D	AGSG1D-G-30393	06/27/12	42	12	17 U	8.1 U

TABLE 4.4 (Cont.)

Location	Sample	Sample Date	Concentration ( $\mu\text{g}/\text{m}^3$ )			
			Carbon Tetrachloride	Chloroform	Methylene Chloride	1,2-Dichloroethane
SG1D	AGSG1D-G-30454	10/18/12	13	9.8 U	17 U	8.1 U
SG1D	AGSG1D-G-30474	01/16/13	100	18	17 U	8.1 U
SG1D	AGSG1D-G-30494	04/02/13	26	9.8 U	17 U	8.1 U
SG1D	AGSG1D-G-30526	07/11/13	13 U	9.8 U	17 U	8.1 U
SG1D	AGSG1DDUP-G-30531 <sup>b</sup>	07/11/13	13 U	9.8 U	17 U	8.1 U
SG1D	AGSG1D-G-35717	09/17/13	13 U	9.8 U	17 U	8.1 U
SG1D	AGSG1D-G-35737	11/20/13	13 U	9.8 U	17 U	8.1 U
SG1D	AGSG1D-G-35757	02/26/14	13 U	9.8 U	17 U	8.1 U
SG1D	AGSG1DDUP-G-35762 <sup>b</sup>	02/26/14	13 U	9.8 U	17 U	8.1 U
SG1D	AGSG1D-G-36605	06/25/14	13 U	9.8 U	17 U	8.1 U
SG1D	AGSG1D-G-36817	09/30/14	13 U	9.8 U	17 U	8.1 U
SG1D	AGSG1D-G-36839	12/02/14	13 U	9.8 U	17 U	8.1 U
SG1D	AGSG1DDUP-G-36844 <sup>b</sup>	12/02/14	13 U	9.8 U	17 U	8.1 U
SG1D	AGSG1D-G-37181	03/27/15	13 U	9.8 U	17 U	8.1 U
SG2S	AGSG2S-G-17929	05/20/09	450	330	17 U	8.1 U
SG2S	AGSG2S-G-17936	05/26/09	330	98 U	170 U	81 U
SG2S	AGSG2S-G-17962	07/30/09	250	28	45 U	21 U
SG2S	AGSG2S-G-17980	09/18/09	2,600	730	180 U	81 U
SG2S	AGSG2S-G-17993	11/25/09	1,400	190	35 U	16 U
SG2S	AGSG2S-G-30133	02/12/10	13 U	19	17 U	8.1 U
SG2S	AGSG2S-G-30140	03/23/10	88	27	17 U	8.1 U
SG2S	AGSG2S-G-30158	05/27/10	110	30	52 U	24 U
SG2S	AGSG2S-G-30239	09/16/10	360	97 U	170 U	80 U
SG2S	AGSG2SDUP-G-30243 <sup>b</sup>	09/16/10	230	74 U	130 U	62 U
SG2S	AGSG2S-G-30258	12/16/10	230	9.8 U	17 U	8.1 U
SG2S	AGSG2S-G-30277	03/16/11	99	79 U	140 U	65 U
SG2S	AGSG2S-G-30309	06/07/11	40	20 U	35 U	16 U
SG2S	AGSG2S-G-30332	10/05/11	25 U	20 U	35 U	16 U
SG2S	AGSG2S-G-30352	12/14/11	13 U	9.8 U	17 U	8.1 U
SG2S	AGSG2S-G-30373	03/14/12	13 U	9.8 U	17 U	8.1 U
SG2S	AGSG2S-G-30394	06/27/12	37 U	29 U	51 U	24 U
SG2S	AGSG2SDUP-G-30479 <sup>b</sup>	01/16/13	20	9.8 U	17 U	8.1 U
SG2S	AGSG2S-G-30455	10/18/12	13	9.8 U	17 U	8.1 U
SG2S	AGSG2S-G-30475	01/16/13	14	9.8 U	17 U	8.1 U
SG2S	AGSG2S-G-30495	04/02/13	13 U	9.8 U	17 U	8.1 U
SG2S	AGSG2S-G-30527	07/11/13	13 U	9.8 U	17 U	8.1 U
SG2S	AGSG2S-G-35718	09/17/13	13 U	9.8 U	17 U	8.1 U
SG2S	AGSG2S-G-35738	11/20/13	13 U	9.8 U	17 U	8.1 U
SG2S	AGSG2S-G-35758	02/26/14	13 U	9.8 U	17 U	8.1 U
SG2S	AGSG2S-G-36606	06/25/14	13 U	9.8 U	17 U	8.1 U
SG2S	AGSG2S-G-36818	09/30/14	13 U	9.8 U	17 U	8.1 U
SG2S	AGSG2S-G-36840	12/02/14	13 U	9.8 U	17 U	8.1 U
SG2S	AGSG2S-G-37182	03/27/15	13 U	9.8 U	17 U	8.1 U
SG2D	AGSG2D-G-17930	05/20/09	13 U	9.8 U	17 U	8.1 U
SG2D	AGSG2D-G-17937	05/26/09	57	20 U	35 U	16 U
SG2D	AGSG2D-G-17963	07/30/09	13 U	9.8 U	17 U	8.1 U
SG2D	AGSG2DDUP-G-17966 <sup>b</sup>	07/30/09	13 U	9.8 U	17 U	8.1 U
SG2D	AGSG2D-G-17981	09/18/09	100	19	17 U	8.1 U
SG2D	AGSG2D-G-17994	11/25/09	14	9.8 U	17 U	8.1 U
SG2D	AGSG2D-G-30134	02/12/10	20	9.8 U	17 U	8.1 U
SG2D	AGSG2D-G-30141	03/23/10	13 U	9.8 U	17 U	8.1 U

TABLE 4.4 (Cont.)

Location	Sample	Sample Date	Concentration ( $\mu\text{g}/\text{m}^3$ )			
			Carbon Tetrachloride	Chloroform	Methylene Chloride	1,2-Dichloroethane
SG2D	AGSG2DDUP-G-30144 <sup>b</sup>	03/23/10	13 U	9.8 U	17 U	8.1 U
SG2D	AGSG2D-G-30240	09/16/10	13 U	9.8 U	17 U	8.1 U
SG2D	AGSG2D-G-30259	12/16/10	51	9.8 U	17 U	8.1 U
SG2D	AGSG2D-G-30278	03/16/11	13 U	9.8 U	17 U	8.1 U
SG2D	AGSG2DDUP-G-30281 <sup>b</sup>	03/16/11	13 U	9.8 U	17 U	8.1 U
SG2D	AGSG2D-G-30310	06/07/11	13 U	9.8 U	17 U	8.1 U
SG2D	AGSG2D-G-30333	10/05/11	13 U	9.8 U	17 U	8.1 U
SG2D	AGSG2D-G-30353	12/14/11	13 U	9.8 U	17 U	8.1 U
SG2D	AGSG2D-G-30374	03/14/12	13 U	9.8 U	17 U	8.1 U
SG2D	AGSG2D-G-30395	06/27/12	13 U	9.8 U	17 U	8.1 U
SG2D	AGSG2D-G-30456	10/18/12	13 U	9.8 U	17 U	8.1 U
SG2D	AGSG2D-G-30476	01/16/13	13 U	9.8 U	17 U	8.1 U
SG2D	AGSG2D-G-30496	04/02/13	13 U	9.8 U	17 U	8.1 U
SG2D	AGSG2D-G-30528	07/11/13	13 U	9.8 U	17 U	8.1 U
SG2D	AGSG2D-G-35719	09/17/13	d	d	d	d
SG2D	AGSG2D-G-35739	11/20/13	13 U	9.8 U	17 U	8.1 U
SG2D	AGSG2D-G-35759	02/26/14	13 U	9.8 U	17 U	8.1 U
SG2D	AGSG2D-G-36607	06/25/14	13 U	9.8 U	17 U	8.1 U
SG2D	AGSG2D-G-36819	09/30/14	13 U	9.8 U	17 U	8.1 U
SG2D	AGSG2DDUP-G-36822 <sup>b</sup>	09/30/14	13 U	9.8 U	17 U	8.1 U
SG2D	AGSG2D-G-36841	12/02/14	13 U	9.8 U	17 U	8.1 U
SG2D	AGSG2D-G-37183	03/27/15	13 U	9.8 U	17 U	8.1 U
SG3S	AGSG3S-G-17931	05/21/09	13 U	9.8 U	17 U	8.1 U
SG3S	AGSG3SDUP-G-17934 <sup>b</sup>	05/21/09	13 U	9.8 U	17 U	8.1 U
SG3S	AGSG3S-G-17938	05/26/09	140	100 U	180 U	85 U
SG3S	AGSG3S-G-17964	07/30/09	3,100	310	45 U	20 U
SG3S	AGSG3S-G-17982	09/18/09	6,900	1,700	180 U	81 U
SG3S	AGSG3S-G-17995	11/25/09	1,600	170	35 U	16 U
SG3S	AGSG3S-G-30135	02/12/10	2,200	160	17 U	8.1 U
SG3S	AGSG3S-G-30142	03/23/10	1,200	120	17 U	8.1 U
SG3S	AGSG3S-G-30160	05/27/10	570	73	87 U	40 U
SG3S	AGSG3S-G-30241	09/16/10	200	74 U	130 U	61 U
SG3S	AGSG3S-G-30260	12/16/10	210	13	17 U	8.1 U
SG3S	AGSG3S-G-30279	03/16/11	100	19 U	34 U	16 U
SG3S	AGSG3S-G-30311	06/07/11	31	20 U	35 U	16 U
SG3S	AGSG3S-G-30334	10/05/11	25 U	20 U	35 U	16 U
SG3S	AGSG3S-G-30354	12/14/11	16	9.8 U	17 U	8.1 U
SG3S	AGSG3S-G-30375	03/14/12	16	9.8 U	17 U	8.1 U
SG3S	AGSG3SDUP-G-30377 <sup>b</sup>	03/14/12	13 U	9.8 U	17 U	8.1 U
SG3S	AGSG3S-G-30396	06/27/12	13 U	9.8 U	17 U	8.1 U
SG3S	AGSB3SDUP-G-30459 <sup>b</sup>	10/18/12	13 U	9.8 U	17 U	8.1 U
SG3S	AGSG3S-G-30457	10/18/12	13 U	9.8 U	17 U	8.1 U
SG3S	AGSG3S-G-30477	01/16/13	13 U	9.8 U	17 U	8.1 U
SG3S	AGSG3S-G-30497	04/02/13	13 U	9.8 U	17 U	8.1 U
SG3S	AGSG3S-G-30529	07/11/13	13 U	9.8 U	17 U	8.1 U
SG3S	AGSG3S-G-35720	09/17/13	13 U	9.8 U	17 U	8.1 U
SG3S	AGSG3S-G-35740	11/20/13	13 U	9.8 U	17 U	8.1 U
SG3S	AGSG3S-G-35760	02/26/14	13 U	9.8 U	17 U	8.1 U
SG3S	AGSG3S-G-36608	06/25/14	13 U	9.8 U	17 U	8.1 U
SG3S	AGSG3S-G-36820	09/30/14	13 U	9.8 U	17 U	8.1 U
SG3S	AGSG3S-G-36842	12/02/14	13 U	9.8 U	17 U	8.1 U
SG3S	AGSG3S-G-37184	03/27/15	13 U	9.8 U	17 U	8.1 U

TABLE 4.4 (Cont.)

Location	Sample	Sample Date	Concentration ( $\mu\text{g}/\text{m}^3$ )			
			Carbon Tetrachloride	Chloroform	Methylene Chloride	1,2-Dichloroethane
SG3D	AGSG3D-G-17932	05/20/09	6,900	1,700	20	8.1 U
SG3D	AGSG3D-G-17939	05/26/09	2,700	830	350 U	160 U
SG3D	AGSG3DDUP-G-17940 <sup>b</sup>	05/26/09	2,700	630	350 U	160 U
SG3D	AGSG3D-G-17965	07/30/09	6,900	1,100	69 U	32 U
SG3D	AGSG3D-G-17983	09/18/09	5,900	2,600	90 U	40 U
SG3D	AGSG3D-G-17996	11/25/09	40	28	17 U	8.1 U
SG3D	AGSG3DDUP-G-17997 <sup>b</sup>	11/25/09	60	42	17 U	8.1 U
SG3D	AGSG3D-G-30136	02/12/10	15	9.8 U	17 U	8.1 U
SG3D	AGSG3D-G-30143	03/23/10	13 U	9.8 U	17 U	8.1 U
SG3D	AGSG3D-G-30161	05/27/10	13 U	9.8 U	17 U	8.1 U
SG3D	AGSG3D-G-30242	09/16/10	13	12	17 U	8.1 U
SG3D	AGSG3D-G-30261	12/16/10	410	86	63 U	30 U
SG3D	AGSG3DDUP-G-30262 <sup>b</sup>	12/16/10	660	190	63 U	30 U
SG3D	AGSG3D-G-30280	03/16/11	330	86	32 U	15 U
SG3D	AGSG3D-G-30312	06/07/11	47	29 U	51 U	24 U
SG3D	AGSG3D-G-30335	10/05/11	49	15	17 U	8.1 U
SG3D	AGSG3DDUP-G-30336 <sup>b</sup>	10/05/11	130	37	17 U	8.1 U
SG3D	AGSG3D-G-30355	12/14/11	13 U	9.8 U	17 U	8.1 U
SG3D	AGSG3D-G-30376	03/14/12	59	17	17 U	8.1 U
SG3D	AGSG3D-G-30397	06/27/12	83	22	17 U	8.1 U
SG3D	AGSG3D-G-30458	10/18/12	13 U	9.8 U	17 U	8.1 U
SG3D	AGSG3D-G-30478	01/16/13	66	19	17 U	8.1 U
SG3D	AGSG3D-G-30498	04/02/13	54	18	17 U	8.1 U
SG3D	AGSG3DDUP-G-30499 <sup>b</sup>	04/02/13	51	17	17 U	8.1 U
SG3D	AGSG3D-G-30530	07/11/13	13 U	9.8 U	17 U	8.1 U
SG3D	AGSG3D-G-35721	09/17/13	13 U	9.8 U	17 U	8.1 U
SG3D	AGSG3DDUP-G-35722 <sup>b</sup>	09/17/13	13 U	9.8 U	17 U	8.1 U
SG3D	AGSG3D-G-35741	11/20/13	14	9.8 U	17 U	8.1 U
SG3D	AGSG3D-G-35761	02/26/14	13 U	9.8 U	17 U	8.1 U
SG3D	AGSG3D-W-36609	06/25/14	13 U	9.8 U	17 U	8.1 U
SG3D	AGSG3DDUP-W-36610 <sup>b</sup>	06/25/14	13 U	9.8 U	17 U	8.1 U
SG3D	AGSG3D-G-36821	09/30/14	13 U	9.8 U	17 U	8.1 U
SG3D	AGSG3D-G-36843	12/02/14	13 U	9.8 U	17 U	8.1 U
SG3D	AGSG3D-G-37185	03/27/15	13 U	9.8 U	17 U	8.1 U
SG3D	AGSG3DDUP-G-37186 <sup>b</sup>	03/27/15	13 U	9.8 U	17 U	8.1 U
QC	AGSGBKGD-G-17933	05/21/09	1.3 U	0.98 U	1.7 U	0.81 U
QC	AGBKGD-G-17967	07/30/09	1.3 U	0.98 U	1.7 U	0.81 U
QC	AGBKGD-G-17984	09/18/09	1.3 U	0.98 U	1.7 U	0.81 U
QC	AGBKGD-G-17998	11/25/09	1.3 U	0.98 U	1.7 U	0.81 U
QC	AGBKGD-G-30137	02/12/10	1.3 U	0.98 U	1.7 U	0.81 U
QC	AGBKGD-G-30145	03/23/10	1.3 U	0.98 U	1.7 U	0.81 U
QC	AGBKGD-G-30163	05/27/10	1.3 U	0.98 U	1.7 U	0.81 U
QC	AGBKGD-G-30244	09/16/10	1.3 U	0.98 U	1.7 U	0.81 U
QC	AGBKGD-G-30263	12/16/10	1.3 U	0.98 U	1.7 U	0.81 U
QC	AGBKGD-G-30282	03/16/11	13 U	9.8 U	17 U	8.1 U
QC	AGBKGD-G-30314	06/07/11	1.3 U	0.98 U	1.7 U	0.81 U
QC	AGBKGD-G-30337	10/05/11	13 U	9.8 U	17 U	8.1 U
QC	AGBKGD-G-30357	12/14/11	13 U	9.8 U	17 U	8.1 U
QC	AGBKGD-G-30378	03/14/12	13 U	9.8 U	17 U	8.1 U
QC	AGBKGD-G-30399	06/27/12	13 U	9.8 U	17 U	8.1 U
QC	AGBKGD-G-30460	10/18/12	13 U	9.8 U	17 U	8.1 U
QC	AGBKGD-G-30480	01/16/13	13 U	9.8 U	17 U	8.1 U

TABLE 4.4 (Cont.)

Location	Sample	Sample Date	Concentration ( $\mu\text{g}/\text{m}^3$ )			
			Carbon Tetrachloride	Chloroform	Methylene Chloride	1,2-Dichloroethane
QC	AGBKGD-G-30500	04/02/13	13 U	9.8 U	17 U	8.1 U
QC	AGBKGD-G-30532	07/11/13	13 U	9.8 U	17 U	8.1 U
QC	AGBKGD-G-35723	09/17/13	13 U	9.8 U	17 U	8.1 U
QC	AGBKGD-G-35743	11/20/13	13 U	9.8 U	17 U	8.1 U
QC	AGBKGD-G-35763	02/26/14	13 U	9.8 U	17 U	8.1 U
QC	AGBKGD-G-36611	06/25/14	13 U	9.8 U	17 U	8.1 U
QC	AGBKGD-G-36823	09/30/14	13 U	9.8 U	17 U	8.1 U
QC	AGBKGD-G-36845	12/02/14	13 U	9.8 U	17 U	8.1 U
QC	AGBKGD-G-37187	03/27/15	13 U	9.8 U	17 U	8.1 U

<sup>a</sup> U, compound analyzed for but not detected at a level greater than or equal to the indicated method detection limit.

<sup>b</sup> Quality control replicate sample.

<sup>c</sup> Internal standard response outside QC limits.

<sup>d</sup> Sample not analyzed. Canister received with valve open and at zero pressure.

TABLE 4.5 Analytical results for groundwater samples.

Location	Sample	Sample Date	Concentration (µg/L)				Sampled By	Analyzed By
			Carbon Tetrachloride	Chloroform	Methylene Chloride	1,2-DCA		
GW1	AGGW1-W-17896	05/20/09	114	8.1	ND <sup>a</sup>	ND	Argonne	AGEM
GW1	GW-1	05/29/09	32	6.7	-	ND	GeoCore	Accutest
GW1	GW-1	08/28/09	46	7.7	-	ND	GeoCore	Accutest
GW1	AGGW1-W-17973	09/18/09	46	5.8	ND	ND	Argonne	AGEM
GW1	GW-1	11/27/09	48	7.3	-	ND	GeoCore	Accutest
GW1	AGGW1-W-30123	12/13/09	47	5.9	ND	ND	Argonne	AGEM
GW1	GW-1	02/25/10	36	4.2	-	ND	GeoCore	Accutest
GW1	AGGW1-W-30149	03/23/10	11	3.2	ND	ND	Argonne	AGEM
GW1	GW-1	05/27/10	25	5.1	-	ND	GeoCore	Accutest
GW1	AGGW1-W-30167	06/16/10	26	4.1	ND	ND	Argonne	AGEM
GW1	GW-1	08/27/10	30	5.4	ND	ND	GeoCore	Accutest
GW1	AGGW1-W-30229	09/16/10	38	5.8	ND	ND	Argonne	AGEM
GW1	GW-1	11/19/10	31	5.8	ND	ND	GeoCore	Accutest
GW1	AGGW1-W-30248	12/16/10	54	6.2	ND	ND	Argonne	AGEM
GW1	GW-1	03/01/11	40	5.5	ND	ND	GeoCore	Accutest
GW1	AGGW1-W-30267	03/16/11	42	4.8	ND	ND	Argonne	AGEM
GW1	No sample	05/25/11	b	b	b	b	GeoCore	b
GW1	AGGW1-W-30298	06/06/11	37	4.9	ND	ND	Argonne	AGEM
GW1	AGGW1-W-30321	10/05/11	38	5.2	ND	ND	Argonne	AGEM
GW1	GW-1	10/27/11	34	5.4	-	ND	GeoCore	Accutest
GW1	AGGW1-W-30341	12/14/11	38	4.9	ND	ND	Argonne	AGEM
GW1	GW-1	01/26/12	39	5.7	-	ND	GeoCore	Accutest
GW1	AGGW1-W-30361	03/14/12	42	4.6	ND	ND	Argonne	AGEM
GW1	GW-1	04/26/12	39	5.0	-	ND	GeoCore	Accutest
GW1	AGGW1-W-30382	06/27/12	64	5.7	ND	ND	Argonne	AGEM
GW1	GW-1	07/31/12	45	4.8	-	ND	GeoCore	Accutest
GW1	AGGW1-W-30444	10/18/12	68	5.0	ND	ND	Argonne	AGEM
GW1	GW-1	10/30/12	46	5.7	-	ND	GeoCore	Accutest
GW1	AGGW1-W-30464	01/16/13	67	5.0	ND	ND	Argonne	AGEM
GW1	GW-1	02/01/13	31	3.3	-	ND	GeoCore	Accutest
GW1	AGGW1-W-30484	04/02/13	72	4.9	ND	ND	Argonne	AGEM
GW1	GW-1	04/26/13	56	5.1	-	ND	GeoCore	Accutest
GW1	AGGW1-W-30516	07/11/13	74	4.9	ND	ND	Argonne	AGEM
GW1	GW-1	08/01/13	50	5.7	-	ND	GeoCore	Accutest
GW1	AGGW1-W-35707	09/17/13	88	5.2	ND	ND	Argonne	AGEM
GW1	GW-1	10/29/13	85	5.7	-	ND	GeoCore	Accutest
GW1	AGGW1-W-35727	11/25/13	78	4.4	ND	ND	Argonne	AGEM
GW1	GW-1	01/31/14	94	5.6	-	ND	GeoCore	Accutest
GW1	AGGW1-W-35747	02/25/14	107	5.8	ND	ND	Argonne	AGEM
GW1	GW-1	04/30/14	70	5.0	-	ND	GeoCore	Accutest
GW1	AGGW1-W-36595	06/27/14	69	3.1	ND	ND	Argonne	AGEM
GW1	GW-1	08/01/14	77	5.8	-	ND	GeoCore	Accutest
GW1	AGGW1-W-36807	09/30/14	66	4.7	ND	ND	Argonne	AGEM
GW1	GW-1	10/29/14	66	4.5	-	ND	GeoCore	Accutest
GW1	AGGW1-W-36828	12/02/14	76	5.0	ND	ND	Argonne	AGEM
GW1	GW-1	01/23/15	83	6.3	-	ND	GeoCore	Accutest
GW1	AGGW1-W-36850	03/27/15	56	5.0	ND	ND	Argonne	AGEM
GW1	GW-1	04/30/15	48	4.8	-	ND	GeoCore	Accutest
GW1	AGGW1-W-37191	06/30/15	52	5.2	ND	ND	Argonne	AGEM
GW2	AGGW2-W-17806	05/20/09	6,090	46	ND	ND	Argonne	AGEM
GW2	AGGW2-W-17971	09/18/09	2,491	19	ND	ND	Argonne	AGEM
GW2	AGGW2-W-30121	12/13/09	2,817	26	ND	ND	Argonne	AGEM
GW2	AGGW2-W-30150	03/23/10	2,943	32	ND	ND	Argonne	AGEM
GW2	AGGW2-W-30168	06/16/10	500	13	ND	ND	Argonne	AGEM
GW2	AGGW2-W-30230	09/16/10	1,978	24	ND	ND	Argonne	AGEM
GW2	AGGW2-W-30249	12/16/10	2,959	28	ND	ND	Argonne	AGEM
GW2	AGGW2-W-30268	03/16/11	3,164	21	ND	ND	Argonne	AGEM
GW2	AGGW2-W-30299	06/06/11	2,900	20	ND	ND	Argonne	AGEM
GW2	AGGW2-W-30322	10/05/11	4,207	22	ND	ND	Argonne	AGEM
GW2	AGGW2-W-30342	12/14/11	2,745	44	0.5 J <sup>c</sup>	ND	Argonne	AGEM
GW2	AGGW2-W-30362	03/14/12	3,925	25	ND	ND	Argonne	AGEM
GW2	AGGW2-W-30383	06/27/12	5,802	24	ND	ND	Argonne	AGEM
GW2	AGGW2-W-30445	10/18/12	3,556	25	ND	ND	Argonne	AGEM
GW2	AGGW2-W-30465	01/16/13	3,942	27	ND	ND	Argonne	AGEM
GW2	AGGW2-W-30485	04/02/13	4,197	22	ND	ND	Argonne	AGEM
GW2	AGGW2-W-30517	07/11/13	4,024	22	ND	ND	Argonne	AGEM
GW2	AGGW2-W-35708	09/17/13	4,992	25	ND	ND	Argonne	AGEM
GW2	AGGW2-W-35728	11/25/13	5,182	26	ND	ND	Argonne	AGEM
GW2	AGGW2-W-35748	02/25/14	6,511	28	ND	ND	Argonne	AGEM



TABLE 4.5 (Cont.)

Location	Sample	Sample Date	Concentration (µg/L)				Sampled By	Analyzed By
			Carbon Tetrachloride	Chloroform	Methylene Chloride	1,2-DCA		
GW2	AGGW2-W-36596	06/27/14	2,291	15	ND	ND	Argonne	AGEM
GW2	AGGW2-W-36808	09/30/14	3,084	21	ND	ND	Argonne	AGEM
GW2	AGGW2-W-36829	12/02/14	4,283	23	ND	ND	Argonne	AGEM
GW2	AGGW2-W-36851	03/27/15	3,480	24	ND	ND	Argonne	AGEM
GW2	AGGW2-W-37192	06/30/15	4,256	23	ND	ND	Argonne	AGEM
GW3	AGGW3-W-17894	05/20/09	9,198	28	ND	ND	Argonne	AGEM
GW3	GW-3	05/29/09	1,210	23	-	ND	GeoCore	Accutest
GW3	GW-3	08/28/09	968	29	-	ND	GeoCore	Accutest
GW3	AGGW3-W-17968	09/18/09	1,302	15	ND	ND	Argonne	AGEM
GW3	GW-3	11/27/09	797	17	-	ND	GeoCore	Accutest
GW3	AGGW3-W-30120	12/13/09	1,233	17	ND	ND	Argonne	AGEM
GW3	GW-3	02/25/10	733	15	-	ND	GeoCore	Accutest
GW3	AGGW3-W-30151	03/23/10	229	10	ND	ND	Argonne	AGEM
GW3	GW-3	05/27/10	748	16	-	ND	GeoCore	Accutest
GW3	AGGW3-W-30169	06/16/10	119	7.1	ND	ND	Argonne	AGEM
GW3	GW-3	08/27/10	913	17	ND	ND	GeoCore	Accutest
GW3	AGGW3-W-30231	09/16/10	2,219	19	ND	ND	Argonne	AGEM
GW3	GW-3	11/19/10	629	25	ND	ND	GeoCore	Accutest
GW3	AGGW3-W-30250	12/16/10	2,167	18	ND	ND	Argonne	AGEM
GW3	GW-3	03/01/11	1,180	23	ND	ND	GeoCore	Accutest
GW3	AGGW3-W-30269	03/16/11	2,422	14	ND	ND	Argonne	AGEM
GW3	No sample	05/25/11	b	b	b	b	GeoCore	b
GW3	AGGW3-W-30300	06/06/11	1,777	15	ND	ND	Argonne	AGEM
GW3	AGGW3-W-30323	10/05/11	2,429	15	ND	ND	Argonne	AGEM
GW3	GW-3	10/27/11	867	16	-	ND	GeoCore	Accutest
GW3	AGGW3-W-30343	12/14/11	922	16	ND	ND	Argonne	AGEM
GW3	GW-3	01/26/12	857	18	-	ND	GeoCore	Accutest
GW3	AGGW3-W-30363	03/14/12	2,015	d	ND	ND	Argonne	AGEM
GW3	GW-3	04/26/12	899	14	-	ND	GeoCore	Accutest
GW3	AGGW3-W-30384	06/27/12	2,406	d	ND	ND	Argonne	AGEM
GW3	GW-3	07/31/12	937	12	-	ND	GeoCore	Accutest
GW3	AGGW3-W-30446	10/18/12	2,290	15	ND	ND	Argonne	AGEM
GW3	GW-3	10/30/12	947	14	-	ND	GeoCore	Accutest
GW3	AGGW3-W-30466	01/16/13	1,927	18	ND	ND	Argonne	AGEM
GW3	GW-3	02/01/13	84	3.8	-	ND	GeoCore	Accutest
GW3	AGGW3-W-30486	04/02/13	2,097	56	ND	ND	Argonne	AGEM
GW3	GW-3	04/26/13	1,870	15	-	ND	GeoCore	Accutest
GW3	AGGW3-W-30518	07/11/13	2,206	16	ND	ND	Argonne	AGEM
GW3	GW-3	08/01/13	1,110	23	-	ND	GeoCore	Accutest
GW3	AGGW3-W-35709	09/17/13	2,460	16	ND	ND	Argonne	AGEM
GW3	GW-3	10/29/13	1,850	ND	-	ND	GeoCore	Accutest
GW3	AGGW3-W-35729	11/25/13	1,748	11	ND	ND	Argonne	AGEM
GW3	GW-3	01/31/14	978	ND	-	ND	GeoCore	Accutest
GW3	AGGW3-W-35749	02/25/14	2,244	13	ND	ND	Argonne	AGEM
GW3	GW-3	04/30/14	1,810	15	-	ND	GeoCore	Accutest
GW3	AGGW3-W-36597	06/27/14	1,521	9.3	ND	ND	Argonne	AGEM
GW3	GW-3	08/01/14	1,550	23	-	ND	GeoCore	Accutest
GW3	AGGW3-W-36809	09/30/14	1,523	12	ND	ND	Argonne	AGEM
GW3	GW-3	10/29/14	1,420	15	-	ND	GeoCore	Accutest
GW3	AGGW3-W-36830	12/02/14	2,069	12	ND	ND	Argonne	AGEM
GW3	GW-3	01/23/15	2,270	ND	-	ND	GeoCore	Accutest
GW3	AGGW3-W-36852	03/27/15	1,960	13	ND	ND	Argonne	AGEM
GW3	GW-3	04/30/15	1,530	ND	-	ND	GeoCore	Accutest
GW3	AGGW3-W-37193	06/30/15	1,496	13	ND	ND	Argonne	AGEM
GW4	AGGW4-W-17895	05/20/09	127	2.3	ND	ND	Argonne	AGEM
GW4	GW-4	05/29/09	79	2.6	-	ND	GeoCore	Accutest
GW4	GW-4	08/28/09	154	4.1	-	ND	GeoCore	Accutest
GW4	AGGW4-W-17972	09/18/09	150	2.2	ND	ND	Argonne	AGEM
GW4	GW-4	11/27/09	150	2.9	-	ND	GeoCore	Accutest
GW4	AGGW4-W-30124	12/13/09	227	3.6	ND	ND	Argonne	AGEM
GW4	GW-4	02/25/10	228	3.1	-	ND	GeoCore	Accutest
GW4	AGGW4-W-30152	03/23/10	144	2.4	ND	ND	Argonne	AGEM
GW4	GW-4	05/27/10	191	2.5	-	ND	GeoCore	Accutest
GW4	AGGW4-W-30170	06/16/10	97	ND	ND	ND	Argonne	AGEM
GW4	GW-4	08/27/10	70	1.8	ND	ND	GeoCore	Accutest
GW4	AGGW4-W-30232	09/16/10	107	1.8	ND	ND	Argonne	AGEM
GW4	GW-4	11/19/10	78	1.7	ND	ND	GeoCore	Accutest
GW4	AGGW4-W-30251	12/16/10	171	2.2	ND	ND	Argonne	AGEM
GW4	GW-4	03/01/11	184	2.6	ND	ND	GeoCore	Accutest
GW4	AGGW4-W-30270	03/16/11	86	1.6	ND	ND	Argonne	AGEM

TABLE 4.5 (Cont.)

Location	Sample	Sample Date	Concentration (µg/L)				Sampled By	Analyzed By
			Carbon Tetrachloride	Chloroform	Methylene Chloride	1,2-DCA		
GW4	No sample	05/25/11	b	b	b	b	GeoCore	b
GW4	AGGW4-W-30301	06/06/11	112	1.4	ND	ND	Argonne	AGEM
GW4	AGGW4-W-30324	10/05/11	230	3.0	ND	ND	Argonne	AGEM
GW4	GW-4	10/27/11	172	2.5	-	ND	GeoCore	Accutest
GW4	AGGW4-W-30344	12/14/11	207	2.3	ND	ND	Argonne	AGEM
GW4	GW-4	01/26/12	259	3.3	-	ND	GeoCore	Accutest
GW4	AGGW4-W-30364	03/14/12	95	1.6	ND	ND	Argonne	AGEM
GW4	GW-4	04/26/12	199	3.2	-	ND	GeoCore	Accutest
GW4	AGGW4-W-30385	06/27/12	171	d	ND	ND	Argonne	AGEM
GW4	GW-4	07/31/12	183	4.2	-	ND	GeoCore	Accutest
GW4	AGGW4-W-30447	10/18/12	243	3.6	ND	ND	Argonne	AGEM
GW4	GW-4	10/30/12	262	4.1	-	ND	GeoCore	Accutest
GW4	AGGW4-W-30467	01/16/13	229	2.8	ND	ND	Argonne	AGEM
GW4	GW-4	02/01/13	46	5.5	-	ND	GeoCore	Accutest
GW4	AGGW4-W-30487	04/02/13	163	2.5	ND	ND	Argonne	AGEM
GW4	GW-4	04/26/13	246	3.9	-	ND	GeoCore	Accutest
GW4	AGGW4-W-30519	07/11/13	45	0.5 J	ND	ND	Argonne	AGEM
GW4	GW-4	08/01/13	236	6.7	-	ND	GeoCore	Accutest
GW4	AGGW4-W-35710	09/17/13	335	3.9	ND	ND	Argonne	AGEM
GW4	GW-4	10/29/13	243	3.9	-	ND	GeoCore	Accutest
GW4	AGGW4-W-35730	11/25/13	266	3.0	ND	ND	Argonne	AGEM
GW4	GW-4	01/31/14	337	ND	-	ND	GeoCore	Accutest
GW4	AGGW4-W-35750	02/25/14	427	2.3	ND	ND	Argonne	AGEM
GW4	GW-4	04/30/14	274	ND	-	ND	GeoCore	Accutest
GW4	AGGW4-W-36598	06/27/14	263	2.7	ND	ND	Argonne	AGEM
GW4	GW-4	08/01/14	223	ND	-	ND	GeoCore	Accutest
GW4	AGGW4-W-36810	09/30/14	281	3.3	ND	ND	Argonne	AGEM
GW4	GW-4	10/29/14	259	3.8	-	ND	GeoCore	Accutest
GW4	AGGW4-W-36831	12/02/14	334	3.6	ND	ND	Argonne	AGEM
GW4	GW-4	01/23/15	276	3.4	-	ND	GeoCore	Accutest
GW4	AGGW4-W-36853	03/27/15	256	4.1	ND	ND	Argonne	AGEM
GW4	GW-4	04/30/15	191	3.2	-	ND	GeoCore	Accutest
GW4	AGGW4_W-37194	06/30/15	325	3.7	ND	ND	Argonne	AGEM
GW5	AGGW5-W-17925	05/20/09	ND	ND	ND	ND	GeoCore	Argonne
GW5	AGGW5-W-17974	09/18/09	ND	ND	ND	ND	Argonne	AGEM
GW5	AGGW5-W-30127	12/13/09	ND	ND	ND	ND	Argonne	AGEM
GW5	AGGW5-W-30153	03/23/10	ND	ND	ND	ND	Argonne	AGEM
GW5	AGGW5-W-30171	06/16/10	ND	ND	ND	ND	Argonne	AGEM
GW5	AGGW5-W-30233	09/16/10	ND	ND	ND	ND	Argonne	AGEM
GW5	AGGW5-W-30252	12/16/10	ND	ND	ND	ND	Argonne	AGEM
GW5	AGGW5-W-30271	03/16/11	ND	ND	ND	ND	Argonne	AGEM
GW5	AGGW5-W-30302	06/06/11	0.4 J	ND	ND	ND	Argonne	AGEM
GW5	AGGW5-W-30325	10/05/11	ND	ND	ND	ND	Argonne	AGEM
GW5	AGGW5-W-30345	12/14/11	0.3 J	ND	ND	ND	Argonne	AGEM
GW5	AGGW5-W-30365	03/14/12	ND	ND	ND	ND	Argonne	AGEM
GW5	AGGW5-W-30386	06/27/12	ND	ND	ND	ND	Argonne	AGEM
GW5	AGGW5-W-30448	10/18/12	ND	ND	ND	ND	Argonne	AGEM
GW5	AGGW5-W-30468	01/16/13	ND	ND	ND	ND	Argonne	AGEM
GW5	AGGW5-W-30488	04/02/13	ND	ND	ND	ND	Argonne	AGEM
GW5	AGGW5-W-30520	07/11/13	0.3 J	ND	ND	ND	Argonne	AGEM
GW5	AGGW5-W-35711	09/17/13	ND	ND	ND	ND	Argonne	AGEM
GW5	AGGW5-W-35731	11/25/13	0.3 J	ND	ND	ND	Argonne	AGEM
GW5	AGGW5-W-35751	02/25/14	ND	ND	ND	ND	Argonne	AGEM
GW5	AGGW5-W-36599	06/28/14	ND	ND	ND	ND	Argonne	AGEM
GW5	AGGW5-W-36811	09/30/14	ND	ND	ND	ND	Argonne	AGEM
GW5	AGGW5-W-36832	12/02/14	ND	ND	ND	ND	Argonne	AGEM
GW5	AGMWJ-W-36848	03/27/15	ND	ND	ND	ND	Argonne	AGEM
GW5	AGMWJ-W-37189	06/30/15	ND	ND	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-17908	10/29/08	32	0.3 J	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-17945	06/16/09	13	0.1 J	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-17986	11/03/09	52	0.4 J	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-30128	12/13/09	32	ND	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-30147	03/23/10	23	ND	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-30165	06/16/10	23	ND	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-30227	09/16/10	32	0.3 J	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-30246	12/16/10	27	ND	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-30265	03/16/11	15	ND	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-30287	06/07/11	18	ND	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-30319	10/05/11	24	ND	ND	ND	Argonne	AGEM

TABLE 4.5 (Cont.)

Location	Sample	Sample Date	Concentration (µg/L)				Sampled By	Analyzed By
			Carbon Tetrachloride	Chloroform	Methylene Chloride	1,2-DCA		
MW-J	AGMWJ-W-30339	12/14/11	22	ND	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-30359	03/14/12	14	ND	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-30408	06/27/12	12	ND	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-30442	10/18/12	14	ND	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-30462	01/16/13	15	ND	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-30482	04/02/13	11	0.2 J	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-30505	07/10/13	12	0.2 J	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-35705	09/16/13	15	ND	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-35725	11/25/13	13	0.2 J	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-35745	02/26/14	20	ND	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-36562	06/28/14	12	ND	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-36805	09/30/14	13	ND	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-36826	12/02/14	18	ND	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-36848	03/27/15	ND	ND	ND	ND	Argonne	AGEM
MW-J	AGMWJ-W-37189	06/30/15	11	ND	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-17914	10/28/08	318	5.5	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-17948	06/16/09	260	11	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-17985	11/03/09	334	5.9	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-30126	12/13/09	480	7.9	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-30148	03/23/10	318	7.5	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-30166	06/16/10	259	6.0	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-30228	09/16/10	240	7.0	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-30247	12/16/10	297	7.8	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-30266	03/16/11	296	6.4	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-30290	06/06/11	222	5.9	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-30320	10/05/11	221	6.1	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-30340	12/14/11	303	7.1	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-30360	03/14/12	313	6.7	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-30381	06/27/12	377	7.0	ND	ND	Argonne	AGEM
MW-P	AGMWPDUW-30449	10/18/12	266	6.2	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-30443	10/18/12	276	7.3	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-30463	01/16/13	288	6.6	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-30483	04/02/13	212	6.9	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-30508	07/10/13	427	6.5	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-35706	09/16/13	417	7.6	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-35726	11/25/13	432	6.8	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-35746	02/26/14	651	8.5	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-36594	06/28/14	262	4.3	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-36806	09/30/14	410	6.6	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-36827	12/02/14	552	7.4	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-36849	03/27/15	295	5.7	ND	ND	Argonne	AGEM
MW-P	AGMWP-W-37190	06/30/15	332	5.5	ND	ND	Argonne	AGEM
KMW-03	AGKMW3-W-17900	10/28/08	2.1	ND	ND	ND	Argonne	AGEM
KMW-03	AGKMW3-W-17942	06/16/09	ND	ND	ND	ND	Argonne	AGEM
KMW-03	AGKMW03-W-30122	12/13/09	ND	ND	ND	ND	Argonne	AGEM
KMW-03	AGKMW3-W-30146	03/23/10	ND	ND	ND	ND	Argonne	AGEM
KMW-03	AGKMW3-W-30164	06/16/10	ND	ND	ND	ND	Argonne	AGEM
KMW-03	AGKMW3-W-30226	09/16/10	ND	ND	ND	ND	Argonne	AGEM
KMW-03	AGKMW3-W-30245	12/16/10	ND	ND	ND	ND	Argonne	AGEM
KMW-03	AGKMW3-W-30264	03/16/11	ND	ND	ND	ND	Argonne	AGEM
KMW-03	AGKMW3-W-30284	06/06/11	ND	ND	ND	ND	Argonne	AGEM
KMW-03	AGKMW3-W-30318	10/05/11	ND	ND	ND	ND	Argonne	AGEM
KMW-03	AGKMW3-W-30338	12/14/11	ND	ND	ND	ND	Argonne	AGEM
KMW-03	AGKMW3-W-30358	03/14/12	ND	ND	ND	ND	Argonne	AGEM
KMW-03	AGKMW3-W-30379	06/27/12	ND	ND	ND	ND	Argonne	AGEM
KMW-03	AGKMW3-W-30441	10/18/12	ND	ND	ND	ND	Argonne	AGEM
KMW-03	AGKMW3-W-30461	01/16/13	ND	ND	ND	ND	Argonne	AGEM
KMW-03	AGKMW3-W-30481	04/02/13	ND	ND	ND	ND	Argonne	AGEM
KMW-03	AGKMW3-W-30502	07/10/13	ND	ND	ND	ND	Argonne	AGEM
KMW-03	AGKMW3-W-35704	09/16/13	ND	ND	ND	ND	Argonne	AGEM
KMW-03	AGKMW3-W-35724	11/25/13	0.3 J	ND	ND	ND	Argonne	AGEM
KMW-03	AGKMW3-W-35744	02/26/14	0.9 J	ND	ND	ND	Argonne	AGEM
KMW-03	AGKMW3-W-36593	06/28/14	ND	ND	ND	ND	Argonne	AGEM
KMW-03	AGKMW3-W-36804	09/30/14	ND	ND	ND	ND	Argonne	AGEM

TABLE 4.5 (Cont.)

Location	Sample	Sample Date	Concentration (µg/L)				Sampled By	Analyzed By
			Carbon Tetrachloride	Chloroform	Methylene Chloride	1,2-DCA		
KMW-03	AGKMW3-W-36825	12/02/14	ND	ND	ND	ND	Argonne	AGEM
KMW-03	AGKMW3-W-36847	03/27/15	ND	ND	ND	ND	Argonne	AGEM
KMW-03	AGKMW3-W-37188	06/30/15	NE	ND	ND	ND	Argonne	AGEM

<sup>a</sup> ND, compound analyzed for but not detected at a level greater than or equal to the method detection limit (< 1 µg/L).

<sup>b</sup> Inaccessible because of rainwater.

<sup>c</sup> J, compound identified with an estimated concentration between the instrument detection limit and the method detection limit.

<sup>d</sup> Analyzed at dilution. Chloroform not detected in the diluted analysis.

TABLE 4.6 Dissolved oxygen levels in groundwater since 2009.<sup>a</sup>

Sampling Date	Dissolved Oxygen (mg/L)							
	GW1	GW2	GW3	GW4	GW5	KMW03	MW-J	MW-P
06/16/09	–	–	–	–	–	5.93	8.25	7.73
09/18/09	10.43	10.85	10.87	10.62	9.08	–	–	–
11/03/09	–	–	–	–	–	–	7.01	8.22
12/13/09	NR <sup>b</sup>	NR	NR	NR	NR	6.82	8.51	9.45
03/23/10	NR	NR	NR	NR	NR	7.80	8.54	10.16
06/16/10	NR	NR	NR	NR	NR	6.38	7.38	8.69
08/03/10	–	–	–	–	–	–	7.46	–
09/16/10	NR	NR	NR	NR	NR	11.19	6.98	8.19
12/16/10	9.15	10.14	8.49	9.21	8.10	7.92	7.32	8.81
03/16/11	9.80	10.29	9.62	9.23	8.93	14.30	9.23	9.03
06/06/11	10.00	9.67	9.10	9.00	8.67	7.28	7.72	8.68
10/05/11	10.73	9.44	9.35	10.08	8.62	7.12	7.09	8.15
12/14/11	NR	NR	NR	NR	NR	7.25	7.16	8.62
03/14/12	NR	NR	NR	NR	NR	6.60	7.03	7.66
06/25/12	10.11	11.00	9.68	9.97	9.12	6.35	7.23	8.42
10/18/12	9.07	9.28	9.10	9.40	8.54	7.86	8.26	9.41
01/16/13	9.63	9.39	9.13	8.01	8.29	7.70	8.20	9.50
04/02/13	9.76	9.60	9.50	9.25	8.54	6.99	6.79	8.14
07/11/13	9.98	10.77	10.58	10.07	9.25	6.10	7.49	7.35
09/16/13-09/17/13	9.65	10.55	9.43	9.63	9.10	7.33	7.45	8.61
11/25/13	12.09	12.72	13.21	12.31	11.30	7.99	8.01	9.58
02/25/14-02/26/14	16.30	17.88	18.82	19.64	12.68	11.86	10.11	20.81
06/27/14-06/28/14	9.64	9.98	9.69	9.90	9.10	7.14	0.27	0.20
09/30/14	4.42	8.05	4.04	5.20	8.89	6.24	7.15	8.25
12/02/14	8.54	7.77	4.84	5.85	4.84	4.42	4.49	4.55
03/27/15	29.75	38.24	35.22	35.39	22.30	31.40	20.48	35.18
06/30/15	9.26	10.17	8.74	7.70	8.51	7.79	8.17	9.47

<sup>a</sup> Measurements by Argonne for the CCC/USDA.

<sup>b</sup> NR, not recorded.

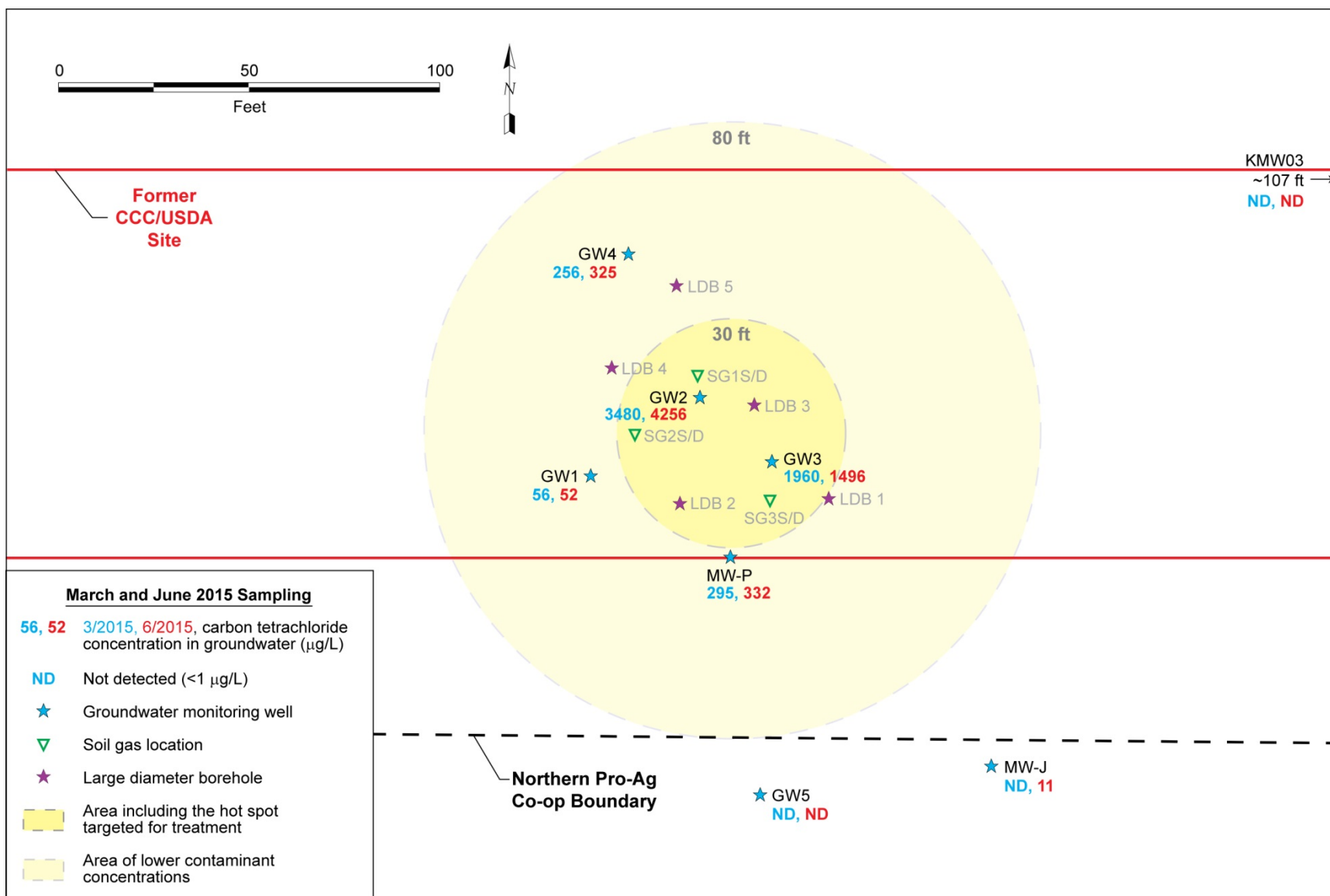


FIGURE 4.1 Carbon tetrachloride concentrations in groundwater in the Agra treatment area during the current reporting period, with circles representing areas within 30 ft and 80 ft of the approximate center of the LDB installations.

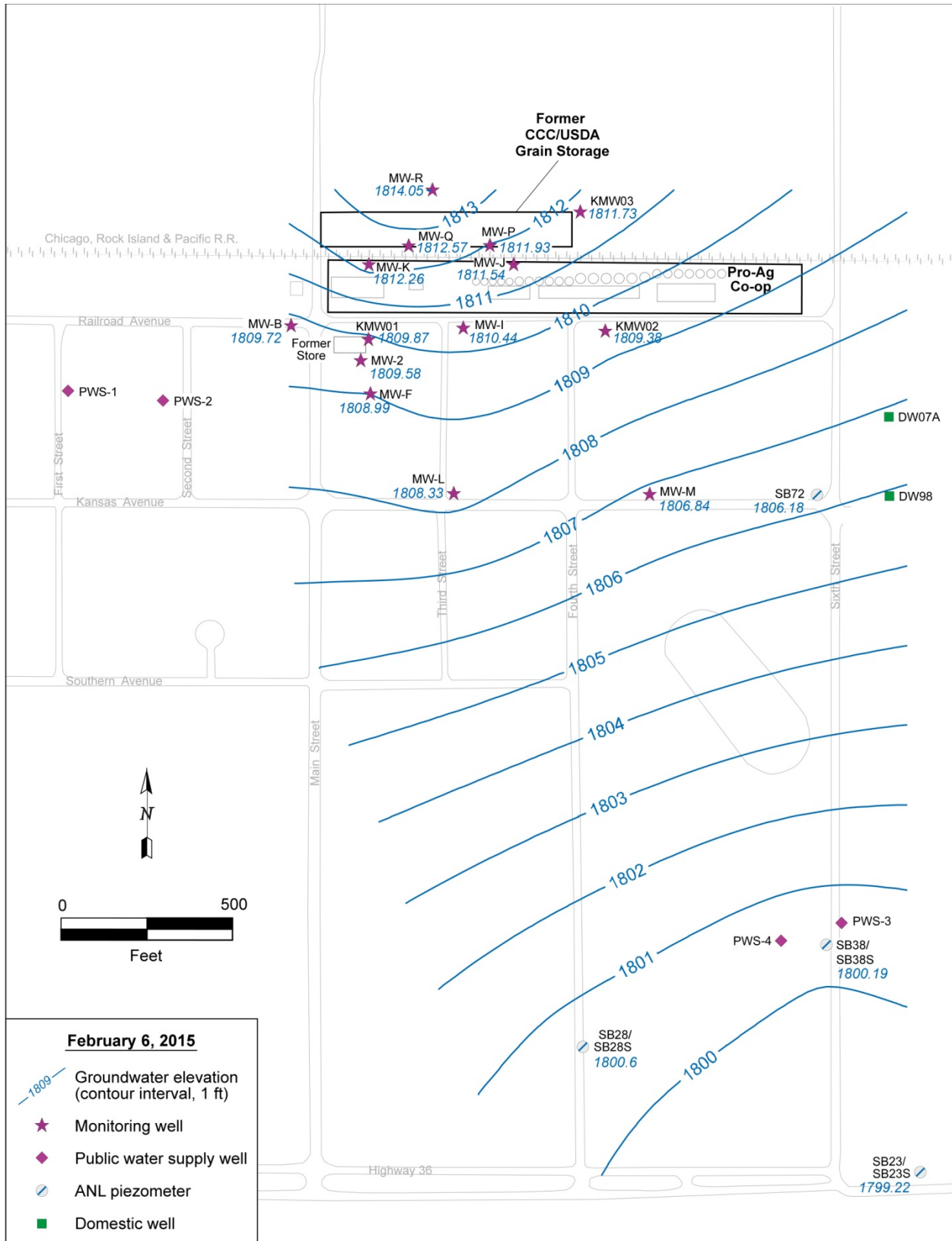


FIGURE 4.2a Sitewide groundwater level elevations on February 6, 2015, as interpreted from manually recorded data.

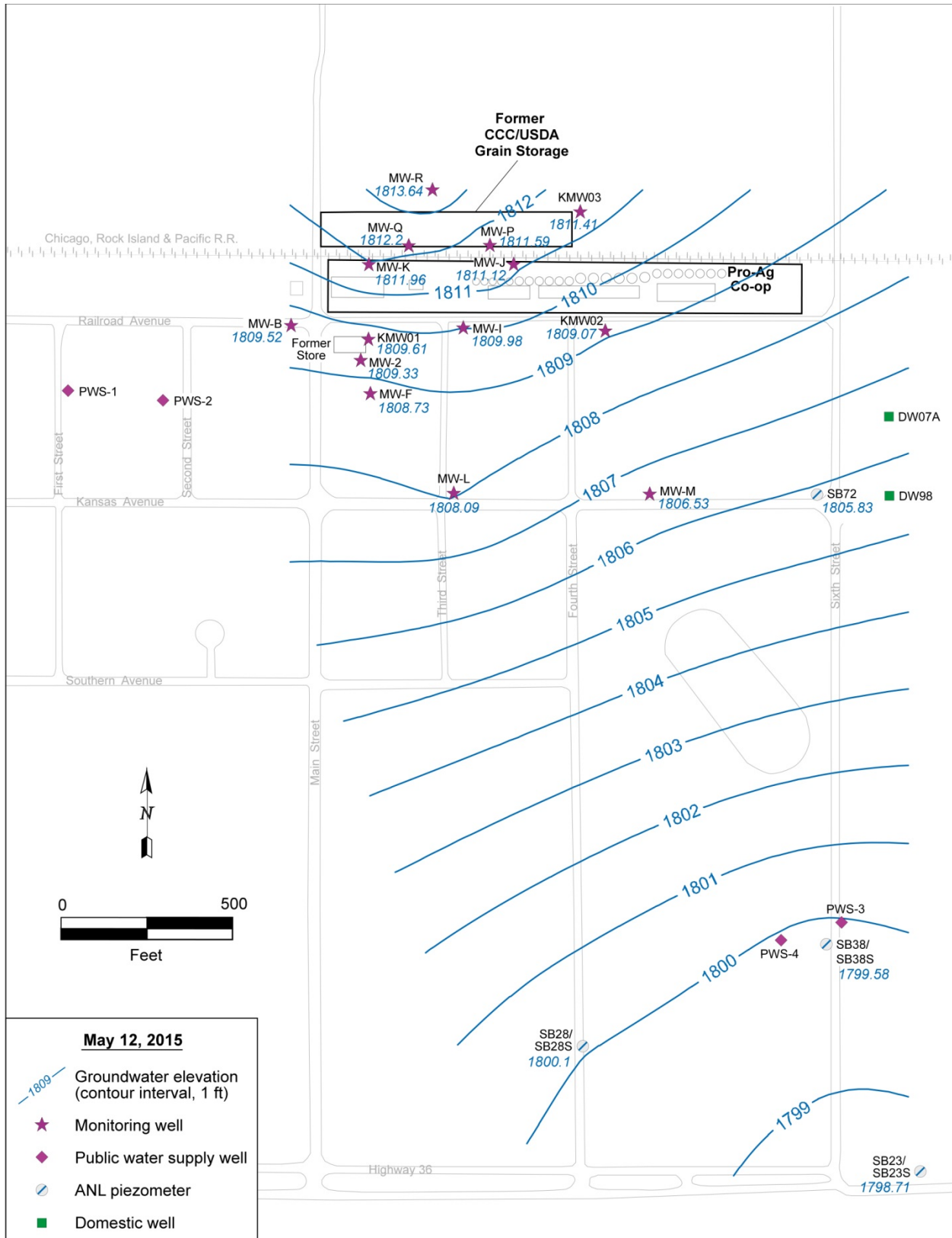


FIGURE 4.2b Sitewide groundwater level elevations on May 12, 2015, as interpreted from manually recorded data.



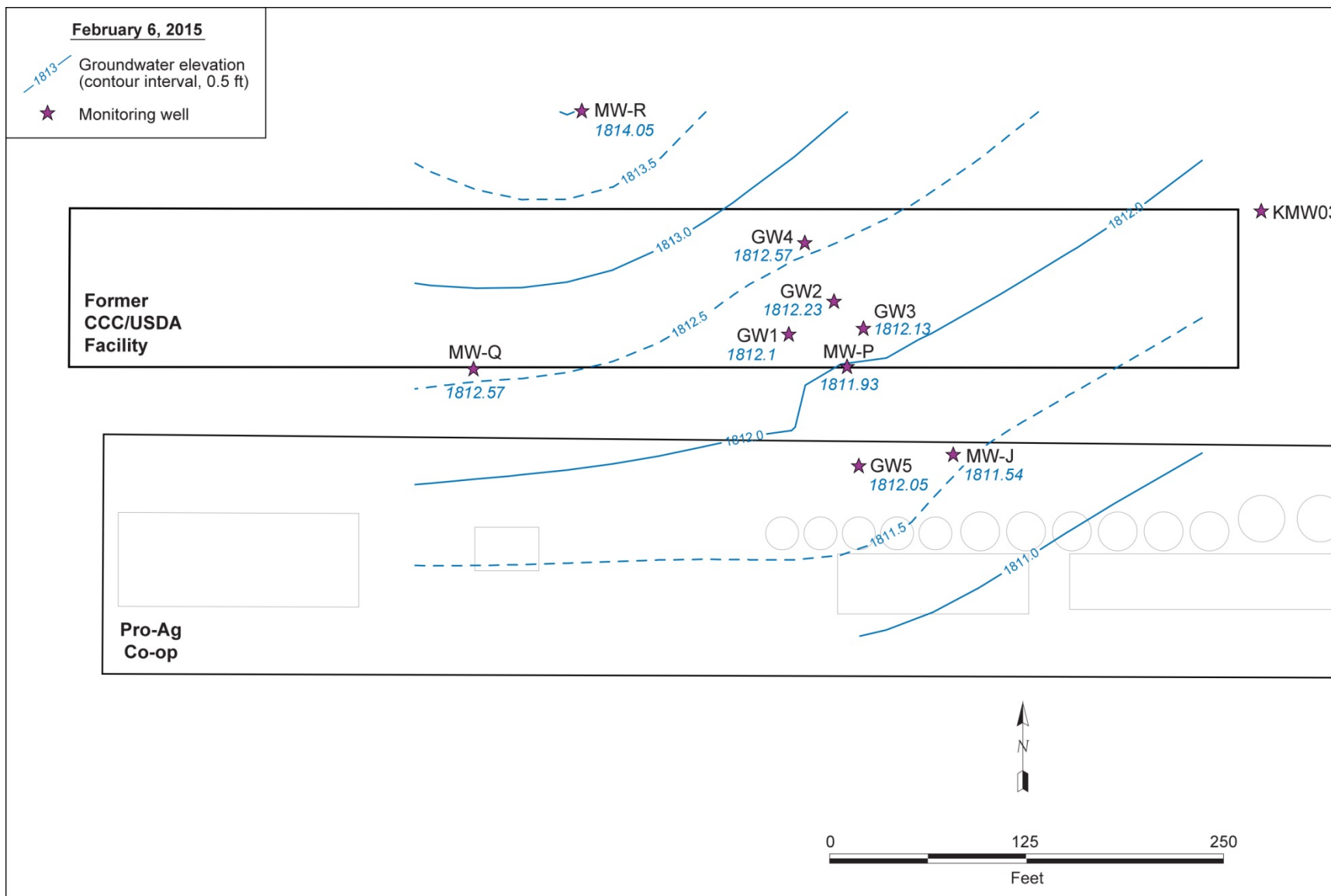


FIGURE 4.3a Treatment area groundwater level elevations on February 6, 2015, as interpreted from manually recorded data.

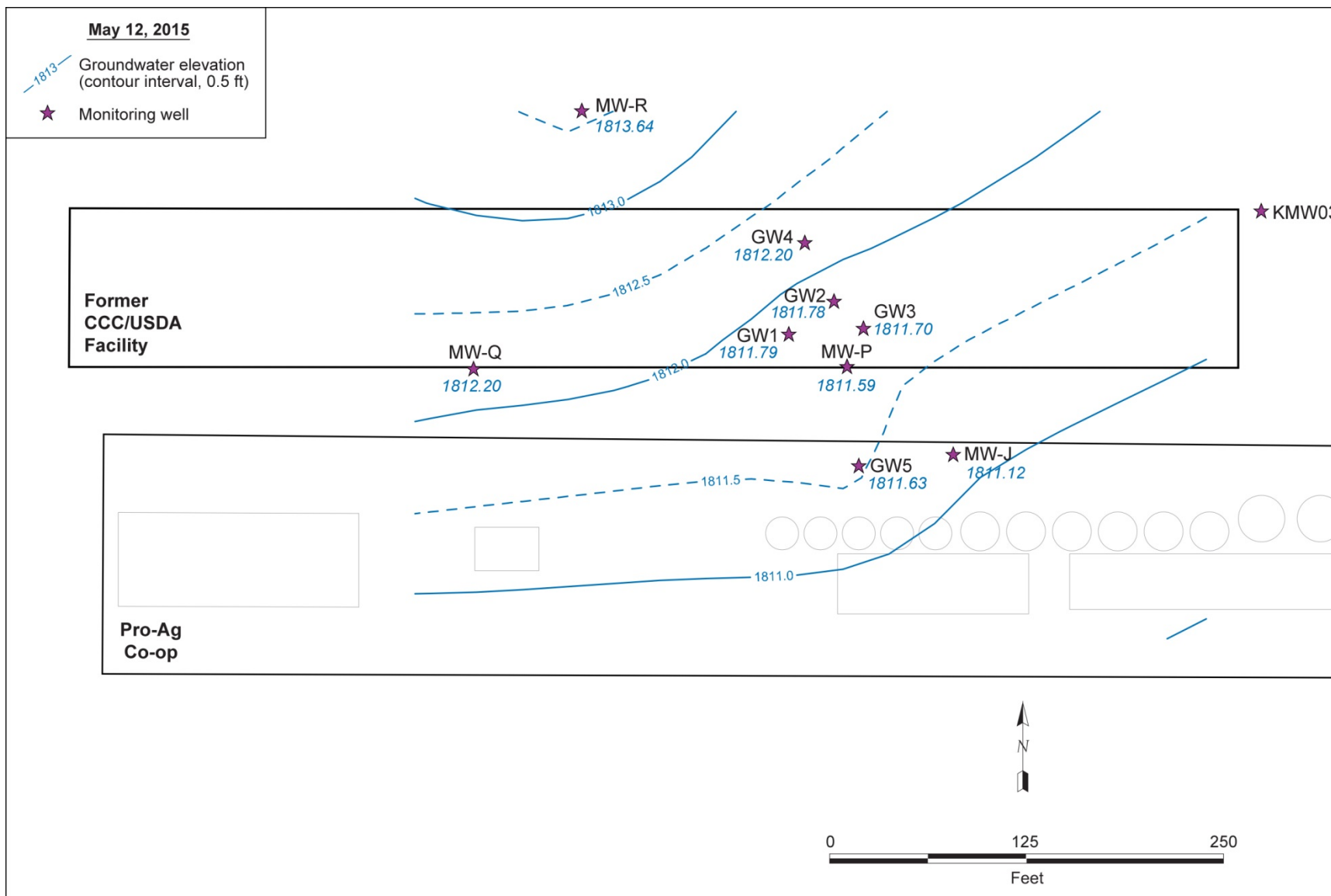


FIGURE 4.3b Treatment area groundwater level elevations on May 12, 2015, as interpreted from manually recorded data.

## 5 Analysis and Discussion

### 5.1 Effectiveness of the SVE/AS System in Removing Carbon Tetrachloride

Effective remediation of the identified soil and groundwater source at the former CCC/USDA grain storage facility requires (1) removal of contaminant mass in the unsaturated and saturated soils that is leaching into the groundwater and (2) a corresponding sustained reduction in dissolved VOCs concentrations in groundwater. The following measures are evidence of declining contaminant concentrations:

- Concentrations of carbon tetrachloride in extracted vapors dropped dramatically after system start-up, from approximately 46,000  $\mu\text{g}/\text{m}^3$  (as measured in the SVE effluent) on May 29, 2009, to 11  $\mu\text{g}/\text{m}^3$  on January 23, 2015.
- The carbon tetrachloride concentrations in soil gas also moderated, declining from a maximum of approximately 19,000  $\mu\text{g}/\text{m}^3$  prior to system start-up (as measured at location SG1D on May 20, 2009) to levels below the method detection limit of 13  $\mu\text{g}/\text{m}^3$  at all sample locations, on March 27, 2015.

The remedial system has had a more limited impact on VOCs in the saturated zone. In the localized hot-spot area, initial (prior to system start-up in May 2009) maximum carbon tetrachloride concentrations were approximately 6,000  $\mu\text{g}/\text{L}$  at GW2 and 9,000  $\mu\text{g}/\text{L}$  at GW3. In June 2015, the maximum concentrations were approximately 4,300  $\mu\text{g}/\text{L}$  at GW2 and 1,500  $\mu\text{g}/\text{L}$  at GW3 (the maximum concentrations in March 2015 were approximately 3,500  $\mu\text{g}/\text{L}$  at GW2 and 2,000  $\mu\text{g}/\text{L}$  at GW3).

The VOCs in extracted vapors (SVE effluent) represent a combination of vapors withdrawn from soil pores and vapors generated by the AS wells in the LDB backfill. At system start-up, the AS system was stripping VOCs primarily from the groundwater in the LDBs, and the mass removed was relatively high. More recently, mass removal by the AS system has been limited to the flux of dissolved VOCs entering the LDB backfill, which is controlled by groundwater flow velocities.

The initial rapid declines in VOCs concentrations in the soil gas monitoring wells and SVE wells indicate that significant amounts of the VOCs initially present were removed rapidly from the pore spaces of vadose zone soils. More recently, VOCs removal is likely occurring through relatively slow desorption from the predominantly low-permeability silt and clay in these soils.

The SVE/AS remedial system was operating well in general in 2009-2011 (with the exception of the persistent low flow at AS-5) and was effective in removing contaminant mass from the subsurface. While the radius of influence of the individual SVE wells in the vadose (unsaturated) zone provides excellent horizontal coverage in the treatment area, with substantial overlap between individual wells, the removal process also depends on groundwater flow into the LDBs. Therefore, an operating strategy to increase groundwater flow into the LDBs and hence increase their radius of influence in the saturated zone (and increase the rate of mass removal) was devised during the first half of 2012 (Argonne 2013a). Implementation and effectiveness of this optimization strategy is discussed in Section 5.2.

## **5.2 Optimization of System Performance**

Inspection of the SVE/AS remedial system in November 2011 (Argonne 2012) led to system repairs and the installation of a larger AS blower (Argonne 2013a), plus rewiring and installation of new valves, relays, and timers (Table 1.1). Replacement of the blower resulted in consistently higher AS system pressures but not sustained improvement in the AS flow rates. The cumulative air flow in the AS system also remains below design values (Table 4.1), though the reported rates show some improvement. Overall, increased oversight has resulted in uninterrupted operation of the system since mid-January 2013 — nearly two and a half years.

In late May 2012, the SVE and AS systems were modified to permit individual operation of the SVE-3, SVE-4, and SVE-5 wells and the pulsed operation summarized in Table 5.1 (Argonne 2013a,b). Since then, monitoring data under cyclic (pulsing) operating conditions (Argonne 2013c, 2014a,b, and 2015) have indicated limited potential for significant acceleration of the groundwater treatment via this approach. The effectiveness of pulsing and overall system performance in treating groundwater was therefore assessed with input from the GreenField original design engineer during the present monitoring period. The findings of this assessment are presented below.

Cyclic (pulsing) operating conditions were originally implemented on the basis of technical recommendations following inspection of the SVE/AS remedial system in November 2011 (Argonne 2012) to assess the potential for vacuum-induced groundwater mounding in the LDBs. Apparent mounding amounts of approximately 0.35 ft and 1 ft above static conditions were observed at LDB5 and LDB4, respectively, in response to approximately 60 in. water column (WC) of indicated wellhead vacuum. The reported changes in water levels correspond to estimated increases of approximately 21 gal and 60 gal in the volume of groundwater contained in LDB5 and LDB4, respectively (assuming 30% effective porosity for the LDB backfill). The apparent low response observed in this test might in part be an artifact of relatively low permeability in the natural saturated deposits surrounding the LDBs, which will limit the rate(s) of groundwater migration into the LDB fill. The test results could also be due to possible vacuum losses in the LDBs, similar in concept to the well losses associated with fluid flow through the permeable media (sand pack).

Figures 5.1-5.3 illustrate the SVE vacuum levels achieved at the process trailer manifold and at the wellhead, with associated SVE flow rates, for LDB3, LDB4, and LDB5, respectively, for the period from November 28, 2011 (approximately six months prior to initiation of the modified well operations) to June 29, 2015. Monthly readings have been reported by GreenField for LDB3, while readings have generally been obtained for LDB4 and LDB5 only in conjunction with the quarterly monitoring events since the pulsing operation of these wells began in May 2012.

These diagrams indicate that under the modified operating conditions, wellhead vacuum levels at SVE-3 through SVE-5 generally increased from May 2012 through approximately July 2012, then began a relatively steady decline that continues at all wells. A single exception is observed in the trace for SVE-3 (Figure 5.1), which shows a second isolated peak in the reported wellhead vacuum in March 2013. At SVE3, the maximum vacuum levels ranged from 20 in. WC to 24 in. WC at SVE-4 and SVE-5, the maximum wellhead vacuums reported were 20.8 in. WC and 18 in. WC, respectively. These levels represent roughly one-third of the vacuum employed for the initial mounding tests conducted in November 2011. The lower vacuum levels achieved operationally (relative to the November 2011 testing) reflect in part the simultaneous operation of SVE-1 and SVE-2 under the current operating scheme, which influences the combined vacuum and flow capacities of the SVE blower. Other factors, however (such as transient changes in the moisture content and/or effective air permeability of the vadose soils might also contribute to the observed responses.

On September 27, 2012, GreenField obtained measurements of the LDB water levels (1) during a pumping cycle and (2) during a non-pumping cycle at each of the SVE-3 through SVE-5 wells, to determine the apparent degree of groundwater mounding generated by the enhanced vacuum pumping. The reported (pumping) wellhead vacuum levels associated with these observations ranged from 16.1 in. WC to 16.3 in. WC for all three wells. The mounding responses reported by GreenField were approximately 0.23 ft at SVE-3, 0.67 ft at SVE-5, and 1.2 ft at SVE-4, relative to static conditions (although field notes for SVE-4 suggest possible uncertainty in the level measured under pumping conditions). The corresponding incremental volumes of groundwater drawn into the borings that were estimated from these observations are 13 gal, 40 gal, and 72 gal, respectively.

Figures 5.1-5.3 demonstrate that by approximately December 2012 (on the basis of the monthly data for SVE-3) to February 2013 (on the basis of the quarterly data for SVE-3 and SVE-4), the wellhead vacuums generated under the modified operating scheme had effectively declined to levels equivalent to those observed at each well prior to initiation of the cyclic operation. Under these conditions, no incremental groundwater mounding effects will continue to occur beyond those that would be expected under the previous, continuous operating conditions. The observed SVE flow rates at the SVE-3 through SVE-5 wells remain elevated despite the declines in wellhead vacuum (flow rates at SVE-4 and SVE-5 briefly returned to their approximate earlier levels before an increasing trend began in late fall 2014 that continues through the present period). These observations suggest that the higher vacuum levels and resulting flow rates initially induced at the SVE-3 through SVE-5 wells might have further enhanced the local air permeability in the vadose zone or otherwise fostered the development of preferred migration pathways near these borings, resulting in persistent higher flow rates at lower vacuum levels.

The monitoring data obtained to date therefore suggest that the potential to develop and sustain significantly enhanced wellhead vacuum levels at the LDBs is limited under the recent soil moisture conditions. It is conceivable that longer operation of each SVE well individually might result in a greater mounding effect, if groundwater migration rates into the LDB fill are in fact limited by the surrounding low natural permeability. The results further demonstrate, however, that only a small incremental increase in the amount of groundwater exposed to the AS treatment can reasonably be expected as a result of mounding in any one boring operating individually at an increased vacuum level.

Under the static groundwater conditions in the vicinity of the LDBs during the fall of 2012 (approximately 39.4-39.8 ft BGL at well GW2, during the peak in wellhead vacuum levels recorded at SVE-3 through SVE-5; Figures 5.1-5.3), the estimated volume of groundwater present in each of these LDBs above the top of the AS screen, and thus amenable to the VOCs stripping effects of the AS system, ranged from approximately 860 gal at LDB3 (with the shallowest reported AS screen placement) to 1,140 gal at LDB4 (with the deepest AS screen placement). Relative to these quantities, the estimated increases in casing storage (13-72 gal) reported as a result of the vacuum-induced mounding effects observed by Greenfield represent, at best, a potential 6-12% increase in the volume of groundwater being treated by each well during an “on” cycle. This corresponds to a potential increase of only 0.3-0.5 ft in the theoretical radius of influence of the LDBs under the range of testing and operating conditions documented by the field measurements to date, assuming an effective porosity of 10% for the surrounding fine-grained sediments. In this context, Figures 5.4 and 5.5 show no apparent beneficial changes in the trends of carbon tetrachloride concentrations observed in the SVE-3 through SVE-5 effluents, or in groundwater sampled at nearby monitoring wells GW2 and GW3, in association with the cyclic SVE/AS operation (despite an isolated and temporary decrease in carbon tetrachloride concentration at GW2 between February and June 2014).

Overall, the operation of SVE-3 through SVE-5 on the current cyclic basis results in a substantial net decrease in the total volume of groundwater that is exposed to the SVE and AS systems, in any given time period, in comparison to simultaneous operation of wells SVE-3 through SVE-5 over the same period (but at a lower vacuum level).

### **5.3 Anticipated Actions**

The current monitoring and reporting schedule will also continue, at the request of the KDHE (2015a).

### **5.4 Summary and Conclusions**

Operations have continued uninterrupted since January 16, 2013.

A review of data from wells SVE-3, SVE-4, and SVE-5 (Argonne 2013b) and monitoring data generated from July 2012 through June 2013 under cyclic operating conditions (Argonne

2013c) indicated that the potential for significant acceleration of the groundwater treatment effort through this approach is limited. As a result, overall system operation was assessed, with input from the GreenField engineer, to determine strategies for optimizing system performance. Recommendations for further testing and sampling based on this assessment (Section 5.2) are outlined in Section 5.5.

The KDHE (2014) agreed to extend the reporting schedule from 45 days after the end of the monitoring period to 60 days after the end of the monitoring period. This change will ensure that the needed information is available for data evaluation and report preparation.

## **5.5 Recommendations**

To address the concerns discussed in Section 5.2, recommendations are outlined below for a program of supplemental testing and sampling at the IM site that will help to explore an alternative operations scheme for continuation of the source area cleanup.

### **5.5.1 Shutdown of the SVE/AS System, to Investigate for Rebound**

To investigate the rate of accumulation of carbon tetrachloride contamination in the soil gas as a result of release from the vadose zone sediments and/or the underlying groundwater, a temporary shutdown of the SVE and AS systems of up to three months is suggested. Immediately upon shutdown, a vapor sample for VOCs analysis will be collected directly from each SVE wellhead (with the SVE blower off), as well as at SG1S,D. After 1 month and 3 months, additional vapor samples will be collected for VOCs analyses from each wellhead and at SG1S,D, to assess the potential build-up of contaminant levels with time. If rapid concentration increases are documented, the shutdown might be ended after the first month. Upon restart of the SVE and AS systems, the SVE well effluents and SG1S,D should be sampled for VOCs analysis immediately upon start-up, after approximately 1 week, and after 1 month (and thereafter on the existing twice-yearly schedule), to assess the rates at which the SVE/AS wells can reduce the soil vapor carbon tetrachloride levels. The shutdown of the SVE and AS systems is proposed to begin within the next quarter (October-December 2015).



### **5.5.2 Aquifer Hydraulic Testing, to Determine Potential Groundwater Migration Rates**

To develop a basis for quantitative estimation of the groundwater flow rates and hence potential contaminant migration rates in the immediate vicinity of the IM treatment area, single-well slug testing of existing monitoring wells MW-J, MW-P, MW-R and GW1-GW5 (Figure 1.1) should be conducted 1-2 weeks after the start of the proposed temporary SVE/AS system shutdown (Section 5.5.1). Slug testing of the AS-1 and AS-4 wells during the shutdown is also recommended, to obtain an estimate of the effective hydraulic conductivity of the LDB gravel pack materials. Procedures for slug testing are described in detail in the *Master Work Plan* (Argonne 2002).

### **5.5.3 Sampling of the SVE Wells for Groundwater**

In conjunction with the proposed temporary SVE/AS system shutdown (Section 5.5.1), a sample of the groundwater should be collected from each SVE well for VOCs analysis on the time schedule previously noted (immediately upon shutdown, after 1 month, and after 3 months, as well as immediately upon restart and after 1 week and 1 month of renewed operation), to investigate directly the possible concentration changes reflecting both the natural rates of groundwater migration into and through the LDB backfill and the treatment effects of the SVE/AS operation.

TABLE 5.1 Schedule for pulsed operation, beginning in May 2012.

Well	Cycle	Flow Rate (scfm)
<i>SVE wells</i>		
SVE-1	Continuous	10
SVE-2	Continuous	10
SVE-3	1 hr on, 2 hr off	Maximum
SVE-4	1 hr on, 2 hr off	Maximum
SVE-5	1 hr on, 2 hr off	Maximum
<i>AS wells</i>		
AS-1	2 hr on, 2 hr off	3-5
AS-2	2 hr on, 2 hr off	3-5
AS-3	On in conjunction with SVE-3	5-10
AS-4	On in conjunction with SVE-4	5-10
AS-5	On in conjunction with SVE-5	5-10

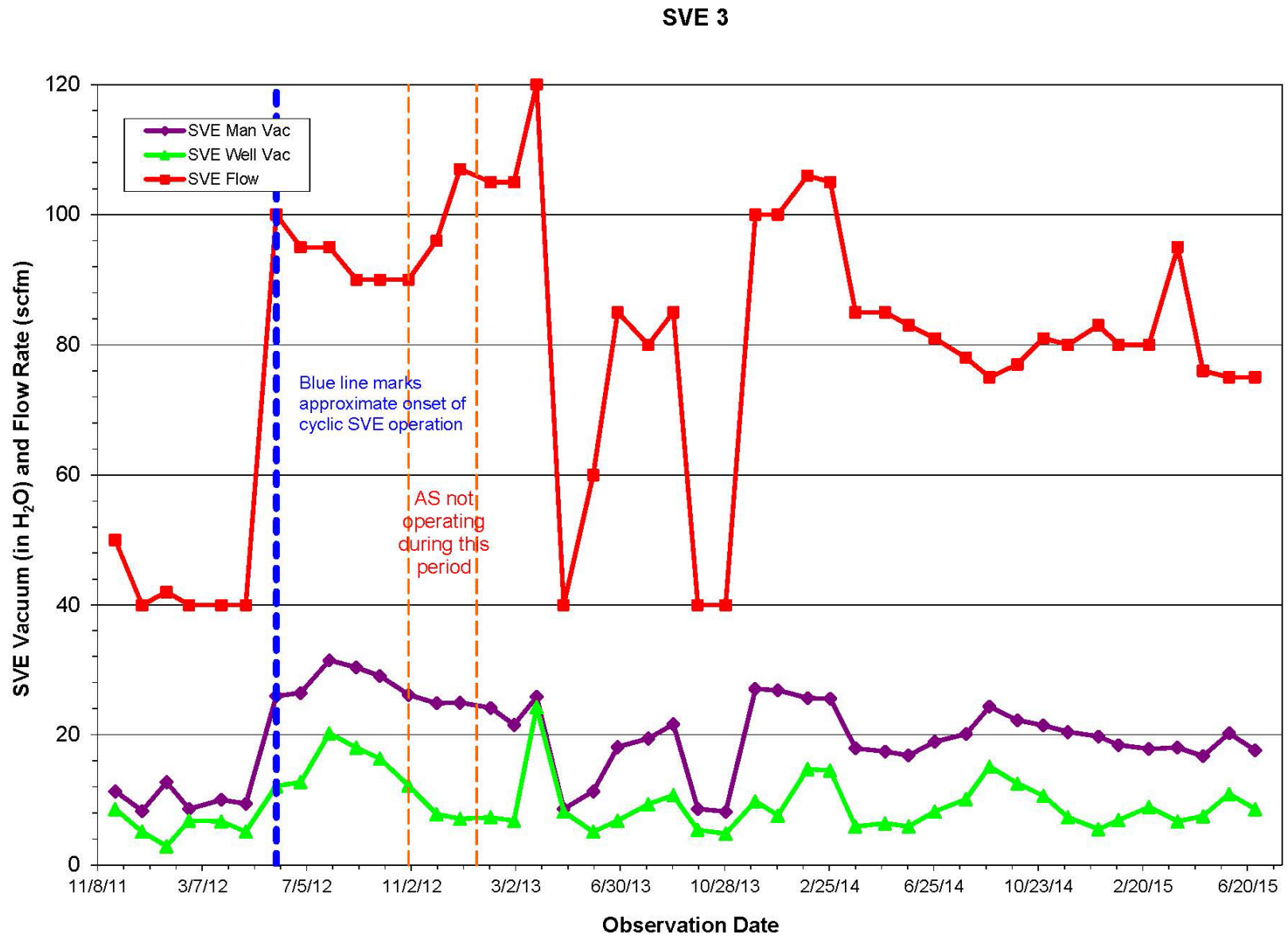


FIGURE 5.1 SVE vacuum and flow rates observed in well SVE-3 from November 28, 2011, to June 29, 2015, illustrating the effects of pulsed operation that began in May 2012.

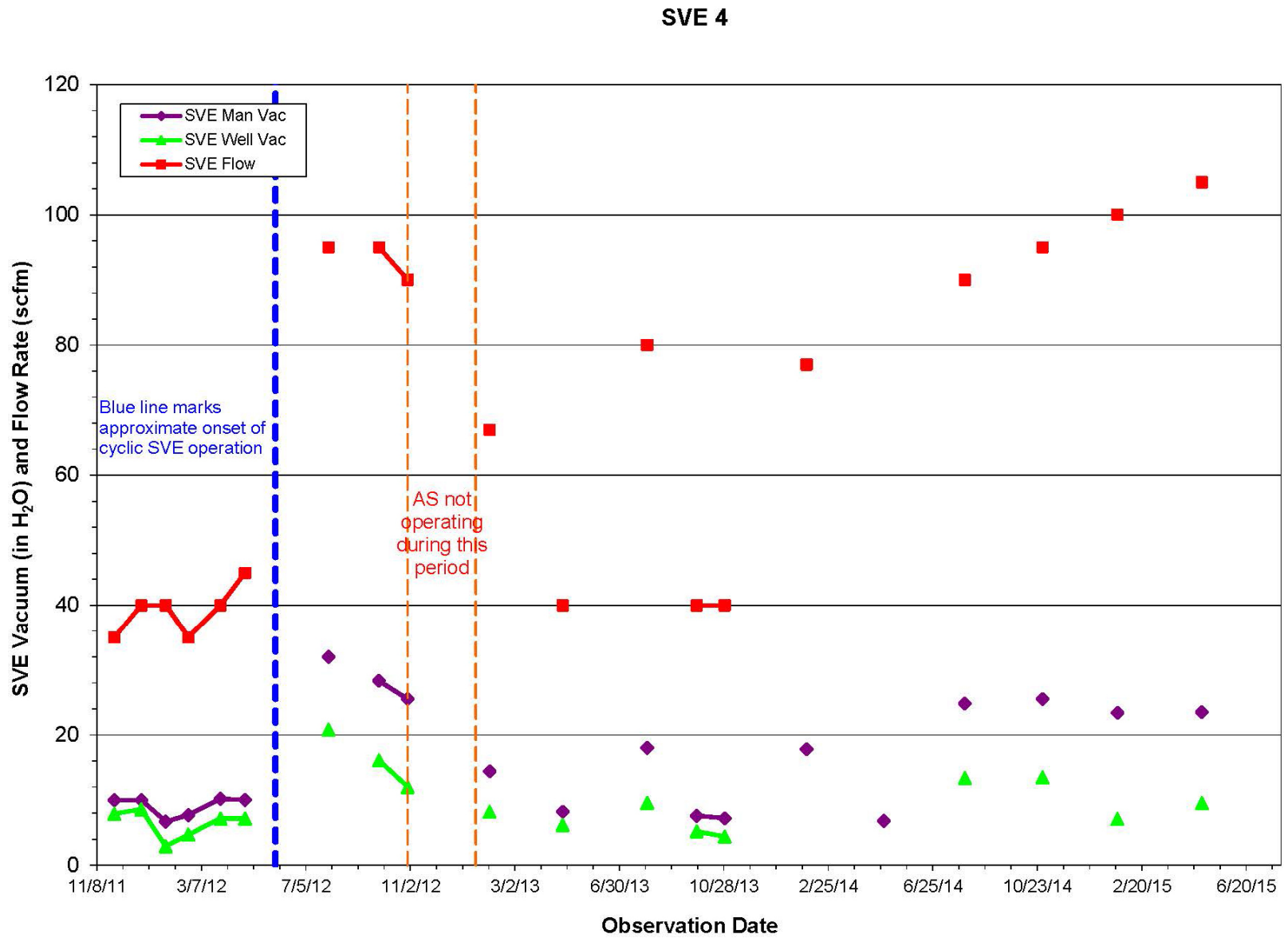


FIGURE 5.2 SVE vacuum and flow rates observed in well SVE-4 from November 28, 2011, to June 29, 2015, illustrating the effects of pulsed operation that began in May 2012.

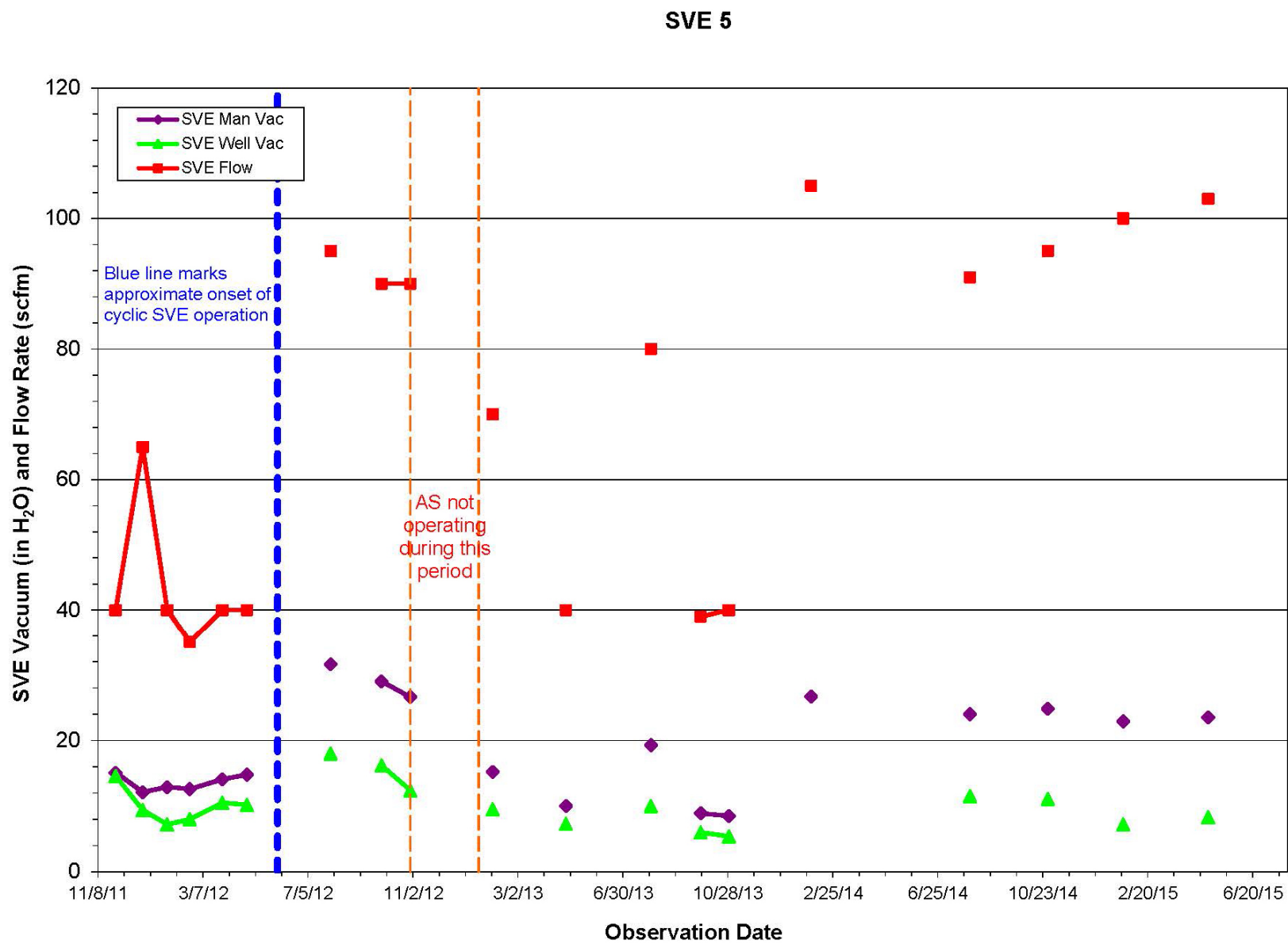


FIGURE 5.3 SVE vacuum and flow rates observed in well SVE-5 from November 28, 2011, to June 29, 2015, illustrating the effects of pulsed operation that began in May 2012.

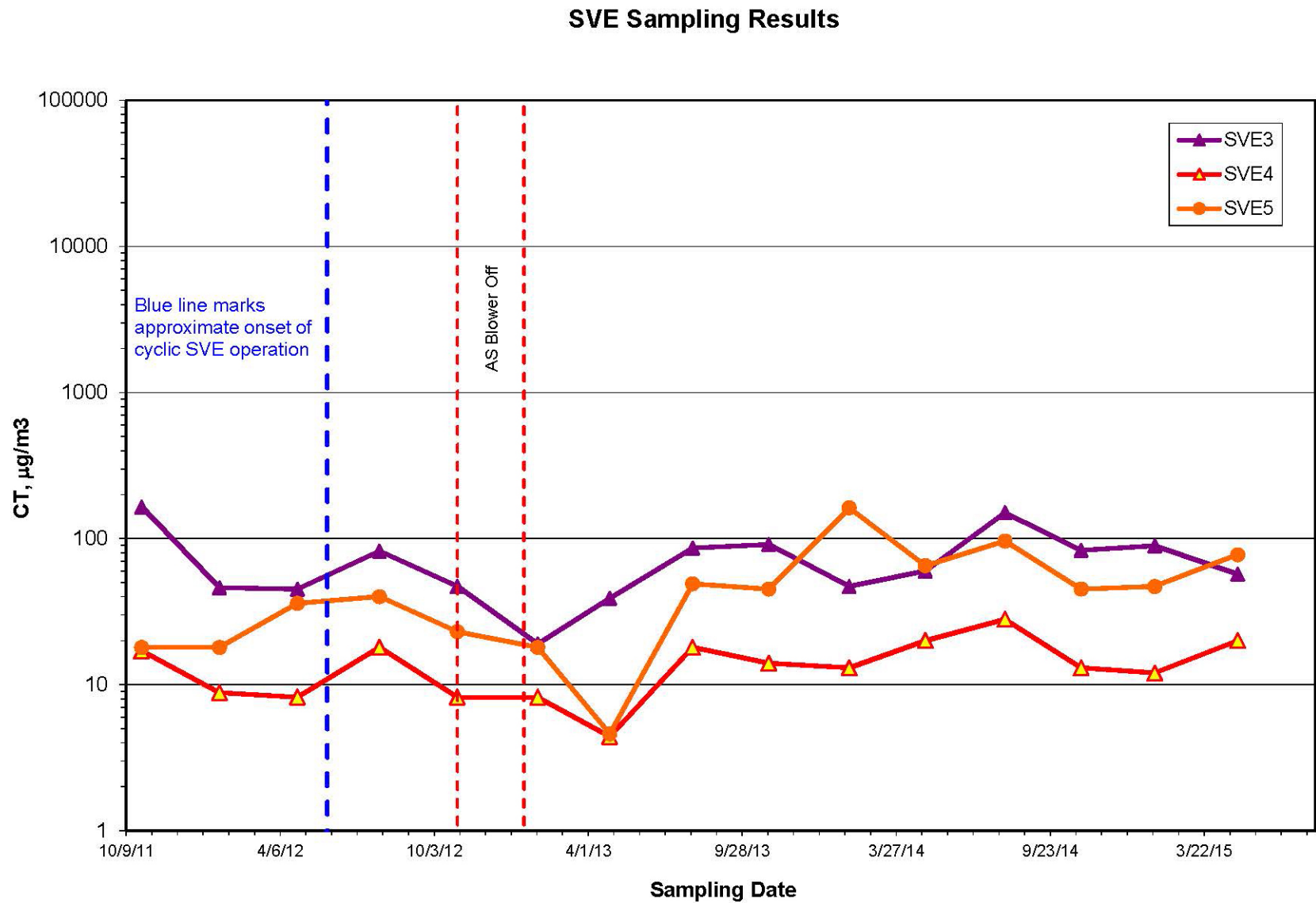


FIGURE 5.4 Carbon tetrachloride concentrations in effluent from wells SVE-3, SVE-4, and SVE-5 from November 28, 2011, to June 29, 2015, illustrating the effects of pulsed operation that began in May 2012.

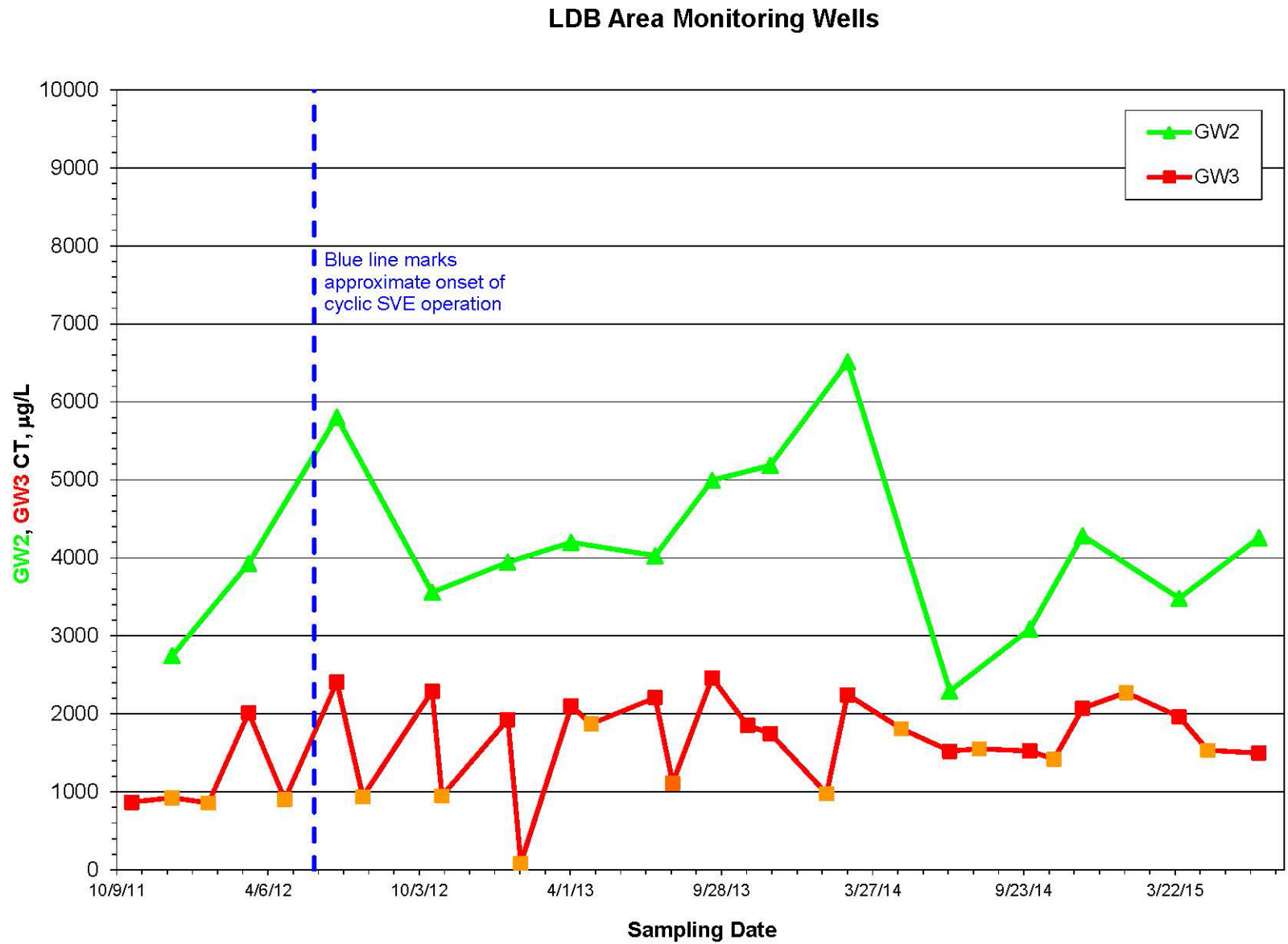


FIGURE 5.5 Carbon tetrachloride concentrations in groundwater wells GW2 and GW3 from November 28, 2011, to June 29, 2015, illustrating the effects of pulsed operation that began in May 2012.

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**Appendix A:**

**Data for Argonne's Twice Yearly Soil Gas and Quarterly Groundwater Sampling  
on March 27, 2015**

TABLE A.1 Sequence of activities during twice-yearly soil gas and quarterly groundwater sampling on March 27, 2015.

Sample Date and Time	Location	Sample	Sample Type <sup>a</sup>	Sample Depth (ft BGL)	Sample Matrix <sup>b</sup>	Chain of Custody	Shipment Date	Sample Description
3/27/15 8:00	QC	AGQCTB-W-37178	TB	-	WQC	AG328151115	3/28/15	Trip blank sent with water samples shipped to AGEM Laboratory.
3/27/15 8:00	QC	AGQCTB-W-37178VER	VER	-	WQC	AG328151130	3/28/15	Verification sample sent to TestAmerica (Vermont).
3/27/15 13:05	MW-J	AGMWJ-W-36848	N	56-66	WG	AG328151115	3/28/15	Depth to water = 43.02 ft TOC. Depth of 2 in. well = 66 ft. Sample collected using low flow bladder pump after purging 6 liters.
3/27/15 13:30	SG1S	AGSG1S-G-37180	N	20-21	SOIL GAS	AG328151100	3/28/15	Sample collected without purge. Beginning pressure -27 in. Hg. Ending pressure 0 in. Hg.
3/27/15 13:50	GW5	AGGW5-W-37174	N	43-53	WG	AG328151115	3/28/15	Depth to water = 42.23 ft TOC. Depth of 1 in. well = 53 ft. Sample collected using Watera pump after purging 5 liters.
3/27/15 13:51	SG1D	AGSG1D-G-37181	N	29-30	SOIL GAS	AG328151100	3/28/15	Sample collected after purging 3 tank volumes. Beginning pressure -29 in. Hg. Ending pressure 0 in. Hg.
3/27/15 14:00	QC	AGQCIR-W-37176	RI	-	WQC	AG328151115	3/28/15	Rinsate of decontaminated sampling line after collection of sample AGMWJ-W-36848.
3/27/15 14:11	SG2S	AGSG2S-G-37182	N	20-21	SOIL GAS	AG328151100	3/28/15	Sample collected without purge. Beginning pressure -29 in. Hg. Ending pressure 0 in. Hg.
3/27/15 14:39	GW1	AGGW1DUP-W-37175	DUP-F	43-53	WG	AG328151115	3/28/15	Field replicate.
3/27/15 14:39	GW1	AGGW1-W-36850	N	43-53	WG	AG328151115	3/28/15	Depth to water = 41.96 ft TOC. Depth of 1 in. well = 53 ft. Sample collected using Watera pump after purging 5 liters.
3/27/15 14:48	SG2D	AGSG2D-G-37183	N	29-30	SOIL GAS	AG328151100	3/28/15	Sample collected after purging 3 tank volumes. Beginning pressure -30 in. Hg. Ending pressure -1 in. Hg.

TABLE A.1 (Cont.)

Sample Date and Time	Location	Sample	Sample Type <sup>a</sup>	Sample Depth (ft BGL)	Sample Matrix <sup>b</sup>	Chain of Custody	Shipment Date	Sample Description
3/27/15 15:10	GW4	AGGW4-W-36853	N	43-53	WG	AG328151115	3/28/15	Depth to water = 42.19 ft TOC. Depth of 1 in. well = 53 ft. Sample collected using Watera pump after purging 5 liters.
3/27/15 15:14	SG3S	AGSG3S-G-37184	N	20-21	SOIL GAS	AG328151100	3/28/15	Sample collected without purge. Beginning pressure -29 in. Hg. Ending pressure 0 in. Hg.
3/27/15 15:23	SG3D	AGSG3D-G-37185	N	29-30	SOIL GAS	AG328151100	3/28/15	Sample collected after purging 3 tank volumes. Begin pressure -29 in. Hg. End pressure 0 in. Hg.
3/27/15 15:35	GW2	AGGW2-W-36851	N	43-53	WG	AG328151115	3/28/15	Depth to water = 42.42 ft TOC. Depth of 1 in. well = 53 ft. Sample collected using Watera pump after purging 5 liters.
3/27/15 15:35	GW2	AGGW2-W-36851DUP	DUP-L	43-53	WG	AG328151115	3/28/15	Duplicate laboratory analysis.
3/27/15 15:35	GW2	AGGW2-W-36851VER	VER	43-53	WG	AG328151130	3/28/15	Verification sample sent to TestAmerica (Vermont).
3/27/15 15:40	SG3D	AGSG3DDUP-G-37186	DUP-F	29-30	SOIL GAS	AG328151100	3/28/15	Sample collected after purging 3 tank volumes. Beginning pressure -30 in. Hg. Ending pressure 0 in. Hg.
3/27/15 15:51	QC	AGBKGD-G-37187	N	-	SOIL GAS	AG328151100	3/28/15	Background sample. Sample collected without purge. Beginning pressure -29 in. Hg. Ending pressure 0 in. Hg.
3/27/15 16:12	GW3	AGGW3-W-36852	N	43-53	WG	AG328151115	3/28/15	Depth to water = 41.99 ft TOC. Depth of 1 in. well = 53 ft. Sample collected using Watera pump after purging 5 liters.
3/27/15 16:56	MW-P	AGMWP-W-36849	N	35.4-54.9	WG	AG328151115	3/28/15	Depth to water = 45.23 ft TOC. Depth of 2 in. well = 54.92 ft. Sample collected using low flow bladder pump after purging 4.5 liters.

TABLE A.1 (Cont.)

Sample Date and Time	Location	Sample	Sample Type <sup>a</sup>	Sample Depth (ft BGL)	Sample Matrix <sup>b</sup>	Chain of Custody	Shipment Date	Sample Description
3/27/15 18:02	KMW-03	AGKMW3-W-36847	N	-	WG	AG328151115	3/28/15	Depth to water = 45.45 ft TOC. Depth of 2 in. well = 89 ft. Sample collected using low flow bladder pump after purging 6 liters.
3/27/15 18:02	KMW-03	AGKMW3-W-36847VER	VER	-	WG	AG328151130	3/28/15	Verification sample sent to TestAmerica (Vermont).
3/27/15 18:20	QC	AGDIH2O-W-37177	FB	-	WQC	AG328151115	3/28/15	Field blank of water used for equipment decontamination during March 2015 sampling event.
4/6/15 17:30	QC	AGIDW-W-37179	WASTE	-	WG	Pace-06Apr2015	4/6/15	Composite sample of the purge water containerized on-site during March 2015 sampling event.

<sup>a</sup> Sample type codes: DUP-F, field replicate; DUP-L, laboratory duplicate; FB, field blank; N, primary sample; RI, rinsate; TB, trip blank; VER, verification sample; WASTE, investigation-derived wastewater.

<sup>b</sup> Sample matrix codes: SOIL GAS, soil gas; WG, groundwater; WQC, quality control sample (e.g., trip blank).



TABLE A.2 Field measurements made during collection of groundwater samples on March 27, 2015.

Location	Sample	Sample Depth (ft BGL)	Temperature (°C)	pH	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	Oxygen Reduction Potential (mV)
GW1	AGGW1-W-36850	43-53	17.6	7.09	1700	29.75	196
GW2	AGGW2-W-36851	43-53	12.5	7.06	1230	38.24	217
GW3	AGGW3-W-36852	43-53	14.0	7.15	1286	35.22	180
GW4	AGGW4-W-36853	43-53	12.9	7.14	919	35.39	193
GW5	AGGW5-W-37174	43-53	12.8	6.76	1341	22.30	197
KMW-03	AGKMW3-W-36847	74-89	14.3	6.73	971	31.40	157
MW-J	AGMWJ-W-36848	54-66	11.5	6.51	1208	20.48	203
MWP	AGMWP-W-36849	35.4-54.9	14.3	7.09	1376	35.18	172

TABLE A.3 TestAmerica analytical results for soil gas samples collected on March 27, 2015.<sup>a</sup>

Location	Sample	Sample Date	Sample Type <sup>b</sup>	Sample Depth (ft BGL)	Carbon Tetrachloride (µg/m <sup>3</sup> )	Chloroform (µg/m <sup>3</sup> )	Methylene Chloride (µg/m <sup>3</sup> )	1,2-Dichloroethane (µg/m <sup>3</sup> )
SG1S	AGSG1S-G-37180	3/27/15	N	20-21	13 U <sup>c</sup>	9.8 U	17 U	8.1 U
SG1D	AGSG1D-G-37181	3/27/15	N	29-30	13 U	9.8 U	17 U	8.1 U
SG2S	AGSG2S-G-37182	3/27/15	N	20-21	13 U	9.8 U	17 U	8.1 U
SG2D	AGSG2D-G-37183	3/27/15	N	29-30	13 U	9.8 U	17 U	8.1 U
SG3S	AGSG3S-G-37184	3/27/15	N	20-21	13 U	9.8 U	17 U	8.1 U
SG3D	AGSG3D-G-37185	3/27/15	N	29-30	13 U	9.8 U	17 U	8.1 U
SG3D	AGSG3DDUP-G-37186	3/27/15	DUP-F	29-30	13 U	9.8 U	17 U	8.1 U
QC	AGBKGD-G-37187	3/27/15	N	-	13 U	9.8 U	17 U	8.1 U

<sup>a</sup> Analysis by TestAmerica (Vermont) for VOCs using EPA Method TO-15. The complete data package is in sample delivery group 200-27300 in Supplement 3 (on CD).

<sup>b</sup> Sample type codes: DUP-F, field replicate; N, primary sample.

<sup>c</sup> U, compound analyzed for but not detected at a level greater than or equal to the indicated method detection limit.

TABLE A.4 AGEM Laboratory analytical results for quarterly groundwater samples collected on March 27, 2015.

Location	Sample	Sample Depth (ft BGL)	Concentration (µg/L)			
			Carbon Tetrachloride	Chloroform	Methylene Chloride	1,2-Dichloroethane
GW1	AGGW1-W-36850	43-53	56	5.0	ND	ND
GW2	AGGW2-W-36851	43-53	3480	24	ND	ND
GW3	AGGW3-W-36852	43-53	1960	13	ND	ND
GW4	AGGW4-W-36853	43-53	256	4.1	ND	ND
GW5	AGGW5-W-37174	43-53	ND <sup>a</sup>	ND	ND	ND
KMW-03	AGKMW3-W-36847	-	ND	ND	ND	ND
MW-J	AGMWJ-W-36848	56-66	ND	ND	ND	ND
MW-P	AGMWP-W-36849	35.4-54.9	295	5.7	ND	ND

<sup>a</sup> ND, compound analyzed for but not detected at a level greater than or equal to the method detection limit (<1 µg/L).

TABLE A.5 AGEM Laboratory analytical results for quality control samples collected during quarterly groundwater monitoring on March 27, 2015

Location	Sample	Sample Depth (ft BGL)	Sample Type <sup>a</sup>	Concentration (µg/L)			
				Carbon Tetrachloride	Chloroform	Methylene Chloride	1,2-Dichloroethane
GW1	AGGW1-W-36850	43-53	N	56	5.0	ND	ND
GW1	AGGW1DUP-W-37175	43-53	DUP-F	59	5.2	ND	ND
GW2	AGGW2-W-36851	43-53	N	3480	24	ND	ND
GW2	AGGW2-W-36851DUP	43-53	DUP-L	3076	ND D <sup>c</sup>	ND	ND
QC	AGDIH2O-W-37177	–	FB	ND <sup>b</sup>	ND	ND	ND
QC	AGQCIR-W-37176	–	RI	ND	ND	ND	ND
QC	AGQCTB-W-37178	–	TB	ND	ND	ND	ND

<sup>a</sup> Sample type codes: DUP-F, field replicate; DUP-L, laboratory duplicate; N, primary sample; RI, rinsate; TB, trip blank.

<sup>b</sup> ND, compound analyzed for but not detected at a level greater than or equal to the method detection limit (<1 µg/L).

<sup>c</sup> D, sample analyzed at secondary dilution factor.

TABLE A.6 Analytical results for quarterly groundwater samples collected on March 27, 2015, and submitted for verification analysis.<sup>a</sup>

Location	Sample	Sample Depth (ft BGL)	Analytical Laboratory	Concentration (µg/L)				Method Detection Limit
				Carbon Tetrachloride	Chloroform	Methylene Chloride	1,2-Dichloroethane	
GW2	AGGW2-W-36851	43-53	AGEM	3,480	24	ND <sup>b</sup>	ND	1
GW2	AGGW2-W-36851VER	43-53	TestAmerica	3,400	24	ND	ND	0.5
KMW-03	AGKMW3-W-36847	-	AGEM	ND	ND	ND	ND	1
KMW-03	AGKMW3-W-36847VER	-	TestAmerica	ND	ND	ND	ND	0.5
QC	AGQCTB-W-37178	-	AGEM	ND	ND	ND	ND	1
QC	AGQCTB-W-37178VER	-	TestAmerica	ND	ND	ND	ND	0.5

<sup>a</sup> TestAmerica (Vermont) verification data are in sample delivery group 200-27298 in Supplement 4 (on CD).

<sup>b</sup> ND, compound analyzed for but not detected at a level greater than or equal to the indicated method detection limit.

**Appendix B:**

**Data for Argonne's Quarterly Groundwater Sampling on June 30, 2015**

TABLE B.1 Sequence of activities during quarterly groundwater sampling on June 30, 2015.

Sample Date and Time	Location	Sample	Sample Type <sup>a</sup>	Sample Depth (ft BGL)	Sample Matrix <sup>b</sup>	Chain of Custody	Shipment Date	Sample Description
6/30/15 10:00	QC	AGDIH2O-W-37198	FB	-	WQC	AG71151700	7/1/15	Field blank of water used for equipment decontamination during June 2015 sampling event.
6/30/15 10:00	QC	AGQCTB-W-37199	TB	-	WQC	AG71151700	7/1/15	Trip blank sent to AGEM Laboratory with water samples.
6/30/15 10:00	QC	AGQCTB-W-37199VER	VER	-	WQC	AG71151710	7/1/15	Verification sample sent to TestAmerica (Vermont).
6/30/15 11:15	KMW-03	AGKMW3-W-37188	N	-	WG	AG71151700	7/1/15	Depth to water = 45.75 ft TOC. Depth of 2 in. well = 89 ft. Sample collected using low flow bladder pump after purging 9 liters.
6/30/15 12:00	QC	AGQCIR-W-37197	RI	-	WQC	AG71151700	7/1/15	Rinsate of decontaminated sampling line after collection of sample AGKMW3-W-37188.
6/30/15 12:30	MW-P	AGMWP-W-37190	N	35.4-54.9	WG	AG71151700	7/1/15	Depth to water = 45.55 ft TOC. Depth of 2 in. well = 54.92 ft. Sample collected using low flow bladder pump after purging 9.25 liters.
6/30/15 13:30	GW1	AGGW1-W-37191	N	43-53	WG	AG71151700	7/1/15	Depth to water = 42.20 ft TOC. Depth of 1 in. well = 53 ft. Sample collected using Watera pump after purging 4.75 liters.
6/30/15 14:15	GW2	AGGW2-W-37192	N	43-53	WG	AG71151700	7/1/15	Depth to water = 43.00 ft TOC. Depth of 1 in. well = 53 ft. Sample collected using Watera pump after purging 4.5 liters.
6/30/15 14:15	GW2	AGGW2-W-37192DUP	DUP-L	43-53	WG	AG71151700	7/1/15	Duplicate laboratory analysis.
6/30/15 14:50	GW3	AGGW3DUP-W-37196	DUP-F	43-53	WG	AG71151700	7/1/15	Field replicate.
6/30/15 14:50	GW3	AGGW3DUP-W-37196DUP	DUP-L	43-53	WG	AG71151700	7/1/15	Duplicate laboratory analysis.
6/30/15 14:50	GW3	AGGW3-W-37193	N	43-53	WG	AG71151700	7/1/15	Depth to water = 42.25 ft TOC. Depth of 1 in. well = 53 ft. Sample collected using Watera pump after purging 4.75 liters.
6/30/15 15:30	GW4	AGGW4-W-37194	N	43-53	WG	AG71151700	7/1/15	Depth to water = 42.40 ft TOC. Depth of 1 in. well = 53 ft. Sample collected using Watera pump after purging 4.75 liters.
6/30/15 15:30	GW4	AGGW4-W-37194VER	VER	43-53	WG	AG71151710	7/1/15	Verification sample sent to TestAmerica (Vermont).
6/30/15 16:30	GW5	AGGW5-W-37195	N	43-53	WG	AG71151700	7/1/15	Depth to water = 42.35 ft TOC. Depth of 1 in. well = 53 ft. Sample collected using Watera pump after purging 4.75 liters.

TABLE B.1 (Cont.)

Sample Date and Time	Location	Sample	Sample Type <sup>a</sup>	Sample Depth (ft BGL)	Sample Matrix <sup>b</sup>	Chain of Custody	Shipment Date	Sample Description
6/30/15 17:15	MW-J	AGMWJ-W-37189	N	56-66	WG	AG71151700	7/1/15	Depth to water = 43.20 ft TOC. Depth of 2 in. well = 66 ft. Sample collected using low flow bladder pump after purging 9 liters.
6/30/15 17:15	MW-J	AGMWJ-W-37189VER	VER	56-66	WG	AG71151710	7/1/15	Verification sample sent to TestAmerica (Vermont).
7/1/15 17:30	QC	AGIDW-W-37200	WASTE	-	WG	Pace-01Jul2015	7/1/15	Composite sample of the purge water containerized on-site during June 2015 sampling event.

<sup>a</sup> Sample type codes: DUP-F, field replicate; DUP-L, laboratory duplicate; FB, field blank; N, primary sample; RI, rinsate; TB, trip blank; VER, verification sample; WASTE, investigation-derived wastewater.

<sup>b</sup> Matrix codes: WG, groundwater; WQC, water quality control sample (e.g., trip blank).



TABLE B.2 Field measurements made during collection of groundwater samples on June 30, 2015.

Location	Sample	Sample Depth (ft BGL)	Temperature (°C)	pH	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	Oxygen Reduction Potential (mV)
GW1	AGGW1-W-37191	43-53	17.9	7.26	1438	9.26	169
GW2	AGGW2-W-37192	43-53	18.6	7.35	1053	10.17	191
GW3	AGGW3-W-37193	43-53	19.5	7.39	1128	8.74	189
GW4	AGGW4-W-37194	43-53	25.4	7.41	829	7.70	180
GW5	AGGW5-W-37195	43-53	18.3	7.16	1213	8.51	196
KMW-03	AGKMW3-W-37188	74-89	17.8	7.15	791	7.79	152
MW-J	AGMWJ-W-37189	54-66	16.2	7.14	976	8.17	163
MW-P	AGMWP-W-37190	35.4-54.9	15.7	7.25	1091	9.47	142

TABLE B.3 AGEM Laboratory analytical results for quarterly groundwater samples collected on June 30, 2015.

Location	Sample	Sample Depth (ft BGL)	Concentration (µg/L)			
			Carbon Tetrachloride	Chloroform	Methylene Chloride	1,2-Dichloroethane
GW1	AGGW1-W-37191	43-53	52	5.2	ND	ND
GW2	AGGW2-W-37192	43-53	4256	23	ND	ND
GW3	AGGW3-W-37193	43-53	1496	13	ND	ND
GW4	AGGW4-W-37194	43-53	325	3.7	ND	ND
GW5	AGGW5-W-37195	43-53	ND <sup>a</sup>	ND	ND	ND
KMW-03	AGKMW3-W-37188	-	ND	ND	ND	ND
MW-J	AGMWJ-W-37189	56-66	11	ND	ND	ND
MW-P	AGMWP-W-37190	35.4-54.9	332	5.5	ND	ND

<sup>a</sup> ND, compound analyzed for but not detected at a level greater than or equal to the method detection limit (<1 µg/L).

TABLE B.4 AGEM Laboratory analytical results for quality control samples collected during quarterly groundwater monitoring on June 30, 2015.

Location	Sample	Sample Depth (ft BGL)	Sample Type <sup>a</sup>	Concentration (µg/L)			
				Carbon Tetrachloride	Chloroform	Methylene Chloride	1,2-Dichloroethane
GW2	AGGW2-W-37192	43-53	N	4256	23	ND	ND
GW2	AGGW2-W-37192DUP	43-53	DUP-L	4195	ND D <sup>c</sup>	ND	ND
GW3	AGGW3-W-37193	43-53	N	1496	13	ND	ND
GW3	AGGW3DUP-W-37196	43-53	DUP-F	1432	13	ND	ND
GW3	AGGW3DUP-W-37196DUP	43-53	DUP-L	1449	12	ND	ND
QC	AGDIH2O-W-37198	-	FB	ND <sup>b</sup>	ND	ND	ND
QC	AGQCIR-W-37197	-	RI	ND	ND	ND	ND
QC	AGQCTB-W-37199	-	TB	ND	ND	ND	ND

<sup>a</sup> Sample type codes: DUP-F, field replicate; DUP-L, laboratory duplicate; N, primary sample; RI, rinsate; TB, trip blank.

<sup>b</sup> ND, compound analyzed for but not detected at a level greater than or equal to the method detection limit (<1 µg/L).

<sup>c</sup> D, sample analyzed at secondary dilution factor.

TABLE B.5 Analytical results for quarterly groundwater samples collected on June 30, 2015, and submitted for verification analysis.<sup>a</sup>

Location	Sample	Sample Depth (ft BGL)	Analytical Laboratory	Concentration (µg/L)				Method Detection Limit
				Carbon Tetrachloride	Chloroform	Methylene Chloride	1,2-Dichloroethane	
GW4	AGGW4-W-37194	43-53	AGEM	325	3.7	ND <sup>d</sup>	ND	1
GW4	AGGW4-W-37194VER	43-53	TestAmerica	320 D <sup>b</sup>	3.9	ND	ND	0.5
MW-J	AGMWJ-W-37189	56-66	AGEM	11	ND	ND	ND	1
MW-J	AGMWJ-W-37189VER	56-66	TestAmerica	15	ND	ND	ND	0.5
QC	AGQCTB-W-37199	-	AGEM	ND	ND	ND	ND	1
QC	AGQCTB-W-37199VER	-	TestAmerica	ND	0.08 J <sup>c</sup>	ND	ND	0.5

<sup>a</sup> TestAmerica verification data are in sample delivery group 200-28712 in Supplement 9 (on CD).

<sup>b</sup> D, result from analysis at secondary dilution factor.

<sup>c</sup> J, compound identified with an estimated concentration between the instrument detection limit and the method detection limit.

<sup>d</sup> ND, compound analyzed for but not detected at a level greater than or equal to the indicated method detection limit.

**Appendix C:**

**Water Level Data**

TABLE C.1 Hand-measured groundwater levels since 2009.

Well Name	Easting	Northing	TOC (ft AMSL) <sup>a</sup>	7/30/09			6/28/11			10/3/12			6/6/13			9/6/13			2/15/14		
				Time	ft TOC	ft AMSL	Time	ft TOC	ft AMSL	Time	ft TOC	ft AMSL	Time	ft TOC	ft AMSL	Time	ft TOC	ft AMSL	Time	ft TOC	ft AMSL
KMW-01	997915	522702	1857.71	17:18	44.97	1812.74	11:28	44.16	1813.55	14:52	44.72	1812.99	14:26	45.57	1812.14	12:48	46.16	1811.55	14:09	46.66	1811.05
KMW-02	998604	522716	1855.42	17:47	43.73	1811.69	11:49	42.67	1812.75	15:08	43.24	1812.18	14:42	43.90	1811.52	12:42	44.46	1810.96	14:26	44.87	1810.55
KMW-03	998534	523065	1857.03							14:09	42.24	1814.79	14:04	43.06	1813.97	12:09	43.56	1813.47	11:52	44.10	1812.93
MW-2	997892	522640	1856.88	17:22	44.49	1812.39	11:33	43.64	1813.24	14:55	44.17	1812.71	14:29	45.02	1811.86	12:50	45.64	1811.24	14:14	46.14	1810.74
MW-B	997691	522742	1852.59	17:06	39.97	1812.62	11:24	39.22	1813.37	14:43	39.81	1812.78	14:18	40.65	1811.94	12:58	41.21	1811.38	14:01	41.75	1810.84
MW-F	997920	522543	1856.14	17:25	44.33	1811.81	11:36	43.44	1812.70	14:58	43.96	1812.18	14:32	44.88	1811.26	12:54	45.42	1810.72	14:18	45.95	1810.19
MW-I	998193	522730	1855.26	17:33	42.10	1813.16	11:43	41.33	1813.93	15:03	41.96	1813.30	14:38	42.74	1812.52	12:36	43.34	1811.92	14:22	43.55	1811.71
MW-J	998339	522914	1854.29	16:45	39.81	1814.48	13:48	39.07	1815.22	14:01	39.78	1814.51	13:45	40.64	1813.65	12:29	41.12	1813.17	13:43	41.59	1812.70
MW-K	997920	522915	1854.86	16:51	39.74	1815.12	13:21	39.02	1815.84	14:21	39.65	1815.21	13:50	40.49	1814.37	12:22	41.02	1813.84	13:57	41.46	1813.40
MW-L	998157	522251	1852.93	18:50	41.68	1811.25	11:12	40.86	1812.07	15:27	41.45	1811.48	15:00	42.30	1810.63	14:56	42.98	1809.95	14:45	43.28	1809.65
MW-M	998727	522242	1851.52	18:10	42.77	1808.75	12:03	41.39	1810.13	15:21	42.08	1809.44	14:54	42.53	1808.99	15:07	43.23	1808.29	14:38	43.51	1808.01
MW-P	998271	522970	1857.11	16:37	42.18	1814.93	14:10	41.46	1815.65	11:02	42.18	1814.93	11:20	43.03	1814.08	12:05	43.53	1813.58	12:00	43.97	1813.14
MW-Q	998034	522971	1857.78	16:56	42.36	1815.42	13:28	41.61	1816.17	14:17	42.22	1815.56	13:54	43.09	1814.69	12:19	43.62	1814.16	13:52	44.06	1813.72
MW-R	998105	523133	1859.43	16:33	42.56	1816.87	13:30	41.83	1817.60	14:14	42.45	1816.98	13:58	43.24	1816.19	12:14	43.85	1815.58	11:47	44.23	1815.20
SB23	999489	520269	1830.32	19:14	30.54	1799.78	10:42	27.93	1802.39	16:20	28.30	1802.02	15:34	29.05	1801.27	15:40	29.72	1800.60			
SB23S	999487	520270	1830.46	19:18	30.65	1799.81	10:45	28.02	1802.44	16:25	28.47	1801.99	15:37	29.18	1801.28	15:44	29.80	1800.66	15:04	30.06	1800.40
SB28	998516	520640	1839.40	19:00	38.18	1801.22	11:03	36.07	1803.33	15:42	36.50	1802.90	15:10	36.94	1802.46	15:59	37.98	1801.42	14:52	37.81	1801.59
SB28S	998516	520646	1839.38	18:56	38.00	1801.38	11:00	35.72	1803.66	15:55	36.33	1803.05	15:13	36.73	1802.65	15:55	37.61	1801.77	14:58	37.58	1801.80
SB38	999229	520932	1838.19	19:21	37.41	1800.78	12:36	37.02	1801.17	16:06	35.83	1802.36	15:18	36.24	1801.95	15:25	39.11	1799.08	15:19	36.88	1801.31
SB38S	999227	520927	1838.28	19:26	37.53	1800.75	12:29	36.55	1801.73	16:02	36.03	1802.25	15:24	36.37	1801.91	15:29	39.30	1798.98	15:21	36.92	1801.36
SB72	999214	522233	1845.79	18:04	37.84	1807.95	11:57	36.20	1809.59	15:16	37.05	1808.74	14:49	37.58	1808.21	15:20	38.33	1807.46	14:32	38.50	1807.29
GW-1	998235	522992	1853.97	19:59	38.40	1815.57				14:35	38.74	1815.23	12:41	39.57	1814.40	13:12	40.12	1813.85	11:34	40.58	1813.39
GW-2	998264	523012	1854.28	19:45	38.99	1815.29	14:18	38.40	1815.88	12:24	39.02	1815.26	12:45	39.98	1814.30	13:21	40.42	1813.86	11:42	40.88	1813.40
GW-3	998283	522995	1853.87	20:01	38.90	1814.97				14:31	38.68	1815.19	13:14	39.63	1814.24	13:15	40.06	1813.81	11:37	40.52	1813.35
GW-4	998246	523050	1854.69	19:38	39.09	1815.60	14:36	38.40	1816.29	12:14	39.03	1815.66	13:04	39.98	1814.71	13:07	40.48	1814.21	11:40	40.96	1813.73
GW-5	998278	522907	1853.94	19:55	38.74	1815.20	14:00	38.12	1815.82	12:39	38.88	1815.06	13:20	39.82	1814.12	13:43	40.25	1813.69	13:16	40.76	1813.18

TABLE C.1 (Cont.)

Well Name	Easting	Northing	TOC (ft AMSL) <sup>a</sup>	6/10/14			7/31/14			9/30/14			11/19/14			12/2/14			2/6/15			5/12/15		
				Time	ft TOC	ft AMSL	Time	ft TOC	ft AMSL	Time	ft TOC	ft AMSL	Time	ft TOC	ft AMSL	Time	ft TOC	ft AMSL	Time	ft TOC	ft AMSL	Time	ft TOC	ft AMSL
KMW-01	997915	522702	1857.71	12:18	47.08	1810.63	13:57	47.30	1810.41				12:37	47.75	1809.96				11:56	47.84	1809.87	11:45	48.10	1809.61
KMW-02	998604	522716	1855.42	12:48	45.27	1810.15	14:23	45.53	1809.89				12:53	45.94	1809.48				11:38	46.04	1809.38	12:01	46.35	1809.07
KMW-03	998534	523065	1857.03	13:19	44.54	1812.49	13:07	44.75	1812.28	45.03	1812.00		13:17	45.19	1811.84	45.12	1811.91		12:38	45.30	1811.73	12:26	45.62	1811.41
MW-2	997892	522640	1856.88	13:32	46.55	1810.33	14:00	46.78	1810.10				12:39	47.21	1809.67				11:58	47.30	1809.58	11:48	47.55	1809.33
MW-B	997691	522742	1852.59	12:12	42.12	1810.47	13:50	42.30	1810.29				12:32	42.74	1809.85				12:06	42.87	1809.72	11:40	43.07	1809.52
MW-F	997920	522543	1856.14	12:37	46.35	1809.79	14:03	46.78	1809.36				12:42	47.04	1809.10				12:00	47.15	1808.99	11:51	47.41	1808.73
MW-I	998193	522730	1855.26	12:38	44.21	1811.05	14:12	44.45	1810.81				12:49	44.91	1810.35				11:44	44.82	1810.44	11:57	45.28	1809.98
MW-J	998339	522914	1854.29	13:09	42.07	1812.22	12:59	42.28	1812.01	42.44	1811.85		13:11	42.70	1811.59	42.56	1811.73		12:28	42.75	1811.54	12:46	43.17	1811.12
MW-K	997920	522915	1854.86	12:58	41.95	1812.91	13:20	42.15	1812.71				12:59	42.52	1812.34				12:15	42.60	1812.26	12:09	42.90	1811.96
MW-L	998157	522251	1852.93	11:52	43.85	1809.08	14:43	44.15	1808.78				12:14	44.44	1808.49				11:13	44.60	1808.33	11:33	44.84	1808.09
MW-M	998727	522242	1851.52	11:47	43.89	1807.63	14:36	44.27	1807.25				12:07	44.61	1806.91				11:21	44.68	1806.84	11:28	44.99	1806.53
MW-P	998271	522970	1857.11	13:35	44.43	1812.68	13:24	44.62	1812.49	44.82	1812.29		13:55	45.09	1812.02	44.95	1812.16		12:43	45.18	1811.93	12:30	45.52	1811.59
MW-Q	998034	522971	1857.78	13:03	44.50	1813.28	13:16	44.77	1813.01				13:03	45.16	1812.62				12:19	45.21	1812.57	12:13	45.58	1812.20
MW-R	998105	523133	1859.43	13:14	44.70	1814.73	13:13	45.02	1814.41				13:50	45.33	1814.10				12:33	45.38	1814.05	12:20	45.79	1813.64
SB23	999489	520269	1830.32	11:19	30.50	1799.82	15:01	30.98	1799.34				11:47	31.06	1799.26				10:40	31.17	1799.15	10:51	31.58	1798.74
SB23S	999487	520270	1830.46	11:14	30.64	1799.82	15:03	30.98	1799.48				11:44	31.17	1799.29				10:38	31.24	1799.22	10:52	31.75	1798.71
SB28	998516	520640	1839.40	12:03	38.37	1801.03	14:51	39.31	1800.09				12:24	38.99	1800.41				11:02	39.00	1800.40	11:02	39.49	1799.91
SB28S	998516	520646	1839.38	12:00	38.14	1801.24	14:54	38.76	1800.62				12:20	38.75	1800.63				11:06	38.78	1800.60	11:03	39.28	1800.10
SB38	999229	520932	1838.19	11:32	37.55	1800.64	15:16	41.65	1796.54				11:51	38.55	1799.64				10:55	38.04	1800.15	11:13	38.77	1799.42
SB38S	999227	520927	1838.28	11:28	37.61	1800.67	15:20	39.82	1798.46				11:53	38.22	1800.06				10:51	38.09	1800.19	11:11	38.70	1799.58
SB72	999214	522233	1845.79	11:40	38.85	1806.94	14:30	39.33	1806.46				12:01	39.50	1806.29				11:30	39.61	1806.18	11:22	39.96	1805.83
GW-1	998235	522992	1853.97	13:41	41.24	1812.73	13:31	41.37	1812.60	41.39	1812.58		13:39	41.67	1812.30	41.60	1812.37		12:54	41.87	1812.10	12:37	42.18	1811.79
GW-2	998264	523012	1854.28	14:21	41.34	1812.94	12:22	41.58	1812.70	42.22	1812.06		13:42	41.98	1812.30	42.15	1812.13		13:50	42.05	1812.23	14:20	42.50	1811.78
GW-3	998283	522995	1853.87	13:43	41.01	1812.86	13:37	41.21	1812.66	41.36	1812.51		13:36	41.62	1812.25	41.55	1812.32		13:00	41.74	1812.13	12:34	42.17	1811.70
GW-4	998246	523050	1854.69	13:38	41.40	1813.29	13:41	41.53	1813.16	41.92	1812.77		13:44	41.98	1812.71	42.08	1812.61		12:57	42.12	1812.57	12:41	42.49	1812.20
GW-5	998278	522907	1853.94	14:35	41.27	1812.67	12:40	41.41	1812.53	41.69	1812.25		13:58	41.85	1812.09	41.72	1812.22		14:09	41.89	1812.05	14:35	42.31	1811.63

<sup>a</sup> Reference elevation (ft AMSL, feet above mean sea level) measured from top of casing (TOC).

**Supplement 1:**

**GreenField Report for Quarterly OMM Event on January 23, 2015**



March 10, 2015

Lorraine M. LaFreniere, Ph.D., Manager  
Applied Geosciences and Environmental Management Section  
Environmental Science Division  
Argonne National Laboratory  
9700 South Cass Avenue, Building 203  
Argonne, Illinois 60439-4843

**RE: Former CCC/USDA Site, Main & Railroad Streets, Agra, Kansas  
Sixth Quarterly OMM Report of the Third OMM Contract**

Ms. LaFreniere,

GreenField Contractors, Inc. is submitting the attached copy of the quarterly OMM report of the referenced site. Please contact me if you have any question concerning this report or the remedial project in general.

Sincerely,



Melisa McElwee  
GreenField Contractors, Inc.

# **First Quarterly Report of the Second Scope of OMM Services**

**Former Agra Commodity Credit Corporation, United States  
Department of Agriculture Grain Storage Facility  
Agra, Kansas**

KDHE Project Code: C6-074-00002  
Legal Description: SW ¼, SE ¼, NW ¼, S27, T3S, R16W  
Phillips County, Kansas

Prepared for:  
Lorraine M. LaFreniere, Ph.D., Manager  
Applied Geosciences and Environmental Management Section  
Environmental Science Division  
Argonne National Laboratory  
9700 South Cass Avenue, Building 203  
Argonne, Illinois 60439-4843

Submitted by:  
GreenField Contractors, Inc.  
Tim Pace, Remedial Director  
P.O. Box 677  
Salina, Kansas 67401-0677  
(785)-822-0900

March 10, 2015

**GreenField Contractors, Inc.**

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## **1.0 OPERATION, MAINTENANCE AND MONITORING**

This quarterly OMM report for the USDA/CCC site located in Agra, Kansas, documents site activities from the sixth quarter of operation under the third scope of OMM services.

### **1.1 Operation and Maintenance**

Between October 29, 2014 and January 23, 2015 two monthly OMM events and one quarterly OMM events were conducted at the Agra CCC/USDA site. Vapor samples were collected from each individual SVE well line at the SVE manifold and one from the SVE effluent stack at the quarterly OMM event for laboratory analysis of carbon tetrachloride, chloroform, and 1,2 DCA. Groundwater samples were collected from onsite wells GW-1, 3, and 4 at the quarterly OMM event. General maintenance was conducted on the SVE and ASP systems as well. The air sparge blower vanes were replaced at the January 23, 2015 quarterly OMM event.

#### **Soil Vapor Extraction System**

The SVE system operates SVE wells SVE-1 & 2 continuously while SVE-3, 4, & 5 are individually operated on alternating intervals. For consistency, SVE operating parameters are collected when SVE-1, 2, & 3 are operating. The SVE system operated at an average pre-filter vacuum of 43.27 inches of water and an average manifold flow rate of 183 cubic feet per minute (cfm) this quarter with the air dilution valve closed.

Monitoring activities on the SVE vapors included measuring total volatile organic compounds (VOC's), carbon dioxide, and oxygen concentrations on the SVE manifold and on each individual well line. Oxygen concentrations maintained 20.9 percent of extracted air. Carbon dioxide levels were at non-detectable levels. The vapor samples were collected from the SVE Effluent and the individual well lines at the SVE manifold at the quarterly OMM event. Vapor samples collected at the SVE manifold were analyzed via EPA Method TO-15 for VOC's carbon tetrachloride, chloroform, and 1,2 DCA. Carbon tetrachloride was detected in five of the six air samples collected ranging in concentration from 11 to 89.3 ug/m<sup>3</sup>. Chloroform was not detected above laboratory detection limits in any of the vapor samples analyzed. 1,2 DCA was only detected in the SVE-1 vapor sample at 8.5 ug/m<sup>3</sup>.

#### **Air Sparge System**

The AS system operated at an average pressure of 14.07 psi and an average cumulative airflow rate of 14.5 scfm this quarter. Wellhead pressures ranged from 4.17 psi to greater than 10 psi. Individual well line airflow rates ranged from 1.8 to 7.0 scfm.

## **1.2 Monitoring Monitoring Wells**

Groundwater samples were collected at the quarterly OMM event. The samples were analyzed for chloroform, carbon tetrachloride, and 1,2 DCA. Carbon tetrachloride was detected in the three groundwater samples ranging in concentration from 82.7 to 2,270 ug/L. Chloroform was also detected in all three groundwater samples ranging in concentration from 3.4 ug/L to 6.3 ug/L. 1,2 DCA was not detected in any of the three groundwater samples analyzed.

**Quarterly Monitoring Report**

**Facility Name:** Former Agra CCC/USDA  
**Facility Address:** 671 Railroad Ave. Agra, KS  
**Consultant:** GreenField Contractors Inc.  
**Reporting Period:** 10/29/2014 through 1/23/2015  
**Days in Reporting Period** 86

**Project #:** 1491  
**Consultant Project Mgr.:** Tim Pace  
**Number of Days SVE System Operating:** 86  
**Number of Days ASP System Operating:** 86

**Section 1 - Summary of Remedial Action**

**Groundwater:**

Pump & Treat:  Total Fluids Pumps (Electric)  Dual Phase Pumps (Electric)  
 Total Fluids Pumps (Pneumatic)  Dual Phase Pumps (Pneumatic)  
 With Off-gas Treatment  W/O Off-gas Treatment  
 Air Sparge System:

Recovery Trench(es):  NO L  ft. W  ft. D  ft.  
 No. of GW Recovery Wells:  No. of Sparge Wel  Yes  
 Startup Dates: GW Pump & Treat  Sparge  5 Off-gas Treatment

ISOC System: No. of ISOC Wells:   
 Startup Dates: ISOC

Water Treatment System:  Carbon  Air Stripper Tower  Tray Stripper  
 Other (Specify):   
 Public Well Treatment System:  Carbon  Air Stripper Tower  Tray Stripper  
 Other (Specify):   
 Disposition of Treated Water:  Sanitary Sewer  NPDES  Reinjection  
 Other (Specify):

**Soil:**

Vapor Extraction System:  With Off-gas Treatment  W/O Off-gas Treatment:  
 No. of SVE Wells:  5 Startup Dates:  VES  Off-gas Treatment

**Comments:**

SVE and ASP wells are installed in large diameter borings(LDBs)

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

Project #: 1491

Continued Section 1 - Summary of Remedial Action

Major Equipment on Site:				Warr. Exp.
Skimmer Pumps:	Brand _____	Type _____	Capacity _____	Date _____
Groundwater Pumps:	Brand _____	Type _____	Capacity _____	Date _____
Pre-Treatment/Filter:	Brand _____	Type _____		Date _____
Air Stripper:	Brand _____	Type _____	Capacity _____	Date _____
Enclosure Type:	Fence _____	Building _____	Skid _____	Other <input type="checkbox"/> Trailer <input type="checkbox"/>
Transfer Pumps:	Brand _____	Type _____	Capacity _____	Date _____
Air Compressor:	Brand _____	Type _____		Date _____
SVE Vacuum Pump:	Brand <u>Republic</u>	Type <u>HRB-900E</u>	Capacity _____	Date _____
Sparge Blower Pump:	Brand <u>Reitschle</u>	Type <u>DLT-40</u>	Capacity _____	Date _____
Oil/H2O Separator:	Brand _____	Type _____	Capacity _____	Date _____
Knockout Tank:	Brand <u>Ametek</u>	Type <u>M5350B</u>	Capacity <u>350 cfm</u>	Date _____
Vapor Phase Carbon:	Brand _____	Type _____		Date _____
Water Phase Carbon:	Brand _____	Type _____		Date _____
PWS Treatment Equip.	Brand _____	Type _____	Capacity _____	Date _____
Telemetry:	Model <u>Sensaphone 2000</u>	Type _____		Date _____
Off-gas Treatment Equip.:	Brand _____	Type _____	Capacity _____	Date _____
ISOC Oxygen Injection System:	Brand _____	Type _____	Capacity _____	Date _____

Facility Name: Former Agra CCC/USDA

Project #: 1491

Section 2 - Groundwater/Vapor Extraction/Injection Information

Design Air Flow Rate for Vapor Extraction System:	<u>    --    </u>	CFM	
Actual Ave. Flow Rate During 1st. Month of Operation:	<u>  255.50  </u>	CFM	
Actual Average System Flow Rate Since Start-up:	<u>  201.17  </u>	CFM	
Reporting Period Average Flow Rate:	<u>  183.00  </u>	CFM	
Blower Operation:	<u>    X    </u>	Continual	<input type="checkbox"/> Cycling
Design Air Flow Rate for Air Sparge System:	<u>  20.00  </u>	CFM	
Actual Ave. Flow Rate During 1st. Month of Operation:	<u>  19.10  </u>	CFM	
Actual Average System Flow Rate Since Start-up:	<u>  13.86  </u>	CFM	
Reporting Period Average Flow Rate:	<u>  14.50  </u>	CFM	
Blower Operation:	<u>    X    </u>	Continual	<input type="checkbox"/> Cycling





**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

**Section 7 - Ground Water Elevations**

Date: 5/29/2009

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
GW-1		39.02		NA	NA
GW-3		--		NA	NA
GW-4		39.93		NA	NA

Date: 8/28/2009

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
GW-1		39.26		NA	NA
GW-3		39.16		NA	NA
GW-4		39.85		NA	NA

Date: 11/27/2009

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
GW-1		38.22		NA	NA
GW-3		38.25		NA	NA
GW-4		39.36		NA	NA

Date: 2/25/2010

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
GW-1		37.40		NA	NA
GW-3		37.94		NA	NA
GW-4		39.44		NA	NA

Date: 5/27/2010

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
GW-1		37.97		NA	NA
GW-3		38.36		NA	NA
GW-4		39.51		NA	NA

Date: 8/27/2010

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
GW-1		37.73		NA	NA
GW-3		37.73		NA	NA
GW-4		38.96		NA	NA

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

**Section 7 - Ground Water Elevations**

Date: 11/19/2010

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
GW-1		37.78		NA	NA
GW-3		37.72		NA	NA
GW-4		39.12		NA	NA

Date: 3/1/2011

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
GW-1		39.30		NA	NA
GW-3		37.92		NA	NA
GW-4		38.05		NA	NA

Date: 5/25/2011

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
GW-1		NA		NA	NA
GW-3		NA		NA	NA
*GW-4		NA		NA	NA

\* SWL'S not collected. Wellheads under water.

Date: 10/27/2011

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		NA		NA	NA
*GW-3		NA		NA	NA
*GW-4		NA		NA	NA

\* No SWL'S. Water level indicator probe too big for 1" wells.

Date: 1/26/2012

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		37.98		NA	NA
*GW-3		38.95		NA	NA
*GW-4		39.10		NA	NA

\* No SWL'S. Water level indicator faulty.

Date: 4/26/2012

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		37.98		NA	NA
*GW-3		38.95		NA	NA
*GW-4		39.10		NA	NA

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

**Section 7 - Ground Water Elevations**

Date: 7/31/2012

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		38.40		NA	NA
*GW-3		38.40		NA	NA
*GW-4		39.30		NA	NA

Date: 10/30/2012

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		38.92		NA	NA
*GW-3		38.87		NA	NA
*GW-4		39.91		NA	NA

Date: 2/1/2013

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		39.12		NA	NA
*GW-3		39.04		NA	NA
*GW-4		40.28		NA	NA

Date: 4/26/2013

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		39.41		NA	NA
*GW-3		39.26		NA	NA
*GW-4		40.41		NA	NA

Date: 8/1/2013

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		39.93		NA	NA
*GW-3		39.79		NA	NA
*GW-4		40.20		NA	NA

Date: 10/29/2013

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		40.28		NA	NA
*GW-3		40.20		NA	NA
*GW-4		40.48		NA	NA

Date: 1/31/2014

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		40.55		NA	NA
*GW-3		40.47		NA	NA
*GW-4		40.91		NA	NA

Date: 4/30/2014

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		41.02		NA	NA
*GW-3		40.89		NA	NA
*GW-4		41.28		NA	NA

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

**Section 7 - Ground Water Elevations**

Date: 8/1/2014

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		41.27		NA	NA
*GW-3		41.21		NA	NA
*GW-4		41.59		NA	NA

Date: 10/29/2014

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		41.57		NA	NA
*GW-3		41.51		NA	NA
*GW-4		41.84		NA	NA

Date: 1/23/2015

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		41.62		NA	NA
*GW-3		41.56		NA	NA
*GW-4		41.96		NA	NA

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA Project #: 1491

**Section 10A - Monitoring & Recovery Well Analytical**  
(Use ppb units)

		Chloroform	Carbon tetrachloride	1,2-Dichloroethane					Volume Purged (gallons)
Method		8260B	8260B	8260B					
Det. Level		0.5	0.5	0.5					
Well I.D.	Date								
GW-1	5/29/09	6.7	31.7	ND(1)					NA
	8/28/09	7.7	45.9	ND(1)					NA
	11/27/09	7.3	48.3	ND(1)					NA
	2/25/10	4.2	35.8	ND(1)					NA
	5/27/10	5.1	24.8	ND(1)					NA
	8/27/10	5.4	30.3	ND(1)					NA
	11/19/10	5.8	31.2	ND(1)					NA
	3/1/11	5.5	39.8	ND(1)					NA
	5/25/11	Unable to access due to rain water							
	10/27/11	5.4	34	ND(1)					NA
	1/26/12	5.7	38.9	ND(1)					NA
	4/26/12	5	39.3	ND(1)					NA
	7/31/12	4.8	45	ND(1)					NA
	10/30/12	5.7	45.6	ND(1)					NA
	2/1/13	3.3	30.7	ND(1)					NA
	4/26/13	5.1	56.2	ND(1)					NA
	8/1/13	5.7	50.3	ND(1)					NA
	10/29/13	5.7	84.6	ND(1)					NA
	1/31/14	5.6	93.7	ND(1)					NA
	4/30/14	5	70	ND(1)					NA
	8/1/14	5.8	76.6	ND(1)					NA
	10/29/14	4.5	66.1	ND(1)					NA
	1/23/15	6.3	82.7	ND(1)					NA

		Chloroform	Carbon tetrachloride	1,2-Dichloroethane					Volume Purged (gallons)
Method		8260B	8260B	8260B					
Det. Level		0.5	0.5	0.5					
Well I.D.	Date								
GW-3	5/29/09	22.7	1210	ND(1)					NA
	8/28/09	29.4	968	ND(20)					NA
	11/27/09	17.4	797	ND(10)					NA
	2/25/10	15.2	733	ND(5)					NA
	5/27/10	16	748	ND(5)					NA
	8/27/10	17.4	913	ND(10)					NA
	11/19/10	25.2	629	ND(10)					NA
	3/1/11	23.3	1180	ND(1)					NA
	5/25/11	Unable to access due to rain water							
	10/27/11	16.2	867	ND(10)					NA
	1/26/12	17.6	857	ND(1)					NA
	4/26/12	14.2	899	ND(10)					NA
	7/31/12	11.6	937	ND(10)					NA
	10/30/12	13.6	947	ND(10)					NA
	2/1/13	3.8	84.4	ND(1)					NA
	4/26/13	15	1870	ND(1)					NA
	8/1/13	23.4	1110	ND(20)					NA
	10/29/13	ND(50)	1850	ND(50)					NA
	1/31/14	ND(20)	978	ND(20)					NA
	4/30/14	15.1	1810	ND(10)					NA
	8/1/14	22.7	1550	ND(20)					NA
	10/29/14	15	1420	ND(1)					NA
	1/23/15	ND(20)	2270	ND(20)					NA

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA Project #: 1491

**Section 10A - Monitoring & Recovery Well Analytical**

(Use ppb units)

		Chloroform	Carbon tetrachloride	1,2-Dichloroethane					Volume Purged (gallons)
Method		8260B	8260B	8260B					
Det. Level		0.5	0.5	0.5					
Well I.D.	Date								
GW-4	5/29/09	2.6	78.6	ND(1)					NA
	8/28/09	4.1	154	ND(1)					NA
	11/27/09	2.9	150	ND(2)					NA
	2/25/10	3.1	228	ND(2)					NA
	5/27/10	2.5	191	ND(2)					NA
	8/27/10	1.8	70.1	ND(1)					NA
	11/19/10	1.7	77.5	ND(1)					NA
	3/1/11	2.6	184	ND(1)					NA
	5/25/11	Unable to access due to rain water							
	10/27/11	2.5	172	ND(2)					NA
	1/26/12	3.3	259	ND(1)					NA
	4/26/12	3.2	199	ND(1)					NA
	7/31/12	4.2	183	ND(1)					NA
	10/30/12	4.1	262	ND(5)					NA
	2/1/13	5.5	45.6	ND(1)					NA
	4/26/13	3.9	246	ND(1)					NA
	8/1/13	6.7	236	ND(5)					NA
	10/29/13	3.9	243	ND(1)					NA
	1/31/14	ND(5)	337	ND(5)					NA
	4/30/14	ND(5)	274	ND(5)					NA
	8/1/14	ND(5)	223	ND(5)					NA
	10/29/14	3.8	259	ND(1)					NA
	1/23/15	3.4	276	ND(2)					NA





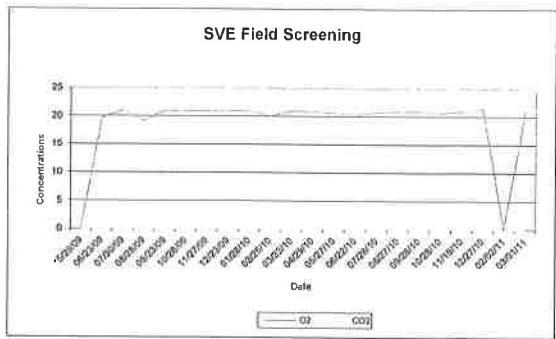
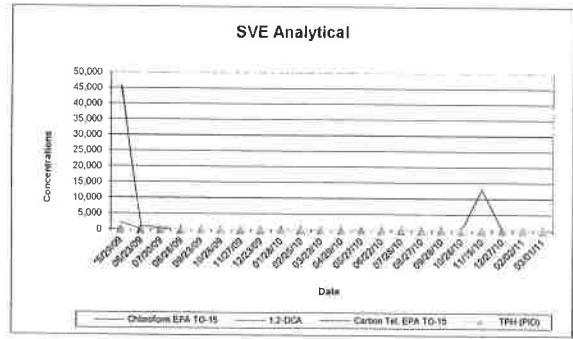


Section 15 - SVE Unit Field and Laboratory Analytical Results

SVE Unit: Effluent

Date	LABORATORY ANALYSIS			FIELD ANALYSIS		
	Chloroform	Carbon Tet.	1,2-DCA	O2 Readings (%)	CO2 Readings (%)	TPH (PID) Readings (ppm)
	Method: EPA TO-15	Method: EPA TO-15	Method: EPA TO-15	Reporting Units ug/m3	Reporting Units ug/m3	Reporting Units ug/m3
*5/29/09	2,000	46,000	ND(64)	--	--	--
06/23/09	99	1,100	ND(2.2)	19.7	0	0.2
07/30/09	26	460	ND(2.5)	20.9	0	0
08/28/09	ND(14)	40	ND(11)	19.1	0	0.2
09/23/09	--	--	--	20.9	0	0.4
10/28/09	--	--	--	20.9	0	4.1
11/27/09	8.8	182	ND(3.2)	20.9	0	0.4
12/23/09	--	--	--	20.9	0	0.8
01/28/10	--	--	--	20.9	0	0
02/25/10	12	115	ND(0.81)	20	0	2.2
03/23/10	--	--	--	20.9	0	0
04/29/10	--	--	--	20.9	0	0
05/27/10	6.8	143	ND(3.2)	20.6	0	0
06/22/10	--	--	--	20.3	0	0
07/28/10	--	--	--	20.7	0	0
08/27/10	2.9	34	ND(3.2)	20.9	0	0
09/28/10	--	--	--	20.9	0	0
10/28/10	--	--	--	20.6	0	0
11/19/10	97.2	13000	ND(3.2)	20.9	0	0
12/27/10	--	--	--	21.5	0	0
02/02/11	--	--	--	--	--	--
03/01/11	ND(3.9)	71.7	ND(3.2)	20.9	0	0.1
03/29/11	--	--	--	20.9	0	0
04/27/11	--	--	--	20.9	0	0
05/25/11	ND(3.9)	49	ND(3.2)	20.9	0	0
08/30/11	--	--	--	20.9	0	0
09/26/11	--	--	--	20.4	0	1.2
10/27/11	ND(3.9)	33	ND(3.2)	20.9	0	0.2
11/28/11	--	--	--	20.9	0	0
12/29/11	--	--	--	20.9	0	0.2
01/26/12	ND(3.9)	21	ND(3.2)	20.9	0	0.2
02/21/12	--	--	--	20.9	0	0.1
03/29/12	--	--	--	20.7	0	0
04/26/12	ND(3.9)	25	ND(3.2)	20.9	0	0.3
05/31/12	--	--	--	20.9	0	0
06/28/12	--	--	--	20.9	0	0
07/31/12	ND(3.9)	52	ND(3.2)	20.9	0	0
08/31/12	--	--	--	20.9	0	0.2
09/27/12	--	--	--	20.9	0	0
10/30/12	ND(3.9)	27	ND(3.2)	20.9	0	0
12/01/12	--	--	--	20.9	0	0
12/27/12	--	--	--	20.9	0	0

\*5/29/09 SVE/AS System Start-up



**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

Project #: 1491

Section 15 - SVE Unit Field and Laboratory Analytical Results

**SVE Unit: Effluent**

Date	LABORATORY ANALYSIS			FIELD ANALYSIS		
	Chloroform	Carbon Tet.	1,2-DCA	O2 Readings (%)	CO2 Readings (%)	TPH (PID) Readings (ppm)
	EPA TO-15	EPA TO-15	EPA TO-15			
02/01/13	ND(3.9)	9.4	ND(3.2)	20.9	0	0
02/28/13	--	--	--	20.9	0	0
03/26/13	--	--	--	20.9	0	0
04/26/13	ND(3.9)	20	ND(3.2)	19.8	0	0
05/30/13	--	--	--	20.9	0	0
06/27/13	--	--	--	20.5	0	0
08/01/13	ND(3.9)	48	ND(3.2)	20.9	0	0
08/31/13	--	--	--	20.9	0	0
09/27/13	--	--	--	20.9	0	0
10/29/13	ND(3.9)	38	ND(3.2)	20.5	0	0
12/02/13	--	--	--	20.9	0	0
12/28/13	--	--	--	20.9	0	0.2
01/31/14	ND(3.9)	9.4	ND(3.2)	20.9	0	0
02/26/14	--	--	--	20.9	0	0
03/27/14	--	--	--	20.6	0	0
04/30/14	ND(3.9)	15	ND(3.2)	20.9	0	0
05/27/14	--	--	--	20.9	0	0
06/26/14	--	--	--	20.9	0	0
08/01/14	ND(3.9)	63.5	ND(3.2)	20.9	0	0
08/28/14	--	--	--	20.9	0	0
09/29/14	--	--	--	20.9	0	0
10/29/14	ND(3.9)	41	ND(3.2)	20.9	0	0
11/26/14	--	--	--	20.9	0	0
12/31/14	--	--	--	20.9	0	0
01/23/15	ND(3.9)	11	ND(3.2)	20.9	0	0

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

Project #: 1491

**Section 17 - SVE Well Field and Laboratory Analytical Results  
(Report in ug/m3)**

SVE Well: SVE-1

Date	LABORATORY ANALYSIS			FIELD ANALYSIS		
	Chloroform	Carbon Tetrachloride	1,2-DCA	O2 Readings (%)	CO2 Readings (%)	TPH (PID) Readings (ppm)
	Method: EPA TO-15	EPA TO-15	EPA TO-15			
05/29/09	710	5,900	ND(31)	--	--	--
06/23/09	11	150	ND(2.6)	19.7	0	0.2
07/30/09	5.1	21	ND(2.4)	20.9	0	0.3
08/28/09	5	20	ND(3.2)	19	0	0.1
09/23/09	--	--	--	20.9	0	0.6
10/28/09	--	--	--	20.9	0	28.1
11/27/09	ND(3.9)	16	ND(3.2)	20.9	0	0.6
12/23/09	--	--	--	20.9	0	3.8
01/28/10	--	--	--	20.9	0	0
02/25/10	2	62	ND(0.81)	20	0	3.9
03/23/10	--	--	--	20.9	0	2.1
04/29/10	--	--	--	20.9	0	0
05/27/10	ND(3.9)	23	ND(3.2)	20.6	0	0
06/22/10	--	--	--	20.3	0	0
07/28/10	--	--	--	20.6	0	0
08/27/10	ND(3.9)	7.5	ND(3.2)	20.9	0	0.4
09/28/10	--	--	--	20.9	0	0.2
10/28/10	--	--	--	20.6	0	0.2
11/19/10	ND(3.9)	138	ND(3.2)	20.6	0	0
12/27/10	--	--	--	21.3	0	0.2
02/02/11	--	--	--	20.9	0	0.2
03/01/11	ND(3.9)	42	ND(3.2)	20.9	0	0.2
03/29/11	--	--	--	20.9	0	0.2
04/27/11	--	--	--	20.9	0	0
05/25/11	ND(3.9)	95	ND(3.2)	20.9	0	0
08/30/11	--	--	--	20.9	0	0.1
09/26/11	--	--	--	20.3	0	1.1
10/27/11	ND(3.9)	5.6	ND(3.2)	20.9	0	0.1
11/28/11	--	--	--	20.9	0	0.1
12/29/11	--	--	--	20.9	0	0.4
01/26/12	ND(3.9)	9.4	ND(3.2)	20.9	0	0.1
02/21/12	--	--	--	20.6	0	0.6
03/29/12	--	--	--	20.9	0	0
04/26/12	ND(3.9)	15	ND(3.2)	20.9	0	0.5
05/31/12	--	--	--	20.9	0	0.1
06/28/12	--	--	--	20.9	0	0.1
07/31/12	Sampling Error			20.9	0	0
08/31/12	--	--	--	20.9	0	0.5
09/27/12	--	--	--	20.9	0	0
10/30/12	ND(3.9)	15	ND(3.2)	20.9	0	0
12/01/12	--	--	--	20.9	0	0.5
12/28/12	--	--	--	20.9	0	0
02/01/13	ND(3.9)	23	ND(3.2)	20.9	0	0.2
02/28/13	--	--	--	20.9	0	0
03/26/13	--	--	--	20.9	0	0.1
04/26/13	ND(3.9)	11	ND(3.2)	19.8	0	0
05/30/13	--	--	--	20.9	0	0
06/27/13	--	--	--	20.5	0	0
08/01/13	ND(3.9)	13	ND(3.2)	20.9	0	0
08/30/13	--	--	--	20.9	0	0
09/27/13	--	--	--	20.9	0	0
10/29/13	ND(0.98)	1.1	ND(0.81)	20.9	0	0
12/02/13	--	--	--	20.9	0	0
12/28/13	--	--	--	20.9	0	0.4
01/31/14	ND(3.9)	8.2	ND(3.2)	20.9	0	0
02/26/14	--	--	--	20.9	0	0
03/27/14	--	--	--	20.9	0	0
04/30/14	ND(3.9)	18	ND(3.2)	20.9	0	0
05/27/14	--	--	--	20.9	0	0
06/26/14	--	--	--	20.9	0	0
08/01/14	ND(3.9)	13	ND(3.2)	20.9	0	0
08/28/14	--	--	--	20.9	0	0
09/29/14	--	--	--	20.9	0	0
10/29/14	ND(3.9)	10	ND(3.2)	20.9	0	0
11/26/14	--	--	--	20.9	0	0
12/31/14	--	--	--	20.9	0	0
01/23/15	ND(3.9)	11	8.5	20.9	0	0

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

Project #: 1491

**Section 17 - SVE Well Field and Laboratory Analytical Results**

SVE Well: SVE-2

(Report in ug/m3)

Date	LABORATORY ANALYSIS			FIELD ANALYSIS		
	Chloroform	Carbon	1,2-DCA	O2	CO2	TPH (PID)
	EPA TO-15	Tetrachloride EPA TO-15	EPA TO-15	Readings (%)	Readings (%)	Readings (ppm)
05/29/09	480	8,800	ND(48)	--	--	--
06/23/09	17	49	ND(2.5)	19.7	0	0.3
07/30/09	5.2	26	ND(2.4)	20.9	0	0.6
08/28/09	1	5	ND(0.80)	19.2	0	0.3
09/23/09	--	--	--	20.9	0	0.7
10/28/09	--	--	--	20.9	0	26.6
11/27/09	2.1	23	ND(3.2)	20.9	0	1.2
12/23/09	--	--	--	20.9	0	5.3
01/28/10	--	--	--	20.9	0	0
02/25/10	1.6	12	ND(0.81)	19.9	0	2.6
03/23/10	--	--	--	20.6	0	2.6
04/29/10	--	--	--	20.9	0	0
05/27/10	ND(3.9)	6.3	ND(3.2)	20.7	0	0
06/22/10	--	--	--	20.4	0	0
07/28/10	--	--	--	20.7	0	0
08/27/10	ND(3.9)	3.8	ND(3.2)	20.9	0	0.4
09/28/10	--	--	--	20.9	0	0.2
10/28/10	--	--	--	20.6	0	0.2
11/19/10	55.7	12000	ND(3.2)	20.6	0	0
12/27/10	--	--	--	21.5	0	0
02/02/10	--	--	--	20.8	0	0
03/01/11	ND(3.9)	5.4	ND(3.2)	20.9	0	0.2
03/29/11	--	--	--	20.9	0	0.2
04/27/11	--	--	--	20.9	0	0
05/25/11	ND(3.9)	23	ND(3.2)	20.9	0	0
08/30/11	--	--	--	20.9	0	0
09/26/11	--	--	--	20.3	0	1.2
10/27/11	ND(3.9)	3.5	ND(3.2)	20.9	0	0.4
11/28/11	--	--	--	20.9	0	0
12/29/11	--	--	--	20.9	0	0.8
01/26/12	ND(3.9)	6.9	ND(3.2)	20.8	0	0
02/21/12	--	--	--	20.6	0	0.6
03/29/12	--	--	--	20.9	0	0.1
04/26/12	ND(3.9)	13	ND(3.2)	20.9	0	0.9
05/31/12	--	--	--	20.9	0	0
06/28/12	--	--	--	20.9	0	0
07/31/12	ND(3.9)	7.5	ND(3.2)	20.9	0	0
08/31/12	--	--	--	20.9	0	0.7
09/27/12	--	--	--	20.9	0	0
10/30/12	2.3	3.7	ND(3.2)	20.9	0	0
12/01/12	--	--	--	20.9	0	0.5
12/28/12	--	--	--	20.9	0	0
02/01/13	ND(3.9)	3.7	ND(3.2)	20.9	0	0.2
02/28/13	--	--	--	20.9	0	0
03/26/13	--	--	--	20.9	0	0
04/26/13	ND(3.9)	5.9	ND(3.2)	19.6	0	0
05/30/13	--	--	--	20.9	0	0
06/27/13	--	--	--	20.3	0	0
08/01/13	ND(3.9)	4.3	ND(3.2)	20.9	0	0
08/31/13	--	--	--	20.9	0	0
09/27/13	--	--	--	20.9	0	0
10/29/13	ND(0.98)	0.82	ND(0.81)	20.9	0	0
12/02/13	--	--	--	20.8	0	0
12/28/13	--	--	--	20.9	0	0.3
01/31/14	ND(3.9)	3.3	ND(3.2)	20.9	0	0
02/26/14	--	--	--	20.9	0	0
03/27/14	--	--	--	20.6	0	0
04/30/14	ND(3.9)	6.3	ND(3.2)	20.9	0	0
05/27/14	--	--	--	20.9	0	0
06/26/14	--	--	--	20.9	0	0
08/01/14	ND(3.9)	5.3	ND(3.2)	20.9	0	0
08/28/14	--	--	--	20.9	0	0
09/29/14	--	--	--	20.9	0	0
10/29/14	ND(3.9)	ND(5)	ND(3.2)	20.9	0	0
11/26/14	--	--	--	20.9	0	0
12/31/14	--	--	--	20.9	0	0
01/23/15	ND(3.9)	ND(5)	ND(3.2)	20.9	0	0

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

Project #: 1491

Section 17 - SVE Well Field and Laboratory Analytical Results  
(Report in ug/m3)

SVE Well: SVE-3

Date	LABORATORY ANALYSIS			FIELD ANALYSIS		
	Chloroform	Carbon Tetrachloride	1,2-DCA	O2 Readings (%)	CO2 Readings (%)	TPH (PID) Readings (ppm)
Method:	EPA TO-15	EPA TO-15	EPA TO-15			
05/29/09	2,600	60,000	ND(310)	--	--	--
06/23/09	190	2,000	ND(2.5)	19.6	0	0.2
07/30/09	54	950	ND(2.4)	20.9	0	0.6
08/28/09	37	502	ND(3.2)	19.1	0	0.4
09/23/09	--	--	--	20.9	0	0.7
10/28/09	--	--	--	20.9	0	27.4
11/27/09	21	528	ND(3.2)	20.9	0	0.7
12/23/09	--	--	--	20.9	0	4.2
01/28/10	--	--	--	20.9	0	0
02/25/10	28	238	ND(1.6)	20	0	5
03/23/10	--	--	--	20.9	0	0
04/29/10	--	--	--	20.9	0	0
05/27/10	15	345	ND(3.2)	20.6	0	0
06/22/10	--	--	--	20.4	0	0.1
07/28/10	--	--	--	20.6	0	0
08/27/10	9.3	113	ND(3.2)	20.9	0	0.3
09/28/10	--	--	--	20.9	0	0.3
10/28/10	--	--	--	20.6	0	0.2
11/19/10	47	7110	ND(3.2)	20.9	0	0
12/27/10	--	--	--	21.5	0	0
02/02/11	--	--	--	20.9	0	0
03/01/11	ND(3.9)	96.2	ND(3.2)	20.9	0	0
03/29/11	--	--	--	20.9	0	0
04/27/11	--	--	--	20.9	0	0
05/25/11	ND(3.9)	5	ND(3.2)	20.9	0	0
08/30/11	--	--	--	20.9	0	0
09/23/11	--	--	--	20.4	0	1.3
10/27/11	3	165	ND(3.2)	20.9	0	0.2
11/28/11	--	--	--	20.9	0	0
12/29/11	--	--	--	20.9	0	0.1
01/26/12	ND(3.9)	46	ND(3.2)	20.9	0	0.2
02/21/12	--	--	--	20.6	0	0.8
03/29/12	--	--	--	20.5	0	0.2
04/26/12	ND(3.9)	45	ND(3.2)	20.9	0	0.3
05/31/12	--	--	--	20.5	0	0
06/28/12	--	--	--	20.9	0	0.2
07/31/12	ND(3.9)	81.8	ND(3.2)	20.9	0	0.1
08/31/12	--	--	--	20.9	0	0.7
09/27/12	--	--	--	20.9	0	0.2
10/30/12	ND(3.9)	47	ND(3.2)	20.9	0	0
12/01/12	--	--	--	20.9	0	0.8
12/28/12	--	--	--	20.9	0	0.1
02/01/13	ND(3.9)	19	ND(3.2)	20.9	0	0.3
02/28/13	--	--	--	20.5	0	0.1
03/26/13	--	--	--	20.9	0	0.2
04/26/13	ND(3.9)	39	ND(3.2)	19.9	0	0
05/30/13	--	--	--	20.9	0	0.1
06/27/13	--	--	--	20.3	0	0
08/01/13	ND(3.9)	85.5	ND(3.2)	20.9	0	0
08/30/13	--	--	--	20.9	0	0
09/27/13	--	--	--	20.9	0	0
10/29/13	ND(3.9)	90.6	ND(3.2)	20.5	0	0
12/02/13	--	--	--	20.8	0	0
12/28/13	--	--	--	20.9	0	0.4
01/31/14	ND(3.9)	47	ND(3.2)	20.9	0	0
02/26/14	--	--	--	20.9	0	0
03/27/14	--	--	--	20.9	0	0
04/30/14	ND(3.9)	60	ND(3.2)	20.9	0	0
05/27/14	--	--	--	20.9	0	0
06/26/14	--	--	--	20.9	0	0
08/01/14	ND(3.9)	150	ND(3.2)	20.9	0	0
08/28/14	--	--	--	20.9	0	0
09/29/14	--	--	--	20.9	0	0
10/29/14	ND(3.9)	83	ND(3.2)	20.9	0	0
11/26/14	--	--	--	20.9	0	0
12/31/14	--	--	--	20.9	0	0
01/23/15	ND(3.9)	89.3	ND(3.2)	20.9	0	0

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

Project #: 1491

Section 17 - SVE Well Field and Laboratory Analytical Results  
(Report in ug/m3)

SVE Well: SVE-4

Date	LABORATORY ANALYSIS			FIELD ANALYSIS		
	Chloroform	Carbon Tetrachloride	1,2-DCA	O2 Readings (%)	CO2 Readings (%)	TPH (PID) Readings (ppm)
	Method: EPA TO-15	EPA TO-15	EPA TO-15			
05/29/09	1,800	29,000	ND(160)	--	--	--
06/23/09	51	400	ND(2.5)	19.5	0	0.4
07/30/09	12	130	ND(2.3)	20.9	0	0.7
08/28/09	8	84	ND(3.2)	19.4	0	0.2
09/23/09	--	--	--	20.9	0	0.8
10/28/09	--	--	--	20.6	0	31.3
11/27/09	7.3	110	ND(3.2)	20.9	0	0.6
12/23/09	--	--	--	20.9	0	3.6
01/28/10	--	--	--	20.9	0	0
02/25/10	6.8	59	ND(0.81)	20	0	0.7
03/23/10	--	--	--	20.9	0	0
04/29/10	--	--	--	20.9	0	0
05/27/10	3.6	35	ND(3.2)	20.4	0	0
06/22/10	--	--	--	20.1	0	0.2
07/28/10	--	--	--	20.5	0	0
08/27/10	3	17	ND(3.2)	20.9	0	0.4
09/28/10	--	--	--	20.9	0	0.4
10/28/10	--	--	--	20.9	0	0.9
11/19/10	90.3	34300	ND(3.2)	20.9	0	0
12/27/10	--	--	--	21.5	0	0.2
02/02/11	--	--	--	20.9	0	0
03/01/11	ND(3.9)	25	ND(3.2)	20.9	0	0
03/29/11	--	--	--	20.9	0	0.2
04/27/11	--	--	--	20.9	0	0
05/25/11	ND(3.9)	23	ND(3.2)	20.9	0	0
08/30/11	--	--	--	20.9	0	0
09/23/11	--	--	--	20.2	0	1.8
10/27/11	ND(3.9)	17	ND(3.2)	20.9	0	0.1
11/28/11	--	--	--	20.9	0	0.1
12/29/11	--	--	--	20.9	0	0.1
01/26/12	ND(3.9)	8.8	ND(3.2)	20.8	0	0.1
02/21/12	--	--	--	20.9	0	0.8
03/29/12	--	--	--	20.8	0	0
04/26/12	ND(3.9)	8.2	ND(3.2)	20.9	0	0.3
05/31/12	--	--	--	--	--	--
06/28/12	--	--	--	--	--	--
07/31/12	ND(3.9)	18	ND(3.2)	20.9	0	0
08/31/12	--	--	--	--	--	--
09/27/12	--	--	--	--	--	--
10/30/12	ND(3.9)	8.2	ND(3.2)	20.9	0	0
12/01/12	--	--	--	--	--	--
12/28/12	--	--	--	--	--	--
02/01/13	ND(3.9)	8.2	ND(3.2)	20.9	0	0.3
02/28/13	--	--	--	Off Cycling		
03/26/13	--	--	--	Off Cycling		
04/26/13	ND(3.9)	4.4	ND(3.2)	20.2	0	0.1
05/30/13	--	--	--	--	--	--
06/27/13	--	--	--	--	--	--
08/01/13	ND(3.9)	18	ND(3.2)	20.5	0	0
08/30/13	--	--	--	--	--	--
09/27/13	--	--	--	20.9	0	0
10/29/13	ND(3.9)	14	ND(3.2)	20.4	0	0
12/02/13	--	--	--	--	--	--
12/28/13	--	--	--	--	--	--
01/31/14	ND(3.9)	13	ND(3.2)	20.9	0	0
02/26/14	--	--	--	--	--	--
03/27/14	--	--	--	--	--	--
04/30/14	ND(3.9)	20	ND(3.2)	20.9	0	0
08/01/14	ND(3.9)	28	ND(3.2)	20.9	0	0
10/29/14	ND(3.9)	13	ND(3.2)	20.9	0	0
01/23/15	ND(3.9)	12	ND(3.2)	20.9	0	0

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

Project #: 1491

**Section 17 - SVE Well Field and Laboratory Analytical Results**

SVE Well: SVE-5

(Report in ug/m3)

Date	LABORATORY ANALYSIS			FIELD ANALYSIS		
	Chloroform	Carbon Tetrachloride	1,2-DCA	O2 Readings (%)	CO2 Readings (%)	TPH (PID) Readings (ppm)
	Method: EPA TO-15	EPA TO-15	EPA TO-15			
05/29/09	310	13,000	ND(64)	--	--	--
06/23/09	160	1,900	ND(2.4)	19.7	0	0.3
07/30/09	39	760	ND(2.4)	20.9	0	0.6
08/28/09	26	525	ND(3.2)	19.2	0	0.3
09/23/09	--	--	--	20.9	0	1.3
10/28/09	--	--	--	20.6	0	29
11/27/09	6.8	188	ND(3.2)	20.9	0	0.5
12/23/09	--	--	--	20.9	0	3.9
01/28/10	--	--	--	20.9	0	0
02/25/10	18	174	ND(0.81)	19.9	0	5.7
03/23/10	--	--	--	20.9	0	0
04/29/10	--	--	--	20.9	0	0
05/27/10	5.9	130	ND(3.2)	20.6	0	0
06/22/10	--	--	--	20.3	0	0.2
07/28/10	--	--	--	20.6	0	0.4
08/27/10	2.9	55	ND(3.2)	20.9	0	0.4
09/28/10	--	--	--	20.9	0	0.2
10/28/10	--	--	--	20.9	0	0.4
11/19/10	31	4940	ND(3.2)	20.9	0	0
12/27/10	--	--	--	21.5	0	0.2
02/02/11	--	--	--	20.9	0	0.1
03/01/11	ND(3.9)	129	ND(3.2)	20.9	0	0
03/29/11	--	--	--	20.9	0	0.2
04/27/11	--	--	--	20.9	0	0
05/25/11	3.2	125	ND(3.2)	20.5	0	0
08/30/11	--	--	--	20.9	0	0.1
09/26/11	--	--	--	20.4	0	1.3
10/27/11	ND(3.9)	18	ND(3.2)	20.9	0	0.1
11/28/11	--	--	--	20.9	0	0
12/29/11	--	--	--	20.8	0	0.3
01/26/12	ND(3.9)	18	ND(3.2)	20.8	0	0
02/21/12	--	--	--	20.9	0	0.7
03/29/12	--	--	--	20.9	0	0.1
04/26/12	2.4	36	ND(3.2)	20.9	0	0.4
05/31/12	--	--	--	OFF	OFF	OFF
06/28/12	--	--	--	OFF	OFF	OFF
07/31/12	ND(3.9)	40	ND(3.2)	20.9	0	0
08/31/12	--	--	--	--	--	--
09/27/12	--	--	--	--	--	--
10/30/12	ND(3.9)	23	ND(3.2)	20.9	0	0
12/01/12	--	--	--	NA		
12/28/12	--	--	--	NA		
02/01/13	ND(3.9)	18	ND(3.2)	20.9	0	0.2
02/28/13	--	--	--	Off Cycling		
03/26/13	--	--	--	Off Cycling		
04/26/13	ND(3.9)	4.6	ND(3.2)	20	0	0
05/30/13	--	--	--	--	--	--
06/27/13	--	--	--	--	--	--
08/01/13	ND(3.9)	49	ND(3.2)	20.8	0	0
08/30/13	--	--	--	--	--	--
09/27/13	--	--	--	20.9	0	0
10/25/13	ND(3.9)	45	ND(3.2)	20.5	0	0
12/02/13	--	--	--	--	--	--
12/28/13	--	--	--	--	--	--
01/31/14	ND(3.9)	162	ND(3.2)	20.9	0	0
02/26/14	--	--	--	--	--	--
03/27/14	--	--	--	--	--	--
04/30/14	ND(3.9)	64.8	ND(3.2)	20.9	0	0
08/01/14	ND(3.9)	96.2	ND(3.2)	20.9	0	0
10/29/14	ND(3.9)	45	ND(3.2)	20.9	0	0
01/23/15	ND(3.9)	47	ND(3.2)	20.9	0	0

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

Project #: 1491

Section 18 - Air Sparge (A/S) Wells / System Operation

A/S Well: AS-1

Parameter:	Manifold	Wellhead	Flow Rate
	Well Pressure	Well Pressure	
Units:	(psi)	(psi)	(scfm)
Date			
05/29/09	5.5	4.95	5
06/23/09	5.89	5.29	3.5
07/29/09	6.11	5.25	6
08/28/09	5.86	4.13	6
09/23/09	5.91	5.04	6.9
10/28/09	5.47	4.03	9
11/27/09	5.96	5.76	3.6
12/23/09	4.97	4.29	4
01/28/10	4.77	4.56	5
02/25/10	4.95	4.72	4.9
03/23/10	4.84	4.46	4.8
04/29/10	5.47	5.31	3
05/27/10	5.69	5.14	4.2
06/22/10	6.18	5.54	5
07/28/10	1.06	0.57	4.8
08/27/10	Blower faulty. System deactivated.		
10/28/10	0.92	0.32	5.9
11/19/10	Possible broken line. Well Line deactivated.		
12/27/10	OFF		
02/02/11	5.4	4.89	3
03/01/11	5.34	NA	3
03/29/11	4.61	NA	4
04/27/11	5.47	5.01	3.3
05/25/11	5.65	NA	3.5
08/30/11	OFF		
09/26/11	OFF		
10/27/11	5.75	5.49	4
11/28/11	5.68	5.11	4
12/29/11	5.32	5.31	4
01/26/12	5.54	5.3	3
02/21/12	5.68	5.19	2.8
03/29/12	5.86	5.41	3
04/28/12	5.62	5.18	2.5
05/31/12	5.44	5.18	2
06/28/12	5.34	5.17	4
07/31/12	5.28	5.04	4
08/31/12	5.44	4.85	6
09/27/12	5.33	4.9	5
10/30/12	5.32	4.98	4
12/01/12	Needs Vanes & Filters		
02/01/13	5.14	4.86	3
02/28/13	4.73	4.36	5
03/26/13	4.59	4.4	4
04/26/13	4.91	4.79	3
05/30/13	4.91	4.55	3.5
06/27/13	4.91	4.51	4
08/01/13	4.69	4.4	3.5
08/30/13	4.67	4.24	4
09/27/13	4.54	4.26	3.8
10/29/13	4.74	4.47	3.5
12/02/13	4.4	3.96	6
12/28/13	4.73	4.55	3.5
01/31/14	4.27	4.06	3.5
02/26/14	4.16	3.82	5
03/27/14	4.38	3.94	5
04/30/14	4.31	3.9	5.3
05/27/14	4.63	3.96	5.2
06/26/14	4.52	3.93	4.9
08/01/14	4.27	3.9	5
08/28/14	4.42	3.89	5.5
09/29/14	4.36	3.8	6
10/29/14	4.37	3.69	6.7
11/26/14	4.42	3.63	7
12/31/14	4.26	3.34	6.8
01/23/15	4.17	3.57	6.6

Possible broken line, pad hit by tractor & moved. Took readings & turned off

Wellhead Pad Under construction

Wellhead Pad Under construction

Unable to collect wellhead pressure reading due to standing water over wellhead



**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

Project #: 1491

**Section 18 - Air Sparge (A/S) Wells / System Operation**

A/S Well: AS-2

	Manifold	Wellhead	
Parameter:	Well Pressure	Well Pressure	Flow Rate
Units:	(psi)	(psi)	(scfm)
Date			
05/29/09	8	7.5	5
06/23/09	8.84	8.31	4
07/29/09	8.27	8.21	1.5
08/28/09	8.33	8.08	2
09/23/09	8.2	8.1	1.1
10/28/09	8.2	7.96	0.5
11/27/09	8.74	8.61	3.5
12/23/09	8.48	8.06	4
01/28/10	8.33	8.06	3.7
02/25/10	8.41	8.22	3
03/23/10	8.47	8.37	2
04/29/10	8.61	8.35	3
05/27/10	8.88	8.48	3.7
06/22/10	8.74	8.53	2.4
07/28/10	8.9	8.45	2.8
08/27/10	Blower faulty. System deactivated.		
10/28/10	8.42	8.27	3.7
11/19/10	8.92	8.61	4
12/27/10	9.13	8.65	5
02/02/11	8.76	8.41	3.7
03/01/11	2	0.54	3
03/29/11	0.44	0.11	4
04/27/11	<b>Deactivated due to no PSI at Manifold through 10-6-11</b>		
11/28/11	9.03	9	4
12/29/11	9.03	9	4
01/26/12	8.68	8.67	3
02/21/12	8.97	8.63	2.8
03/29/12	9.16	8.66	3
04/26/12	8.95	8.65	3
05/31/12	8.59	8.36	2
06/28/12	8.72	8.14	5
07/31/12	8.36	8.18	5
08/31/12	8.81	8.28	6
09/27/12	8.49	8.13	5
10/30/12	8.25	8.02	4
12/01/12	Needs Vanes & Filters		
02/01/13	8.43	8.11	3.7
02/28/13	7.98	7.59	5
03/26/13	7.68	7.3	4
04/26/13	7.96	7.82	3
05/30/13	7.86	7.47	2.5
06/27/13	8.37	7.92	4
08/01/13	7.59	7.32	4
08/31/13	7.76	7.3	4
09/27/13	7.82	7.55	4
10/29/13	7.85	7.59	3.7
12/02/13	7.8	7.38	6
12/28/13	7.87	7.79	3.5
01/31/14	7.68	7.42	3.5
02/26/14	7.67	7.29	5
03/27/14	7.87	7.45	5
04/30/14	7.89	7.38	2
05/27/14	8.05	7.43	5.2
06/26/14	7.98	7.37	5.1
08/01/14	7.93	7.27	5
08/28/14	8.61	7.38	8.5
09/29/14	8.34	7.29	8
10/29/14	8.04	7.17	7.7
11/26/14	7.78	7.09	7
12/31/14	7.37	6.76	5.5
01/23/15	7.26	6.9	5

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

Project #: 1491

Section 18 - Air Sparge (A/S) Wells / System Operation

A/S Well: AS-3			
	Manifold	Wellhead	
Parameter:	Well Pressure	Well Pressure	Flow Rate
Units:	(psi)	(psi)	(scfm)
Date			
05/29/09	8	7.21	5
06/23/09	7.75	6.98	4
07/29/09	8.87	8.08	5
08/28/09	8.5	8.13	7
09/23/09	8.3	7.8	5
10/28/09	8.16	7.89	3.2
11/27/09	8.86	8.8	2.2
12/23/09	7.41	7.33	4
01/28/10	7.19	6.66	4.7
02/25/10	7.15	6.78	4.8
03/25/10	6.9	6.6	5
04/29/10	7.4	7.22	3
05/27/10	7.78	7.51	4.9
06/22/10	8.71	8.27	4
07/28/10	8.96	8.27	4
08/27/10	Blower faulty. System deactivated.		
10/28/10	8.35	7.67	5
11/19/10	8.82	8.05	6.8
12/27/10	9.19	8.74	3.5
02/02/11	8.68	8.39	2
03/01/11	8	7.64	3
03/29/11	7.75	7.46	4
04/27/11	8.22	8.09	3
05/25/11	10+	NA	2.8
08/30/11	OFF		
09/26/11	OFF		
10/27/11	8	7.73	5
11/28/11	8.32	8.04	4
12/29/11	10.55	10.21	4
01/26/12	12.46	12.42	3
02/21/12	10+	10+	1.3
03/29/12	11.74	10.74	1.5
04/28/12	11.13	11	3
05/31/12	13.98	13.8	3
06/28/12	15.72	15.07	6
07/31/12	10+	10+	2
08/31/12	7.71	7.65	1
09/27/12	10+	10+	1.5
10/30/12	10+	10+	2
12/01/12	Needs Vanes & Filters		
02/01/13	10+	10+	3.2
02/28/13	10+	10+	4
03/26/13	10+	10+	2
04/26/13	10+	10+	0.5
05/30/13	10+	10+	1.5
06/27/13	10+	10+	0
08/01/13	10+	10+	<0.5
08/31/13	10+	10+	1
09/27/13	10+	10+	0.5
10/29/13	10+	10+	0.5
12/02/13	10+	10+	0
12/28/13	10+	10+	0.5
01/31/14	6.39	5.32	1
02/26/14	10+	10+	7
03/27/14	10+	10+	3
04/30/14	15.77	15.66	2
05/27/14	16.11	15.87	1.5
06/26/14	14.32	14.23	1.7
08/01/14	10+	10+	1.7
08/28/14	10+	10+	2
09/29/14	10+	10+	2
10/29/14	10+	10+	1.7
11/26/14	10+	10+	2
12/31/14	10+	10+	1.8
01/23/15	10+	10+	1.8

Unable to collect wellhead pressure reading due to standing water over wellhead

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

Project #: 1491

**Section 18 - Air Sparge (A/S) Wells / System Operation**

A/S Well: AS-4

	Manifold	Wellhead	
Parameter:	Well Pressure	Well Pressure	Flow Rate
Units:	(psi)	(psi)	(scfm)
Date			
05/29/09	9	8.56	5
06/23/09	8.41	8.16	3.7
07/29/09	8.17	8.03	1.5
08/28/09	8.38	8.14	3
09/23/09	8.05	7.95	1.5
10/28/09	8.2	7.97	1
11/27/09	8.65	8.48	3.6
12/23/09	8.29	8.16	4
01/28/10	8.32	7.81	5
02/25/10	8.37	8.01	4.5
03/23/10	8.43	8.11	4.5
04/29/10	8.48	8.25	3
05/27/10	8.34	8.25	1.8
06/22/10	8.44	8.14	3
07/28/10	8.62	7.93	2.2
08/27/10	Blower faulty. System deactivated.		
10/28/10	8.46	8.26	3.6
11/19/10	8.9	8.52	4.6
12/27/10	8.5	8.4	4
02/02/11	8.49	8.36	2
03/01/11	8.68	8.52	3
03/29/11	10+	7.89	1
04/27/11	8.58	8.28	2
05/25/11	8.71	NA	2.5
08/30/11	OFF		
09/26/11	OFF		
10/27/11	8.72	8.45	4
11/28/11	8.84	8.55	4
12/29/11	8.61	8.36	4
01/26/12	8.96	8.81	3
02/21/12	10+	8.28	2.8
03/29/12	8.89	8.09	3
04/26/12	8.65	8.19	3
05/31/12	OFF	OFF	OFF
06/28/12	OFF	OFF	OFF
07/30/12	8.25	7.76	5
08/31/12	--	--	--
09/27/12	8.54	7.76	6
10/30/12	8.88	8.1	7.75
12/01/12	Needs Vanes & Filters		
02/01/13	10+	8.16	8.5
02/28/13	Off Cycling		
03/26/13	Off Cycling		
04/26/13	7.91	7.86	2.5
05/30/13	--	--	--
06/27/13	--	--	--
08/01/13	8.75	7.18	7
08/31/13	--	--	--
09/27/13	7.51	7.35	3.5
10/29/13	7.71	7.47	3.7
12/02/13	--	--	--
12/28/13	--	--	--
01/31/14	7.61	--	4.5
04/30/14	8.39	7.23	9
08/01/14	7.95	7.03	Broken
10/29/14	8.15	6.88	10.1
01/23/14	7.63	6.72	8.8

Unable to collect wellhead pressure reading due to standing water over wellhead

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

Project #: 1491

Section 18 - Air Sparge (A/S) Wells / System Operation

A/S Well: AS-5			
	Manifold	Wellhead	
Parameter:	Well Pressure	Well Pressure	Flow Rate
Units:	(psi)	(psi)	(scfm)
Date			
05/29/09	8	7.9	5
06/23/09	8.93	8.42	3
07/29/09	8.92	8.7	3.2
08/28/09	8.65	8.5	2
09/23/09	8.45	8.39	0
10/28/09	8.28	8.22	0
11/27/09	8.95	8.85	0
12/23/09	10+	8.29	1.5
01/28/10	8.47	8.44	0
02/25/10	8.51	8.5	0
03/23/10	8.59	8.57	0
04/29/10	9.96	9.64	3
05/27/10	8.96	8.8	0
06/22/10	8.84	8.79	0
07/28/10	10+	8.84	0
08/27/10	Blower faulty. System deactivated.		
10/28/10	8.55	8.43	0
11/19/10	10	8.88	0
12/27/10	9.3	8.97	3
02/02/11	10+	9.02	3.3
03/01/11	8.98	8.14	2.5
03/29/11	10+	8.96	4
04/27/11	10+	8.8	3.5
05/25/11	10+	NA	4.5
08/30/11	OFF		
09/26/11	OFF		
10/27/11	11.61	11.3	3
11/28/11	10+	10+	0
12/29/11	11.1	11.1	0
01/26/12	12.52	12.5	0.5
02/21/12	10+	10+	0.5
03/29/12	11.77	11.32	0.5
04/28/12	11.63	11.62	1
05/31/12	OFF	OFF	OFF
06/28/12	OFF	OFF	OFF
07/31/12	10+	10+	7
08/31/12	--	--	--
09/27/12	10+	10+	5
10/30/12	10+	10+	2.5
12/01/12	Needs Vanes & Filters		
02/01/13	10+	10+	2
02/28/13	Off Cycling		
03/26/13	Off Cycling		
04/26/13	10+	10+	0.5
05/30/13	--	--	--
06/27/13	--	--	--
08/01/13	10+	10+	*..
08/31/13	--	--	--
09/27/13	10+	10+	*..
10/29/13	10+	10+	0.5
12/02/13	--	--	--
01/31/14	10+	--	--
02/26/14	8.27	7.7	6.25
04/30/14	8.99	7.55	10
08/01/14	8.24	7.31	8
10/29/14	8.51	7.25	9.4
01/23/15	7.85	6.99	8

Unable to collect wellhead pressure reading due to standing water over wellhead

\* Flowmeter broken

**Quarterly Monitoring Report**

**Facility Name:** Former Agra CCC/USDA

**Project #:** 1491

Section 18 - Air Sparge (A/S) Wells / System Operation

Complete A/S System (If applicable)

Parameter:	System		Bleed-Off	Pre	Post	Operation Time		
	Pressure	Flow Rate	Valve	Air Temp.	Air Temp.	Continuous	Cycling	
Units:	(psi)	(scfm)	(%) Open	(Deg. F)	(Deg. F)	(Hours)	(Hours)	
Date								
05/29/09	8	20	Closed	--	--			
06/23/09	10.8	18.2	Closed	148	--		591.7	
07/29/09	11.4	17.2	Closed	129	--		1111.1	
08/28/09	11	20	Closed	--	--		1112.1	
09/23/09	11.3	14.5	Closed	128	--		1112.1	
10/28/09	11.4	13.7	Closed	113	--		1112.2	
11/27/09	12	12.9	Closed	119	--		1112.2	
12/23/09	14	17.5	Closed	113	--		1112.2	
01/28/10	21.7	18.4	Closed	91	--		175.7	
02/25/10	12	17.2	Closed	101	--		507.5	
03/23/10	11.6	16.3	Closed	116	--		813	
04/29/10	12.7	15	Closed	134	--		1261.1	
05/27/10	11.4	14.6	Closed	139	--		1938.6	
06/22/10	11.4	14.4	Closed	135	--		2556.5	
07/28/10	11.1	13.8	Closed	147	--		3421.3	
08/27/10	Blower faulty. System deactivated.							3954.2
10/28/10	10.8	18.2	Closed	124	--		4478.4	
11/19/10	10.4	15.4	Closed	119	--		5010.7	
12/27/10	11	15.5	Closed	110	--		5921.1	
02/02/11	10.8	14	Closed	109	--		6808.4	
03/01/11	10	16.5	Closed	120	--		7456.5	
03/29/11	11.1	17	Closed	111	--		7770.2	
04/27/11	11.1	15.8	Closed	122	--		8467.3	
05/25/11	11.9	13.3	Closed	124	--		9138.8	
08/30/11	OFF							
09/26/11	OFF							
10/27/11	13	16	Closed	126	--		9644.7	
11/28/11	13.5	16	Closed	120	--		10407.5	
12/29/11	11	16	Closed	120	--		11155.5	
01/26/12	14	12.5	Closed	104	--		11824.4	
02/21/12	14	10.2	Closed	111	--		12448.6	
03/29/12	13	11	Closed	120	--		13336.4	
04/26/12	13	12.5	Closed	127	--		14000.7	
05/31/12	16	7	Closed	110	--		14642.9	
06/28/12	18	15	Closed	150	--		15313.4	
07/31/12	16	16	Closed	140	--		16105.7	
08/31/12	19.9	13	Closed	139	--		16849.7	
09/27/12	20	11.5	Closed	118	--		17498.6	
10/30/12	20	10	Closed	110	--		18288.7	
12/01/12	Needs Vanes & Filters							
02/01/13	13.5	20.4	Closed	107	--		18671.6	
02/28/13	20	14	Closed	106	--		19317.5	
03/26/13	21	10	Closed	100	--		19939.9	
04/26/13	21	6	Closed	112	--		20687.2	
05/30/13	21.5	7.5	Closed	120	--		21499.8	
06/27/13	19	8	Closed	130	--		22171.8	
08/01/13	19	8	Closed	106	--		23014.5	
08/31/13	20	9	Closed	--	--		23706.2	
09/27/13	21	7.8	Closed	122	--		24378.7	
10/29/13	18.5	11.9	Closed	104	--		25148	
12/02/13	15	12	Closed	110	--		25963.7	
12/28/13	18.5	7.5	Closed	100	--		26587.8	
01/31/14	19	17	Closed	79	--		27405.9	
02/26/14	17	17	Closed	82	--		28027.3	
03/27/14	17.9	13	Closed	84	--		28723.8	
04/30/14	18.2	13.1	Closed	108	--		29538.2	
05/27/14	18.5	11.9	Closed	133	--		30187.8	
06/26/14	17	11.7	Closed	181	--		30896.1	
08/01/14	16.1	11.7	Closed	131	--		31765.9	
08/28/14	16.7	16	Closed	133	--		32412.5	
09/29/14	16	16	Closed	129	--		33178.4	
10/29/14	16.2	16.1	Closed	99	--		33899.2	
11/26/14	14.4	16	Closed	85	--		34569.1	
12/31/14	14.3	14.1	Closed	94	--		35412.3	
01/23/15	13.5	13.4	Closed	102	--		35964.8	

12/22/09 ASP set to run 4hours on 4 hours off.



### Quarterly Monitoring Report

Facility Name: Former Agra CCC/USDA

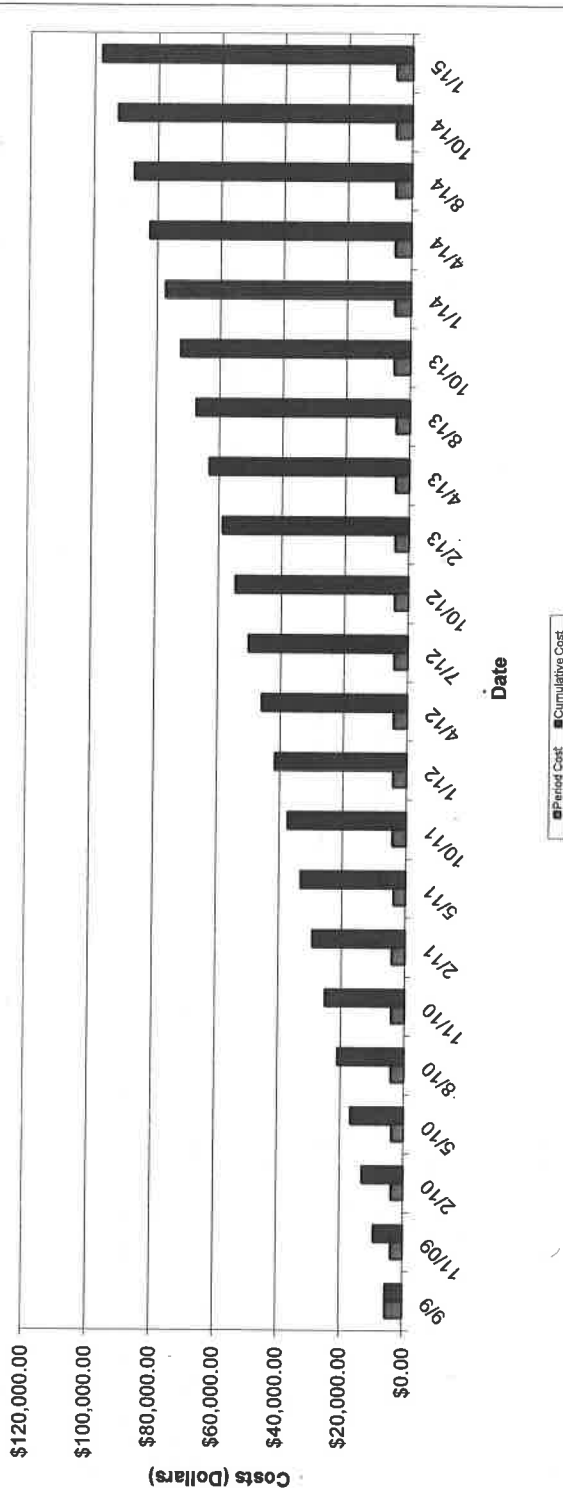
Project #: 1491

#### Section 20 - Operation & Maintenance Cost vs. Time

Date	9/9	11/09	2/10	5/10	8/10	11/10	2/11	5/11	10/11	1/12	4/12	7/12
Period Cost	\$5,461.00	\$3,781.00	\$3,781.00	\$3,781.00	\$4,144.00	\$4,144.00	\$4,144.00	\$3,759.00	\$4,285.00	\$4,285.00	\$4,285.00	\$4,286.00
Cumulative Cost	\$5,461.00	\$9,242.00	\$13,023.00	\$16,804.00	\$20,948.00	\$25,092.00	\$29,236.00	\$32,995.00	\$37,280.00	\$41,565.00	\$45,850.00	\$50,136.00

Date	10/12	2/13	4/13	8/13	10/13	1/14	4/14	8/14	10/14	1/15
Period Cost	\$4,285.00	\$4,285.00	\$4,285.00	\$4,285.00	\$5,055.00	\$5,030.00	\$5,055.00	\$5,055.00	\$5,055.00	\$5,055.00
Cumulative Cost	\$54,421.00	\$58,706.00	\$62,991.00	\$67,276.00	\$72,331.00	\$77,361.00	\$82,416.00	\$87,471.00	\$92,526.00	\$97,581.00

### OM&M Costs



**Quarterly Monitoring Report**

**Facility Name:** Former Agra CCC/USDA

**Project #:** 1491

Section 21 - Permits

Permit	Permit #	Original Application Date	Renewal Date
Class V Injection Well (BOW)		Granted 5/22/2009	
Flushmount Waiver		Granted 5/29/2009	
Landfarm		Granted 10/16/2008	
Notification of Soil Vapor Extraction		Recognition Letter Received 1/21/2009	



SB43

SB69

⊕GW4

●SB45

●SB46

●SB68

REMEDIAL TRAILER  
APPROXIMATELY 377 FT.  
WEST

LDB4 ⊕  
SVE-4/AS-4

LDB5 ⊕  
SVE-5/AS-5

SVE-3/AS-3  
LDB3 ⊕

⊕GW2

GW3 ⊕

GW1 ⊕

LDB2 ⊕  
SVE-2/AS-2

LDB1 ⊕  
SVE-1/AS-1

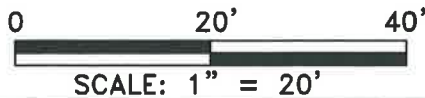
MW-P ⊕

●SB49

⊕GW5

MW-J ⊕

- ⊕ MONITORING WELL
- 2005 INVESTIGATION LOCATION
- ⊕ CCC/USDA MONITORING WELL
- ⊕ LDB LOCATION



# GEOCORE INC.

P.O. BOX 386

(785) 826-1616

SALINA, KANSAS

FIGURE 1:  
SITE BASE MAP

GEOCORE PROJECT  
NO. 1491

SITE: FORMER CCC / USDA

DATE: 07/15/09

LOCATION: AGRA, KANSAS

SCALE: N/A

ADDRESS: RAILROAD AVENUE & MAIN STREET

DRAWING #: NA

CLIENT: GREENFIELD CONTRACTORS, INC.

DRAFTER: JAM

LEGAL: SW, SE, NW

KDHE#: C6 074 00002

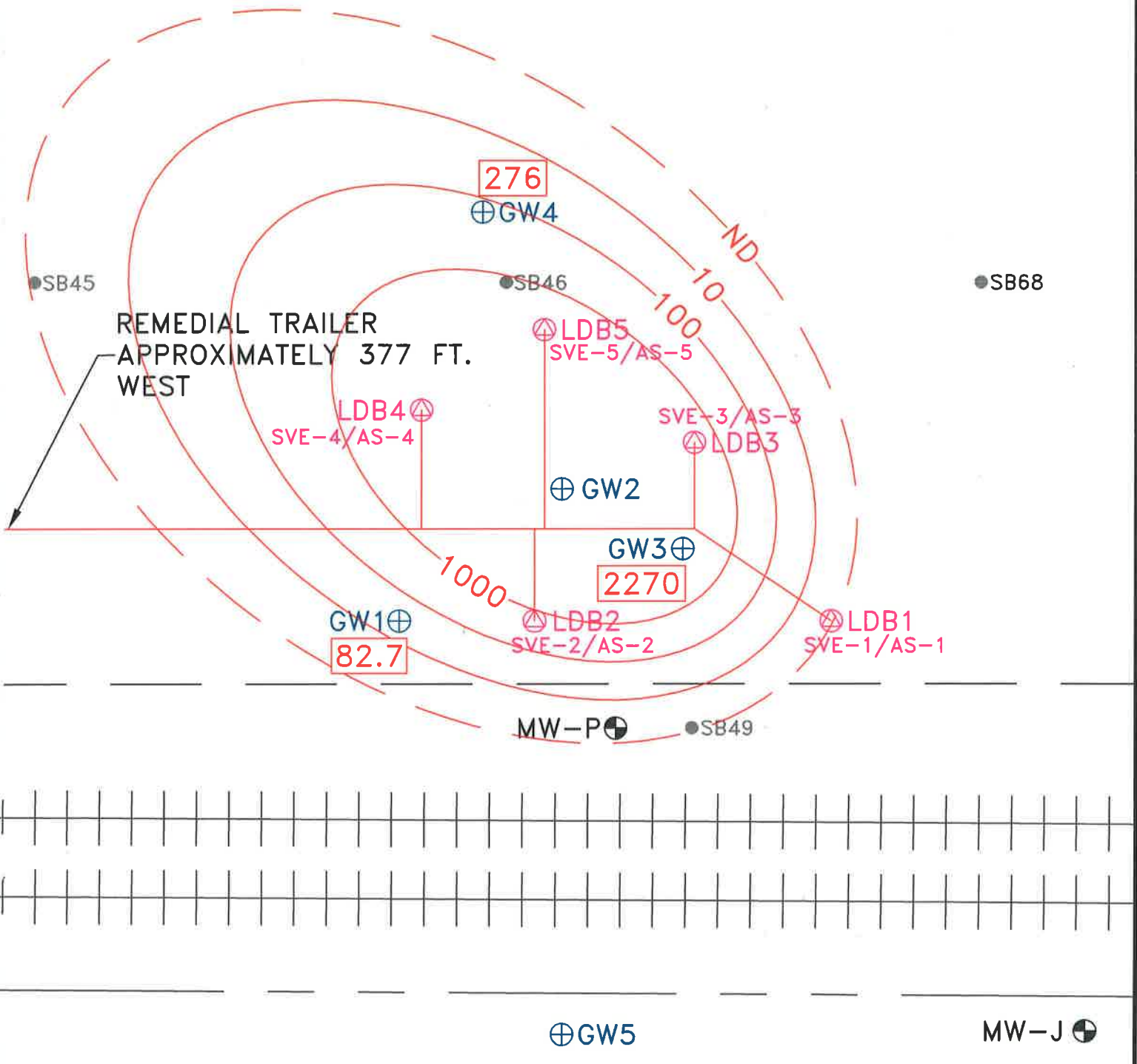
SEC 27, T3S, R16W

AGRA.DWG



SB43

SB69



⊕ MONITORING WELL  
 ● 2005 INVESTIGATION LOCATION  
 ⊕ CCC/USDA MONITORING WELL  
 ⊕ LDB LOCATION  
 [123.4] CARBON TETRACHLORIDE (ppb)

0 20' 40'

SCALE: 1" = 20'

# GEOCORE INC.

P.O. BOX 386 (785) 826-1616 SALINA, KANSAS

FIGURE 2  
CARBON TETRACHLORIDE IN GROUNDWATER  
SAMPLED: 01/23/15

GEOCORE PROJECT  
NO. 1491

SITE: FORMER CCC / USDA

DATE: 07/15/09

LOCATION: AGRA, KANSAS

SCALE: N/A

ADDRESS: RAILROAD AVENUE & MAIN STREET

DRAWING #: NA

CLIENT: GREENFIELD CONTRACTORS, INC.

DRAFTER: JAM

LEGAL: SW, SE, NW

KDHE#: C6 074 00002

SEC 27, T3S, R16W

AGRA.DWG



SB43

SB69

3.4  
⊕GW4

●SB45

●SB46

●SB68

REMEDIAL TRAILER  
APPROXIMATELY 377 FT.  
WEST

LDB4  
SVE-4/AS-4

LDB5  
SVE-5/AS-5

SVE-3/AS-3  
LDB3

⊕GW2

6.3  
⊕GW1

GW3  
ND

LDB2  
SVE-2/AS-2

LDB1  
SVE-1/AS-1

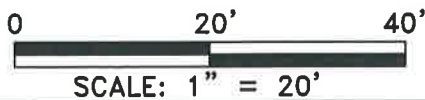
MW-P

●SB49

⊕GW5

MW-J

- ⊕ MONITORING WELL
- 2005 INVESTIGATION LOCATION
- ⊕ CCC/USDA MONITORING WELL
- ⊕ LDB LOCATION
- 123.4 CHLOROFORM (ppb)



# GEOCORE INC.

P.O. BOX 386

(785) 826-1616

SALINA, KANSAS

FIGURE 31  
CHLOROFORM IN GROUNDWATER  
SAMPLED: 01/23/15

GEOCORE PROJECT  
NO. 1491

SITE: FORMER CCC / USDA

DATE: 07/15/09

LOCATION: AGRA, KANSAS

SCALE: N/A

ADDRESS: RAILROAD AVENUE & MAIN STREET

DRAWING #: NA

CLIENT: GREENFIELD CONTRACTORS, INC.

DRAFTER: JAM

LEGAL: SW, SE, NW

KDHE#: C6 074 00002

SEC 27, T3S, R16W

AGRA.DWG



SB43

SB69

ND  
⊕GW4

●SB45

●SB46

●SB68

REMEDIAL TRAILER  
APPROXIMATELY 377 FT.  
WEST

LDB4  
SVE-4/AS-4

LDB5  
SVE-5/AS-5

SVE-3/AS-3  
LDB3

⊕GW2

ND  
⊕GW1

⊕GW3

ND

LDB2  
SVE-2/AS-2

LDB1  
SVE-1/AS-1

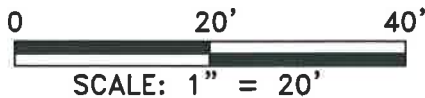
MW-P

●SB49

⊕GW5

MW-J

- ⊕ MONITORING WELL
- 2005 INVESTIGATION LOCATION
- ⊕ CCC/USDA MONITORING WELL
- ⊗ LDB LOCATION
- 123.4 1,2 DCA (ppb)



# GEOCORE INC.

P.O. BOX 386 (785) 826-1616 SALINA, KANSAS

FIGURE 4  
1,2 DCA IN GROUNDWATER  
SAMPLED: 01/23/15

GEOCORE PROJECT  
NO. 1491

SITE: FORMER CCC / USDA DATE: 07/15/09

LOCATION: AGRA, KANSAS SCALE: N/A

ADDRESS: RAILROAD AVENUE & MAIN STREET DRAWING #: NA

CLIENT: GREENFIELD CONTRACTORS, INC. DRAFTER: JAM

LEGAL: SW, SE, NW KDHE#: C6 074 00002

SEC 27, T3S, R16W

AGRA.DWG



# **APPENDIX 1**

## **LABORATORY INFORMATION**

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- 3
- 4
- 5

-1-

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**Technical Report for**

GeoCore, Inc.-Remediation  
AGRA CCC/USDA, Agra, KS

1491

Accutest Job Number: FA21688

Sampling Date: 01/23/15

**Report to:**

GeoCore, Inc  
 2775 Arnold Ave Suite D  
 Salina, KS 67401  
 jgebhardt@geocore.net; boentrich@geocore.net;  
 dcorl@geocore.net  
 ATTN: Brad Oentrich

Total number of pages in report: 16



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Client Service contact: Sue Bell 407-425-6700

Certifications: FL (B33510), LA (09051), KS (E-10327), IA (368), IL (200663), NC (579), NJ (FL002), SC (96036001)  
DOD ELAP (L-A-B L2229), CA (2937), TX (T104704004), PA (68-03373), VA (460177), AK, AR, GA, KY, MA, NV, OK, UT, WA

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*Norm Farmer*  
Norm Farmer  
Technical Director

**Summary of Hits**

Job Number: FA21688  
 Account: GeoCore, Inc-Remediation  
 Project: AGRA CCC/USDA, Agra, KS  
 Collected: 01/23/15

**Sample Summary**

GeoCore, Inc-Remediation  
 AGRA CCC/USDA, Agra, KS  
 Project No: 1491  
 Job No: FA21688

Sample Number	Collected Date	Time By	Matrix Received	Code Type	Client Sample ID
FA21688-1	01/23/15	11:40 TD	AQ	Ground Water	GW-1
FA21688-2	01/23/15	12:20 TD	AQ	Ground Water	GW-3
FA21688-3	01/23/15	12:00 TD	AQ	Ground Water	GW-4

Lab Analyte	Sample ID	Client Sample ID	Result/Qual	RL	MDL	Units	Method
FA21688-1	GW-1						
Carbon Tetrachloride <sup>a</sup>			82.7	1.0		ug/l	SW846 8260B
Chloroform <sup>a</sup>			6.3	1.0		ug/l	SW846 8260B
FA21688-2	GW-3						
Carbon Tetrachloride			2270	50		ug/l	SW846 8260B
FA21688-3	GW-4						
Carbon Tetrachloride <sup>a</sup>			276	5.0		ug/l	SW846 8260B
Chloroform <sup>a</sup>			3.4	2.0		ug/l	SW846 8260B

(a) Sample was not preserved to a pH < 2.

**Report of Analysis**

Client Sample ID: GW-1  
 Lab Sample ID: FA21688-1  
 Matrix: AQ - Ground Water  
 Method: SW846 8260B  
 Project: AGRA CCC/USDA, Agra, KS

Date Sampled: 01/23/15  
 Date Received: 01/27/15  
 Percent Solids: n/a

**Sample Results**

Run #1 a	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	N0082660.D	1	01/30/15	RB	n/a	n/a	VN3647

Purge Volume  
 Run #1 5.0 ml  
 Run #2

**Report of Analysis**

**VOA SPECIAL LIST**

CAS No.	Compound	Result	RL	Units	Q
56-23-5	Carbon Tetrachloride	82.7	1.0	ug/l	
67-66-3	Chloroform	6.3	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
1868-53-7	Dibromofluoromethane	109%		83-118%	
17060-07-0	1,2-Dichloroethane-D4	109%		79-125%	
2037-26-5	Toluene-D8	96%		85-112%	
460-00-4	4-Bromofluorobenzene	105%		83-118%	

(a) Sample was not preserved to a pH < 2.

ND = Not detected  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



Report of Analysis

Client Sample ID:	GW-3		Date Sampled:	01/23/15	
Lab Sample ID:	FA21688-2		Date Received:	01/27/15	
Matrix:	AQ - Ground Water		Percent Solids:	n/a	
Method:	SW846 8260B				
Project:	AGRA CCC/USDA, Agra, KS				
File ID	DF	Analyzed	By	Prep Date	Prep Batch
Run #1	N0082661.D	20	01/30/15	RB	n/a
Run #2	N0082672.D	50	01/30/15	RB	n/a
Run #3 a	C0104388.D	50	01/28/15	EP	n/a
Analytical Batch					
	VN3647				
	VC4175				
Purge Volume					
Run #1	5.0 ml				
Run #2	5.0 ml				
Run #3	5.0 ml				

VOA SPECIAL LIST

CAS No.	Compound	Result	RL	Units	Q
56-23-5	Carbon Tetrachloride	2270 b	50	ug/l	
67-66-3	Chloroform	ND	20	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
1868-53-7	Dibromofluoromethane	112%	111%	104%	83-118%
17060-07-0	1,2-Dichloroethane-D4	117%	119%	131%	79-125%
2037-26-5	Toluene-D8	101%	99%	101%	85-112%
460-00-4	4-Bromofluorobenzene	100%	109%	92%	83-118%

(a) Confirmation run.

(b) Result is from Run# 2

ND = Not detected  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GW-4		Date Sampled:	01/23/15	
Lab Sample ID:	FA21688-3		Date Received:	01/27/15	
Matrix:	AQ - Ground Water		Percent Solids:	n/a	
Method:	SW846 8260B				
Project:	AGRA CCC/USDA, Agra, KS				
File ID	DF	Analyzed	By	Prep Date	Prep Batch
Run #1 a	N0082662.D	2	01/30/15	RB	n/a
Run #2 a	N0082673.D	5	01/30/15	RB	n/a
Analytical Batch					
	VN3647				
	VN3647				
Purge Volume					
Run #1	5.0 ml				
Run #2	5.0 ml				

VOA SPECIAL LIST

CAS No.	Compound	Result	RL	Units	Q
56-23-5	Carbon Tetrachloride	276 b	5.0	ug/l	
67-66-3	Chloroform	3.4	2.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
1868-53-7	Dibromofluoromethane	113%	111%	83-118%	
17060-07-0	1,2-Dichloroethane-D4	118%	121%	79-125%	
2037-26-5	Toluene-D8	98%	100%	85-112%	
460-00-4	4-Bromofluorobenzene	108%	103%	83-118%	

(a) Sample was not preserved to a pH < 2.

(b) Result is from Run# 2

ND = Not detected  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

**ACCUTEST LABORATORIES**  
2776 Arnold Ave Ste D  
Salina, Kansas 67401  
Brod Campbell  
315-525-1616  
brodcamp@accutest.com

**Chain of Custody Form**

Client Name: **Chloroform**  
Client Address: **12000 83rd St**  
Client Phone: **781-871-1491**  
Client Contact: **Chloroform**

Specimen ID: **12000 83rd St**

DATE	TIME	INITIALS	DESCRIPTION	TESTS	REMARKS
12/12/11	12:00	[Signature]	Specimen received		
12/13/11	12:00	[Signature]	Specimen stored		
12/14/11	12:00	[Signature]	Specimen analyzed		

Approved By: **[Signature]**  
Date: **12/14/11**

Received By: **[Signature]**  
Date: **12/14/11**

Temp: **4.0**  
Cable Temperature @ Cabinet: **22**

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA21688 CLIENT: Leobee PROJECT: 1471  
 DATE/TIME RECEIVED: 01/27/05 9:30 (MM/DD/YYYY 24:00) NUMBER OF COOLERS RECEIVED: 1  
 METHOD OF DELIVERY: SEDEX UPS ACCUTEST COURIER DELIVERY OTHER: \_\_\_\_\_  
 AIRBILL NUMBERS: 8063 18816766

**COOLER INFORMATION**  
 CUSTODY SEAL NOT PRESENT OR NOT INTACT  
 CHAIN OF CUSTODY NOT RECEIVED (COC)  
 ANALYSIS REQUESTED IS UNCLEAR OR MISSING  
 SAMPLE DATES OR TIMES UNCLEAR OR MISSING  
 TEMPERATURE CRITERIA NOT MET

**TRIP BLANK INFORMATION**  
 TRIP BLANK PROVIDED  
 TRIP BLANK NOT PROVIDED  
 TRIP BLANK NOT ON COC  
 TRIP BLANK INTACT  
 TRIP BLANK NOT INTACT  
 RECEIVED WATER TRIP BLANK  
 RECEIVED SOIL TRIP BLANK

**MISC. INFORMATION**  
 NUMBER OF ENCLOSURES: 2-GRAM \_\_\_\_\_ 5-GRAM \_\_\_\_\_  
 NUMBER OF 505 FILD KITS: 1 \_\_\_\_\_  
 NUMBER OF LAB FILTERED METALS: \_\_\_\_\_  
 PH PAPER LOTS: \_\_\_\_\_ WIDE RANGE: \_\_\_\_\_ AIRBILT: \_\_\_\_\_  
 NARROW RANGE: \_\_\_\_\_ HCL/USA: \_\_\_\_\_ OTHER (specify): \_\_\_\_\_ 495-339010

**TEMPERATURE INFORMATION**  
 IR THERM ID: 1 CORR. FACTOR: 40.4  
 OBSERVED TEMP: 1.3  
 CORRECTED TEMP: 2.7

**SAMPLE INFORMATION**  
 INCORRECT NUMBER OF CONTAINERS USED  
 SAMPLE RECEIVED IMPROPERLY PRESERVED  
 INSUFFICIENT VOLUME FOR ANALYSIS  
 DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL  
 IDs ON COC DO NOT MATCH LABEL  
 VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)  
 BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED  
 NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED  
 UNCLEAR FILTERING OR COMPOSTING INSTRUCTIONS  
 SAMPLE CONTAINERS: RECEIVED BROKEN  
 505 FILD KITS NOT RECEIVED WITHIN 48 HOURS  
 BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS  
 % SOLIDS JAR NOT RECEIVED  
 RESIDUAL CHLORINE PRESENT  
 (APPLICABLE TO EPA 405 SERIES OR NORTH CAROLINA USE/ANALYSIS) LOTS: \_\_\_\_\_

TECHNICIAN SIGNATURE/DATE: [Signature] REVIEWER SIGNATURE/DATE: \_\_\_\_\_  
 NF 1014 receipt confirmation 102914.xls



**Method Blank Summary**

Job Number: FA21688  
Account: GCOREKSR GeoCore, Inc.-Remediation  
Project: AGRA CCC/USDA, Agra, KS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN3647-MB	N0082657.D	1	01/30/15	RB	n/a	n/a	VN3647

5.1.1 **5**

The QC reported here applies to the following samples:

FA21688-1, FA21688-2, FA21688-3

Method: SW846 8260B

**QC Data Summaries**

CAS No.	Compound	Result	RL	Units	Q
56-23-5	Carbon Tetrachloride	ND	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
CAS No.	Surrogate Recoveries				
1868-53-7	Dibromofluoromethane	108%		83-118%	
17060-07-0	1,2-Dichloroethane-D4	111%		79-125%	
2037-26-5	Toluene-D8	101%		85-112%	
460-00-4	4-Bromofluorobenzene	105%		83-118%	

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

**GC/MS Volatiles**

**5**

**Blank Spike Summary**

Job Number: FA21688  
 Account: GCOREKSR GeoCore, Inc.-Remediation  
 Project: AGRA CCC/USDA, Agra, KS

Page 1 of 1

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN3647-BS	N0082655.D	1	01/30/15	RB	n/a	n/a	VN3647

The QC reported here applies to the following samples:

FA21688-1, FA21688-2, FA21688-3

Method: SW846 8260B

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
56-23-5	Carbon Tetrachloride	25	29.8	119	76-136
67-66-3	Chloroform	25	26.4	106	80-124
107-06-2	1,2-Dichloroethane	25	25.6	102	75-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	83-118%
17060-07-0	1,2-Dichloroethane-D4	105%	79-125%
2037-26-5	Toluene-D8	98%	85-112%
460-00-4	4-Bromofluorobenzene	98%	83-118%

\* = Outside of Control Limits.

5.2.1

5

**Matrix Spike/Matrix Spike Duplicate Summary**

Job Number: FA21688  
 Account: GCOREKSR GeoCore, Inc.-Remediation  
 Project: AGRA CCC/USDA, Agra, KS

Page 1 of 1

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA21688-2MS	N0082679.D	50	01/30/15	RB	n/a	n/a	VN3647
FA21688-2MSD	N0082680.D	50	01/30/15	RB	n/a	n/a	VN3647
FA21688-2	N0082661.D	20	01/30/15	RB	n/a	n/a	VN3647
FA21688-2	N0082672.D	50	01/30/15	RB	n/a	n/a	VN3647

The QC reported here applies to the following samples:

FA21688-1, FA21688-2, FA21688-3

Method: SW846 8260B

CAS No.	Compound	FA21688-2 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	Limits Rec/RPD
56-23-5	Carbon Tetrachloride	2270 <sup>a</sup>	1250	3510	99	1250	3380	89	4 76-136/23
67-66-3	Chloroform	19.3	1250	1370	108	1250	1350	106	1 80-124/15
107-06-2	1,2-Dichloroethane	ND	1250	1380	110	1250	1340	107	3 75-125/14

CAS No.	Surrogate Recoveries	MS	MSD	FA21688-2	Limits
1868-53-7	Dibromofluoromethane	108%	108%	112%	83-118%
17060-07-0	1,2-Dichloroethane-D4	112%	106%	117%	79-125%
2037-26-5	Toluene-D8	96%	100%	101%	85-112%
460-00-4	4-Bromofluorobenzene	99%	100%	100%	83-118%

(a) Result is from Run #2.

\* = Outside of Control Limits.



02/06/15

Technical Report for

GeoCore, Inc-Remediation

AGRA

1491

Accutest Job Number: JB87172

Sampling Date: 01/23/15

Report to:

GeoCore
2775 Arnold Avenue Suite D
Salina, KS 67401
jgebhardt@geocore.net; dcorl@geocore.net;
boentrich@geocore.net
ATTN: Brad Oentrich

Total number of pages in report: 31



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Client Service contact: Marty Vitanza 732-329-0200

Certifications: NJ(12128), NY(10989), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), AZ (AZ0786), PA, RI, SC, TN, VA, WV, DOD ELAP (L-A-B L2248)

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### Report of Analysis

Client Sample ID: SVE-2	Date Sampled: 01/23/15
Lab Sample ID: JB87172-2	Date Received: 01/28/15
Matrix: AIR - Soil Vapor Grab	Summa ID: A575
Method: TO-15	Percent Solids: n/a
Project: AGRA	

File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5W9338.D	1	ML	01/29/15	n/a	V5W368
Run #2						

VOA Special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-86-3	119.4	Chloroform	ND	0.80	0.095	ppbv	ND	ND	3.9	0.46	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	0.10	ppbv	ND	ND	5.0	0.63	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.091	ppbv	ND	ND	3.2	0.37	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		65-128%

ND = Not detected  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

MDL = Method Detection Limit  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

### Report of Analysis

Client Sample ID: SVE-3	Date Sampled: 01/23/15
Lab Sample ID: JB87172-3	Date Received: 01/28/15
Matrix: AIR - Soil Vapor Grab	Summa ID: A513
Method: TO-15	Percent Solids: n/a
Project: AGRA	

File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5W9340.D	1	ML	01/29/15	n/a	V5W368
Run #2						

VOA Special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-86-3	119.4	Chloroform	ND	0.80	0.095	ppbv	ND	ND	3.9	0.46	ug/m3
56-23-5	153.8	Carbon tetrachloride	14.2	0.80	0.10	ppbv	89.3	ND	5.0	0.63	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.091	ppbv	ND	ND	3.2	0.37	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		65-128%

ND = Not detected  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

MDL = Method Detection Limit  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SVE-4	Date Sampled: 01/23/15
Lab Sample ID: JB87172-4	Date Received: 01/28/15
Matrix: AIR - Soil Vapor Grab	Summa ID: A802
Method: TO-15	Percent Solids: n/a
Project: AGRA	

File ID	DF	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5W9341.D	1	01/29/15	ML n/a	V5W368
Run #2					

Initial Volume	
Run #1	100 ml
Run #2	

VOA Special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-66-3	119.4	Chloroform	ND	0.80	0.095	ppbv	ND	ND	3.9	0.46	ug/m3
56-23-5	153.8	Carbon tetrachloride	1.9	0.80	0.10	ppbv	12	ND	5.0	0.63	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.091	ppbv	ND	ND	3.2	0.37	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		65-128%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value  
 RL = Reporting Limit B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SVE-5	Date Sampled: 01/23/15
Lab Sample ID: JB87172-5	Date Received: 01/28/15
Matrix: AIR - Soil Vapor Grab	Summa ID: A1155
Method: TO-15	Percent Solids: n/a
Project: AGRA	

File ID	DF	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5W9342.D	1	01/29/15	ML n/a	V5W368
Run #2					

Initial Volume	
Run #1	100 ml
Run #2	

VOA Special List

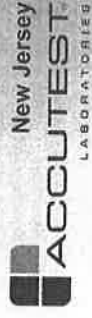
CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-66-3	119.4	Chloroform	ND	0.80	0.095	ppbv	ND	ND	3.9	0.46	ug/m3
56-23-5	153.8	Carbon tetrachloride	7.5	0.80	0.10	ppbv	47	ND	5.0	0.63	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.091	ppbv	ND	ND	3.2	0.37	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		65-128%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value  
 RL = Reporting Limit B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound





Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: SVE MAN: Date Sampled: 01/23/15  
 Lab Sample ID: JB87172-6 Date Received: 01/28/15  
 Matrix: AIR - Soil Vapor Grab Summa ID: A729 Percent Solids: n/a  
 Method: TO-15 Project: AGRA

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	5W9343.D	1	01/29/15	ML	n/a	n/a	V5W368

Run #1	Initial Volume
Run #2	100 ml

VOA Special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-86-3	119.4	Chloroform	ND	0.80	0.095	ppbv	ND	3.9	0.46	ug/m3	
56-23-5	153.8	Carbon tetrachloride	1.8	0.80	0.10	ppbv	11	5.0	0.63	ug/m3	
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.091	ppbv	ND	3.2	0.37	ug/m3	
CAS No.		Surrogate Recoveries	Run# 1	Run# 2	Limits						
460-00-4		4-Bromofluorobenzene	98%		65-128%						

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value  
 RL = Reporting Limit B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

- Includes the following where applicable:
- Chain of Custody
  - Summa Canister and Flow Controller Log

4.1

# ACCUTEST LABORATORIES

## CHAIN OF CUSTODY

### Air Sampling Field Data Sheet

Client: WV-7882419-9 PAGE 1 OF 1  
 Date / Time Received: 12/20/15 10:50:00 AM Client: 1282015 10:50:00 AM Delivery Method:                      Project:                       
 Cooler Temps (Initial/Adjusted):                      Alkali #:                     

Lab Name: Accutest Address: 2775 Arnold Ave Ste D City: Salina, Kansas 67401 State: KS Country: USA  
 Reports to: Brad Oentlich boentlich@accutest.net  
785-526-1616 boentlich@accutest.net

Sampling Method: Passive Air Type:                      Sampling Equipment:                       
 Lab Sample #: 5VE-1 Field ID / Point of Collection:                     

Lab Sample #	Field ID / Point of Collection	Container ID	Flow Control	Time (Date/Time)	Carrier Pressure (PSI)	Flow Rate (LPM)	Sampler Temp (°C)	Sampler Temp (°F)	Notes
1	5VE-1	A-570		12/20/15 12:00					Chloroform/acetone
2	5VE-2	A-571		12/20/15 12:00					Carbon Tetrachloride
3	5VE-3	A-572		12/20/15 12:00					
4	5VE-4	A-573		12/20/15 12:00					
5	5VE-5	A-574		12/20/15 12:00					
6	5VE-71A	A-575		12/20/15 12:00					

Approved By:                      Date:                       
 Received By:                      Date:                     

4.1

4

# ACCUTEST LABORATORIES

## Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB87172 Client:                      Project:                       
 Date / Time Received: 1282015 10:50:00 AM Delivery Method:                      Alkali #:                       
 Cooler Temps (Initial/Adjusted):                     

**Sample Integrity - Documentation**  
 1. Sample labels present on bottles:  Y  N  
 2. Container labeling complete:  Y  N  
 3. Sample container label / COC agrees:  Y  N

**Sample Integrity - Condition**  
 1. Sample received within HT:  Y  N  
 2. All containers accounted for:  Y  N  
 3. Condition of sample:  Y  N

**Sample Integrity - Instructions**  
 1. Analysis requested is clear:  Y  N  
 2. Bottles received for unspecified tests:  Y  N  
 3. Sufficient volume need for analysis:  Y  N  
 4. Compositing instructions clear:  Y  N  
 5. Filtering instructions clear:  Y  N

**Quality Control - Preservation** Y  N  N/A  
 1. Trip Blank present / cooler:  Y  N  
 2. Trip Blank listed on COC:  Y  N  
 3. Samples preserved properly:  Y  N  
 4. VOCs headspace free:  Y  N

**Quality Control - Instrumentation** Y  N  N/A  
 1. Temp criteria achieved:  Y  N  
 2. Cooler temp verification:  Y  N  
 3. Cooler media:  Y  N  
 4. No Coolers:  Y  N

**Quality Control - Documentation** Y  N  N/A  
 1. COC Present:  Y  N  
 2. COC Dates/Time OK:  Y  N  
 3. Smpl Dates/Time OK:  Y  N

**Quality Control - Security** Y  N  N/A  
 1. Custody Seals Present:  Y  N  
 2. Custody Seals Intact:  Y  N

**Quality Control - Tamperability** Y  N  N/A  
 1. Temp criteria achieved:  Y  N  
 2. Cooler temp verification:  Y  N  
 3. Cooler media:  Y  N  
 4. No Coolers:  Y  N

Comments:                     

2220 US Highway 130  
 P.O. Box 5444  
 Dayton, New Jersey  
 08817-0444

4.1

4

# ACCUTEST LABORATORIES

## Chain of Custody

Client: WV-7882419-9 PAGE 1 OF 1  
 Date / Time Received: 12/20/15 10:50:00 AM Client: 1282015 10:50:00 AM Delivery Method:                      Project:                       
 Cooler Temps (Initial/Adjusted):                      Alkali #:                     

Lab Name: Accutest Address: 2775 Arnold Ave Ste D City: Salina, Kansas 67401 State: KS Country: USA  
 Reports to: Brad Oentlich boentlich@accutest.net  
785-526-1616 boentlich@accutest.net

Sampling Method: Passive Air Type:                      Sampling Equipment:                       
 Lab Sample #: 5VE-1 Field ID / Point of Collection:                     

Lab Sample #	Field ID / Point of Collection	Container ID	Flow Control	Time (Date/Time)	Carrier Pressure (PSI)	Flow Rate (LPM)	Sampler Temp (°C)	Sampler Temp (°F)	Notes
1	5VE-1	A-570		12/20/15 12:00					Chloroform/acetone
2	5VE-2	A-571		12/20/15 12:00					Carbon Tetrachloride
3	5VE-3	A-572		12/20/15 12:00					
4	5VE-4	A-573		12/20/15 12:00					
5	5VE-5	A-574		12/20/15 12:00					
6	5VE-71A	A-575		12/20/15 12:00					

Approved By:                      Date:                       
 Received By:                      Date:                     

JB87172: Chain of Custody

Page 1 of 2

JB87172: Chain of Custody

Page 2 of 2



**Summa Canister and Flow Controller Log**

Job Number: JB87172  
 Account: GCOREKSR GeoCore, Inc.-Remediation  
 Project: AGRA  
 Received: 01/28/15

Page 1 of 1

4.2 **4**

SUMMA CANISTERS															
Shipping		Vac Date		By		SCC		Receiving		Date		Vac		Final Dil	
ID	L	" Hg	Out	By	Batch	FileID	SCC	Sample Number	Date In	" Hg	psig	psig	Fact	psig	Fact
A570	1	29.4	01/16/15	RC	CP7467	3W44988.D	JB87172-1	JB87172-1	01/28/15	ML	3		1		
A575	1	29.4	01/16/15	RC	CP7461	5W8992.D	JB87172-2	JB87172-2	01/28/15	ML	3		1		
A513	1	29.4	01/16/15	RC	CP7467	3W44988.D	JB87172-3	JB87172-3	01/28/15	ML	3		1		
A802	1	29.4	01/16/15	RC	CP7461	5W8992.D	JB87172-4	JB87172-4	01/28/15	ML	2		1		
A1155	1	29.4	01/16/15	RC	CP7461	5W8992.D	JB87172-5	JB87172-5	01/28/15	ML	3.5		1		
A729	1	29.4	01/16/15	RC	CP7461	5W8992.D	JB87172-6	JB87172-6	01/28/15	ML	2		1		

Accutest Bottle Order(s):  
 MV-1/28/2014-9

Prep Date 01/16/15 Room Temp(F) 70 Bar Pres \*Hg 29.92

**GC/MS Volatiles**

**QC Data Summaries**

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Surrogate Recovery Summaries

**Method Blank Summary 1**

Job Number: JB87172  
 Account: GCOREKSR GeoCore, Inc-Remediation  
 Project: AGRA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W368-MB	5W9336.D	1	01/29/15	ML	n/a	n/a	V5W368

5.1.1

5

Method: TO-15

The QC reported here applies to the following samples:

JB87172-1, JB87172-2, JB87172-3, JB87172-4, JB87172-5, JB87172-6

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-66-3	Chloroform	ND	0.20	0.024	ppbv	ND	ND	0.98	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.025	ppbv	ND	ND	1.3	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.023	ppbv	ND	ND	0.81	ug/m3

CAS No. Surrogate Recoveries Limits

460-00-4 4-Bromofluorobenzene 94% 65-128%

**Method Blank Summary**

Job Number: JB87172  
 Account: GCOREKSR GeoCore, Inc-Remediation  
 Project: AGRA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W353-MB	5W8987.D	1	01/12/15	ML	n/a	n/a	V5W353

5.1.2

5

Method: TO-15

The QC reported here applies to the following samples:

V5W353-SCC

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-66-3	Chloroform	ND	0.20	0.024	ppbv	ND	ND	0.98	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.025	ppbv	ND	ND	1.3	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.023	ppbv	ND	ND	0.81	ug/m3

CAS No. Surrogate Recoveries Limits

460-00-4 4-Bromofluorobenzene 97% 65-128%

**Duplicate Summary**

Job Number: JB87172  
 Account: GCOREKSR GeoCore, Inc-Remediation  
 Project: AGRA

Page 1 of 1

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JB87172-2DUP	5W9339.D	1	01/29/15	ML	n/a	n/a	V5W368
JB87172-2	5W9338.D	1	01/29/15	ML	n/a	n/a	V5W368

5.4.1

5

The QC reported here applies to the following samples:

Method: TO-15

JB87172-1, JB87172-2, JB87172-3, JB87172-4, JB87172-5, JB87172-6

CAS No.	Compound	JB87172-2	DUP	JB87172-3	JB87172-4	JB87172-5	JB87172-6
67-66-3	Chloroform	ND	ND	nc	nc	12	12
56-23-5	Carbon tetrachloride	ND	ND	nc	nc	10	10
107-06-2	1,2-Dichloroethane	ND	ND	nc	nc	20	20
CAS No.	Surrogate Recoveries	DUP	JB87172-2	Limits			
460-00-4	4-Bromofluorobenzene	96%	97%	65-128%			

\* = Outside of Control Limits.

**Summa Cleaning Certification**

Job Number: JB87172  
 Account: GCOREKSR GeoCore, Inc-Remediation  
 Project: AGRA

Page 1 of 1

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W353-SCC	5W8992.D	1	01/12/15	ML	n/a	n/a	V5W353

5.4.1

5

The QC reported here (Summa A603) applies to the following samples:

Method: TO-15

Batch CP7461 cleaned 12/26/14: JB87172-2(A575), JB87172-4(A802), JB87172-5(A1155), JB87172-6(A729)

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-66-3	Chloroform	ND	0.20	0.024	ppbv	ND	ND	0.98	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.025	ppbv	ND	ND	1.3	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.023	ppbv	ND	ND	0.81	ug/m3
CAS No.	Surrogate Recoveries	Limits							
460-00-4	4-Bromofluorobenzene	94%	94%	65-128%					

**Summa Cleaning Certification**

Job Number: JB87172  
 Account: GCOREKSR GeoCore, Inc.-Remediation  
 Project: AGRA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3W1712-SCC	3W44988.D	1	01/14/15	YMH	n/a	n/a	V3W1712

The QC reported here (Summa A781) applies to the following samples: Method: TO-15

Batch CP7467 cleaned 12/30/14; JB87172-1(A570), JB87172-3(A513)

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-66-3	Chloroform	ND	0.20	0.024	ppbv	ND	0.88	0.88	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.025	ppbv	ND	1.3	1.3	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.023	ppbv	ND	0.81	0.81	ug/m3

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	83% 65-128%

**Instrument Performance Check (BFB)**

Job Number: JB87172  
 Account: GCOREKSR GeoCore, Inc.-Remediation  
 Project: AGRA

Sample	File ID	Injection Date	Injection Time
V3W1706-BFB	3W44854.D	01/06/15	18:36
Instrument ID:	GCMS3W		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	13593	19.1	Pass
75	30.0 - 66.0% of mass 95	33306	46.7	Pass
95	Base peak, 100% relative abundance	71277	100.0	Pass
96	5.0 - 9.0% of mass 95	4780	6.71	Pass
173	Less than 2.0% of mass 174	0	(0.00) a	Pass
174	50.0 - 120.0% of mass 95	59402	83.3	Pass
175	4.0 - 9.01% of mass 174	4589	6.44	Pass
176	93.0 - 101.0% of mass 174	58357	81.9	Pass
177	5.0 - 9.0% of mass 176	3909	5.48	Pass

(a) Value is % of mass 174  
 (b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3W1706-IC1706	3W44855.D	01/06/15	19:15	00:39	Initial cal 10
V3W1706-IC1706	3W44856.D	01/06/15	19:54	01:18	Initial cal 5
V3W1706-IC1706	3W44857.D	01/06/15	20:34	01:58	Initial cal 0.5
ZZZZZZ	3W44858.D	01/06/15	21:13	02:37	(unrelated sample)
V3W1706-IC1706	3W44858.D	01/06/15	21:13	03:17	Initial cal 20
V3W1706-IC1706	3W44859.D	01/06/15	21:53	03:57	Initial cal 15
ZZZZZZ	3W44860.D	01/06/15	22:33	04:36	(unrelated sample)
V3W1706-IC1706	3W44862.D	01/06/15	23:52	05:16	Initial cal 0.1
V3W1706-IC1706	3W44863.D	01/07/15	00:30	05:54	Initial cal 0.04
ZZZZZZ	3W44863.D	01/07/15	00:30	05:54	(unrelated sample)
V3W1706-IC1706	3W44864.D	01/07/15	01:11	06:35	Initial cal 30
V3W1706-IC1706	3W44866.D	01/07/15	02:32	07:56	Initial cal 40
V3W1706-IC1706	3W44868.D	01/07/15	03:51	09:15	Initial cal verification 10

**Instrument Performance Check (BFB)**

Job Number: JB87172  
 Account: GCOREKSR GeoCore, Inc.-Remediation  
 Project: AGR

Sample: V3W1712-BFB  
 Lab File ID: 3W44981.D  
 Instrument ID: GCM53W

Injection Date: 01/14/15  
 Injection Time: 07:48

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	15125	20.1	Pass
75	30.0 - 66.0% of mass 95	35986	47.8	Pass
95	Base peak, 100% relative abundance	75266	100.0	Pass
96	5.0 - 9.0% of mass 95	5183	6.89	Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) a
174	50.0 - 120.0% of mass 95	65741	87.3	Pass
175	4.0 - 9.0% of mass 174	5109	6.79	Pass
176	83.0 - 101.0% of mass 174	64178	85.3	Pass
177	5.0 - 9.0% of mass 176	4293	5.70	Pass

(a) Value is % of mass 174  
 (b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID	Pass/Fail
V3W1712-CC1706	3W44982.D	01/14/15	08:28	00:40	Continuing cal 10	
V3W1712-BS	3W44983.D	01/14/15	09:08	01:20	Blank Spike	
V3W1712-BSD	3W44984.D	01/14/15	09:48	02:00	Blank Spike Duplicate	
V3W1712-MB	3W44986.D	01/14/15	11:36	03:48	Method Blank	
V3W1712-SCC	3W44987.D	01/14/15	12:39	04:51	Summa Cleaning Certification	
V3W1712-SCC	3W44988.D	01/14/15	13:21	05:33	Summa Cleaning Certification	
ZZZZZZ	3W44989.D	01/14/15	14:04	06:16	(unrelated sample)	
ZZZZZZ	3W44991.D	01/14/15	15:28	07:40	(unrelated sample)	
ZZZZZZ	3W44992.D	01/14/15	16:11	08:23	(unrelated sample)	
JB86236-8	3W44993.D	01/14/15	16:51	09:03	(used for QC only; not part of job JB87172)	
JB86236-8DUP	3W44994.D	01/14/15	17:32	09:44	Duplicate	
JB86236-8	3W44995.D	01/14/15	18:12	10:24	(used for QC only; not part of job JB87172)	
V3W1712-SCC	3W44996.D	01/14/15	18:54	11:06	Summa Cleaning Certification	
V3W1712-SCC	3W44997.D	01/14/15	19:36	11:48	Summa Cleaning Certification	

**Instrument Performance Check (BFB)**

Job Number: JB87172  
 Account: GCOREKSR GeoCore, Inc.-Remediation  
 Project: AGR

Sample: V5W347-BFB  
 Lab File ID: 5W8830.D  
 Instrument ID: GCM55W

Injection Date: 01/02/15  
 Injection Time: 16:26

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	23389	16.7	Pass
75	30.0 - 66.0% of mass 95	61560	44.1	Pass
95	Base peak, 100% relative abundance	139690	100.0	Pass
96	5.0 - 9.0% of mass 95	9160	6.56	Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) a
174	50.0 - 120.0% of mass 95	109784	78.6	Pass
175	4.0 - 9.0% of mass 174	8186	5.86	Pass
176	83.0 - 101.0% of mass 174	106170	76.0	Pass
177	5.0 - 9.0% of mass 176	7010	5.02	Pass

(a) Value is % of mass 174  
 (b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID	Pass/Fail
V5W347-IC347	5W8831.D	01/02/15	17:07	00:41	Initial cal 0.04	
ZZZZZZ	5W8831.D	01/02/15	17:07	00:41	(unrelated sample)	
V5W347-IC347	5W8832.D	01/02/15	17:49	01:23	Initial cal 0.1	
ZZZZZZ	5W8832.D	01/02/15	17:49	01:23	(unrelated sample)	
V5W347-IC347	5W8833.D	01/02/15	18:30	02:04	Initial cal 0.2	
ZZZZZZ	5W8833.D	01/02/15	18:30	02:04	(unrelated sample)	
V5W347-IC347	5W8835.D	01/02/15	19:53	03:27	Initial cal 5	
V5W347-IC347	5W8836.D	01/02/15	20:33	04:07	Initial cal 10	
V5W347-IC347	5W8837.D	01/02/15	21:15	04:49	Initial cal 20	
V5W347-IC347	5W8838.D	01/02/15	21:58	05:32	Initial cal 30	
V5W347-IC347	5W8845.D	01/03/15	08:21	15:55	Initial cal 40	
V5W347-IC347	5W8847.D	01/03/15	11:00	18:34	Initial cal 0.5	
V5W347-ICV347	5W8848.D	01/03/15	11:48	19:22	Initial cal verification 10	

**Instrument Performance Check (BFB)**

Job Number: JB87172  
 Account: GCOREKSR GeoCore, Inc.-Remediation  
 Project: AGRA

Sample: V5W353-BFB  
 Lab File ID: 5W8982.D  
 Instrument ID: GCMSSW

Injection Date: 01/12/15  
 Injection Time: 09:04

5.5.4

5

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	22149	18.7	Pass
75	30.0 - 66.0% of mass 95	55666	46.9	Pass
95	Base peak, 100% relative abundance	118629	100.0	Pass
96	5.0 - 9.0% of mass 95	7717	6.51	Pass
173	Less than 2.0% of mass 174	359	0.30	(0.38) a
174	50.0 - 120.0% of mass 95	93397	78.7	Pass
175	4.0 - 9.01% of mass 174	6965	5.87	(7.46) a
176	93.0 - 101.0% of mass 174	90602	76.4	(97.0) a
177	5.0 - 9.0% of mass 176	5869	4.95	(6.48) b

(a) Value is % of mass 174  
 (b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V5W353-CC347	5W8983.D	01/12/15	09:47	00:43	Continuing cal 10
V5W353-BS	5W8984.D	01/12/15	10:30	01:26	Blank Spike
V5W353-BSD	5W8985.D	01/12/15	11:12	02:08	Blank Spike Duplicate
V5W353-MB	5W8987.D	01/12/15	12:51	03:47	Method Blank
ZZZZZZ	5W8988.D	01/12/15	14:29	05:25	(unrelated sample)
JB86096-5	5W8989.D	01/12/15	15:17	06:13	(used for QC only, not part of job JB87172)
ZZZZZZ	5W8990.D	01/12/15	16:06	07:02	Duplicate
V5W353-SDUP	5W8991.D	01/12/15	16:48	07:44	(unrelated sample)
ZZZZZZ	5W8992.D	01/12/15	17:33	08:29	Summa Cleaning Certification
ZZZZZZ	5W8993.D	01/12/15	18:17	09:13	(unrelated sample)
ZZZZZZ	5W8994.D	01/12/15	19:01	09:57	(unrelated sample)
ZZZZZZ	5W8995.D	01/12/15	19:41	10:37	(unrelated sample)

**Instrument Performance Check (BFB)**

Job Number: JB87172  
 Account: GCOREKSR GeoCore, Inc.-Remediation  
 Project: AGRA

Sample: V5W368-BFB  
 Lab File ID: 5W9331.D  
 Instrument ID: GCMSSW

Injection Date: 01/29/15  
 Injection Time: 08:04

5.5.5

5

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	19736	17.6	Pass
75	30.0 - 66.0% of mass 95	50957	45.4	Pass
95	Base peak, 100% relative abundance	112325	100.0	Pass
96	5.0 - 9.0% of mass 95	7513	6.69	Pass
173	Less than 2.0% of mass 174	922	0.82	(1.05) a
174	50.0 - 120.0% of mass 95	87770	78.1	Pass
175	4.0 - 9.01% of mass 174	6497	5.78	(7.40) a
176	93.0 - 101.0% of mass 174	84346	75.1	(96.1) a
177	5.0 - 9.0% of mass 176	5477	4.88	(6.49) b

(a) Value is % of mass 174  
 (b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V5W368-CC347	5W9332.D	01/29/15	09:05	01:01	Continuing cal 10
V5W368-BS	5W9333.D	01/29/15	09:48	01:44	Blank Spike
V5W368-BSD	5W9334.D	01/29/15	10:30	02:26	Blank Spike Duplicate
ZZZZZZ	5W9335.D	01/29/15	11:19	03:15	(unrelated sample)
V5W368-MB	5W9336.D	01/29/15	12:05	04:01	Method Blank
JB87172-1	5W9337.D	01/29/15	12:49	04:45	SVE-1
JB87172-2	5W9338.D	01/29/15	13:32	05:28	SVE-2
JB87172-2DUP	5W9339.D	01/29/15	14:14	06:10	Duplicate
JB87172-3	5W9340.D	01/29/15	14:56	06:52	SVE-3
JB87172-4	5W9341.D	01/29/15	15:39	07:35	SVE-4
JB87172-5	5W9342.D	01/29/15	16:21	08:17	SVE-5
JB87172-6	5W9343.D	01/29/15	17:04	09:00	SVE MAN.
V5W368-SCC	5W9344.D	01/29/15	17:48	09:44	Summa Cleaning Certification
ZZZZZZ	5W9345.D	01/29/15	18:37	10:33	(unrelated sample)
ZZZZZZ	5W9346.D	01/29/15	19:27	11:23	(unrelated sample)
ZZZZZZ	5W9347.D	01/29/15	20:09	12:05	(unrelated sample)



**Volatile Surrogate Recovery Summary**

Page 1 of 1

Job Number: JB87172  
 Account: GCOREKSR GeoCore, Inc.-Remediation  
 Project: ACRA

Method: TO-15 Matrix: AIR

Samples and QC shown here apply to the above method

5.6.1 5

Lab Sample ID	Lab File ID	S1
JB87172-1	5W9337.D	95
JB87172-2	5W9338.D	97
JB87172-3	5W9340.D	96
JB87172-4	5W9341.D	94
JB87172-5	5W9342.D	93
JB87172-6	5W9343.D	98
JB87172-2DUP	5W9339.D	96
V3W1712-SCC	3W44988.D	83
V5W353-SCC	5W8982.D	94
V5W368-BS	5W9333.D	100
V5W368-BSD	5W9334.D	98
V5W368-MB	5W9336.D	94
V3W1712-BS	3W44983.D	107
V3W1712-BSD	3W44984.D	108
V3W1712-MB	3W44986.D	85
V5W353-BS	5W8984.D	101
V5W353-BSD	5W8985.D	100
V5W353-MB	5W8987.D	97

Surrogate Compounds Recovery Limits  
 S1 = 4-Bromofluorobenzene 65-128%

**APPENDIX 2**

**FIELD NOTES**

**AND**

**SUPPORTING DOCUMENTATION**

MONTHLY OPERATION MONITORING & MAINTENANCE REPORT

Facility Name: Former Agra CCC/USDA  
 Facility Address: 671 Railroad Ave  
 Agra, Kansas

Consultant: Greenfield Contractors, Inc.  
 Consultant Project Mgr: Tim Pace  
 Reporting Period: 1-23-14 thru 1-23-15

PROJ. # 1491  
 Inspector: Tim Dorck  
 Inspection Date: 1-23-15  
 Inspection Time: 15:10  
 Electrical Meter Reading: 61644

VAPOR EXTRACTION/INJECTION INFORMATION

Design Parameters for Vapor Extraction System:  
 Reporting Period Parameters:  
 Blower Operation: 250 SCFM 40 "H2O  
 Hour Meter Reading: 126 SCFM 4119 "H2O  
 43465.4 Previous 4407.9 Present  
 25 SCFM 12 PSI  
 13.4 SCFM 13.5 PSI  
 35412.3 Previous 35964.8 Present

Design Parameters for Air Sparge System:  
 Reporting Period Parameters:  
 Blower Operation:  
 Hour Meter Reading:

Well ID	Temp	100'	Depth to	Water Level	Free Phase	Free Phase
No.	Tag No.	Elevation	Water (TOC)	Elevation	Prod. Elev.	Prod. Thick.
GW-1	413782	4162				
GW-3	423132	4156				
GW-4	413922	4196				

SYSTEM DOWN TIME SUMMARY  
 Embankment for Down Time  
 (Indicate Corrective Measures Taken)

DATE: From To

REMEDIAION SYSTEM MAINTENANCE RECORD  
 Description of Work Performed

1-23-15

K.O. Tank:  Filled  Replaced  Empty  
 Filters SVE: / AS  
 ASP Blower Grease:  Checked  Cleaned  
 Cleaned SVE lines: Yes  No  
 Cleaned Flowmeters: Yes  No  
 Used weedeater around trailer: Yes  No  
 Swept trailer:  Yes  No  
 Sensaphone Surge Protector:  Checked  Bad  
 Adjusted Air dilution: From: closed To: closed  
 Vane Width: Becker 3.60  
 AIR Sparge valve measurement minimum 26 MM

Performed by: T. Dorck

SVE Filter: Soberg  
 Air Sparge Filter:  Need

Replaced AS, Vans + Filters

AGRA CCC/USDA WELL INFORMATION T. Dorck  
 DATE: 1-23-15  
 Project # 1491

Well	Total Depth (feet)	Permanent Tag Number	Temporary Tag Number Installed	SWL	Sample Time	Dissolved Oxygen (mg/L)	Volume Purged (Gallons)
GW-1			413782	41.62	11:40		
GW-3			423132	41.56	12:20		
GW-4			413922	41.96	12:00		

Quarterly  
 Sample Analysis: Carbon Tetrachloride, Chloroform, and 1,2 DCA (8260)  
 Record Dissolved Oxygen reading Quarterly

1-23-15

AGRA CCC/USDA AIR SAMPLES INFORMATION

Well	Time Collected				
SVE-1	13:00	A-570			
SVE-2	13:10	A-575			
SVE-3	13:20	A-513			
SVE-4	13:40	A-802			
SVE-5	13:50	A-1155			
SVE Manifold	13:30	A-729			

Columbia Analytical Service

QUARTERLY

Collect one Summa Canister sample from each SVE Manifold leg and one from the overall SVE manifold. 6 total. Analyze for Carbon Tetrachloride, Chloroform, & 1,2 DCA via TO-15.

Former Agra CCC/USDA

Proj. # 1491

Operating Status: Arrive On/Off Departure On/Off

SVE UNIT	Pre KO Tank Vacuum (H <sub>2</sub> O)	Pre/Post Filter Vacuum (H <sub>2</sub> O)	Diffusion Air Flowrate (cfm)	Cumulative Flowrate (cfm) Sum of SVE Wells	O <sub>2</sub> Readings (%)	CO <sub>2</sub> Readings (%)	TPH (PID) Readings (ppm)
	41.9	45/51	closed	186	20.9	10	20.9

SVE WELL FIELD DATA

SVE WELL	Vac. @ Manifold (H <sub>2</sub> O)	Direct Read Flowrate (cfm) 2 line	O <sub>2</sub> Readings (%)	CO <sub>2</sub> Readings (%)	TPH/Drager Readings (ppm)	Vac. @ Wellhead (H <sub>2</sub> O)
SVE-1	9.1	53	20.9	10	10	3.0
SVE-2	8.8	53	20.9	10	10	2.6
SVE-3	13.4	80	20.9	10	10	6.9
SVE-4						
SVE-5						

SPARGE UNIT FIELD DATA

SPARGE UNIT	Pressure (psi)	Flow Rate (cfm)	Bleed Off (% Open)	Pre Air Temp. (deg. F)	Post Air Temp. (deg. F)
	13.5	13.4	closed	15.2°	

SPARGE WELL FIELD DATA

SPARGE WELL	Pressure @ Manifold (psi)	Pressure @ Wellhead (psi)	Direct Read Flow Rate (cfm)
AS-1	4.17	3.57	6.6
AS-2	7.26	6.90	5.0
AS-3	10+	10+	1.8
AS-4			
AS-5			

MONTHLY SVE SCREEN EXPOSURE CALCULATION SHEET

SVE Well	Depth To Water Feet BGS (Rim)	Wellhead Vacuum (in./ft. H <sub>2</sub> O)	Minus	Depth to Top of Screen	Equals	Length of Screen Exposed (ft.)
SVE-1	6w-1 + 6w-4/2 41.79	.25	-	20	=	21.54
SVE-2		.22	-	20	=	21.57
SVE-3		.58	-	20	=	21.21
SVE-4		.59	-	20	=	21.2
SVE-2		.6	-	20	=	21.19

NOTE: 1 PSI = 27.7 INCHES OF WATER  
1 INCH HG = 13.6 INCHES OF WATER  
Positive screen value equals length of screen exposed  
Negative screen value equals length of screen flooded

Measurements Collected By: T. Decker  
Date Measurements Collected: 1-23-15  
Comments:

Well	Flow	Well Vac	Flow	Well Vac	Flow	Well Vac
37-1	48	57	Closed	2.6	20.9	10
37-2	47	57	Closed	2.3	20.9	10
37-4	100	100	7.1	20.9	10	10

Well	Flow	Well Vac	Flow	Well Vac	Flow	Well Vac
37-1	47	57	2.6	20.9	10	10
37-2	47	57	2.3	20.9	10	10
37-4	100	100	7.1	20.9	10	10

Well	Flow	Well Vac	Flow	Well Vac	Flow	Well Vac
37-1	47	57	2.6	20.9	10	10
37-2	47	57	2.3	20.9	10	10
37-4	100	100	7.1	20.9	10	10

Well	Flow	Well Vac	Flow	Well Vac	Flow	Well Vac
37-1	47	57	2.6	20.9	10	10
37-2	47	57	2.3	20.9	10	10
37-4	100	100	7.1	20.9	10	10

Well	Flow	Well Vac	Flow	Well Vac	Flow	Well Vac
37-1	47	57	2.6	20.9	10	10
37-2	47	57	2.3	20.9	10	10
37-4	100	100	7.1	20.9	10	10

Well	Flow	Well Vac	Flow	Well Vac	Flow	Well Vac
37-1	47	57	2.6	20.9	10	10
37-2	47	57	2.3	20.9	10	10
37-4	100	100	7.1	20.9	10	10

Well	Flow	Well Vac	Flow	Well Vac	Flow	Well Vac
37-1	47	57	2.6	20.9	10	10
37-2	47	57	2.3	20.9	10	10
37-4	100	100	7.1	20.9	10	10

Well	Flow	Well Vac	Flow	Well Vac	Flow	Well Vac
37-1	47	57	2.6	20.9	10	10
37-2	47	57	2.3	20.9	10	10
37-4	100	100	7.1	20.9	10	10

MONTHLY SPARGE SCREEN EXPOSURE CALCULATION SHEET

AS Well	Depth to Water below TOC Feet	Plus / Minus	Difference in TOC Elevation Between MW- and AS Well	Adjusted SWL Equals	Depth to Top of Sparge Screen (F)	Minus	Adjusted SWL	Times	Calculation to Determine Amt. PSI Needed	Equals	Wellhead Pressure Needed to Overcome Water Column
AS-1		-			51.37	-	41.79	X	0.434	=	4.16
AS-2		-			50	-		X	0.434	=	7.04
AS-3		-			53.0	-		X	0.434	=	5.26
AS-4		-			50	-		X	0.434	=	7.04
AS-5		-			50.27	-		X	0.434	=	6.28

Measurements Collected By: T. Board

Date Measurements Collected: 1-23-15

Comments

EQUIPMENT BUILDING LOG-IN SHEET

ANYONE ENTERING THIS BUILDING FOR ANY REASON MUST MAKE A LOG ENTRY

("If you do not know where the hour meters are located or how to read them, you make leave this space blank")

Printed Name	Company/Agency	Date	Status ON/OFF	*Hour Meter Reading for each Piece of Equipment	Reason for Visit	Comments																												
							4	3	2	1	4	3	2	1	4	3	2	1	4	3	2	1	4	3	2	1								
Tim Board	Agrolor	10/29/14	on/ov	1578-41953.3	Q	kg. empty b.i. closed 14105-47390																												
Tim Board	Agrolor	11/26/14	on/ov	1578-42622.2	M	kg. empty b.i. closed 11:00-51985																												
Tim Board	Agrolor	12/31/14	on/ov	1578-413465.4	M	kg. empty b.i. closed 14:15-57281																												
Tim Board	Agrolor	1/23/15	on/ov	1578-35964.8	Q	Drained kg. 15110-61644 kg. empty b.i. closed 14:15-57281																												

Site Address: Former Agra CCC/USDA/Agri/ks.  
 Project Name: 1491  
 Project Code: 1491

Acquist Job # 1207-2014-9  
 Acquist Quote # 1207-2014-9  
 SKIFF#

**Client / Reporting Information**  
 Company Name: Formosa Agria LLC/USA  
 Address: State KS  
 City: Agria  
 Project # 1491  
 Client Purchase Order # 1491

**Sampling Information**  
 Project Name: Formosa Agria LLC/USA  
 Date: 12/15/2014  
 Time: 12:00  
 Location: 1207A 2360  
 Analytical Information: Carbon Tetrachloride

**Weather Parameters**  
 Temperature (Fahrenheit): \_\_\_\_\_  
 Humidity (%): \_\_\_\_\_  
 Wind Speed (mph): \_\_\_\_\_  
 Wind Direction: \_\_\_\_\_  
 Barometric Pressure (Inches of Hg): \_\_\_\_\_  
 Precipitation (Inches): \_\_\_\_\_  
 Other weather comment: \_\_\_\_\_

**Stop Sampling Information**  
 Date: \_\_\_\_\_  
 Time (24hr clock): \_\_\_\_\_  
 Reason: \_\_\_\_\_

**Start Sampling Information**  
 Date: \_\_\_\_\_  
 Time (24hr clock): \_\_\_\_\_  
 Reason: \_\_\_\_\_

**Lab Sample #**  
 Field ID / Point of Collection: 1207-1  
 Container # 12315  
 Date: 12/15/2014  
 Time (24hr clock): 13:00

**Lab Use Only**  
 Matrix Codes: 1207A 2360  
 DW - Drinking Water  
 GW - Ground Water  
 SW - Surface Water  
 SO - Soil  
 SL - Sludge  
 LI - Other Liquid  
 SOL - Other Solid  
 WP - Wipe

**CHAIN OF CUSTODY**  
**ACCUTEST LABORATORIES**  
**Air Sampling Field Data Sheet**

**Client / Reporting Information**  
 Project Name: Formosa Agria LLC/USA  
 Address: State KS  
 City: Agria  
 Project # 1491  
 Client Purchase Order # 1491

**Weather Parameters**  
 Temperature (Fahrenheit): \_\_\_\_\_  
 Humidity (%): \_\_\_\_\_  
 Wind Speed (mph): \_\_\_\_\_  
 Wind Direction: \_\_\_\_\_  
 Barometric Pressure (Inches of Hg): \_\_\_\_\_  
 Precipitation (Inches): \_\_\_\_\_  
 Other weather comment: \_\_\_\_\_

**Stop Sampling Information**  
 Date: \_\_\_\_\_  
 Time (24hr clock): \_\_\_\_\_  
 Reason: \_\_\_\_\_

**Start Sampling Information**  
 Date: \_\_\_\_\_  
 Time (24hr clock): \_\_\_\_\_  
 Reason: \_\_\_\_\_

**Lab Sample #**  
 Field ID / Point of Collection: 1207-1  
 Container # 12315  
 Date: 12/15/2014  
 Time (24hr clock): 13:00

**Lab Use Only**  
 Matrix Codes: 1207A 2360  
 DW - Drinking Water  
 GW - Ground Water  
 SW - Surface Water  
 SO - Soil  
 SL - Sludge  
 LI - Other Liquid  
 SOL - Other Solid  
 WP - Wipe

**Lab Sample #**  
 Field ID / Point of Collection  
 Container #  
 Date  
 Time (24hr clock)

1207-1	12315	12/15/2014	13:00
1207-2	12315	12/15/2014	13:10
1207-3	12315	12/15/2014	13:20
1207-4	12315	12/15/2014	13:40
1207-5	12315	12/15/2014	13:50
1207-6	12315	12/15/2014	14:00

**Other:**  
 Full T1  
 Reduced T2  
 Comm A  
 Comm B  
 Other:

**Approved By:** \_\_\_\_\_  
**Date:** \_\_\_\_\_

**Standard - 15 Days**  
 1 Day  
 2 Day  
 3 Day  
 5 Day  
 10 Day

**Sample Custody must be documented below each time samples change possession, including courier delivery.**

**Received By:** FedEx 12/15/2014 14:30  
FedEx 12/15/2014 18:30

**Requested By:** \_\_\_\_\_  
**Date:** \_\_\_\_\_

**Comments / Remarks:**  
 All NDEP TO-15 is mandatory Full T1  
 SH1P1NG: 0.00  
 SPECTAL: 0.00  
 HANDLING: 0.00  
 TOTAL: 0.00  
 DV: 1000.00  
 SHIP PRIORITY OVERNIGHT DER (TRC): 620 6390 4688

20  
12CM

MONTHLY OPERATION MONITORING & MAINTENANCE REPORT

Former Agra CCC/USDA

Proj. # 1491

Facility Name: Former Agra CCC/USDA  
 Facility Address: 571 Railroad Ave, Agra, Kansas  
 Consultant: GreenField Contractors, Inc.  
 Tim Face  
 Reporting Period: 12-31-14 thru 12-31-14  
 Days In Reporting Period:  
 Field Sheet Revision Date:

Operating Status: Arrived 12/31/14 Off. Departure On 12/31/14  
 Pre-KO Tank Vacuum (H2O): 43.2  
 Pre-Post Filler Vacuum (H2O): 55.164  
 Cumulative Flowrate (cfm) Sum of SVE Wells: 183  
 O2 Readings (%): 20.9  
 CO2 Readings (%): 0.0  
 TPH (PbD) Readings (ppm): 0.0

VAPOR EXTRACTION/INJECTION INFORMATION  
 Design Parameters for Vapor Extraction System:  
 Reporting Period Parameters:  
 Blower Operation:  
 Hour Meter Reading:  
 Design Parameters for Air Sparge System:  
 Reporting Period Parameters:  
 Blower Operation:  
 Hour Meter Reading:

Well ID	ISDE No.	Temp. (F)	Temp. (C)	Depth to Water (ft)	Depth to Piezometer (ft)	Water Level Elevation	Free Phase Prod. Elev.	Free Phase Prod. TDS
GW-1		31.87		41.64				0.0
GW-3		34.46		41.58				
GW-4		41.58		41.87				

SYSTEM DOWN TIME SUMMARY  
 Evaluation for Down Time (Indicate Corrective Measures Taken)

DATE	From	To	Description of Work Performed	Performed By
12-31-14			K.O. Tank Drained Filters SVE <del>blow</del> / <del>sys</del> / <del>checked</del> ASP Blower Grease Added Cleaned SVE lines Yes Cleaned Flowmeters Yes Used weedwacker around trailer Yes Swept trailer Yes Sensesphone Surge Protector Bad Adjusted Air dilution: From: <del>Close</del> To: <del>Close</del> AIR Sparge vane measurement minimum 26 MM	T. Doak

Check: Quarterly  
 Vane Width: Beckler 3.60  
 Need

SVE UNIT	Vac @ Manifold (H2O)	Direct Read Flowrate (cfm) 2" line	O2 Readings (%)	CO2 Readings (%)	TPH/Drater Readings (ppm)	Vac @ Wellhead (H2O)
SVE-1	8.4	50	20.9	0	0	2.5
SVE-2	7.8	50	20.9	0	0	2.7
SVE-3	19.7	83	20.9	0	0	5.5
SVE-4						
SVE-5						

SVE WELL FIELD DATA

SVE UNIT	Vac @ Manifold (H2O)	Direct Read Flowrate (cfm) 2" line	O2 Readings (%)	CO2 Readings (%)	TPH/Drater Readings (ppm)	Vac @ Wellhead (H2O)
SVE-1	8.4	50	20.9	0	0	2.5
SVE-2	7.8	50	20.9	0	0	2.7
SVE-3	19.7	83	20.9	0	0	5.5
SVE-4						
SVE-5						

SPARGE UNIT FIELD DATA

SPARGE UNIT	Pressure (psf)	Flow Rate (cfm)	Bleed Off (% Open)	Pre Air Temp. (deg. F)	Post Air Temp. (deg. F)
	14.3	14.1	closed	94°	

SPARGE WELL FIELD DATA

SPARGE WELL	Pressure @ Manifold (psf)	Pressure @ Wellhead (psf)	Direct Read Flow Rate (cfm)
AS-1	4.26	3.34	6.8
AS-2	7.37	6.76	5.5
AS-3	10.0 +	10.0 +	1.8
AS-4			
AS-5			



Former Agra CCC/USDA Agra, Kansas

MONTHLY SVE SCREEN EXPOSURE CALCULATION SHEET

SVE Well	Depth To Water Feet BGS (Rim)	Wellhead Vacuum (In./Ft. H <sub>2</sub> O)	Minus	Depth to Top of Screen	Equals	Length of Screen Exposed (FT.)
SVE-1	6221 + 622 - 4 + 2 41.76	.21	-	20	=	21.55
SVE-2		.23	-	20	=	21.53
SVE-3		.46	-	20	=	21.3
SVE-4			-	20	=	
SVE-2			-	20	=	

NOTE:  
 1 PSI = 2.77 INCHES OF WATER  
 1 INCH HG = 13.6 INCHES OF WATER  
 Positive screen value equals length of screen exposed  
 Negative screen value equals length of screen flooded

Measurements Collected By: T. Duval  
 Date Measurements Collected: 12-31-14

Comments

Former Agra CCC/USDA

MONTHLY SPARGE SCREEN EXPOSURE CALCULATION SHEET

AS Well	Depth to Water Below TOC PSI	Plus / Minus	Difference in TOC Elevation between MW- and AS Well	Adjusted SYL Equals	Depth to Top of Sparge Screen (FT)	Adjusted Minus SYL	Calculation to Determine PSI Needed	Wellhead Pressure Needed to Overcome Water Column
AS-1	51.37	-		*	51.37	X	0.434	41.17
AS-2	56	-		*	56	X	0.434	7.05
AS-3	55.9	-		*	55.9	X	0.434	5.27
AS-4	58	-		*	58	X	0.434	7.05
AS-5	58.27	-		*	58.27	X	0.434	6.30

Measurements Collected By: T. Duval

Date Measurements Collected: 12-31-14

Comments

Operating Status: Arrival On/Off: Departure On/Off

SVE UNIT	Pre KO Tank Vacuum (H2O)	Pre/Post Filler Vacuum (H2O)	Deaeration Air Flowrate (cfm)	Cumulative Flowrate Sum of SVE Wells	O2 Readings (%)	CO2 Readings (%)	TPH (PID) Readings (ppm)
	44.7	56.64	closed	180	20.9	1.0	1.0

SVE WELL FIELD DATA

SVE WELL	Vac @ Manifold (H2O)	Direct Read Flowrate (cfm) 2" line	O2 Readings (%)	CO2 Readings (%)	TPH/Trager Readings (ppm)	Vac. @ Wellhead (H2O)
SVE-1	8.1	50	20.9	1.0	1.0	2.9
SVE-2	8.4	50	20.9	1.0	1.0	2.9
SVE-3	20.4	30	20.9	1.0	1.0	7.3
SVE-4						
SVE-5						

SPARGE UNIT FIELD DATA

Operating Status: Arrival On/Off: Departure On/Off

SPARGE UNIT	Pressure (ps)	Flow Rate (cfm)	Bleed Off (% Open)	Pre Air Temp (deg. F)	Post Air Temp (deg. F)
	14.4	16.0	closed	85	

SPARGE WELL FIELD DATA

SPARGE WELL	Pressure @ Manifold (ps)	Pressure @ Wellhead (ps)	Direct Read Flow Rate (cfm)
AS-1	44.2	3.63	7.0
AS-2	7.78	7.09	7.0
AS-3	10.4	10.4	2.0
AS-4			
AS-5			

Facility Name: Former Agra CCC/USDA  
 Facility Address: 671 Railroad Ave, Agra, Kansas  
 Consultant: GreenField Contractors, Inc.  
 Reporting Period: 10-25-14 thru 11-26-14  
 Days in Reporting Period: 10-25-14 thru 11-26-14  
 Field Sheet Revision Date: 11-26-14

Proj. # 1491  
 Inspector: T. Dorn  
 Inspection Date: 11-26-14  
 Inspection Time: 11:00  
 Electrical Meter Reading: 51985

VAPOR EXTRACTION/INJECTION INFORMATION

Design Parameters for Vapor Extraction System:  
 Reporting Period Parameters:  
 Blower Operation: 250 SCFM "H2O  
 X 180 SCFM "H2O  
 Continual Cycling Present  
 41952.3 Previous 42622.2  
 Blower Operation: 25 SCFM 12 PSI  
 X 16.0 SCFM 11.4 PSI  
 Continual Cycling Present  
 33891.2 Previous 34569.1 Present

GROUNDWATER ELEVATIONS

Well ID	NDHE Site I.D.	Time	TOC	Origin to	Water Level Elevation	Flow Rate Prod. Elev.	Flow Rate Prod. Thick.	DLO
GW-1		413.78		Water (TOC)				
GW-3		413.36		Product (TOC)				
GW-4		413.58						

SYSTEM DOWN TIME SUMMARY  
 Explanations for Down Time (Indicate Corrective Measures Taken)

GATES From: To: /

Date of Changes: / /

REMEDIATION SYSTEM MAINTENANCE RECORD

Date of Changes	Description of Work Performed	Performed by
11-26-14	K.O. Tank Drained Filters SVE Replaced A/SP Blower Grease Added Cleaned SVE lines Yes Cleaned Flowmeters Yes Used wastewater around trailer Yes Swept trailer Yes Sensaphone Surge Protector Good Adjusted Air dilution: From: 1.0 To: 1.0	T. Dorn

Check. Quarterly Vane Width: Becker 3 60  
 AIR Sparge vane measurement minimum 26 MM

SVE Filler	Scrubbing	Need
Air Sparge Filter		

Former Agra CCC/USDA Agra, Kansas

MONTHLY SVE SCREEN EXPOSURE CALCULATION SHEET

SVE Well	Depth To Water Feet BGS (Rim)	Wellhead Vacuum (in./Ft. H <sub>2</sub> O)	Minus	Depth to Top of Screen	Length of Screen Exposed (Ft.)
SVE-1	640-1 + 640-4 + 2 = 411.9	.24	20	216.6	
SVE-2		.24	20	216.6	
SVE-3		.61	20	212.9	
SVE-4			20		
SVE-2			20		

NOTE:  
 1 PSI = 2.77 INCHES OF WATER  
 1 INCH HG = 13.6 INCHES OF WATER  
 Positive screen value equals length of screen exposed  
 Negative screen value equals length of screen flooded

Measurements Collected By T. DeLoach

Date Measurements Collected 11-26-14

Comments \_\_\_\_\_

Former Agra CCC/USDA

MONTHLY SPARGE SCREEN EXPOSURE CALCULATION SHEET

AS Well	Depth to Water Below TOC Feet	Plus / Minus TOC	Reference in TOC Emission Rate MWL and AS Well	Adjusted Equals SWL	Depth to Top Sparge Screen (Ft)	Adjusted SWL	Equals	Calculation to Determine PSI Needed	Wellhead Pressure Needed Equals Water Column
AS-1	51.37	-			51.37	41.9	=	0.634	41.1
AS-2	58	-			58		=	0.634	6.99
AS-3	53.9	-			53.9		=	0.634	5.21
AS-4	58	-			58		=	0.634	6.99
AS-5	56.27	-			56.27		=	0.634	6.24

Measurements Collected By T. DeLoach

Date Measurements Collected 11-26-14

Comments \_\_\_\_\_

**Supplement 2:**

**GreenField Report for Monthly OMM Event on February 27, 2015**



March 3, 2015

Lorraine M. LaFreniere, Ph.D., Manager  
Applied Geosciences and Environmental Management Section  
Environmental Science Division  
Argonne National Laboratory  
9700 South Cass Avenue, Building 203  
Argonne, Illinois 60439-4843

**RE: Former CCC/USDA Site, Main & Railroad Streets, Agra, Kansas  
Thirteenth Monthly OMM Report of the Third Scope of OMM Services**

Ms. LaFreniere,

GreenField Contractors, Inc. is submitting the attached copy of field notes from the February 27, 2015 monthly OMM event conducted at the Agra CCC/USDA remedial site. The soil vapor extraction (SVE) system was operating at a cumulative airflow rate of 180 standard cubic feet per minute (scfm) and a vacuum of 47.7 inches of water. Operating parameters were collected with SVE-1 through 3 operating. The air sparge system was operating at a pressure of 16.5 psi and cumulative airflow rate of 16.9 scfm. Operating parameters were collected with AS-1 through 3 operating. Wellhead pressures ranged from 4.34 to greater than 10 psi. Please contact me if you have any question concerning this report or the remedial project in general.

Sincerely,

Melisa McElwee  
GreenField Contractors, Inc.

MONTHLY OPERATION MONITORING & MAINTENANCE REPORT

Facility Name: Former Agra CCC/USDA  
 Facility Address: 671 Railroad Ave  
Agra, Kansas

PROJ. # 1491

Consultant: GreenField Contractors, Inc.

Inspector: Tim Dorch

Consultant Project Mgr: Tim Pace

Reporting Period: 1-23-15 thru 2-27-15

Inspection Date: 2-27-15

Days In Reporting Period: \_\_\_\_\_

Inspection Time: 11:15

Field Sheet Revision Date: \_\_\_\_\_

Electrical Meter Reading: 67549

VAPOR EXTRACTION/INJECTION INFORMATION			
Design Parameters for Vapor Extraction System:	<u>250</u>	SCFM	<u>40</u> "H2O
Reporting Period Parameters:	<u>180</u>	SCFM	<u>47.7</u> "H2O
Blower Operation:	<u>X</u>	Continual	Cycling
Hour Meter Reading:	<u>44017.9</u>	Previous	<u>44851.5</u> Present
Design Parameters for Air Sparge System:	<u>25</u>	SCFM	<u>12</u> PSI
Reporting Period Parameters:	<u>16.9</u>	SCFM	<u>16.5</u> PSI
Blower Operation:	<u>X</u>	Continual	Cycling
Hour Meter Reading:	<u>35964.8</u>	Previous	<u>36798.5</u> Present

GROUNDWATER ELEVATIONS									
Well I.D. No.	KDHE Site I.D.	Temp. Tag No.	TOC Elevation	Depth to Water (TOC)	Depth to Product (TOC)	Water Level Elevation	Free Phase Prod. Elev.	Free Phase Prod. Thick.	D.O.
GW-1		<u>413876</u>		<u>41.87</u>					
GW-3		<u>413863</u>		<u>41.84</u>					
GW-4		<u>423369</u>		<u>42.11</u>					

SYSTEM DOWN TIME SUMMARY		
DATES		Explanation for Down Time
From	To	(Indicate Corrective Measures Taken)
<u>/</u>	<u>/</u>	

REMEDIATION SYSTEM MAINTENANCE RECORD			
Date of Changes	Description of Work Performed		Performed by
<u>2-27-15</u>	K.O. Tank	<u>Drained</u>	K.O.Meter: Empty
	Filters SVE	<u>Checked</u>	Replaced Cleaned
	A/SP Blower Grease	<u>Checked</u>	Added Cleaned
	Cleared SVE lines	Yes	<u>No</u>
	Cleaned Flowmeters	Yes	<u>No</u>
	Used weedeater around trailer	Yes	<u>No</u>
	Swept trailer	<u>Yes</u>	No
	Sensaphone Surge Protector	<u>Good</u>	Bad
	Adjusted Air dilution:	From: <u>closed</u>	To: <u>closed</u>
	<u>Check Quarterly</u> Becker 3.60	Vane Width:	
	AIR Sparge vane measurement minimum 26 MM		

Need					
SVE Filter	Solberg				
Air Sparge Filter					

T. Dorh 2-27-15

Former Agra CCC/USDA

Proj. # 1491

Operating Status: Arrival  On /  Off Departure  On /  Off

SVE UNIT	Pre KO Tank Vacuum ("H2O)	Pre/Post Filter Vacuum ("H2O)	Dilution Air Flowrate (cfm)	Cumulative Flowrate (cfm) Sum of SVE Wells	O2 Readings (%)	CO2 Readings (%)	TPH (PID) Readings (ppm)
	47.7	60/67	closed	180	20.9	1.0	1.0

SVE WELL FIELD DATA

SVE WELL	Vac. @ Manifold ("H2O)	Direct Read Flowrate (cfm) 2" line	O2 Readings (%)	CO2 Readings (%)	TPH/Drager Readings (ppm)	Vac. @ Wellhead ("H2O)
SVE-1	8.0	50	20.9	1.0	1.0	2.5
SVE-2	6.8	50	20.9	1.0	1.0	2.2
SVE-3	17.8	80	20.9	1.0	1.0	8.9
SVE-4						
SVE-5						

SPARGE UNIT FIELD DATA

Operating Status: Arrival  On /  Off Departure  On /  Off

SPARGE UNIT	Pressure (psi)	Flow Rate (cfm)	Bleed Off (% Open)	Pre Air Temp. (deg. F)	Post Air Temp. (deg. F)
	16.5	16.9	closed	91°	

SPARGE WELL FIELD DATA

SPARGE WELL	Pressure @ Manifold (psi)	Pressure @ Wellhead (psi)	Direct Read Flow Rate (cfm)
AS-1	4.34	3.49	7.9
AS-2	7.56	6.79	7.0
AS-3	10+	10+	2.0
AS-4			
AS-5			

Former Agra CCC/USDA Agra, Kansas

MONTHLY SVE SCREEN EXPOSURE CALCULATION SHEET

SVE Well	Depth To Water Feet BGS (Rim)	Minus	Wellhead Vacuum (In./Ft. H2O)	Minus	Depth to Top of Screen	Equals	Length of Screen Exposed (Ft.)
SVE-1	$\frac{GW-1 + GW-4}{2}$ 41.99	-	.21	-	20	=	21.78
SVE-2		-	.18	-	20	=	21.81
SVE-3		-	.74	-	20	=	21.25
SVE-4		-		-	20	=	
SVE-2		-		-	20	=	

NOTE: 1 PSI = 27.7 INCHES OF WATER  
 1 INCH HG = 13.6 INCHES OF WATER  
 Positive screen value equals length of screen exposed  
 Negative screen value equals length of screen flooded

Measurements Collected By T. Decker

Date Measurements Collected 2-27-15

Comments \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



Former Agra CCC/USDA

MONTHLY SPARGE SCREEN EXPOSURE CALCULATION SHEET

AS Well	Depth to Water below TOC Feet	Plus / Minus	Difference in TOC Elevation Between MW- and AS Well	Equals	Adjusted SWL	Depth to Top of Sparge Screen (Ft)	Minus	Adjusted SWL	Times	Calculation to Determine Amt. PSI Needed	Equals	Wellhead Pressure Needed to Overcome Water Column
AS-1		-		=		51.37	-	41.99	X	0.434	=	4.07
AS-2		-		=		58	-		X	0.434	=	6.95
AS-3		-		=		53.9	-		X	0.434	=	5.17
AS-4		-		=		58	-		X	0.434	=	6.95
AS-5		-		=		56.27	-		X	0.434	=	6.20

Measurements Collected By T. Deah

Date Measurements Collected 2-27-15

Comments

**Supplement 3:**

**TestAmerica Data for Argonne's Quarterly Soil Gas Sampling  
on March 27, 2015**

## ANALYTICAL REPORT

Job Number: 200-27300-1

SDG Number: Agra (200-27300)

Job Description: Agra (200-27300)

Contract Number: 1E-30401

For:

Argonne National Laboratory

9700 South Cass Avenue

Building 203

Office B-141

Argonne, IL 60439

Attention: Ms. Esther Bowen



Approved for release.  
Kathryn A Kelly  
Project Manager I  
4/9/2015 12:14 PM

---

Kathryn A Kelly, Project Manager I  
30 Community Drive, South Burlington, VT, 05403  
kathryn.kelly@testamericainc.com  
04/09/2015

The test results in this report relate only to sample(s) as received by the laboratory. These test results were derived under a quality system that adheres to the requirements of NELAC. Pursuant to NELAC, this report may not be produced in full without written approval from the laboratory

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## **CASE NARRATIVE**

**Client: Argonne National Laboratory**

**Project: Agra (200-27300)**

**Report Number: 200-27300-1**

Enclosed is the data set for the referenced project work. With the exceptions noted as flags or footnotes, standard analytical protocols were followed in performing the analytical work and the applied control limits were met.

Calculations were performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples.

### **Receipt**

The samples were received on 03/30/2015. Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Shipping and Receiving section of this submittal.

### **USEPA Compendium Method TO-15**

The summa canisters and flow regulators that were used in the collection of the samples were prepared and supplied by TestAmerica Burlington. In analyzing the samples in the 1 L canisters in this sample set, the laboratory performed the analysis using a 20 milliliter sample volume. This equates to a 10 fold dilution over the method normally employed by the laboratory for the analysis of a 6 L canister.

The analytical results for the analysis of the samples in this sample set are reported in terms of parts per billion on a volume/volume basis (ppbv), and in terms of ug/cubic meter on a weight/volume basis (ug/m<sup>3</sup>). Within this submittal there are two analytical reports for each sample.

Each sample in the sample set was analyzed without a dilution. Samples AGSG1S-G-37180, AGSG2S-G-37182, and AGSG3S-G-37184 did have a high constituent concentrations of tetrahydrofuran. The presence of that compound was suspected of being related to the construction of the sampling points. The laboratory did identify the issue to the project team, and a decision was made not to pursue a quantitative analysis of tetrahydrofuran.

The responses for each of the target analytes met the 30.0 percent relative standard deviation criterion in the initial calibration. The initial calibration verification was performed using a standard formulation that was independent of the standards that were used for the calibration. The recovery of each target analyte in the initial calibration verification acquisition was between 70 percent and 130 percent. The response for each target analyte met the 30.0 percent difference criterion in the opening/continuing calibration check acquisition. Each of the analyses associated with the analytical work exhibited an acceptable internal standard performance. A laboratory control sample was prepared and analyzed with the samples in the analytical sequence, and the recovery of each target analyte was between 70 percent and 130 percent in that analysis. The analysis of the method blank associated with the analytical work was free of analyte contamination.

Manual integration was employed in deriving certain of the analytical results. The values that have been derived from manual integration are qualified on the quantitation reports. Extracted ion current profiles for each manual integration are included in the data package, and further documented at the end of this submittal.

## DATA REPORTING QUALIFIERS

Client: Argonne National Laboratory

Job Number: 200-27300-1  
Sdg Number: Agra (200-27300)

<b>Lab Section</b>	<b>Qualifier</b>	<b>Description</b>
Air - GC/MS VOA	U	Indicates the analyte was analyzed for but not detected.
	E	Result exceeded calibration range.

## SAMPLE SUMMARY

Client: Argonne National Laboratory

Job Number: 200-27300-1  
Sdg Number: Agra (200-27300)

<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Client Matrix</b>	<b>Date/Time Sampled</b>	<b>Date/Time Received</b>
200-27300-1	AGSG1S-G-37180	Air	03/27/2015 1330	03/30/2015 0835
200-27300-2	AGSG1D-G-37181	Air	03/27/2015 1351	03/30/2015 0835
200-27300-3	AGSG2S-G-37182	Air	03/27/2015 1411	03/30/2015 0835
200-27300-4	AGSG2D-G-37183	Air	03/27/2015 1448	03/30/2015 0835
200-27300-5	AGSG3S-G-37184	Air	03/27/2015 1514	03/30/2015 0835
200-27300-6	AGSG3D-G-37185	Air	03/27/2015 1523	03/30/2015 0835
200-27300-7	AGSG3DDUP-G-37186	Air	03/27/2015 1540	03/30/2015 0835
200-27300-8	AGBKGD-G-37187	Air	03/27/2015 1551	03/30/2015 0835



## METHOD SUMMARY

Client: Argonne National Laboratory

Job Number: 200-27300-1  
Sdg Number: Agra (200-27300)

<b>Description</b>	<b>Lab Location</b>	<b>Method</b>	<b>Preparation Method</b>
<b>Matrix: Air</b>			
Volatile Organic Compounds in Ambient Air	TAL BUR	EPA TO-15	
Collection via Summa Canister	TAL BUR		Summa Canister

### Lab References:

TAL BUR = TestAmerica Burlington

### Method References:

EPA = US Environmental Protection Agency

## METHOD / ANALYST SUMMARY

Client: Argonne National Laboratory

Job Number: 200-27300-1  
Sdg Number: Agra (200-27300)

<b>Method</b>	<b>Analyst</b>	<b>Analyst ID</b>
EPA TO-15	Desjardins, William R	WRD

## Quality Control Results

Client: Argonne National Laboratory

Job Number: 200-27300-1  
Sdg Number: Agra (200-27300)

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>Air - GC/MS VOA</b>					
<b>Analysis Batch:200-86294</b>					
LCS 200-86294/3	Lab Control Sample	T	Air	TO-15	
MB 200-86294/4	Method Blank	T	Air	TO-15	
200-27300-1	AGSG1S-G-37180	T	Air	TO-15	
200-27300-2	AGSG1D-G-37181	T	Air	TO-15	
200-27300-3	AGSG2S-G-37182	T	Air	TO-15	
200-27300-4	AGSG2D-G-37183	T	Air	TO-15	
200-27300-5	AGSG3S-G-37184	T	Air	TO-15	
200-27300-6	AGSG3D-G-37185	T	Air	TO-15	
200-27300-7	AGSG3DDUP-G-37186	T	Air	TO-15	
200-27300-8	AGBKGD-G-37187	T	Air	TO-15	

#### Report Basis

T = Total

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-27300-1

SDG No.: Agra (200-27300)

Instrument ID: CHX.i Analysis Batch Number: 86294

Lab Sample ID: 200-27300-7 Client Sample ID: AGSG3DDUP-G-37186

Date Analyzed: 04/01/15 19:42 Lab File ID: 12901-012.D GC Column: RTX-624 ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzene	11.45	Baseline Event	desjardin sb	04/02/15 08:26

# Method T015

---

Volatile Organic Compounds (GC/MS)  
by Method T015

FORM III  
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Matrix: Air Level: Low Lab File ID: 12901-003.D  
 Lab ID: LCS 200-86294/3 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	10.0	9.88	99	70-130	
Freon 22	10.0	9.65	97	70-130	
1,2-Dichlorotetrafluoroethane	10.0	11.4	114	70-130	
Chloromethane	10.0	9.38	94	70-130	
n-Butane	10.0	9.28	93	70-130	
Vinyl chloride	10.0	9.75	98	70-130	
1,3-Butadiene	10.0	9.50	95	70-130	
Bromomethane	10.0	10.5	105	70-130	
Chloroethane	10.0	9.60	96	70-130	
Bromoethene (Vinyl Bromide)	10.0	9.88	99	70-130	
Trichlorofluoromethane	10.0	9.77	98	70-130	
Freon TF	10.0	10.2	102	70-130	
1,1-Dichloroethene	10.0	10.0	100	70-130	
Acetone	10.0	9.14	91	70-130	
Isopropyl alcohol	10.0	7.94	79	70-130	
Carbon disulfide	10.0	11.6	116	70-130	
3-Chloropropene	10.0	8.14	81	70-130	
Methylene Chloride	10.0	8.95	90	70-130	
tert-Butyl alcohol	10.0	8.55	86	70-130	
Methyl tert-butyl ether	10.0	9.58	96	70-130	
trans-1,2-Dichloroethene	10.0	10.2	102	70-130	
n-Hexane	10.0	9.89	99	70-130	
1,1-Dichloroethane	10.0	9.77	98	70-130	
Methyl Ethyl Ketone	10.0	8.80	88	70-130	
cis-1,2-Dichloroethene	10.0	9.71	97	70-130	
Chloroform	10.0	9.73	97	70-130	
Tetrahydrofuran	10.0	9.85	98	70-130	
1,1,1-Trichloroethane	10.0	10.1	101	70-130	
Cyclohexane	10.0	10.0	100	70-130	
Carbon tetrachloride	10.0	10.0	100	70-130	
2,2,4-Trimethylpentane	10.0	9.51	95	70-130	
Benzene	10.0	9.95	100	70-130	
1,2-Dichloroethane	10.0	9.67	97	70-130	
n-Heptane	10.0	9.01	90	70-130	
Trichloroethene	10.0	9.60	96	70-130	
Methyl methacrylate	10.0	9.11	91	70-130	
1,2-Dichloropropane	10.0	9.02	90	70-130	
1,4-Dioxane	10.0	8.18	82	70-130	
Bromodichloromethane	10.0	9.42	94	70-130	
cis-1,3-Dichloropropene	10.0	9.23	92	70-130	
methyl isobutyl ketone	10.0	8.54	85	70-130	
Toluene	10.0	9.55	96	70-130	

# Column to be used to flag recovery and RPD values

FORM III  
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Matrix: Air Level: Low Lab File ID: 12901-003.D  
 Lab ID: LCS 200-86294/3 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
trans-1,3-Dichloropropene	10.0	8.84	88	70-130	
1,1,2-Trichloroethane	10.0	9.80	98	70-130	
Tetrachloroethene	10.0	9.69	97	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	8.66	87	70-130	
Dibromochloromethane	10.0	9.35	94	70-130	
1,2-Dibromoethane	10.0	9.86	99	70-130	
Chlorobenzene	10.0	9.49	95	70-130	
Ethylbenzene	10.0	9.56	96	70-130	
m,p-Xylene	20.0	19.2	96	70-130	
Xylene, o-	10.0	9.24	92	70-130	
Styrene	10.0	9.44	94	70-130	
Bromoform	10.0	9.56	96	70-130	
Cumene	10.0	9.30	93	70-130	
1,1,2,2-Tetrachloroethane	10.0	9.79	98	70-130	
n-Propylbenzene	10.0	9.62	96	70-130	
4-Ethyltoluene	10.0	10.0	100	70-130	
1,3,5-Trimethylbenzene	10.0	9.58	96	70-130	
2-Chlorotoluene	10.0	9.68	97	70-130	
tert-Butylbenzene	10.0	9.47	95	70-130	
1,2,4-Trimethylbenzene	10.0	9.57	96	70-130	
sec-Butylbenzene	10.0	9.60	96	70-130	
4-Isopropyltoluene	10.0	9.54	95	70-130	
1,3-Dichlorobenzene	10.0	9.89	99	70-130	
1,4-Dichlorobenzene	10.0	9.81	98	70-130	
Benzyl chloride	10.0	9.13	91	70-130	
n-Butylbenzene	10.0	10.2	102	70-130	
1,2-Dichlorobenzene	10.0	9.78	98	70-130	
1,2,4-Trichlorobenzene	10.0	8.62	86	70-130	
Hexachlorobutadiene	10.0	9.59	96	70-130	
Naphthalene	10.0	7.23	72	70-130	

# Column to be used to flag recovery and RPD values

FORM IV  
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Lab File ID: 12901-004.D Lab Sample ID: MB 200-86294/4  
 Matrix: Air Heated Purge: (Y/N) N  
 Instrument ID: CHX.i Date Analyzed: 04/01/2015 13:09  
 GC Column: RTX-624 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-86294/3	12901-003.D	04/01/2015 12:20
AGSG1D-G-37181	200-27300-2	12901-007.D	04/01/2015 15:36
AGSG2S-G-37182	200-27300-3	12901-008.D	04/01/2015 16:26
AGSG2D-G-37183	200-27300-4	12901-009.D	04/01/2015 17:15
AGSG3S-G-37184	200-27300-5	12901-010.D	04/01/2015 18:04
AGSG3D-G-37185	200-27300-6	12901-011.D	04/01/2015 18:52
AGSG3DDUP-G-37186	200-27300-7	12901-012.D	04/01/2015 19:42
AGBKGD-G-37187	200-27300-8	12901-013.D	04/01/2015 20:31
AGSG1S-G-37180	200-27300-1	12901-017.D	04/01/2015 23:47



FORM V  
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Lab File ID: 12677-001.D BFB Injection Date: 03/19/2015  
 Instrument ID: CHX.i BFB Injection Time: 16:11  
 Analysis Batch No.: 85787

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	13.7	
75	30.0 - 66.0% of mass 95	42.8	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.4	
173	Less than 2.0% of mass 174	0.8	(0.8)1
174	50.0 - 120.0% of mass 95	102.6	
175	4.0 - 9.0 % of mass 174	7.4	(7.2)1
176	93.0 - 101.0% of mass 174	100.0	(97.4)1
177	5.0 - 9.0% of mass 176	6.5	(6.5)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-85787/4	12677-004.D	03/19/2015	18:34
	IC 200-85787/5	12677-005.D	03/19/2015	19:23
	IC 200-85787/6	12677-006.D	03/19/2015	20:12
	IC 200-85787/7	12677-007.D	03/19/2015	21:01
	ICIS 200-85787/8	12677-008.D	03/19/2015	21:50
	IC 200-85787/9	12677-009.D	03/19/2015	22:39
	IC 200-85787/10	12677-010.D	03/19/2015	23:28
	IC 200-85787/11	12677-011.D	03/20/2015	00:18
	ICV 200-85787/19	12677-019.D	03/20/2015	09:46

FORM V  
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Lab File ID: 12901-001.D BFB Injection Date: 04/01/2015  
 Instrument ID: CHX.i BFB Injection Time: 10:44  
 Analysis Batch No.: 86294

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	14.0	
75	30.0 - 66.0% of mass 95	43.8	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.6	
173	Less than 2.0% of mass 174	0.8	(0.7)1
174	50.0 - 120.0% of mass 95	103.7	
175	4.0 - 9.0 % of mass 174	7.5	(7.2)1
176	93.0 - 101.0% of mass 174	100.3	(96.8)1
177	5.0 - 9.0% of mass 176	6.5	(6.4)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-86294/2	12901-002.D	04/01/2015	11:31
	LCS 200-86294/3	12901-003.D	04/01/2015	12:20
	MB 200-86294/4	12901-004.D	04/01/2015	13:09
AGSG1D-G-37181	200-27300-2	12901-007.D	04/01/2015	15:36
AGSG2S-G-37182	200-27300-3	12901-008.D	04/01/2015	16:26
AGSG2D-G-37183	200-27300-4	12901-009.D	04/01/2015	17:15
AGSG3S-G-37184	200-27300-5	12901-010.D	04/01/2015	18:04
AGSG3D-G-37185	200-27300-6	12901-011.D	04/01/2015	18:52
AGSG3DDUP-G-37186	200-27300-7	12901-012.D	04/01/2015	19:42
AGBKGD-G-37187	200-27300-8	12901-013.D	04/01/2015	20:31
AGSG1S-G-37180	200-27300-1	12901-017.D	04/01/2015	23:47

FORM VIII  
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Sample No.: ICIS 200-85787/8 Date Analyzed: 03/19/2015 21:50  
 Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32 (mm)  
 Lab File ID (Standard): 12677-008.D Heated Purge: (Y/N) N  
 Calibration ID: 30154

	BCM		DFB		CBZ	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	290160	10.32	1575648	12.32	1464918	18.53
UPPER LIMIT	406224	10.65	2205907	12.65	2050885	18.86
LOWER LIMIT	174096	9.99	945389	11.99	878951	18.20
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 200-85787/19	303857	10.32	1629499	12.32	1513223	18.53

BCM = Bromochloromethane  
 DFB = 1,4-Difluorobenzene  
 CBZ = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area  
 RT Limit = ± 0.33 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Sample No.: CCVIS 200-86294/2 Date Analyzed: 04/01/2015 11:31  
 Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32 (mm)  
 Lab File ID (Standard): 12901-002.D Heated Purge: (Y/N) N  
 Calibration ID: 30154

	BCM		DFB		CBZ		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	371842	10.31	1896832	12.30	1702998	18.52	
UPPER LIMIT	520579	10.64	2655565	12.63	2384197	18.85	
LOWER LIMIT	223105	9.98	1138099	11.97	1021799	18.19	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-86294/3	374125	10.31	1928413	12.31	1738345	18.53	
MB 200-86294/4	371129	10.31	1923339	12.30	1699587	18.52	
200-27300-2	AGSG1D-G-37181	347945	10.31	1791417	12.30	1586795	18.52
200-27300-3	AGSG2S-G-37182	351963	10.31	1797136	12.30	1575338	18.52
200-27300-4	AGSG2D-G-37183	343804	10.31	1769943	12.30	1511446	18.52
200-27300-5	AGSG3S-G-37184	344927	10.31	1766789	12.30	1508151	18.52
200-27300-6	AGSG3D-G-37185	339775	10.31	1728972	12.30	1479748	18.52
200-27300-7	AGSG3DDUP-G-37186	341319	10.31	1743145	12.30	1483158	18.52
200-27300-8	AGBKGD-G-37187	345273	10.31	1770534	12.30	1522874	18.52
200-27300-1	AGSG1S-G-37180	345766	10.32	1773694	12.31	1516651	18.52

BCM = Bromochloromethane  
 DFB = 1,4-Difluorobenzene  
 CBZ = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area  
 RT Limit = ± 0.33 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG1S-G-37180 Lab Sample ID: 200-27300-1  
 Matrix: Air Lab File ID: 12901-017.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 13:30  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 23:47  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
75-71-8	Dichlorodifluoromethane	120.91	5.0	U	5.0	
75-45-6	Freon 22	86.47	5.0	U	5.0	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	2.0	U	2.0	
74-87-3	Chloromethane	50.49	5.0	U	5.0	
106-97-8	n-Butane	58.12	8.2		5.0	
75-01-4	Vinyl chloride	62.50	2.0	U	2.0	
106-99-0	1,3-Butadiene	54.09	2.0	U	2.0	
74-83-9	Bromomethane	94.94	2.0	U	2.0	
75-00-3	Chloroethane	64.52	5.0	U	5.0	
593-60-2	Bromoethene (Vinyl Bromide)	106.96	2.0	U	2.0	
75-69-4	Trichlorofluoromethane	137.37	2.0	U	2.0	
76-13-1	Freon TF	187.38	2.0	U	2.0	
75-35-4	1,1-Dichloroethene	96.94	2.0	U	2.0	
67-64-1	Acetone	58.08	50	U	50	
67-63-0	Isopropyl alcohol	60.10	50	U	50	
75-15-0	Carbon disulfide	76.14	14		5.0	
107-05-1	3-Chloropropene	76.53	5.0	U	5.0	
75-09-2	Methylene Chloride	84.93	5.0	U	5.0	
75-65-0	tert-Butyl alcohol	74.12	50	U	50	
1634-04-4	Methyl tert-butyl ether	88.15	2.0	U	2.0	
156-60-5	trans-1,2-Dichloroethene	96.94	2.0	U	2.0	
110-54-3	n-Hexane	86.17	2.0	U	2.0	
75-34-3	1,1-Dichloroethane	98.96	2.0	U	2.0	
78-93-3	Methyl Ethyl Ketone	72.11	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	96.94	2.0	U	2.0	
67-66-3	Chloroform	119.38	2.0	U	2.0	
109-99-9	Tetrahydrofuran	72.11	1600	E	50	
71-55-6	1,1,1-Trichloroethane	133.41	2.0	U	2.0	
110-82-7	Cyclohexane	84.16	2.0	U	2.0	
56-23-5	Carbon tetrachloride	153.81	2.0	U	2.0	
540-84-1	2,2,4-Trimethylpentane	114.23	2.0	U	2.0	
71-43-2	Benzene	78.11	36		2.0	
107-06-2	1,2-Dichloroethane	98.96	2.0	U	2.0	
142-82-5	n-Heptane	100.21	2.0	U	2.0	
79-01-6	Trichloroethene	131.39	2.0	U	2.0	

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG1S-G-37180 Lab Sample ID: 200-27300-1  
 Matrix: Air Lab File ID: 12901-017.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 13:30  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 23:47  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
80-62-6	Methyl methacrylate	100.12	5.0	U	5.0
78-87-5	1,2-Dichloropropane	112.99	2.0	U	2.0
123-91-1	1,4-Dioxane	88.11	50	U	50
75-27-4	Bromodichloromethane	163.83	2.0	U	2.0
10061-01-5	cis-1,3-Dichloropropene	110.97	2.0	U	2.0
108-10-1	methyl isobutyl ketone	100.16	5.0	U	5.0
108-88-3	Toluene	92.14	2.7		2.0
10061-02-6	trans-1,3-Dichloropropene	110.97	2.0	U	2.0
79-00-5	1,1,2-Trichloroethane	133.41	2.0	U	2.0
127-18-4	Tetrachloroethene	165.83	2.0	U	2.0
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	5.0	U	5.0
124-48-1	Dibromochloromethane	208.29	2.0	U	2.0
106-93-4	1,2-Dibromoethane	187.87	2.0	U	2.0
108-90-7	Chlorobenzene	112.56	2.0	U	2.0
100-41-4	Ethylbenzene	106.17	2.0	U	2.0
179601-23-1	m,p-Xylene	106.17	5.0	U	5.0
95-47-6	Xylene, o-	106.17	2.0	U	2.0
100-42-5	Styrene	104.15	2.0	U	2.0
75-25-2	Bromoform	252.75	2.0	U	2.0
98-82-8	Cumene	120.19	6.1		2.0
79-34-5	1,1,2,2-Tetrachloroethane	167.85	2.0	U	2.0
103-65-1	n-Propylbenzene	120.19	2.0	U	2.0
622-96-8	4-Ethyltoluene	120.20	2.0	U	2.0
108-67-8	1,3,5-Trimethylbenzene	120.20	2.0	U	2.0
95-49-8	2-Chlorotoluene	126.59	2.0	U	2.0
98-06-6	tert-Butylbenzene	134.22	2.0	U	2.0
95-63-6	1,2,4-Trimethylbenzene	120.20	2.0	U	2.0
135-98-8	sec-Butylbenzene	134.22	2.0	U	2.0
99-87-6	4-Isopropyltoluene	134.22	2.0	U	2.0
541-73-1	1,3-Dichlorobenzene	147.00	2.0	U	2.0
106-46-7	1,4-Dichlorobenzene	147.00	2.0	U	2.0
100-44-7	Benzyl chloride	126.58	2.0	U	2.0
104-51-8	n-Butylbenzene	134.22	2.0	U	2.0
95-50-1	1,2-Dichlorobenzene	147.00	2.0	U	2.0

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG1S-G-37180 Lab Sample ID: 200-27300-1  
 Matrix: Air Lab File ID: 12901-017.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 13:30  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 23:47  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
120-82-1	1,2,4-Trichlorobenzene	181.45	5.0	U	5.0	
87-68-3	Hexachlorobutadiene	260.76	2.0	U	2.0	
91-20-3	Naphthalene	128.17	5.0	U	5.0	

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG1S-G-37180 Lab Sample ID: 200-27300-1  
 Matrix: Air Lab File ID: 12901-017.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 13:30  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 23:47  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
75-71-8	Dichlorodifluoromethane	120.91	25	U	25
75-45-6	Freon 22	86.47	18	U	18
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	14	U	14
74-87-3	Chloromethane	50.49	10	U	10
106-97-8	n-Butane	58.12	19		12
75-01-4	Vinyl chloride	62.50	5.1	U	5.1
106-99-0	1,3-Butadiene	54.09	4.4	U	4.4
74-83-9	Bromomethane	94.94	7.8	U	7.8
75-00-3	Chloroethane	64.52	13	U	13
593-60-2	Bromoethene (Vinyl Bromide)	106.96	8.7	U	8.7
75-69-4	Trichlorofluoromethane	137.37	11	U	11
76-13-1	Freon TF	187.38	15	U	15
75-35-4	1,1-Dichloroethene	96.94	7.9	U	7.9
67-64-1	Acetone	58.08	120	U	120
67-63-0	Isopropyl alcohol	60.10	120	U	120
75-15-0	Carbon disulfide	76.14	44		16
107-05-1	3-Chloropropene	76.53	16	U	16
75-09-2	Methylene Chloride	84.93	17	U	17
75-65-0	tert-Butyl alcohol	74.12	150	U	150
1634-04-4	Methyl tert-butyl ether	88.15	7.2	U	7.2
156-60-5	trans-1,2-Dichloroethene	96.94	7.9	U	7.9
110-54-3	n-Hexane	86.17	7.0	U	7.0
75-34-3	1,1-Dichloroethane	98.96	8.1	U	8.1
78-93-3	Methyl Ethyl Ketone	72.11	15	U	15
156-59-2	cis-1,2-Dichloroethene	96.94	7.9	U	7.9
67-66-3	Chloroform	119.38	9.8	U	9.8
109-99-9	Tetrahydrofuran	72.11	4700	E	150
71-55-6	1,1,1-Trichloroethane	133.41	11	U	11
110-82-7	Cyclohexane	84.16	6.9	U	6.9
56-23-5	Carbon tetrachloride	153.81	13	U	13
540-84-1	2,2,4-Trimethylpentane	114.23	9.3	U	9.3
71-43-2	Benzene	78.11	120		6.4
107-06-2	1,2-Dichloroethane	98.96	8.1	U	8.1
142-82-5	n-Heptane	100.21	8.2	U	8.2
79-01-6	Trichloroethene	131.39	11	U	11



FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG1S-G-37180 Lab Sample ID: 200-27300-1  
 Matrix: Air Lab File ID: 12901-017.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 13:30  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 23:47  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
80-62-6	Methyl methacrylate	100.12	20	U	20
78-87-5	1,2-Dichloropropane	112.99	9.2	U	9.2
123-91-1	1,4-Dioxane	88.11	180	U	180
75-27-4	Bromodichloromethane	163.83	13	U	13
10061-01-5	cis-1,3-Dichloropropene	110.97	9.1	U	9.1
108-10-1	methyl isobutyl ketone	100.16	20	U	20
108-88-3	Toluene	92.14	10		7.5
10061-02-6	trans-1,3-Dichloropropene	110.97	9.1	U	9.1
79-00-5	1,1,2-Trichloroethane	133.41	11	U	11
127-18-4	Tetrachloroethene	165.83	14	U	14
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	20	U	20
124-48-1	Dibromochloromethane	208.29	17	U	17
106-93-4	1,2-Dibromoethane	187.87	15	U	15
108-90-7	Chlorobenzene	112.56	9.2	U	9.2
100-41-4	Ethylbenzene	106.17	8.7	U	8.7
179601-23-1	m,p-Xylene	106.17	22	U	22
95-47-6	Xylene, o-	106.17	8.7	U	8.7
100-42-5	Styrene	104.15	8.5	U	8.5
75-25-2	Bromoform	252.75	21	U	21
98-82-8	Cumene	120.19	30		9.8
79-34-5	1,1,2,2-Tetrachloroethane	167.85	14	U	14
103-65-1	n-Propylbenzene	120.19	9.8	U	9.8
622-96-8	4-Ethyltoluene	120.20	9.8	U	9.8
108-67-8	1,3,5-Trimethylbenzene	120.20	9.8	U	9.8
95-49-8	2-Chlorotoluene	126.59	10	U	10
98-06-6	tert-Butylbenzene	134.22	11	U	11
95-63-6	1,2,4-Trimethylbenzene	120.20	9.8	U	9.8
135-98-8	sec-Butylbenzene	134.22	11	U	11
99-87-6	4-Isopropyltoluene	134.22	11	U	11
541-73-1	1,3-Dichlorobenzene	147.00	12	U	12
106-46-7	1,4-Dichlorobenzene	147.00	12	U	12
100-44-7	Benzyl chloride	126.58	10	U	10
104-51-8	n-Butylbenzene	134.22	11	U	11
95-50-1	1,2-Dichlorobenzene	147.00	12	U	12

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG1S-G-37180 Lab Sample ID: 200-27300-1  
 Matrix: Air Lab File ID: 12901-017.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 13:30  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 23:47  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
120-82-1	1,2,4-Trichlorobenzene	181.45	37	U	37	
87-68-3	Hexachlorobutadiene	260.76	21	U	21	
91-20-3	Naphthalene	128.17	26	U	26	

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG1D-G-37181 Lab Sample ID: 200-27300-2  
 Matrix: Air Lab File ID: 12901-007.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 13:51  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 15:36  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
75-71-8	Dichlorodifluoromethane	120.91	5.0	U	5.0	
75-45-6	Freon 22	86.47	5.0	U	5.0	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	2.0	U	2.0	
74-87-3	Chloromethane	50.49	5.0	U	5.0	
106-97-8	n-Butane	58.12	5.0	U	5.0	
75-01-4	Vinyl chloride	62.50	2.0	U	2.0	
106-99-0	1,3-Butadiene	54.09	2.0	U	2.0	
74-83-9	Bromomethane	94.94	2.0	U	2.0	
75-00-3	Chloroethane	64.52	5.0	U	5.0	
593-60-2	Bromoethene (Vinyl Bromide)	106.96	2.0	U	2.0	
75-69-4	Trichlorofluoromethane	137.37	2.0	U	2.0	
76-13-1	Freon TF	187.38	2.0	U	2.0	
75-35-4	1,1-Dichloroethene	96.94	2.0	U	2.0	
67-64-1	Acetone	58.08	50	U	50	
67-63-0	Isopropyl alcohol	60.10	50	U	50	
75-15-0	Carbon disulfide	76.14	5.0	U	5.0	
107-05-1	3-Chloropropene	76.53	5.0	U	5.0	
75-09-2	Methylene Chloride	84.93	5.0	U	5.0	
75-65-0	tert-Butyl alcohol	74.12	50	U	50	
1634-04-4	Methyl tert-butyl ether	88.15	2.0	U	2.0	
156-60-5	trans-1,2-Dichloroethene	96.94	2.0	U	2.0	
110-54-3	n-Hexane	86.17	2.0	U	2.0	
75-34-3	1,1-Dichloroethane	98.96	2.0	U	2.0	
78-93-3	Methyl Ethyl Ketone	72.11	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	96.94	2.0	U	2.0	
67-66-3	Chloroform	119.38	2.0	U	2.0	
109-99-9	Tetrahydrofuran	72.11	50	U	50	
71-55-6	1,1,1-Trichloroethane	133.41	2.0	U	2.0	
110-82-7	Cyclohexane	84.16	2.0	U	2.0	
56-23-5	Carbon tetrachloride	153.81	2.0	U	2.0	
540-84-1	2,2,4-Trimethylpentane	114.23	2.0	U	2.0	
71-43-2	Benzene	78.11	6.8		2.0	
107-06-2	1,2-Dichloroethane	98.96	2.0	U	2.0	
142-82-5	n-Heptane	100.21	2.0	U	2.0	
79-01-6	Trichloroethene	131.39	2.0	U	2.0	

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG1D-G-37181 Lab Sample ID: 200-27300-2  
 Matrix: Air Lab File ID: 12901-007.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 13:51  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 15:36  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
80-62-6	Methyl methacrylate	100.12	5.0	U	5.0
78-87-5	1,2-Dichloropropane	112.99	2.0	U	2.0
123-91-1	1,4-Dioxane	88.11	50	U	50
75-27-4	Bromodichloromethane	163.83	2.0	U	2.0
10061-01-5	cis-1,3-Dichloropropene	110.97	2.0	U	2.0
108-10-1	methyl isobutyl ketone	100.16	5.0	U	5.0
108-88-3	Toluene	92.14	2.0	U	2.0
10061-02-6	trans-1,3-Dichloropropene	110.97	2.0	U	2.0
79-00-5	1,1,2-Trichloroethane	133.41	2.0	U	2.0
127-18-4	Tetrachloroethene	165.83	2.0	U	2.0
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	5.0	U	5.0
124-48-1	Dibromochloromethane	208.29	2.0	U	2.0
106-93-4	1,2-Dibromoethane	187.87	2.0	U	2.0
108-90-7	Chlorobenzene	112.56	2.0	U	2.0
100-41-4	Ethylbenzene	106.17	2.0	U	2.0
179601-23-1	m,p-Xylene	106.17	5.0	U	5.0
95-47-6	Xylene, o-	106.17	2.0	U	2.0
100-42-5	Styrene	104.15	2.0	U	2.0
75-25-2	Bromoform	252.75	2.0	U	2.0
98-82-8	Cumene	120.19	2.0	U	2.0
79-34-5	1,1,2,2-Tetrachloroethane	167.85	2.0	U	2.0
103-65-1	n-Propylbenzene	120.19	2.0	U	2.0
622-96-8	4-Ethyltoluene	120.20	2.0	U	2.0
108-67-8	1,3,5-Trimethylbenzene	120.20	2.0	U	2.0
95-49-8	2-Chlorotoluene	126.59	2.0	U	2.0
98-06-6	tert-Butylbenzene	134.22	2.0	U	2.0
95-63-6	1,2,4-Trimethylbenzene	120.20	2.0	U	2.0
135-98-8	sec-Butylbenzene	134.22	2.0	U	2.0
99-87-6	4-Isopropyltoluene	134.22	2.0	U	2.0
541-73-1	1,3-Dichlorobenzene	147.00	2.0	U	2.0
106-46-7	1,4-Dichlorobenzene	147.00	2.0	U	2.0
100-44-7	Benzyl chloride	126.58	2.0	U	2.0
104-51-8	n-Butylbenzene	134.22	2.0	U	2.0
95-50-1	1,2-Dichlorobenzene	147.00	2.0	U	2.0

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG1D-G-37181 Lab Sample ID: 200-27300-2  
 Matrix: Air Lab File ID: 12901-007.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 13:51  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 15:36  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
120-82-1	1,2,4-Trichlorobenzene	181.45	5.0	U	5.0
87-68-3	Hexachlorobutadiene	260.76	2.0	U	2.0
91-20-3	Naphthalene	128.17	5.0	U	5.0

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG1D-G-37181 Lab Sample ID: 200-27300-2  
 Matrix: Air Lab File ID: 12901-007.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 13:51  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 15:36  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
75-71-8	Dichlorodifluoromethane	120.91	25	U	25
75-45-6	Freon 22	86.47	18	U	18
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	14	U	14
74-87-3	Chloromethane	50.49	10	U	10
106-97-8	n-Butane	58.12	12	U	12
75-01-4	Vinyl chloride	62.50	5.1	U	5.1
106-99-0	1,3-Butadiene	54.09	4.4	U	4.4
74-83-9	Bromomethane	94.94	7.8	U	7.8
75-00-3	Chloroethane	64.52	13	U	13
593-60-2	Bromoethene (Vinyl Bromide)	106.96	8.7	U	8.7
75-69-4	Trichlorofluoromethane	137.37	11	U	11
76-13-1	Freon TF	187.38	15	U	15
75-35-4	1,1-Dichloroethene	96.94	7.9	U	7.9
67-64-1	Acetone	58.08	120	U	120
67-63-0	Isopropyl alcohol	60.10	120	U	120
75-15-0	Carbon disulfide	76.14	16	U	16
107-05-1	3-Chloropropene	76.53	16	U	16
75-09-2	Methylene Chloride	84.93	17	U	17
75-65-0	tert-Butyl alcohol	74.12	150	U	150
1634-04-4	Methyl tert-butyl ether	88.15	7.2	U	7.2
156-60-5	trans-1,2-Dichloroethene	96.94	7.9	U	7.9
110-54-3	n-Hexane	86.17	7.0	U	7.0
75-34-3	1,1-Dichloroethane	98.96	8.1	U	8.1
78-93-3	Methyl Ethyl Ketone	72.11	15	U	15
156-59-2	cis-1,2-Dichloroethene	96.94	7.9	U	7.9
67-66-3	Chloroform	119.38	9.8	U	9.8
109-99-9	Tetrahydrofuran	72.11	150	U	150
71-55-6	1,1,1-Trichloroethane	133.41	11	U	11
110-82-7	Cyclohexane	84.16	6.9	U	6.9
56-23-5	Carbon tetrachloride	153.81	13	U	13
540-84-1	2,2,4-Trimethylpentane	114.23	9.3	U	9.3
71-43-2	Benzene	78.11	22		6.4
107-06-2	1,2-Dichloroethane	98.96	8.1	U	8.1
142-82-5	n-Heptane	100.21	8.2	U	8.2
79-01-6	Trichloroethene	131.39	11	U	11

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG1D-G-37181 Lab Sample ID: 200-27300-2  
 Matrix: Air Lab File ID: 12901-007.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 13:51  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 15:36  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
80-62-6	Methyl methacrylate	100.12	20	U	20
78-87-5	1,2-Dichloropropane	112.99	9.2	U	9.2
123-91-1	1,4-Dioxane	88.11	180	U	180
75-27-4	Bromodichloromethane	163.83	13	U	13
10061-01-5	cis-1,3-Dichloropropene	110.97	9.1	U	9.1
108-10-1	methyl isobutyl ketone	100.16	20	U	20
108-88-3	Toluene	92.14	7.5	U	7.5
10061-02-6	trans-1,3-Dichloropropene	110.97	9.1	U	9.1
79-00-5	1,1,2-Trichloroethane	133.41	11	U	11
127-18-4	Tetrachloroethene	165.83	14	U	14
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	20	U	20
124-48-1	Dibromochloromethane	208.29	17	U	17
106-93-4	1,2-Dibromoethane	187.87	15	U	15
108-90-7	Chlorobenzene	112.56	9.2	U	9.2
100-41-4	Ethylbenzene	106.17	8.7	U	8.7
179601-23-1	m,p-Xylene	106.17	22	U	22
95-47-6	Xylene, o-	106.17	8.7	U	8.7
100-42-5	Styrene	104.15	8.5	U	8.5
75-25-2	Bromoform	252.75	21	U	21
98-82-8	Cumene	120.19	9.8	U	9.8
79-34-5	1,1,2,2-Tetrachloroethane	167.85	14	U	14
103-65-1	n-Propylbenzene	120.19	9.8	U	9.8
622-96-8	4-Ethyltoluene	120.20	9.8	U	9.8
108-67-8	1,3,5-Trimethylbenzene	120.20	9.8	U	9.8
95-49-8	2-Chlorotoluene	126.59	10	U	10
98-06-6	tert-Butylbenzene	134.22	11	U	11
95-63-6	1,2,4-Trimethylbenzene	120.20	9.8	U	9.8
135-98-8	sec-Butylbenzene	134.22	11	U	11
99-87-6	4-Isopropyltoluene	134.22	11	U	11
541-73-1	1,3-Dichlorobenzene	147.00	12	U	12
106-46-7	1,4-Dichlorobenzene	147.00	12	U	12
100-44-7	Benzyl chloride	126.58	10	U	10
104-51-8	n-Butylbenzene	134.22	11	U	11
95-50-1	1,2-Dichlorobenzene	147.00	12	U	12

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG1D-G-37181 Lab Sample ID: 200-27300-2  
 Matrix: Air Lab File ID: 12901-007.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 13:51  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 15:36  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
120-82-1	1,2,4-Trichlorobenzene	181.45	37	U	37	
87-68-3	Hexachlorobutadiene	260.76	21	U	21	
91-20-3	Naphthalene	128.17	26	U	26	



FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG2S-G-37182 Lab Sample ID: 200-27300-3  
 Matrix: Air Lab File ID: 12901-008.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 14:11  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 16:26  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
75-71-8	Dichlorodifluoromethane	120.91	5.0	U	5.0
75-45-6	Freon 22	86.47	5.0	U	5.0
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	2.0	U	2.0
74-87-3	Chloromethane	50.49	5.0	U	5.0
106-97-8	n-Butane	58.12	6.9		5.0
75-01-4	Vinyl chloride	62.50	2.0	U	2.0
106-99-0	1,3-Butadiene	54.09	2.0	U	2.0
74-83-9	Bromomethane	94.94	2.0	U	2.0
75-00-3	Chloroethane	64.52	5.0	U	5.0
593-60-2	Bromoethene (Vinyl Bromide)	106.96	2.0	U	2.0
75-69-4	Trichlorofluoromethane	137.37	2.0	U	2.0
76-13-1	Freon TF	187.38	2.0	U	2.0
75-35-4	1,1-Dichloroethene	96.94	2.0	U	2.0
67-64-1	Acetone	58.08	50	U	50
67-63-0	Isopropyl alcohol	60.10	50	U	50
75-15-0	Carbon disulfide	76.14	11		5.0
107-05-1	3-Chloropropene	76.53	5.0	U	5.0
75-09-2	Methylene Chloride	84.93	5.0	U	5.0
75-65-0	tert-Butyl alcohol	74.12	50	U	50
1634-04-4	Methyl tert-butyl ether	88.15	2.0	U	2.0
156-60-5	trans-1,2-Dichloroethene	96.94	2.0	U	2.0
110-54-3	n-Hexane	86.17	2.0	U	2.0
75-34-3	1,1-Dichloroethane	98.96	2.0	U	2.0
78-93-3	Methyl Ethyl Ketone	72.11	5.0	U	5.0
156-59-2	cis-1,2-Dichloroethene	96.94	2.0	U	2.0
67-66-3	Chloroform	119.38	2.0	U	2.0
109-99-9	Tetrahydrofuran	72.11	470	E	50
71-55-6	1,1,1-Trichloroethane	133.41	2.0	U	2.0
110-82-7	Cyclohexane	84.16	2.0	U	2.0
56-23-5	Carbon tetrachloride	153.81	2.0	U	2.0
540-84-1	2,2,4-Trimethylpentane	114.23	2.0	U	2.0
71-43-2	Benzene	78.11	11		2.0
107-06-2	1,2-Dichloroethane	98.96	2.0	U	2.0
142-82-5	n-Heptane	100.21	2.0	U	2.0
79-01-6	Trichloroethene	131.39	2.0	U	2.0

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG2S-G-37182 Lab Sample ID: 200-27300-3  
 Matrix: Air Lab File ID: 12901-008.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 14:11  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 16:26  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
80-62-6	Methyl methacrylate	100.12	5.0	U	5.0
78-87-5	1,2-Dichloropropane	112.99	2.0	U	2.0
123-91-1	1,4-Dioxane	88.11	50	U	50
75-27-4	Bromodichloromethane	163.83	2.0	U	2.0
10061-01-5	cis-1,3-Dichloropropene	110.97	2.0	U	2.0
108-10-1	methyl isobutyl ketone	100.16	5.0	U	5.0
108-88-3	Toluene	92.14	2.0	U	2.0
10061-02-6	trans-1,3-Dichloropropene	110.97	2.0	U	2.0
79-00-5	1,1,2-Trichloroethane	133.41	2.0	U	2.0
127-18-4	Tetrachloroethene	165.83	2.0	U	2.0
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	5.0	U	5.0
124-48-1	Dibromochloromethane	208.29	2.0	U	2.0
106-93-4	1,2-Dibromoethane	187.87	2.0	U	2.0
108-90-7	Chlorobenzene	112.56	2.0	U	2.0
100-41-4	Ethylbenzene	106.17	2.0	U	2.0
179601-23-1	m,p-Xylene	106.17	5.0	U	5.0
95-47-6	Xylene, o-	106.17	2.0	U	2.0
100-42-5	Styrene	104.15	2.0	U	2.0
75-25-2	Bromoform	252.75	2.0	U	2.0
98-82-8	Cumene	120.19	3.8		2.0
79-34-5	1,1,2,2-Tetrachloroethane	167.85	2.0	U	2.0
103-65-1	n-Propylbenzene	120.19	2.0	U	2.0
622-96-8	4-Ethyltoluene	120.20	2.0	U	2.0
108-67-8	1,3,5-Trimethylbenzene	120.20	2.0	U	2.0
95-49-8	2-Chlorotoluene	126.59	2.0	U	2.0
98-06-6	tert-Butylbenzene	134.22	2.0	U	2.0
95-63-6	1,2,4-Trimethylbenzene	120.20	2.0	U	2.0
135-98-8	sec-Butylbenzene	134.22	2.0	U	2.0
99-87-6	4-Isopropyltoluene	134.22	2.0	U	2.0
541-73-1	1,3-Dichlorobenzene	147.00	2.0	U	2.0
106-46-7	1,4-Dichlorobenzene	147.00	2.0	U	2.0
100-44-7	Benzyl chloride	126.58	2.0	U	2.0
104-51-8	n-Butylbenzene	134.22	2.0	U	2.0
95-50-1	1,2-Dichlorobenzene	147.00	2.0	U	2.0

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG2S-G-37182 Lab Sample ID: 200-27300-3  
 Matrix: Air Lab File ID: 12901-008.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 14:11  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 16:26  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
120-82-1	1,2,4-Trichlorobenzene	181.45	5.0	U	5.0	
87-68-3	Hexachlorobutadiene	260.76	2.0	U	2.0	
91-20-3	Naphthalene	128.17	5.0	U	5.0	

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG2S-G-37182 Lab Sample ID: 200-27300-3  
 Matrix: Air Lab File ID: 12901-008.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 14:11  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 16:26  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
75-71-8	Dichlorodifluoromethane	120.91	25	U	25
75-45-6	Freon 22	86.47	18	U	18
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	14	U	14
74-87-3	Chloromethane	50.49	10	U	10
106-97-8	n-Butane	58.12	16		12
75-01-4	Vinyl chloride	62.50	5.1	U	5.1
106-99-0	1,3-Butadiene	54.09	4.4	U	4.4
74-83-9	Bromomethane	94.94	7.8	U	7.8
75-00-3	Chloroethane	64.52	13	U	13
593-60-2	Bromoethene (Vinyl Bromide)	106.96	8.7	U	8.7
75-69-4	Trichlorofluoromethane	137.37	11	U	11
76-13-1	Freon TF	187.38	15	U	15
75-35-4	1,1-Dichloroethene	96.94	7.9	U	7.9
67-64-1	Acetone	58.08	120	U	120
67-63-0	Isopropyl alcohol	60.10	120	U	120
75-15-0	Carbon disulfide	76.14	34		16
107-05-1	3-Chloropropene	76.53	16	U	16
75-09-2	Methylene Chloride	84.93	17	U	17
75-65-0	tert-Butyl alcohol	74.12	150	U	150
1634-04-4	Methyl tert-butyl ether	88.15	7.2	U	7.2
156-60-5	trans-1,2-Dichloroethene	96.94	7.9	U	7.9
110-54-3	n-Hexane	86.17	7.0	U	7.0
75-34-3	1,1-Dichloroethane	98.96	8.1	U	8.1
78-93-3	Methyl Ethyl Ketone	72.11	15	U	15
156-59-2	cis-1,2-Dichloroethene	96.94	7.9	U	7.9
67-66-3	Chloroform	119.38	9.8	U	9.8
109-99-9	Tetrahydrofuran	72.11	1400	E	150
71-55-6	1,1,1-Trichloroethane	133.41	11	U	11
110-82-7	Cyclohexane	84.16	6.9	U	6.9
56-23-5	Carbon tetrachloride	153.81	13	U	13
540-84-1	2,2,4-Trimethylpentane	114.23	9.3	U	9.3
71-43-2	Benzene	78.11	35		6.4
107-06-2	1,2-Dichloroethane	98.96	8.1	U	8.1
142-82-5	n-Heptane	100.21	8.2	U	8.2
79-01-6	Trichloroethene	131.39	11	U	11

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG2S-G-37182 Lab Sample ID: 200-27300-3  
 Matrix: Air Lab File ID: 12901-008.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 14:11  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 16:26  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
80-62-6	Methyl methacrylate	100.12	20	U	20
78-87-5	1,2-Dichloropropane	112.99	9.2	U	9.2
123-91-1	1,4-Dioxane	88.11	180	U	180
75-27-4	Bromodichloromethane	163.83	13	U	13
10061-01-5	cis-1,3-Dichloropropene	110.97	9.1	U	9.1
108-10-1	methyl isobutyl ketone	100.16	20	U	20
108-88-3	Toluene	92.14	7.5	U	7.5
10061-02-6	trans-1,3-Dichloropropene	110.97	9.1	U	9.1
79-00-5	1,1,2-Trichloroethane	133.41	11	U	11
127-18-4	Tetrachloroethene	165.83	14	U	14
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	20	U	20
124-48-1	Dibromochloromethane	208.29	17	U	17
106-93-4	1,2-Dibromoethane	187.87	15	U	15
108-90-7	Chlorobenzene	112.56	9.2	U	9.2
100-41-4	Ethylbenzene	106.17	8.7	U	8.7
179601-23-1	m,p-Xylene	106.17	22	U	22
95-47-6	Xylene, o-	106.17	8.7	U	8.7
100-42-5	Styrene	104.15	8.5	U	8.5
75-25-2	Bromoform	252.75	21	U	21
98-82-8	Cumene	120.19	19		9.8
79-34-5	1,1,2,2-Tetrachloroethane	167.85	14	U	14
103-65-1	n-Propylbenzene	120.19	9.8	U	9.8
622-96-8	4-Ethyltoluene	120.20	9.8	U	9.8
108-67-8	1,3,5-Trimethylbenzene	120.20	9.8	U	9.8
95-49-8	2-Chlorotoluene	126.59	10	U	10
98-06-6	tert-Butylbenzene	134.22	11	U	11
95-63-6	1,2,4-Trimethylbenzene	120.20	9.8	U	9.8
135-98-8	sec-Butylbenzene	134.22	11	U	11
99-87-6	4-Isopropyltoluene	134.22	11	U	11
541-73-1	1,3-Dichlorobenzene	147.00	12	U	12
106-46-7	1,4-Dichlorobenzene	147.00	12	U	12
100-44-7	Benzyl chloride	126.58	10	U	10
104-51-8	n-Butylbenzene	134.22	11	U	11
95-50-1	1,2-Dichlorobenzene	147.00	12	U	12

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG2S-G-37182 Lab Sample ID: 200-27300-3  
 Matrix: Air Lab File ID: 12901-008.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 14:11  
 Sample wt/vol: 20(mL) Date Analyzed: 04/01/2015 16:26  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
120-82-1	1,2,4-Trichlorobenzene	181.45	37	U	37	
87-68-3	Hexachlorobutadiene	260.76	21	U	21	
91-20-3	Naphthalene	128.17	26	U	26	

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG2D-G-37183 Lab Sample ID: 200-27300-4  
 Matrix: Air Lab File ID: 12901-009.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 14:48  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 17:15  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
75-71-8	Dichlorodifluoromethane	120.91	5.0	U	5.0	
75-45-6	Freon 22	86.47	5.0	U	5.0	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	2.0	U	2.0	
74-87-3	Chloromethane	50.49	5.0	U	5.0	
106-97-8	n-Butane	58.12	5.0	U	5.0	
75-01-4	Vinyl chloride	62.50	2.0	U	2.0	
106-99-0	1,3-Butadiene	54.09	2.0	U	2.0	
74-83-9	Bromomethane	94.94	2.0	U	2.0	
75-00-3	Chloroethane	64.52	5.0	U	5.0	
593-60-2	Bromoethene (Vinyl Bromide)	106.96	2.0	U	2.0	
75-69-4	Trichlorofluoromethane	137.37	2.0	U	2.0	
76-13-1	Freon TF	187.38	2.0	U	2.0	
75-35-4	1,1-Dichloroethene	96.94	2.0	U	2.0	
67-64-1	Acetone	58.08	50	U	50	
67-63-0	Isopropyl alcohol	60.10	50	U	50	
75-15-0	Carbon disulfide	76.14	5.0	U	5.0	
107-05-1	3-Chloropropene	76.53	5.0	U	5.0	
75-09-2	Methylene Chloride	84.93	5.0	U	5.0	
75-65-0	tert-Butyl alcohol	74.12	50	U	50	
1634-04-4	Methyl tert-butyl ether	88.15	2.0	U	2.0	
156-60-5	trans-1,2-Dichloroethene	96.94	2.0	U	2.0	
110-54-3	n-Hexane	86.17	2.0	U	2.0	
75-34-3	1,1-Dichloroethane	98.96	2.0	U	2.0	
78-93-3	Methyl Ethyl Ketone	72.11	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	96.94	2.0	U	2.0	
67-66-3	Chloroform	119.38	2.0	U	2.0	
109-99-9	Tetrahydrofuran	72.11	50	U	50	
71-55-6	1,1,1-Trichloroethane	133.41	2.0	U	2.0	
110-82-7	Cyclohexane	84.16	2.0	U	2.0	
56-23-5	Carbon tetrachloride	153.81	2.0	U	2.0	
540-84-1	2,2,4-Trimethylpentane	114.23	2.0	U	2.0	
71-43-2	Benzene	78.11	2.0	U	2.0	
107-06-2	1,2-Dichloroethane	98.96	2.0	U	2.0	
142-82-5	n-Heptane	100.21	2.0	U	2.0	
79-01-6	Trichloroethene	131.39	2.0	U	2.0	

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG2D-G-37183 Lab Sample ID: 200-27300-4  
 Matrix: Air Lab File ID: 12901-009.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 14:48  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 17:15  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
80-62-6	Methyl methacrylate	100.12	5.0	U	5.0
78-87-5	1,2-Dichloropropane	112.99	2.0	U	2.0
123-91-1	1,4-Dioxane	88.11	50	U	50
75-27-4	Bromodichloromethane	163.83	2.0	U	2.0
10061-01-5	cis-1,3-Dichloropropene	110.97	2.0	U	2.0
108-10-1	methyl isobutyl ketone	100.16	5.0	U	5.0
108-88-3	Toluene	92.14	2.0	U	2.0
10061-02-6	trans-1,3-Dichloropropene	110.97	2.0	U	2.0
79-00-5	1,1,2-Trichloroethane	133.41	2.0	U	2.0
127-18-4	Tetrachloroethene	165.83	2.0	U	2.0
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	5.0	U	5.0
124-48-1	Dibromochloromethane	208.29	2.0	U	2.0
106-93-4	1,2-Dibromoethane	187.87	2.0	U	2.0
108-90-7	Chlorobenzene	112.56	2.0	U	2.0
100-41-4	Ethylbenzene	106.17	2.0	U	2.0
179601-23-1	m,p-Xylene	106.17	5.0	U	5.0
95-47-6	Xylene, o-	106.17	2.0	U	2.0
100-42-5	Styrene	104.15	2.0	U	2.0
75-25-2	Bromoform	252.75	2.0	U	2.0
98-82-8	Cumene	120.19	2.0	U	2.0
79-34-5	1,1,2,2-Tetrachloroethane	167.85	2.0	U	2.0
103-65-1	n-Propylbenzene	120.19	2.0	U	2.0
622-96-8	4-Ethyltoluene	120.20	2.0	U	2.0
108-67-8	1,3,5-Trimethylbenzene	120.20	2.0	U	2.0
95-49-8	2-Chlorotoluene	126.59	2.0	U	2.0
98-06-6	tert-Butylbenzene	134.22	2.0	U	2.0
95-63-6	1,2,4-Trimethylbenzene	120.20	2.0	U	2.0
135-98-8	sec-Butylbenzene	134.22	2.0	U	2.0
99-87-6	4-Isopropyltoluene	134.22	2.0	U	2.0
541-73-1	1,3-Dichlorobenzene	147.00	2.0	U	2.0
106-46-7	1,4-Dichlorobenzene	147.00	2.0	U	2.0
100-44-7	Benzyl chloride	126.58	2.0	U	2.0
104-51-8	n-Butylbenzene	134.22	2.0	U	2.0
95-50-1	1,2-Dichlorobenzene	147.00	2.0	U	2.0



FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG2D-G-37183 Lab Sample ID: 200-27300-4  
 Matrix: Air Lab File ID: 12901-009.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 14:48  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 17:15  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
120-82-1	1,2,4-Trichlorobenzene	181.45	5.0	U	5.0	
87-68-3	Hexachlorobutadiene	260.76	2.0	U	2.0	
91-20-3	Naphthalene	128.17	5.0	U	5.0	

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG2D-G-37183 Lab Sample ID: 200-27300-4  
 Matrix: Air Lab File ID: 12901-009.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 14:48  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 17:15  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
75-71-8	Dichlorodifluoromethane	120.91	25	U	25
75-45-6	Freon 22	86.47	18	U	18
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	14	U	14
74-87-3	Chloromethane	50.49	10	U	10
106-97-8	n-Butane	58.12	12	U	12
75-01-4	Vinyl chloride	62.50	5.1	U	5.1
106-99-0	1,3-Butadiene	54.09	4.4	U	4.4
74-83-9	Bromomethane	94.94	7.8	U	7.8
75-00-3	Chloroethane	64.52	13	U	13
593-60-2	Bromoethene (Vinyl Bromide)	106.96	8.7	U	8.7
75-69-4	Trichlorofluoromethane	137.37	11	U	11
76-13-1	Freon TF	187.38	15	U	15
75-35-4	1,1-Dichloroethene	96.94	7.9	U	7.9
67-64-1	Acetone	58.08	120	U	120
67-63-0	Isopropyl alcohol	60.10	120	U	120
75-15-0	Carbon disulfide	76.14	16	U	16
107-05-1	3-Chloropropene	76.53	16	U	16
75-09-2	Methylene Chloride	84.93	17	U	17
75-65-0	tert-Butyl alcohol	74.12	150	U	150
1634-04-4	Methyl tert-butyl ether	88.15	7.2	U	7.2
156-60-5	trans-1,2-Dichloroethene	96.94	7.9	U	7.9
110-54-3	n-Hexane	86.17	7.0	U	7.0
75-34-3	1,1-Dichloroethane	98.96	8.1	U	8.1
78-93-3	Methyl Ethyl Ketone	72.11	15	U	15
156-59-2	cis-1,2-Dichloroethene	96.94	7.9	U	7.9
67-66-3	Chloroform	119.38	9.8	U	9.8
109-99-9	Tetrahydrofuran	72.11	150	U	150
71-55-6	1,1,1-Trichloroethane	133.41	11	U	11
110-82-7	Cyclohexane	84.16	6.9	U	6.9
56-23-5	Carbon tetrachloride	153.81	13	U	13
540-84-1	2,2,4-Trimethylpentane	114.23	9.3	U	9.3
71-43-2	Benzene	78.11	6.4	U	6.4
107-06-2	1,2-Dichloroethane	98.96	8.1	U	8.1
142-82-5	n-Heptane	100.21	8.2	U	8.2
79-01-6	Trichloroethene	131.39	11	U	11

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG2D-G-37183 Lab Sample ID: 200-27300-4  
 Matrix: Air Lab File ID: 12901-009.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 14:48  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 17:15  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
80-62-6	Methyl methacrylate	100.12	20	U	20
78-87-5	1,2-Dichloropropane	112.99	9.2	U	9.2
123-91-1	1,4-Dioxane	88.11	180	U	180
75-27-4	Bromodichloromethane	163.83	13	U	13
10061-01-5	cis-1,3-Dichloropropene	110.97	9.1	U	9.1
108-10-1	methyl isobutyl ketone	100.16	20	U	20
108-88-3	Toluene	92.14	7.5	U	7.5
10061-02-6	trans-1,3-Dichloropropene	110.97	9.1	U	9.1
79-00-5	1,1,2-Trichloroethane	133.41	11	U	11
127-18-4	Tetrachloroethene	165.83	14	U	14
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	20	U	20
124-48-1	Dibromochloromethane	208.29	17	U	17
106-93-4	1,2-Dibromoethane	187.87	15	U	15
108-90-7	Chlorobenzene	112.56	9.2	U	9.2
100-41-4	Ethylbenzene	106.17	8.7	U	8.7
179601-23-1	m,p-Xylene	106.17	22	U	22
95-47-6	Xylene, o-	106.17	8.7	U	8.7
100-42-5	Styrene	104.15	8.5	U	8.5
75-25-2	Bromoform	252.75	21	U	21
98-82-8	Cumene	120.19	9.8	U	9.8
79-34-5	1,1,2,2-Tetrachloroethane	167.85	14	U	14
103-65-1	n-Propylbenzene	120.19	9.8	U	9.8
622-96-8	4-Ethyltoluene	120.20	9.8	U	9.8
108-67-8	1,3,5-Trimethylbenzene	120.20	9.8	U	9.8
95-49-8	2-Chlorotoluene	126.59	10	U	10
98-06-6	tert-Butylbenzene	134.22	11	U	11
95-63-6	1,2,4-Trimethylbenzene	120.20	9.8	U	9.8
135-98-8	sec-Butylbenzene	134.22	11	U	11
99-87-6	4-Isopropyltoluene	134.22	11	U	11
541-73-1	1,3-Dichlorobenzene	147.00	12	U	12
106-46-7	1,4-Dichlorobenzene	147.00	12	U	12
100-44-7	Benzyl chloride	126.58	10	U	10
104-51-8	n-Butylbenzene	134.22	11	U	11
95-50-1	1,2-Dichlorobenzene	147.00	12	U	12

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG2D-G-37183 Lab Sample ID: 200-27300-4  
 Matrix: Air Lab File ID: 12901-009.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 14:48  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 17:15  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
120-82-1	1,2,4-Trichlorobenzene	181.45	37	U	37
87-68-3	Hexachlorobutadiene	260.76	21	U	21
91-20-3	Naphthalene	128.17	26	U	26

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG3S-G-37184 Lab Sample ID: 200-27300-5  
 Matrix: Air Lab File ID: 12901-010.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 15:14  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 18:04  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
75-71-8	Dichlorodifluoromethane	120.91	5.0	U	5.0	
75-45-6	Freon 22	86.47	5.0	U	5.0	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	2.0	U	2.0	
74-87-3	Chloromethane	50.49	5.0	U	5.0	
106-97-8	n-Butane	58.12	6.9		5.0	
75-01-4	Vinyl chloride	62.50	2.0	U	2.0	
106-99-0	1,3-Butadiene	54.09	2.0	U	2.0	
74-83-9	Bromomethane	94.94	2.0	U	2.0	
75-00-3	Chloroethane	64.52	5.0	U	5.0	
593-60-2	Bromoethene (Vinyl Bromide)	106.96	2.0	U	2.0	
75-69-4	Trichlorofluoromethane	137.37	2.0	U	2.0	
76-13-1	Freon TF	187.38	2.0	U	2.0	
75-35-4	1,1-Dichloroethene	96.94	2.0	U	2.0	
67-64-1	Acetone	58.08	50	U	50	
67-63-0	Isopropyl alcohol	60.10	50	U	50	
75-15-0	Carbon disulfide	76.14	13		5.0	
107-05-1	3-Chloropropene	76.53	5.0	U	5.0	
75-09-2	Methylene Chloride	84.93	5.0	U	5.0	
75-65-0	tert-Butyl alcohol	74.12	50	U	50	
1634-04-4	Methyl tert-butyl ether	88.15	2.0	U	2.0	
156-60-5	trans-1,2-Dichloroethene	96.94	2.0	U	2.0	
110-54-3	n-Hexane	86.17	2.0	U	2.0	
75-34-3	1,1-Dichloroethane	98.96	2.0	U	2.0	
78-93-3	Methyl Ethyl Ketone	72.11	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	96.94	2.0	U	2.0	
67-66-3	Chloroform	119.38	2.0	U	2.0	
109-99-9	Tetrahydrofuran	72.11	580	E	50	
71-55-6	1,1,1-Trichloroethane	133.41	2.0	U	2.0	
110-82-7	Cyclohexane	84.16	2.0	U	2.0	
56-23-5	Carbon tetrachloride	153.81	2.0	U	2.0	
540-84-1	2,2,4-Trimethylpentane	114.23	2.0	U	2.0	
71-43-2	Benzene	78.11	13		2.0	
107-06-2	1,2-Dichloroethane	98.96	2.0	U	2.0	
142-82-5	n-Heptane	100.21	2.0	U	2.0	
79-01-6	Trichloroethene	131.39	2.0	U	2.0	

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG3S-G-37184 Lab Sample ID: 200-27300-5  
 Matrix: Air Lab File ID: 12901-010.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 15:14  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 18:04  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
80-62-6	Methyl methacrylate	100.12	5.0	U	5.0
78-87-5	1,2-Dichloropropane	112.99	2.0	U	2.0
123-91-1	1,4-Dioxane	88.11	50	U	50
75-27-4	Bromodichloromethane	163.83	2.0	U	2.0
10061-01-5	cis-1,3-Dichloropropene	110.97	2.0	U	2.0
108-10-1	methyl isobutyl ketone	100.16	5.0	U	5.0
108-88-3	Toluene	92.14	2.0	U	2.0
10061-02-6	trans-1,3-Dichloropropene	110.97	2.0	U	2.0
79-00-5	1,1,2-Trichloroethane	133.41	2.0	U	2.0
127-18-4	Tetrachloroethene	165.83	2.0	U	2.0
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	5.0	U	5.0
124-48-1	Dibromochloromethane	208.29	2.0	U	2.0
106-93-4	1,2-Dibromoethane	187.87	2.0	U	2.0
108-90-7	Chlorobenzene	112.56	2.0	U	2.0
100-41-4	Ethylbenzene	106.17	2.0	U	2.0
179601-23-1	m,p-Xylene	106.17	5.0	U	5.0
95-47-6	Xylene, o-	106.17	2.0	U	2.0
100-42-5	Styrene	104.15	2.0	U	2.0
75-25-2	Bromoform	252.75	2.0	U	2.0
98-82-8	Cumene	120.19	2.3		2.0
79-34-5	1,1,2,2-Tetrachloroethane	167.85	2.0	U	2.0
103-65-1	n-Propylbenzene	120.19	2.0	U	2.0
622-96-8	4-Ethyltoluene	120.20	2.0	U	2.0
108-67-8	1,3,5-Trimethylbenzene	120.20	2.0	U	2.0
95-49-8	2-Chlorotoluene	126.59	2.0	U	2.0
98-06-6	tert-Butylbenzene	134.22	2.0	U	2.0
95-63-6	1,2,4-Trimethylbenzene	120.20	2.0	U	2.0
135-98-8	sec-Butylbenzene	134.22	2.0	U	2.0
99-87-6	4-Isopropyltoluene	134.22	2.0	U	2.0
541-73-1	1,3-Dichlorobenzene	147.00	2.0	U	2.0
106-46-7	1,4-Dichlorobenzene	147.00	2.0	U	2.0
100-44-7	Benzyl chloride	126.58	2.0	U	2.0
104-51-8	n-Butylbenzene	134.22	2.0	U	2.0
95-50-1	1,2-Dichlorobenzene	147.00	2.0	U	2.0

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG3S-G-37184 Lab Sample ID: 200-27300-5  
 Matrix: Air Lab File ID: 12901-010.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 15:14  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 18:04  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
120-82-1	1,2,4-Trichlorobenzene	181.45	5.0	U	5.0	
87-68-3	Hexachlorobutadiene	260.76	2.0	U	2.0	
91-20-3	Naphthalene	128.17	5.0	U	5.0	

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG3S-G-37184 Lab Sample ID: 200-27300-5  
 Matrix: Air Lab File ID: 12901-010.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 15:14  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 18:04  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
75-71-8	Dichlorodifluoromethane	120.91	25	U	25
75-45-6	Freon 22	86.47	18	U	18
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	14	U	14
74-87-3	Chloromethane	50.49	10	U	10
106-97-8	n-Butane	58.12	16		12
75-01-4	Vinyl chloride	62.50	5.1	U	5.1
106-99-0	1,3-Butadiene	54.09	4.4	U	4.4
74-83-9	Bromomethane	94.94	7.8	U	7.8
75-00-3	Chloroethane	64.52	13	U	13
593-60-2	Bromoethene (Vinyl Bromide)	106.96	8.7	U	8.7
75-69-4	Trichlorofluoromethane	137.37	11	U	11
76-13-1	Freon TF	187.38	15	U	15
75-35-4	1,1-Dichloroethene	96.94	7.9	U	7.9
67-64-1	Acetone	58.08	120	U	120
67-63-0	Isopropyl alcohol	60.10	120	U	120
75-15-0	Carbon disulfide	76.14	40		16
107-05-1	3-Chloropropene	76.53	16	U	16
75-09-2	Methylene Chloride	84.93	17	U	17
75-65-0	tert-Butyl alcohol	74.12	150	U	150
1634-04-4	Methyl tert-butyl ether	88.15	7.2	U	7.2
156-60-5	trans-1,2-Dichloroethene	96.94	7.9	U	7.9
110-54-3	n-Hexane	86.17	7.0	U	7.0
75-34-3	1,1-Dichloroethane	98.96	8.1	U	8.1
78-93-3	Methyl Ethyl Ketone	72.11	15	U	15
156-59-2	cis-1,2-Dichloroethene	96.94	7.9	U	7.9
67-66-3	Chloroform	119.38	9.8	U	9.8
109-99-9	Tetrahydrofuran	72.11	1700	E	150
71-55-6	1,1,1-Trichloroethane	133.41	11	U	11
110-82-7	Cyclohexane	84.16	6.9	U	6.9
56-23-5	Carbon tetrachloride	153.81	13	U	13
540-84-1	2,2,4-Trimethylpentane	114.23	9.3	U	9.3
71-43-2	Benzene	78.11	41		6.4
107-06-2	1,2-Dichloroethane	98.96	8.1	U	8.1
142-82-5	n-Heptane	100.21	8.2	U	8.2
79-01-6	Trichloroethene	131.39	11	U	11



FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG3S-G-37184 Lab Sample ID: 200-27300-5  
 Matrix: Air Lab File ID: 12901-010.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 15:14  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 18:04  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
80-62-6	Methyl methacrylate	100.12	20	U	20
78-87-5	1,2-Dichloropropane	112.99	9.2	U	9.2
123-91-1	1,4-Dioxane	88.11	180	U	180
75-27-4	Bromodichloromethane	163.83	13	U	13
10061-01-5	cis-1,3-Dichloropropene	110.97	9.1	U	9.1
108-10-1	methyl isobutyl ketone	100.16	20	U	20
108-88-3	Toluene	92.14	7.5	U	7.5
10061-02-6	trans-1,3-Dichloropropene	110.97	9.1	U	9.1
79-00-5	1,1,2-Trichloroethane	133.41	11	U	11
127-18-4	Tetrachloroethene	165.83	14	U	14
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	20	U	20
124-48-1	Dibromochloromethane	208.29	17	U	17
106-93-4	1,2-Dibromoethane	187.87	15	U	15
108-90-7	Chlorobenzene	112.56	9.2	U	9.2
100-41-4	Ethylbenzene	106.17	8.7	U	8.7
179601-23-1	m,p-Xylene	106.17	22	U	22
95-47-6	Xylene, o-	106.17	8.7	U	8.7
100-42-5	Styrene	104.15	8.5	U	8.5
75-25-2	Bromoform	252.75	21	U	21
98-82-8	Cumene	120.19	12		9.8
79-34-5	1,1,2,2-Tetrachloroethane	167.85	14	U	14
103-65-1	n-Propylbenzene	120.19	9.8	U	9.8
622-96-8	4-Ethyltoluene	120.20	9.8	U	9.8
108-67-8	1,3,5-Trimethylbenzene	120.20	9.8	U	9.8
95-49-8	2-Chlorotoluene	126.59	10	U	10
98-06-6	tert-Butylbenzene	134.22	11	U	11
95-63-6	1,2,4-Trimethylbenzene	120.20	9.8	U	9.8
135-98-8	sec-Butylbenzene	134.22	11	U	11
99-87-6	4-Isopropyltoluene	134.22	11	U	11
541-73-1	1,3-Dichlorobenzene	147.00	12	U	12
106-46-7	1,4-Dichlorobenzene	147.00	12	U	12
100-44-7	Benzyl chloride	126.58	10	U	10
104-51-8	n-Butylbenzene	134.22	11	U	11
95-50-1	1,2-Dichlorobenzene	147.00	12	U	12

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG3S-G-37184 Lab Sample ID: 200-27300-5  
 Matrix: Air Lab File ID: 12901-010.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 15:14  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 18:04  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
120-82-1	1,2,4-Trichlorobenzene	181.45	37	U	37
87-68-3	Hexachlorobutadiene	260.76	21	U	21
91-20-3	Naphthalene	128.17	26	U	26

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG3D-G-37185 Lab Sample ID: 200-27300-6  
 Matrix: Air Lab File ID: 12901-011.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 15:23  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 18:52  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
75-71-8	Dichlorodifluoromethane	120.91	5.0	U	5.0	
75-45-6	Freon 22	86.47	5.0	U	5.0	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	2.0	U	2.0	
74-87-3	Chloromethane	50.49	5.0	U	5.0	
106-97-8	n-Butane	58.12	5.0	U	5.0	
75-01-4	Vinyl chloride	62.50	2.0	U	2.0	
106-99-0	1,3-Butadiene	54.09	2.0	U	2.0	
74-83-9	Bromomethane	94.94	2.0	U	2.0	
75-00-3	Chloroethane	64.52	5.0	U	5.0	
593-60-2	Bromoethene (Vinyl Bromide)	106.96	2.0	U	2.0	
75-69-4	Trichlorofluoromethane	137.37	2.0	U	2.0	
76-13-1	Freon TF	187.38	2.0	U	2.0	
75-35-4	1,1-Dichloroethene	96.94	2.0	U	2.0	
67-64-1	Acetone	58.08	88		50	
67-63-0	Isopropyl alcohol	60.10	50	U	50	
75-15-0	Carbon disulfide	76.14	5.0	U	5.0	
107-05-1	3-Chloropropene	76.53	5.0	U	5.0	
75-09-2	Methylene Chloride	84.93	5.0	U	5.0	
75-65-0	tert-Butyl alcohol	74.12	50	U	50	
1634-04-4	Methyl tert-butyl ether	88.15	2.0	U	2.0	
156-60-5	trans-1,2-Dichloroethene	96.94	2.0	U	2.0	
110-54-3	n-Hexane	86.17	2.0	U	2.0	
75-34-3	1,1-Dichloroethane	98.96	2.0	U	2.0	
78-93-3	Methyl Ethyl Ketone	72.11	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	96.94	2.0	U	2.0	
67-66-3	Chloroform	119.38	2.0	U	2.0	
109-99-9	Tetrahydrofuran	72.11	51		50	
71-55-6	1,1,1-Trichloroethane	133.41	2.0	U	2.0	
110-82-7	Cyclohexane	84.16	2.0	U	2.0	
56-23-5	Carbon tetrachloride	153.81	2.0	U	2.0	
540-84-1	2,2,4-Trimethylpentane	114.23	2.0	U	2.0	
71-43-2	Benzene	78.11	7.9		2.0	
107-06-2	1,2-Dichloroethane	98.96	2.0	U	2.0	
142-82-5	n-Heptane	100.21	2.0	U	2.0	
79-01-6	Trichloroethene	131.39	2.0	U	2.0	

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG3D-G-37185 Lab Sample ID: 200-27300-6  
 Matrix: Air Lab File ID: 12901-011.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 15:23  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 18:52  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
80-62-6	Methyl methacrylate	100.12	5.0	U	5.0
78-87-5	1,2-Dichloropropane	112.99	2.0	U	2.0
123-91-1	1,4-Dioxane	88.11	50	U	50
75-27-4	Bromodichloromethane	163.83	2.0	U	2.0
10061-01-5	cis-1,3-Dichloropropene	110.97	2.0	U	2.0
108-10-1	methyl isobutyl ketone	100.16	5.0	U	5.0
108-88-3	Toluene	92.14	2.0	U	2.0
10061-02-6	trans-1,3-Dichloropropene	110.97	2.0	U	2.0
79-00-5	1,1,2-Trichloroethane	133.41	2.0	U	2.0
127-18-4	Tetrachloroethene	165.83	2.0	U	2.0
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	5.0	U	5.0
124-48-1	Dibromochloromethane	208.29	2.0	U	2.0
106-93-4	1,2-Dibromoethane	187.87	2.0	U	2.0
108-90-7	Chlorobenzene	112.56	2.0	U	2.0
100-41-4	Ethylbenzene	106.17	2.0	U	2.0
179601-23-1	m,p-Xylene	106.17	5.0	U	5.0
95-47-6	Xylene, o-	106.17	2.0	U	2.0
100-42-5	Styrene	104.15	2.0	U	2.0
75-25-2	Bromoform	252.75	2.0	U	2.0
98-82-8	Cumene	120.19	2.0	U	2.0
79-34-5	1,1,2,2-Tetrachloroethane	167.85	2.0	U	2.0
103-65-1	n-Propylbenzene	120.19	2.0	U	2.0
622-96-8	4-Ethyltoluene	120.20	2.0	U	2.0
108-67-8	1,3,5-Trimethylbenzene	120.20	2.0	U	2.0
95-49-8	2-Chlorotoluene	126.59	2.0	U	2.0
98-06-6	tert-Butylbenzene	134.22	2.0	U	2.0
95-63-6	1,2,4-Trimethylbenzene	120.20	2.0	U	2.0
135-98-8	sec-Butylbenzene	134.22	2.0	U	2.0
99-87-6	4-Isopropyltoluene	134.22	2.0	U	2.0
541-73-1	1,3-Dichlorobenzene	147.00	2.0	U	2.0
106-46-7	1,4-Dichlorobenzene	147.00	2.0	U	2.0
100-44-7	Benzyl chloride	126.58	2.0	U	2.0
104-51-8	n-Butylbenzene	134.22	2.0	U	2.0
95-50-1	1,2-Dichlorobenzene	147.00	2.0	U	2.0

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG3D-G-37185 Lab Sample ID: 200-27300-6  
 Matrix: Air Lab File ID: 12901-011.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 15:23  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 18:52  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
120-82-1	1,2,4-Trichlorobenzene	181.45	5.0	U	5.0	
87-68-3	Hexachlorobutadiene	260.76	2.0	U	2.0	
91-20-3	Naphthalene	128.17	5.0	U	5.0	

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG3D-G-37185 Lab Sample ID: 200-27300-6  
 Matrix: Air Lab File ID: 12901-011.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 15:23  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 18:52  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
75-71-8	Dichlorodifluoromethane	120.91	25	U	25
75-45-6	Freon 22	86.47	18	U	18
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	14	U	14
74-87-3	Chloromethane	50.49	10	U	10
106-97-8	n-Butane	58.12	12	U	12
75-01-4	Vinyl chloride	62.50	5.1	U	5.1
106-99-0	1,3-Butadiene	54.09	4.4	U	4.4
74-83-9	Bromomethane	94.94	7.8	U	7.8
75-00-3	Chloroethane	64.52	13	U	13
593-60-2	Bromoethene (Vinyl Bromide)	106.96	8.7	U	8.7
75-69-4	Trichlorofluoromethane	137.37	11	U	11
76-13-1	Freon TF	187.38	15	U	15
75-35-4	1,1-Dichloroethene	96.94	7.9	U	7.9
67-64-1	Acetone	58.08	210		120
67-63-0	Isopropyl alcohol	60.10	120	U	120
75-15-0	Carbon disulfide	76.14	16	U	16
107-05-1	3-Chloropropene	76.53	16	U	16
75-09-2	Methylene Chloride	84.93	17	U	17
75-65-0	tert-Butyl alcohol	74.12	150	U	150
1634-04-4	Methyl tert-butyl ether	88.15	7.2	U	7.2
156-60-5	trans-1,2-Dichloroethene	96.94	7.9	U	7.9
110-54-3	n-Hexane	86.17	7.0	U	7.0
75-34-3	1,1-Dichloroethane	98.96	8.1	U	8.1
78-93-3	Methyl Ethyl Ketone	72.11	15	U	15
156-59-2	cis-1,2-Dichloroethene	96.94	7.9	U	7.9
67-66-3	Chloroform	119.38	9.8	U	9.8
109-99-9	Tetrahydrofuran	72.11	150		150
71-55-6	1,1,1-Trichloroethane	133.41	11	U	11
110-82-7	Cyclohexane	84.16	6.9	U	6.9
56-23-5	Carbon tetrachloride	153.81	13	U	13
540-84-1	2,2,4-Trimethylpentane	114.23	9.3	U	9.3
71-43-2	Benzene	78.11	25		6.4
107-06-2	1,2-Dichloroethane	98.96	8.1	U	8.1
142-82-5	n-Heptane	100.21	8.2	U	8.2
79-01-6	Trichloroethene	131.39	11	U	11

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG3D-G-37185 Lab Sample ID: 200-27300-6  
 Matrix: Air Lab File ID: 12901-011.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 15:23  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 18:52  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
80-62-6	Methyl methacrylate	100.12	20	U	20
78-87-5	1,2-Dichloropropane	112.99	9.2	U	9.2
123-91-1	1,4-Dioxane	88.11	180	U	180
75-27-4	Bromodichloromethane	163.83	13	U	13
10061-01-5	cis-1,3-Dichloropropene	110.97	9.1	U	9.1
108-10-1	methyl isobutyl ketone	100.16	20	U	20
108-88-3	Toluene	92.14	7.5	U	7.5
10061-02-6	trans-1,3-Dichloropropene	110.97	9.1	U	9.1
79-00-5	1,1,2-Trichloroethane	133.41	11	U	11
127-18-4	Tetrachloroethene	165.83	14	U	14
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	20	U	20
124-48-1	Dibromochloromethane	208.29	17	U	17
106-93-4	1,2-Dibromoethane	187.87	15	U	15
108-90-7	Chlorobenzene	112.56	9.2	U	9.2
100-41-4	Ethylbenzene	106.17	8.7	U	8.7
179601-23-1	m,p-Xylene	106.17	22	U	22
95-47-6	Xylene, o-	106.17	8.7	U	8.7
100-42-5	Styrene	104.15	8.5	U	8.5
75-25-2	Bromoform	252.75	21	U	21
98-82-8	Cumene	120.19	9.8	U	9.8
79-34-5	1,1,2,2-Tetrachloroethane	167.85	14	U	14
103-65-1	n-Propylbenzene	120.19	9.8	U	9.8
622-96-8	4-Ethyltoluene	120.20	9.8	U	9.8
108-67-8	1,3,5-Trimethylbenzene	120.20	9.8	U	9.8
95-49-8	2-Chlorotoluene	126.59	10	U	10
98-06-6	tert-Butylbenzene	134.22	11	U	11
95-63-6	1,2,4-Trimethylbenzene	120.20	9.8	U	9.8
135-98-8	sec-Butylbenzene	134.22	11	U	11
99-87-6	4-Isopropyltoluene	134.22	11	U	11
541-73-1	1,3-Dichlorobenzene	147.00	12	U	12
106-46-7	1,4-Dichlorobenzene	147.00	12	U	12
100-44-7	Benzyl chloride	126.58	10	U	10
104-51-8	n-Butylbenzene	134.22	11	U	11
95-50-1	1,2-Dichlorobenzene	147.00	12	U	12

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG3D-G-37185 Lab Sample ID: 200-27300-6  
 Matrix: Air Lab File ID: 12901-011.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 15:23  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 18:52  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
120-82-1	1,2,4-Trichlorobenzene	181.45	37	U	37
87-68-3	Hexachlorobutadiene	260.76	21	U	21
91-20-3	Naphthalene	128.17	26	U	26



FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG3DDUP-G-37186 Lab Sample ID: 200-27300-7  
 Matrix: Air Lab File ID: 12901-012.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 15:40  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 19:42  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
75-71-8	Dichlorodifluoromethane	120.91	5.0	U	5.0
75-45-6	Freon 22	86.47	5.0	U	5.0
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	2.0	U	2.0
74-87-3	Chloromethane	50.49	5.0	U	5.0
106-97-8	n-Butane	58.12	5.0	U	5.0
75-01-4	Vinyl chloride	62.50	2.0	U	2.0
106-99-0	1,3-Butadiene	54.09	2.0	U	2.0
74-83-9	Bromomethane	94.94	2.0	U	2.0
75-00-3	Chloroethane	64.52	5.0	U	5.0
593-60-2	Bromoethene (Vinyl Bromide)	106.96	2.0	U	2.0
75-69-4	Trichlorofluoromethane	137.37	2.0	U	2.0
76-13-1	Freon TF	187.38	2.0	U	2.0
75-35-4	1,1-Dichloroethene	96.94	2.0	U	2.0
67-64-1	Acetone	58.08	50	U	50
67-63-0	Isopropyl alcohol	60.10	50	U	50
75-15-0	Carbon disulfide	76.14	5.0	U	5.0
107-05-1	3-Chloropropene	76.53	5.0	U	5.0
75-09-2	Methylene Chloride	84.93	5.0	U	5.0
75-65-0	tert-Butyl alcohol	74.12	50	U	50
1634-04-4	Methyl tert-butyl ether	88.15	2.0	U	2.0
156-60-5	trans-1,2-Dichloroethene	96.94	2.0	U	2.0
110-54-3	n-Hexane	86.17	2.0	U	2.0
75-34-3	1,1-Dichloroethane	98.96	2.0	U	2.0
78-93-3	Methyl Ethyl Ketone	72.11	5.0	U	5.0
156-59-2	cis-1,2-Dichloroethene	96.94	2.0	U	2.0
67-66-3	Chloroform	119.38	2.0	U	2.0
109-99-9	Tetrahydrofuran	72.11	85		50
71-55-6	1,1,1-Trichloroethane	133.41	2.0	U	2.0
110-82-7	Cyclohexane	84.16	2.0	U	2.0
56-23-5	Carbon tetrachloride	153.81	2.0	U	2.0
540-84-1	2,2,4-Trimethylpentane	114.23	2.0	U	2.0
71-43-2	Benzene	78.11	2.0	U	2.0
107-06-2	1,2-Dichloroethane	98.96	2.0	U	2.0
142-82-5	n-Heptane	100.21	2.0	U	2.0
79-01-6	Trichloroethene	131.39	2.0	U	2.0

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG3DDUP-G-37186 Lab Sample ID: 200-27300-7  
 Matrix: Air Lab File ID: 12901-012.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 15:40  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 19:42  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
80-62-6	Methyl methacrylate	100.12	5.0	U	5.0
78-87-5	1,2-Dichloropropane	112.99	2.0	U	2.0
123-91-1	1,4-Dioxane	88.11	50	U	50
75-27-4	Bromodichloromethane	163.83	2.0	U	2.0
10061-01-5	cis-1,3-Dichloropropene	110.97	2.0	U	2.0
108-10-1	methyl isobutyl ketone	100.16	5.0	U	5.0
108-88-3	Toluene	92.14	2.4		2.0
10061-02-6	trans-1,3-Dichloropropene	110.97	2.0	U	2.0
79-00-5	1,1,2-Trichloroethane	133.41	2.0	U	2.0
127-18-4	Tetrachloroethene	165.83	2.0	U	2.0
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	5.0	U	5.0
124-48-1	Dibromochloromethane	208.29	2.0	U	2.0
106-93-4	1,2-Dibromoethane	187.87	2.0	U	2.0
108-90-7	Chlorobenzene	112.56	2.0	U	2.0
100-41-4	Ethylbenzene	106.17	2.0	U	2.0
179601-23-1	m,p-Xylene	106.17	5.0	U	5.0
95-47-6	Xylene, o-	106.17	2.0	U	2.0
100-42-5	Styrene	104.15	2.0	U	2.0
75-25-2	Bromoform	252.75	2.0	U	2.0
98-82-8	Cumene	120.19	2.0	U	2.0
79-34-5	1,1,2,2-Tetrachloroethane	167.85	2.0	U	2.0
103-65-1	n-Propylbenzene	120.19	2.0	U	2.0
622-96-8	4-Ethyltoluene	120.20	2.0	U	2.0
108-67-8	1,3,5-Trimethylbenzene	120.20	2.0	U	2.0
95-49-8	2-Chlorotoluene	126.59	2.0	U	2.0
98-06-6	tert-Butylbenzene	134.22	2.0	U	2.0
95-63-6	1,2,4-Trimethylbenzene	120.20	2.0	U	2.0
135-98-8	sec-Butylbenzene	134.22	2.0	U	2.0
99-87-6	4-Isopropyltoluene	134.22	2.0	U	2.0
541-73-1	1,3-Dichlorobenzene	147.00	2.0	U	2.0
106-46-7	1,4-Dichlorobenzene	147.00	2.0	U	2.0
100-44-7	Benzyl chloride	126.58	2.0	U	2.0
104-51-8	n-Butylbenzene	134.22	2.0	U	2.0
95-50-1	1,2-Dichlorobenzene	147.00	2.0	U	2.0

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG3DDUP-G-37186 Lab Sample ID: 200-27300-7  
 Matrix: Air Lab File ID: 12901-012.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 15:40  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 19:42  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
120-82-1	1,2,4-Trichlorobenzene	181.45	5.0	U	5.0	
87-68-3	Hexachlorobutadiene	260.76	2.0	U	2.0	
91-20-3	Naphthalene	128.17	5.0	U	5.0	

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG3DDUP-G-37186 Lab Sample ID: 200-27300-7  
 Matrix: Air Lab File ID: 12901-012.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 15:40  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 19:42  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
75-71-8	Dichlorodifluoromethane	120.91	25	U	25
75-45-6	Freon 22	86.47	18	U	18
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	14	U	14
74-87-3	Chloromethane	50.49	10	U	10
106-97-8	n-Butane	58.12	12	U	12
75-01-4	Vinyl chloride	62.50	5.1	U	5.1
106-99-0	1,3-Butadiene	54.09	4.4	U	4.4
74-83-9	Bromomethane	94.94	7.8	U	7.8
75-00-3	Chloroethane	64.52	13	U	13
593-60-2	Bromoethene (Vinyl Bromide)	106.96	8.7	U	8.7
75-69-4	Trichlorofluoromethane	137.37	11	U	11
76-13-1	Freon TF	187.38	15	U	15
75-35-4	1,1-Dichloroethene	96.94	7.9	U	7.9
67-64-1	Acetone	58.08	120	U	120
67-63-0	Isopropyl alcohol	60.10	120	U	120
75-15-0	Carbon disulfide	76.14	16	U	16
107-05-1	3-Chloropropene	76.53	16	U	16
75-09-2	Methylene Chloride	84.93	17	U	17
75-65-0	tert-Butyl alcohol	74.12	150	U	150
1634-04-4	Methyl tert-butyl ether	88.15	7.2	U	7.2
156-60-5	trans-1,2-Dichloroethene	96.94	7.9	U	7.9
110-54-3	n-Hexane	86.17	7.0	U	7.0
75-34-3	1,1-Dichloroethane	98.96	8.1	U	8.1
78-93-3	Methyl Ethyl Ketone	72.11	15	U	15
156-59-2	cis-1,2-Dichloroethene	96.94	7.9	U	7.9
67-66-3	Chloroform	119.38	9.8	U	9.8
109-99-9	Tetrahydrofuran	72.11	250		150
71-55-6	1,1,1-Trichloroethane	133.41	11	U	11
110-82-7	Cyclohexane	84.16	6.9	U	6.9
56-23-5	Carbon tetrachloride	153.81	13	U	13
540-84-1	2,2,4-Trimethylpentane	114.23	9.3	U	9.3
71-43-2	Benzene	78.11	6.4	U	6.4
107-06-2	1,2-Dichloroethane	98.96	8.1	U	8.1
142-82-5	n-Heptane	100.21	8.2	U	8.2
79-01-6	Trichloroethene	131.39	11	U	11

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG3DDUP-G-37186 Lab Sample ID: 200-27300-7  
 Matrix: Air Lab File ID: 12901-012.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 15:40  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 19:42  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
80-62-6	Methyl methacrylate	100.12	20	U	20
78-87-5	1,2-Dichloropropane	112.99	9.2	U	9.2
123-91-1	1,4-Dioxane	88.11	180	U	180
75-27-4	Bromodichloromethane	163.83	13	U	13
10061-01-5	cis-1,3-Dichloropropene	110.97	9.1	U	9.1
108-10-1	methyl isobutyl ketone	100.16	20	U	20
108-88-3	Toluene	92.14	8.9		7.5
10061-02-6	trans-1,3-Dichloropropene	110.97	9.1	U	9.1
79-00-5	1,1,2-Trichloroethane	133.41	11	U	11
127-18-4	Tetrachloroethene	165.83	14	U	14
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	20	U	20
124-48-1	Dibromochloromethane	208.29	17	U	17
106-93-4	1,2-Dibromoethane	187.87	15	U	15
108-90-7	Chlorobenzene	112.56	9.2	U	9.2
100-41-4	Ethylbenzene	106.17	8.7	U	8.7
179601-23-1	m,p-Xylene	106.17	22	U	22
95-47-6	Xylene, o-	106.17	8.7	U	8.7
100-42-5	Styrene	104.15	8.5	U	8.5
75-25-2	Bromoform	252.75	21	U	21
98-82-8	Cumene	120.19	9.8	U	9.8
79-34-5	1,1,2,2-Tetrachloroethane	167.85	14	U	14
103-65-1	n-Propylbenzene	120.19	9.8	U	9.8
622-96-8	4-Ethyltoluene	120.20	9.8	U	9.8
108-67-8	1,3,5-Trimethylbenzene	120.20	9.8	U	9.8
95-49-8	2-Chlorotoluene	126.59	10	U	10
98-06-6	tert-Butylbenzene	134.22	11	U	11
95-63-6	1,2,4-Trimethylbenzene	120.20	9.8	U	9.8
135-98-8	sec-Butylbenzene	134.22	11	U	11
99-87-6	4-Isopropyltoluene	134.22	11	U	11
541-73-1	1,3-Dichlorobenzene	147.00	12	U	12
106-46-7	1,4-Dichlorobenzene	147.00	12	U	12
100-44-7	Benzyl chloride	126.58	10	U	10
104-51-8	n-Butylbenzene	134.22	11	U	11
95-50-1	1,2-Dichlorobenzene	147.00	12	U	12

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGSG3DDUP-G-37186 Lab Sample ID: 200-27300-7  
 Matrix: Air Lab File ID: 12901-012.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 15:40  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 19:42  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
120-82-1	1,2,4-Trichlorobenzene	181.45	37	U	37	
87-68-3	Hexachlorobutadiene	260.76	21	U	21	
91-20-3	Naphthalene	128.17	26	U	26	

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGBKGD-G-37187 Lab Sample ID: 200-27300-8  
 Matrix: Air Lab File ID: 12901-013.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 15:51  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 20:31  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
75-71-8	Dichlorodifluoromethane	120.91	5.0	U	5.0	
75-45-6	Freon 22	86.47	5.0	U	5.0	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	2.0	U	2.0	
74-87-3	Chloromethane	50.49	5.0	U	5.0	
106-97-8	n-Butane	58.12	5.0	U	5.0	
75-01-4	Vinyl chloride	62.50	2.0	U	2.0	
106-99-0	1,3-Butadiene	54.09	2.0	U	2.0	
74-83-9	Bromomethane	94.94	2.0	U	2.0	
75-00-3	Chloroethane	64.52	5.0	U	5.0	
593-60-2	Bromoethene (Vinyl Bromide)	106.96	2.0	U	2.0	
75-69-4	Trichlorofluoromethane	137.37	2.0	U	2.0	
76-13-1	Freon TF	187.38	2.0	U	2.0	
75-35-4	1,1-Dichloroethene	96.94	2.0	U	2.0	
67-64-1	Acetone	58.08	50	U	50	
67-63-0	Isopropyl alcohol	60.10	50	U	50	
75-15-0	Carbon disulfide	76.14	5.0	U	5.0	
107-05-1	3-Chloropropene	76.53	5.0	U	5.0	
75-09-2	Methylene Chloride	84.93	5.0	U	5.0	
75-65-0	tert-Butyl alcohol	74.12	50	U	50	
1634-04-4	Methyl tert-butyl ether	88.15	2.0	U	2.0	
156-60-5	trans-1,2-Dichloroethene	96.94	2.0	U	2.0	
110-54-3	n-Hexane	86.17	2.0	U	2.0	
75-34-3	1,1-Dichloroethane	98.96	2.0	U	2.0	
78-93-3	Methyl Ethyl Ketone	72.11	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	96.94	2.0	U	2.0	
67-66-3	Chloroform	119.38	2.0	U	2.0	
109-99-9	Tetrahydrofuran	72.11	50	U	50	
71-55-6	1,1,1-Trichloroethane	133.41	2.0	U	2.0	
110-82-7	Cyclohexane	84.16	2.0	U	2.0	
56-23-5	Carbon tetrachloride	153.81	2.0	U	2.0	
540-84-1	2,2,4-Trimethylpentane	114.23	2.0	U	2.0	
71-43-2	Benzene	78.11	2.0	U	2.0	
107-06-2	1,2-Dichloroethane	98.96	2.0	U	2.0	
142-82-5	n-Heptane	100.21	2.0	U	2.0	
79-01-6	Trichloroethene	131.39	2.0	U	2.0	

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGBKGD-G-37187 Lab Sample ID: 200-27300-8  
 Matrix: Air Lab File ID: 12901-013.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 15:51  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 20:31  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
80-62-6	Methyl methacrylate	100.12	5.0	U	5.0
78-87-5	1,2-Dichloropropane	112.99	2.0	U	2.0
123-91-1	1,4-Dioxane	88.11	50	U	50
75-27-4	Bromodichloromethane	163.83	2.0	U	2.0
10061-01-5	cis-1,3-Dichloropropene	110.97	2.0	U	2.0
108-10-1	methyl isobutyl ketone	100.16	5.0	U	5.0
108-88-3	Toluene	92.14	2.0	U	2.0
10061-02-6	trans-1,3-Dichloropropene	110.97	2.0	U	2.0
79-00-5	1,1,2-Trichloroethane	133.41	2.0	U	2.0
127-18-4	Tetrachloroethene	165.83	2.0	U	2.0
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	5.0	U	5.0
124-48-1	Dibromochloromethane	208.29	2.0	U	2.0
106-93-4	1,2-Dibromoethane	187.87	2.0	U	2.0
108-90-7	Chlorobenzene	112.56	2.0	U	2.0
100-41-4	Ethylbenzene	106.17	2.0	U	2.0
179601-23-1	m,p-Xylene	106.17	5.0	U	5.0
95-47-6	Xylene, o-	106.17	2.0	U	2.0
100-42-5	Styrene	104.15	2.0	U	2.0
75-25-2	Bromoform	252.75	2.0	U	2.0
98-82-8	Cumene	120.19	2.0	U	2.0
79-34-5	1,1,2,2-Tetrachloroethane	167.85	2.0	U	2.0
103-65-1	n-Propylbenzene	120.19	2.0	U	2.0
622-96-8	4-Ethyltoluene	120.20	2.0	U	2.0
108-67-8	1,3,5-Trimethylbenzene	120.20	2.0	U	2.0
95-49-8	2-Chlorotoluene	126.59	2.0	U	2.0
98-06-6	tert-Butylbenzene	134.22	2.0	U	2.0
95-63-6	1,2,4-Trimethylbenzene	120.20	2.0	U	2.0
135-98-8	sec-Butylbenzene	134.22	2.0	U	2.0
99-87-6	4-Isopropyltoluene	134.22	2.0	U	2.0
541-73-1	1,3-Dichlorobenzene	147.00	2.0	U	2.0
106-46-7	1,4-Dichlorobenzene	147.00	2.0	U	2.0
100-44-7	Benzyl chloride	126.58	2.0	U	2.0
104-51-8	n-Butylbenzene	134.22	2.0	U	2.0
95-50-1	1,2-Dichlorobenzene	147.00	2.0	U	2.0



FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGBKGD-G-37187 Lab Sample ID: 200-27300-8  
 Matrix: Air Lab File ID: 12901-013.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 15:51  
 Sample wt/vol: 20(mL) Date Analyzed: 04/01/2015 20:31  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
120-82-1	1,2,4-Trichlorobenzene	181.45	5.0	U	5.0	
87-68-3	Hexachlorobutadiene	260.76	2.0	U	2.0	
91-20-3	Naphthalene	128.17	5.0	U	5.0	

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGBKGD-G-37187 Lab Sample ID: 200-27300-8  
 Matrix: Air Lab File ID: 12901-013.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 15:51  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 20:31  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
75-71-8	Dichlorodifluoromethane	120.91	25	U	25	
75-45-6	Freon 22	86.47	18	U	18	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	14	U	14	
74-87-3	Chloromethane	50.49	10	U	10	
106-97-8	n-Butane	58.12	12	U	12	
75-01-4	Vinyl chloride	62.50	5.1	U	5.1	
106-99-0	1,3-Butadiene	54.09	4.4	U	4.4	
74-83-9	Bromomethane	94.94	7.8	U	7.8	
75-00-3	Chloroethane	64.52	13	U	13	
593-60-2	Bromoethene (Vinyl Bromide)	106.96	8.7	U	8.7	
75-69-4	Trichlorofluoromethane	137.37	11	U	11	
76-13-1	Freon TF	187.38	15	U	15	
75-35-4	1,1-Dichloroethene	96.94	7.9	U	7.9	
67-64-1	Acetone	58.08	120	U	120	
67-63-0	Isopropyl alcohol	60.10	120	U	120	
75-15-0	Carbon disulfide	76.14	16	U	16	
107-05-1	3-Chloropropene	76.53	16	U	16	
75-09-2	Methylene Chloride	84.93	17	U	17	
75-65-0	tert-Butyl alcohol	74.12	150	U	150	
1634-04-4	Methyl tert-butyl ether	88.15	7.2	U	7.2	
156-60-5	trans-1,2-Dichloroethene	96.94	7.9	U	7.9	
110-54-3	n-Hexane	86.17	7.0	U	7.0	
75-34-3	1,1-Dichloroethane	98.96	8.1	U	8.1	
78-93-3	Methyl Ethyl Ketone	72.11	15	U	15	
156-59-2	cis-1,2-Dichloroethene	96.94	7.9	U	7.9	
67-66-3	Chloroform	119.38	9.8	U	9.8	
109-99-9	Tetrahydrofuran	72.11	150	U	150	
71-55-6	1,1,1-Trichloroethane	133.41	11	U	11	
110-82-7	Cyclohexane	84.16	6.9	U	6.9	
56-23-5	Carbon tetrachloride	153.81	13	U	13	
540-84-1	2,2,4-Trimethylpentane	114.23	9.3	U	9.3	
71-43-2	Benzene	78.11	6.4	U	6.4	
107-06-2	1,2-Dichloroethane	98.96	8.1	U	8.1	
142-82-5	n-Heptane	100.21	8.2	U	8.2	
79-01-6	Trichloroethene	131.39	11	U	11	

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGBKGD-G-37187 Lab Sample ID: 200-27300-8  
 Matrix: Air Lab File ID: 12901-013.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 15:51  
 Sample wt/vol: 20 (mL) Date Analyzed: 04/01/2015 20:31  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
80-62-6	Methyl methacrylate	100.12	20	U	20
78-87-5	1,2-Dichloropropane	112.99	9.2	U	9.2
123-91-1	1,4-Dioxane	88.11	180	U	180
75-27-4	Bromodichloromethane	163.83	13	U	13
10061-01-5	cis-1,3-Dichloropropene	110.97	9.1	U	9.1
108-10-1	methyl isobutyl ketone	100.16	20	U	20
108-88-3	Toluene	92.14	7.5	U	7.5
10061-02-6	trans-1,3-Dichloropropene	110.97	9.1	U	9.1
79-00-5	1,1,2-Trichloroethane	133.41	11	U	11
127-18-4	Tetrachloroethene	165.83	14	U	14
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	20	U	20
124-48-1	Dibromochloromethane	208.29	17	U	17
106-93-4	1,2-Dibromoethane	187.87	15	U	15
108-90-7	Chlorobenzene	112.56	9.2	U	9.2
100-41-4	Ethylbenzene	106.17	8.7	U	8.7
179601-23-1	m,p-Xylene	106.17	22	U	22
95-47-6	Xylene, o-	106.17	8.7	U	8.7
100-42-5	Styrene	104.15	8.5	U	8.5
75-25-2	Bromoform	252.75	21	U	21
98-82-8	Cumene	120.19	9.8	U	9.8
79-34-5	1,1,2,2-Tetrachloroethane	167.85	14	U	14
103-65-1	n-Propylbenzene	120.19	9.8	U	9.8
622-96-8	4-Ethyltoluene	120.20	9.8	U	9.8
108-67-8	1,3,5-Trimethylbenzene	120.20	9.8	U	9.8
95-49-8	2-Chlorotoluene	126.59	10	U	10
98-06-6	tert-Butylbenzene	134.22	11	U	11
95-63-6	1,2,4-Trimethylbenzene	120.20	9.8	U	9.8
135-98-8	sec-Butylbenzene	134.22	11	U	11
99-87-6	4-Isopropyltoluene	134.22	11	U	11
541-73-1	1,3-Dichlorobenzene	147.00	12	U	12
106-46-7	1,4-Dichlorobenzene	147.00	12	U	12
100-44-7	Benzyl chloride	126.58	10	U	10
104-51-8	n-Butylbenzene	134.22	11	U	11
95-50-1	1,2-Dichlorobenzene	147.00	12	U	12

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: AGBKGD-G-37187 Lab Sample ID: 200-27300-8  
 Matrix: Air Lab File ID: 12901-013.D  
 Analysis Method: TO-15 Date Collected: 03/27/2015 15:51  
 Sample wt/vol: 20(mL) Date Analyzed: 04/01/2015 20:31  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
120-82-1	1,2,4-Trichlorobenzene	181.45	37	U	37	
87-68-3	Hexachlorobutadiene	260.76	21	U	21	
91-20-3	Naphthalene	128.17	26	U	26	

FORM VI  
AIR - GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-27300-1 Analy Batch No.: 85787

SDG No.: Agra (200-27300)

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/19/2015 18:34 Calibration End Date: 03/20/2015 00:18 Calibration ID: 30154

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-85787/4	12677-004.D
Level 2	IC 200-85787/5	12677-005.D
Level 3	IC 200-85787/6	12677-006.D
Level 4	IC 200-85787/7	12677-007.D
Level 5	ICIS 200-85787/8	12677-008.D
Level 6	IC 200-85787/9	12677-009.D
Level 7	IC 200-85787/10	12677-010.D
Level 8	IC 200-85787/11	12677-011.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
Propylene	++++ 0.4213	++++ 0.4118	0.5612 0.3973	0.4465	0.4280	Ave		0.4444			13.4		30.0				
Dichlorodifluoromethane	++++ 2.0840	++++ 2.0430	2.1886 1.9756	2.1239	2.1107	Ave		2.0876			3.5		30.0				
Freon 22	++++ 1.0029	++++ 0.9900	1.0685 0.9623	1.0307	1.0197	Ave		1.0124			3.6		30.0				
1,2-Dichlorotetrafluoroethane	++++ 2.0493	2.0253 2.0066	2.1019 1.9292	2.0870	2.0780	Ave		2.0396			2.9		30.0				
Chloromethane	++++ 0.5493	++++ 0.5394	0.5942 0.5316	0.5579	0.5539	Ave		0.5544			3.9		30.0				
n-Butane	++++ 0.8363	++++ 0.8346	0.9170 0.8179	0.8501	0.8491	Ave		0.8508			4.1		30.0				
Vinyl chloride	0.6710 0.6413	0.6204 0.6678	0.6906 0.6646	0.6577	0.6790	Ave		0.6616			3.3		30.0				
1,3-Butadiene	++++ 0.4198	0.4364 0.4314	0.4704 0.4369	0.4358	0.4497	Ave		0.4400			3.6		30.0				
Bromomethane	++++ 0.5837	0.5999 0.5761	0.6415 0.5430	0.5980	0.6046	Ave		0.5924			5.1		30.0				
Chloroethane	++++ 0.2608	++++ 0.2720	0.2883 0.2453	0.2693	0.2812	Ave		0.2695			5.6		30.0				
Isopentane	++++ 0.4567	0.6331 0.4719	0.5619 0.4384	0.4826	0.4929	Ave		0.5053			13.6		30.0				
Bromoethene (Vinyl Bromide)	++++ 0.9126	0.8594 0.8508	0.9048 0.8641	0.9147	0.8637	Ave		0.8814			3.2		30.0				
Trichlorofluoromethane	++++ 2.2756	2.2125 2.2267	2.3610 2.1736	2.2996	2.2234	Ave		2.2532			2.8		30.0				
n-Pentane	++++ 1.0179	++++ 0.9920	1.1314 0.9609	1.0397	1.0065	Ave		1.0248			5.7		30.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
AIR - GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-27300-1 Analy Batch No.: 85787  
 SDG No.: Agra (200-27300)  
 Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N  
 Calibration Start Date: 03/19/2015 18:34 Calibration End Date: 03/20/2015 00:18 Calibration ID: 30154

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
Ethanol	++++ 0.2870	++++ 0.2777	0.2882 0.2695	0.2873	0.2880	Ave		0.2829			2.7		30.0				
Ethyl ether	++++ 0.4879	++++ 0.4767	0.4934 0.4631	0.4876	0.4896	Ave		0.4851			2.4		30.0				
Acrolein	++++ 0.2325	++++ 0.2168	++++ 0.2065	0.2292	0.2325	Ave		0.2235			5.1		30.0				
Freon TF	++++ 1.7456	++++ 1.7002	1.8180 1.6335	1.7602	1.7547	Ave		1.7305			3.4		30.0				
1,1-Dichloroethene	++++ 0.8219	0.8103 0.8037	0.8422 0.7817	0.8234	0.8206	Ave		0.8148			2.3		30.0				
Acetone	++++ 0.9646	++++ 0.8527	++++ 0.8286	1.0247	0.9152	Ave		0.9172			8.8		30.0				
Carbon disulfide	++++ 2.0818	++++ 2.0289	2.1378 1.9871	2.0958	2.0880	Ave		2.0699			2.6		30.0				
Isopropyl alcohol	++++ 0.8420	++++ 0.8003	++++ 0.7648	0.8897	1.0072	Ave		0.8608			10.9		30.0				
3-Chloropropene	++++ 0.6723	0.8338 0.7318	0.7950 0.6892	0.7502	0.6773	Ave		0.7357			8.4		30.0				
Acetonitrile	++++ 0.4069	++++ 0.3881	++++ 0.3773	0.4240	0.4322	Ave		0.4057			5.7		30.0				
Methylene Chloride	++++ 0.7134	++++ 0.6937	0.9983 0.6749	0.7431	0.7219	Ave		0.7576			15.9		30.0				
tert-Butyl alcohol	++++ 1.3842	++++ 1.3262	++++ 1.2860	1.4383	1.5861	Ave		1.4042			8.3		30.0				
Methyl tert-butyl ether	++++ 2.3366	2.2150 2.2854	2.3766 2.2380	2.3522	2.3430	Ave		2.3067			2.7		30.0				
trans-1,2-Dichloroethene	++++ 1.0774	1.0451 1.0489	1.1129 1.0197	1.0885	1.0848	Ave		1.0682			3.0		30.0				
Acrylonitrile	++++ 0.4894	++++ 0.4752	0.5207 0.4689	0.4895	0.4939	Ave		0.4896			3.7		30.0				
n-Hexane	++++ 1.0735	1.3713 1.0495	1.1531 1.0188	1.0922	1.0876	Ave		1.1209			10.5		30.0				
1,1-Dichloroethane	1.4308 1.4247	1.3436 1.3911	1.4716 1.3656	1.4306	1.4192	Ave		1.4096			2.9		30.0				
Vinyl acetate	++++ 1.7127	++++ 1.6630	++++ 1.6254	1.7185	1.7225	Ave		1.6884			2.5		30.0				
cis-1,2-Dichloroethene	++++ 1.0344	0.9943 1.0143	1.0736 0.9997	1.0346	1.0360	Ave		1.0267			2.6		30.0				
Methyl Ethyl Ketone	++++ 0.4525	++++ 0.4342	0.7100 0.4279	0.4577	0.4611	Ave		0.4906			22.1		30.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
AIR - GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Burlington

Job No.: 200-27300-1

Analy Batch No.: 85787

SDG No.: Agra (200-27300)

Instrument ID: CHX.i

GC Column: RTX-624

ID: 0.32 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 03/19/2015 18:34

Calibration End Date: 03/20/2015 00:18

Calibration ID: 30154

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
Ethyl acetate	++++ 0.0786	++++ 0.0752	++++ 0.0746	0.0769	0.0787	Ave		0.0768			2.5		30.0				
Tetrahydrofuran	++++ 0.1443	++++ 0.1385	++++ 0.1363	0.1439	0.1460	Ave		0.1418			2.9		30.0				
Chloroform	++++ 1.9469	1.8968 1.9169	2.0187 1.8885	1.9545	1.9472	Ave		1.9385			2.3		30.0				
Cyclohexane	++++ 0.2561	0.2504 0.2531	0.2609 0.2498	0.2569	0.2554	Ave		0.2547			1.5		30.0				
1,1,1-Trichloroethane	++++ 0.3907	0.3614 0.3856	0.3938 0.3835	0.3891	0.3856	Ave		0.3842			2.8		30.0				
Carbon tetrachloride	0.4335 0.4130	0.3867 0.4304	0.4153 0.4321	0.4233	0.4317	Ave		0.4208			3.8		30.0				
2,2,4-Trimethylpentane	++++ 0.8491	0.8340 0.8350	0.8718 0.8178	0.8625	0.8487	Ave		0.8455			2.2		30.0				
Benzene	++++ 0.5884	0.5736 0.5785	0.6074 0.5699	0.5932	0.5862	Ave		0.5853			2.2		30.0				
1,2-Dichloroethane	++++ 0.2232	0.2132 0.2196	0.2203 0.2190	0.2220	0.2223	Ave		0.2200			1.5		30.0				
n-Heptane	++++ 0.2739	0.3172 0.2663	0.2863 0.2605	0.2785	0.2733	Ave		0.2794			6.7		30.0				
n-Butanol	++++ 0.0995	++++ 0.0948	++++ 0.0974	0.1009	0.1159	Ave		0.1017			8.1		30.0				
Trichloroethene	0.3033 0.2826	0.2554 0.2774	0.2819 0.2771	0.2762	0.2785	Ave		0.2791			4.7		30.0				
1,2-Dichloropropane	++++ 0.2111	0.2079 0.2084	0.2101 0.2089	0.2084	0.2100	Ave		0.2093			0.6		30.0				
Methyl methacrylate	++++ 0.2168	++++ 0.2131	++++ 0.2144	0.2176	0.2126	Ave		0.2147			1.0		30.0				
1,4-Dioxane	++++ 0.1055	++++ 0.0937	++++ 0.0903	0.1049	0.1222	Ave		0.1033			12.1		30.0				
Dibromomethane	++++ 0.3251	0.3155 0.3228	0.3207 0.3266	0.3159	0.3208	Ave		0.3211			1.3		30.0				
Bromodichloromethane	++++ 0.4385	0.3859 0.4340	0.4225 0.4369	0.4310	0.4346	Ave		0.4262			4.3		30.0				
cis-1,3-Dichloropropene	++++ 0.3464	0.3005 0.3403	0.3309 0.3451	0.3369	0.3419	Ave		0.3346			4.8		30.0				
methyl isobutyl ketone	++++ 0.3746	++++ 0.3591	0.4490 0.3568	0.3711	0.3731	Ave		0.3806			9.0		30.0				
Toluene	++++ 0.5087	++++ 0.5008	++++ 0.5016	0.5075	0.5066	Ave		0.5053			0.6		30.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
AIR - GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-27300-1 Analy Batch No.: 85787  
 SDG No.: Agra (200-27300)  
 Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N  
 Calibration Start Date: 03/19/2015 18:34 Calibration End Date: 03/20/2015 00:18 Calibration ID: 30154

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
n-Octane	++++ 0.3964	0.4421 0.3868	0.4257 0.3744	0.4046	0.4002	Ave		0.4043			5.7		30.0				
trans-1,3-Dichloropropene	++++ 0.3544	0.3260 0.3482	0.4271 0.3576	0.3550	0.3508	Ave		0.3599			8.8		30.0				
1,1,2-Trichloroethane	++++ 0.2350	0.2165 0.2355	0.2334 0.2358	0.2344	0.2365	Ave		0.2325			3.1		30.0				
Tetrachloroethene	0.5178 0.5145	0.4791 0.5164	0.4956 0.5204	0.5070	0.5128	Ave		0.5079			2.8		30.0				
Methyl Butyl Ketone (2-Hexanone)	++++ 0.3833	++++ 0.3742	0.5463 0.3737	0.3831	0.3924	Ave		0.4089			16.6		30.0				
Dibromochloromethane	++++ 0.5590	0.4699 0.5711	0.5096 0.5761	0.5527	0.5582	Ave		0.5424			7.1		30.0				
1,2-Dibromoethane	++++ 0.4761	0.4272 0.4724	0.4597 0.4791	0.4711	0.4752	Ave		0.4658			3.9		30.0				
Chlorobenzene	++++ 0.7349	0.6811 0.7309	0.7444 0.7364	0.7297	0.7362	Ave		0.7276			2.9		30.0				
Ethylbenzene	++++ 1.1288	1.0790 1.1255	1.1110 1.1312	1.1258	1.1297	Ave		1.1187			1.7		30.0				
n-Nonane	++++ 0.4582	0.4842 0.4562	0.4539 0.4522	0.4615	0.4633	Ave		0.4613			2.3		30.0				
m,p-Xylene	++++ 0.4716	0.4332 0.4680	0.4628 0.4611	0.4702	0.4707	Ave		0.4625			2.9		30.0				
Xylene, o-	++++ 0.4653	0.4227 0.4678	0.4543 0.4636	0.4600	0.4686	Ave		0.4575			3.5		30.0				
Styrene	++++ 0.7502	0.6051 0.7403	0.7048 0.7472	0.7187	0.7515	Ave		0.7168			7.3		30.0				
Bromoform	++++ 0.6087	0.4468 0.6284	0.5444 0.6255	0.6069	0.6070	Ave		0.5811			11.3		30.0				
Cumene	++++ 1.3813	1.2630 1.3725	1.3373 1.3701	1.3678	1.3747	Ave		1.3524			3.1		30.0				
1,1,2,2-Tetrachloroethane	++++ 0.6256	0.5742 0.6197	0.6298 0.6209	0.6211	0.6263	Ave		0.6168			3.1		30.0				
n-Propylbenzene	++++ 1.5901	1.4365 1.5750	1.5605 1.5725	1.5582	1.5931	Ave		1.5551			3.5		30.0				
1,2,3-Trichloropropane	++++ 0.4877	++++ 0.4838	0.5028 0.4842	0.4842	0.4928	Ave		0.4892			1.5		30.0				
n-Decane	++++ 0.6051	++++ 0.5961	0.5855 0.5926	0.5941	0.6126	Ave		0.5977			1.6		30.0				
4-Ethyltoluene	++++ 1.3940	1.2304 1.3740	1.3500 1.3461	1.3706	1.4004	Ave		1.3522			4.2		30.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.



FORM VI  
AIR - GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-27300-1 Analy Batch No.: 85787  
 SDG No.: Agra (200-27300)  
 Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N  
 Calibration Start Date: 03/19/2015 18:34 Calibration End Date: 03/20/2015 00:18 Calibration ID: 30154

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
2-Chlorotoluene	++++ 1.1007	1.0071 1.0884	1.0886 1.0752	1.0810	1.1019	Ave		1.0776			3.0		30.0				
1,3,5-Trimethylbenzene	++++ 1.1801	1.0251 1.1649	1.1294 1.1733	1.1510	1.1809	Ave		1.1435			4.8		30.0				
Alpha Methyl Styrene	++++ 0.6273	0.4924 0.6124	0.5609 0.6243	0.5892	0.6243	Ave		0.5901			8.4		30.0				
tert-Butylbenzene	++++ 1.1611	1.0460 1.1517	1.1229 1.1365	1.1440	1.1622	Ave		1.1321			3.6		30.0				
1,2,4-Trimethylbenzene	++++ 1.1868	1.0248 1.1636	1.1397 1.1717	1.1515	1.1922	Ave		1.1472			5.0		30.0				
sec-Butylbenzene	++++ 1.6921	1.5159 1.6690	1.6168 1.6426	1.6712	1.6965	Ave		1.6434			3.8		30.0				
4-Isopropyltoluene	++++ 1.5045	1.3032 1.4839	1.4314 1.4594	1.4652	1.5138	Ave		1.4516			4.9		30.0				
1,3-Dichlorobenzene	++++ 0.8996	0.7284 0.8594	0.8756 0.8920	0.8399	0.8973	Ave		0.8560			7.0		30.0				
1,4-Dichlorobenzene	++++ 0.9077	0.7184 0.8567	0.8898 0.9008	0.8284	0.9028	Ave		0.8578			7.9		30.0				
Benzyl chloride	++++ 1.0258	0.7941 0.9937	0.9243 1.0796	0.9490	0.9903	Ave		0.9652			9.4		30.0				
n-Undecane	++++ 0.6568	++++ 0.6079	++++ 0.5917	0.6132	0.6733	Ave		0.6286			5.5		30.0				
n-Butylbenzene	++++ 1.2545	1.0798 1.2026	1.2172 1.1328	1.2056	1.2745	Ave		1.1953			5.7		30.0				
1,2-Dichlorobenzene	++++ 0.8500	0.6911 0.8208	0.8312 0.8473	0.7992	0.8472	Ave		0.8124			7.0		30.0				
n-Dodecane	++++ 0.5971	++++ 0.4426	++++ 0.5501	0.4099	0.6021	Ave		0.5203			17.1		30.0				
1,2,4-Trichlorobenzene	++++ 0.7896	++++ 0.6080	0.7103 0.8126	0.5673	0.7803	Ave		0.7114			14.4		30.0				
Hexachlorobutadiene	++++ 0.7767	0.6499 0.7256	0.7046 0.7756	0.7044	0.7664	Ave		0.7290			6.5		30.0				
Naphthalene	++++ 1.5484	++++ 1.0192	1.4816 1.6229	0.9436	1.5197	Ave		1.3559			21.7		30.0				
1,2,3-Trichlorobenzene	++++ 0.7178	0.2415 0.5357	0.6258 0.7276	0.5143	0.7031	Ave		0.5808			29.7		30.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
 AIR - GC/MS VOA INITIAL CALIBRATION DATA  
 INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-27300-1 Analy Batch No.: 85787

SDG No.: Agra (200-27300)

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/19/2015 18:34 Calibration End Date: 03/20/2015 00:18 Calibration ID: 30154

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-85787/4	12677-004.D
Level 2	IC 200-85787/5	12677-005.D
Level 3	IC 200-85787/6	12677-006.D
Level 4	IC 200-85787/7	12677-007.D
Level 5	ICIS 200-85787/8	12677-008.D
Level 6	IC 200-85787/9	12677-009.D
Level 7	IC 200-85787/10	12677-010.D
Level 8	IC 200-85787/11	12677-011.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8			LVL 6	LVL 7	LVL 8		
Propylene	BCM	Ave	++++ 186724	++++ 244359	8076 480159	64413	124174	++++ 15.0	++++ 20.0	0.500 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	++++ 923597	++++ 1212252	31493 2387594	306424	612313	++++ 15.0	++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	++++ 444459	++++ 587433	15375 1163054	148709	295815	++++ 15.0	++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	++++ 908233	11533 1190635	30245 2331531	301094	602829	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	++++ 243444	++++ 320057	8550 642466	80491	160675	++++ 15.0	++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	++++ 370659	++++ 495230	13195 988434	122644	246331	++++ 15.0	++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	764 284238	3533 396247	9937 803222	94889	196966	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	++++ 186040	2485 255960	6769 527966	62874	130454	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	++++ 258702	3416 341830	9231 656190	86278	175391	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	++++ 115601	++++ 161375	4148 296513	38847	81588	++++ 15.0	++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	++++ 202408	3605 280031	8085 529849	69619	142988	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene (Vinyl Bromide)	BCM	Ave	++++ 404450	4894 504864	13019 1044263	131972	250562	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	++++ 1008496	12599 1321263	33973 2626974	331765	645028	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	++++ 451118	++++ 588639	16280 1161359	150007	291996	++++ 15.0	++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	++++ 169937	++++ 329609	41518 814172	82962	125383	++++ 20.0	++++ 40.0	5.01 100.0	9.99	15.0

FORM VI  
AIR - GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-27300-1 Analy Batch No.: 85787

SDG No.: Agra (200-27300)

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/19/2015 18:34 Calibration End Date: 03/20/2015 00:18 Calibration ID: 30154

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	++++ 216247	2831 282858	7099 559702	70347	142035	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	++++ 103040	++++ 128615	++++ 249624	33061	67448	++++ 15.0	++++ 20.0	++++ 40.0	4.99	10.00
Freon TF	BCM	Ave	++++ 773615	9689 1008824	26160 1974161	253943	509040	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	++++ 364270	4614 476907	12119 944778	118793	238059	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	++++ 427501	++++ 505988	++++ 1001431	147834	265505	++++ 15.0	++++ 20.0	++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	++++ 922621	++++ 1203879	++++ 2401517	30762 302373	605729	++++ 15.0	++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	++++ 373168	++++ 474878	++++ 924277	128353	292201	++++ 15.0	++++ 20.0	++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	++++ 297973	++++ 434256	++++ 832956	11439 108238	196482	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	++++ 180321	++++ 230292	++++ 456037	61179	125370	++++ 15.0	++++ 20.0	++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	++++ 316179	++++ 411633	++++ 815696	14365 107212	209413	++++ 15.0	++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	++++ 613468	++++ 786925	++++ 1554229	207512	460133	++++ 15.0	++++ 20.0	++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	++++ 1035559	++++ 1356109	++++ 2704747	34198 339352	679726	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	++++ 477505	++++ 622397	++++ 1232386	5951 157037	314701	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	++++ 216890	++++ 281964	++++ 566645	7493 70620	143269	++++ 15.0	++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	++++ 475775	++++ 622772	++++ 1231288	7809 157574	315507	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	++++ 631393	++++ 825430	++++ 1650448	1629 206393	411711	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	++++ 759041	++++ 986788	++++ 1964381	247928	499705	++++ 15.0	++++ 20.0	++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	++++ 458443	++++ 601879	++++ 1208227	5662 149262	300533	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	++++ 200531	++++ 257630	++++ 517171	10217 66035	133778	++++ 15.0	++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	++++ 34825	++++ 44621	++++ 90128	11099	22839	++++ 15.0	++++ 20.0	++++ 40.0	4.99	10.00
Tetrahydrofuran	DFB	Ave	++++ 345691	++++ 442199	++++ 881534	112389	230031	++++ 15.0	++++ 20.0	++++ 40.0	4.99	10.00

FORM VI  
AIR - GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington

Job No.: 200-27300-1

Analy Batch No.: 85787

SDG No.: Agra (200-27300)

Instrument ID: CHX.i

GC Column: RTX-624

ID: 0.32 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 03/19/2015 18:34

Calibration End Date: 03/20/2015 00:18

Calibration ID: 30154

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	++++ 862822	10801 1137434	29048 2282411	281981	564888	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFB	Ave	++++ 613437	7815 808115	20540 1615592	200720	402380	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFB	Ave	++++ 935942	11280 1231314	31004 2480154	303973	607423	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFB	Ave	2698 989379	12069 1374534	32689 2794651	330724	680125	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFB	Ave	++++ 2034127	26029 2666347	68626 5288728	673818	1337033	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFB	Ave	++++ 1409701	17902 1847441	47813 3685935	463438	923455	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFB	Ave	++++ 534668	6653 701279	17346 1416384	173448	350224	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFB	Ave	++++ 656217	9901 850334	22534 1684854	217546	430615	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFB	Ave	++++ 238324	++++ 302848	++++ 630200	78818	182641	++++ 15.0	++++ 20.0	++++ 40.0	4.99	10.00
Trichloroethene	DFB	Ave	1888 676921	7971 885978	22194 1792221	215767	438771	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFB	Ave	++++ 505747	6487 665446	16542 1351009	162834	330802	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFB	Ave	++++ 519433	++++ 680611	17131 1386801	166112	336602	++++ 15.0	++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFB	Ave	++++ 252772	++++ 299144	++++ 583960	81968	192476	++++ 15.0	++++ 20.0	++++ 40.0	4.99	10.00
Dibromomethane	DFB	Ave	++++ 778789	9846 1030670	25248 2112250	246818	505441	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFB	Ave	++++ 1050573	12045 1385983	33260 2825786	336704	684614	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFB	Ave	++++ 829869	9378 1086794	26049 2231496	263196	538565	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFB	Ave	++++ 897510	++++ 1146722	35343 2307226	289883	587778	++++ 15.0	++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBZ	Ave	++++ 1146575	14309 1501373	36667 3047586	367644	742044	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFB	Ave	++++ 949660	13797 1235286	33515 2421040	316120	630416	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFB	Ave	++++ 849098	10173 1111959	33624 2312607	277373	552669	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBZ	Ave	++++ 529749	6186 697828	17064 1422778	169837	346455	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI  
 AIR - GC/MS VOA INITIAL CALIBRATION DATA  
 INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-27300-1 Analy Batch No.: 85787

SDG No.: Agra (200-27300)

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/19/2015 18:34 Calibration End Date: 03/20/2015 00:18 Calibration ID: 30154

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBZ	Ave	2950 1159750	13689 1530093	36231 3139646	367280	751117	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBZ	Ave	++++ 864103	++++ 1108921	++++ 2254683	277543	574782	++++ 15.0	++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBZ	Ave	++++ 1260098	13428 1692324	37256 3475728	400386	817624	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBZ	Ave	++++ 1073294	12206 1399923	33608 2890160	341309	695924	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBZ	Ave	++++ 1656478	19461 2165773	54417 4442720	528658	1078278	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBZ	Ave	++++ 2544560	30830 3335238	81221 6824533	815571	1654595	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBZ	Ave	++++ 1032850	13834 1351817	33184 2728152	334323	678561	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBZ	Ave	++++ 2126061	24755 2773863	67673 5563826	681261	1378942	++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBZ	Ave	++++ 1048906	12078 1386147	33214 2797197	333229	686273	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBZ	Ave	++++ 1691111	17289 2193731	51527 4507647	520646	1100734	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBZ	Ave	++++ 1372115	12768 1862021	39800 3773926	439648	889103	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBZ	Ave	++++ 3113704	36089 4067163	97764 8265890	990941	2013481	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBZ	Ave	++++ 1410176	16406 1836257	46042 3745851	449977	917297	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBZ	Ave	++++ 3584338	41047 4667240	114083 9486739	1128825	2333292	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBZ	Ave	++++ 1099412	++++ 1433629	36755 2921031	350760	721738	++++ 15.0	++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBZ	Ave	++++ 1363965	++++ 1766286	42807 3575287	430380	897187	++++ 15.0	++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBZ	Ave	++++ 3142190	35158 4071492	98692 8121243	992941	2051099	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBZ	Ave	++++ 2481134	28777 3225235	79581 6486611	783148	1613928	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBZ	Ave	++++ 2660182	29290 3451841	82569 7078855	833868	1729549	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBZ	Ave	++++ 1414098	14071 1814622	41006 3766298	426843	914367	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBZ	Ave	++++ 2617308	29888 3412729	82092 6856701	828798	1702139	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI  
AIR - GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-27300-1 Analy Batch No.: 85787  
 SDG No.: Agra (200-27300)  
 Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N  
 Calibration Start Date: 03/19/2015 18:34 Calibration End Date: 03/20/2015 00:18 Calibration ID: 30154

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBZ	Ave	++++ 2675255	29281 3448129	83315 7069045	834236	1746182	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBZ	Ave	++++ 3814170	43314 4945685	118195 9909797	1210737	2484701	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBZ	Ave	++++ 3391379	37237 4397328	104644 8804568	1061455	2217218	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBZ	Ave	++++ 2027836	20812 2546571	64008 5381604	608499	1314210	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBZ	Ave	++++ 2046075	20528 2538495	65047 5434481	600161	1322275	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBZ	Ave	++++ 2312264	22689 2944520	67572 6513217	687470	1450451	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBZ	Ave	++++ 1480435	++++ 1801489	++++ 3569899	444257	986126	++++ 15.0	++++ 20.0	++++ 40.0	4.99	10.00
n-Butylbenzene	CBZ	Ave	++++ 2827790	30855 3563561	88983 6833974	873405	1866606	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorobenzene	CBZ	Ave	++++ 1915999	19747 2432101	60766 5111760	579014	1240887	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBZ	Ave	++++ 1345841	++++ 1311440	++++ 3318604	296931	881851	++++ 15.0	++++ 20.0	++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBZ	Ave	++++ 1779891	++++ 1801598	51930 4902671	410962	1142888	++++ 15.0	++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBZ	Ave	++++ 1750679	18570 2150110	51510 4679447	510337	1122447	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBZ	Ave	++++ 3490319	++++ 3020152	108312 9791100	683561	2225745	++++ 15.0	++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBZ	Ave	++++ 1618016	6900 1587276	45750 4389851	372560	1029750	++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:

Ave = Average ISTD

FORM VII  
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Lab Sample ID: ICV 200-85787/19 Calibration Date: 03/20/2015 09:46  
 Instrument ID: CHX.i Calib Start Date: 03/19/2015 18:34  
 GC Column: RTX-624 ID: 0.32 (mm) Calib End Date: 03/20/2015 00:18  
 Lab File ID: 12677-019.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.4444	0.3780		8.50	10.0	-14.9	30.0
Dichlorodifluoromethane	Ave	2.088	1.973		9.45	10.0	-5.5	30.0
Freon 22	Ave	1.012	0.9567		9.45	10.0	-5.5	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.040	2.215		10.9	10.0	8.6	30.0
Chloromethane	Ave	0.5544	0.5121		9.24	10.0	-7.6	30.0
n-Butane	Ave	0.8508	0.7928		9.32	10.0	-6.8	30.0
Vinyl chloride	Ave	0.6616	0.6308		9.53	10.0	-4.6	30.0
1,3-Butadiene	Ave	0.4400	0.4088		9.29	10.0	-7.1	30.0
Bromomethane	Ave	0.5924	0.5903		9.96	10.0	-0.4	30.0
Chloroethane	Ave	0.2695	0.2704		10.0	10.0	0.3	30.0
Isopentane	Ave	0.5053	0.5125		10.1	10.0	1.4	30.0
Bromoethene (Vinyl Bromide)	Ave	0.8814	0.8810		9.99	10.0	-0.0	30.0
Trichlorofluoromethane	Ave	2.253	2.185		9.70	10.0	-3.0	30.0
n-Pentane	Ave	1.025	1.091		10.6	10.0	6.4	30.0
Ethanol	Ave	0.2829	0.2770		14.7	15.0	-2.1	30.0
Ethyl ether	Ave	0.4851	0.5232		10.8	10.0	7.9	30.0
Acrolein	Ave	0.2235	0.2582		11.6	10.0	15.5	30.0
Freon TF	Ave	1.731	1.727		9.98	10.0	-0.2	30.0
1,1-Dichloroethene	Ave	0.8148	0.7949		9.75	10.0	-2.4	30.0
Acetone	Ave	0.9172	1.019		11.1	10.0	11.0	30.0
Carbon disulfide	Ave	2.070	2.348		11.3	10.0	13.4	30.0
Isopropyl alcohol	Ave	0.8608	0.7157		8.31	10.0	-16.9	30.0
3-Chloropropene	Ave	0.7357	0.6776		9.21	10.0	-7.9	30.0
Acetonitrile	Ave	0.4057	0.4209		10.4	10.0	3.7	30.0
Methylene Chloride	Ave	0.7576	0.6982		9.21	10.0	-7.8	30.0
tert-Butyl alcohol	Ave	1.404	1.245		8.87	10.0	-11.3	30.0
Methyl tert-butyl ether	Ave	2.307	2.266		9.82	10.0	-1.8	30.0
trans-1,2-Dichloroethene	Ave	1.068	1.119		10.5	10.0	4.8	30.0
Acrylonitrile	Ave	0.4896	0.5037		10.3	10.0	2.9	30.0
n-Hexane	Ave	1.121	1.137		10.1	10.0	1.4	30.0
1,1-Dichloroethane	Ave	1.410	1.393		9.88	10.0	-1.2	30.0
Vinyl acetate	Ave	1.688	1.645		9.74	10.0	-2.6	30.0
cis-1,2-Dichloroethene	Ave	1.027	1.001		9.74	10.0	-2.5	30.0
Methyl Ethyl Ketone	Ave	0.4906	0.4437		9.04	10.0	-9.5	30.0
Ethyl acetate	Ave	0.0768	0.0829		10.8	10.0	7.9	30.0
Tetrahydrofuran	Ave	0.1418	0.1399		9.87	10.0	-1.3	30.0
Chloroform	Ave	1.938	1.911		9.86	10.0	-1.4	30.0
Cyclohexane	Ave	0.2547	0.2556		10.0	10.0	0.4	30.0
1,1,1-Trichloroethane	Ave	0.3842	0.3828		9.96	10.0	-0.4	30.0
Carbon tetrachloride	Ave	0.4208	0.3949		9.38	10.0	-6.1	30.0

FORM VII  
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Lab Sample ID: ICV 200-85787/19 Calibration Date: 03/20/2015 09:46  
 Instrument ID: CHX.i Calib Start Date: 03/19/2015 18:34  
 GC Column: RTX-624 ID: 0.32 (mm) Calib End Date: 03/20/2015 00:18  
 Lab File ID: 12677-019.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.8455	0.8242		9.75	10.0	-2.5	30.0
Benzene	Ave	0.5853	0.5827		9.95	10.0	-0.4	30.0
1,2-Dichloroethane	Ave	0.2200	0.2180		9.91	10.0	-0.9	30.0
n-Heptane	Ave	0.2794	0.2629		9.41	10.0	-5.9	30.0
n-Butanol	Ave	0.1017	0.0941		9.25	10.0	-7.5	30.0
Trichloroethene	Ave	0.2791	0.2773		9.93	10.0	-0.6	30.0
1,2-Dichloropropane	Ave	0.2093	0.2018		9.64	10.0	-3.5	30.0
Methyl methacrylate	Ave	0.2147	0.2129		9.91	10.0	-0.8	30.0
1,4-Dioxane	Ave	0.1033	0.0890		8.61	10.0	-13.9	30.0
Dibromomethane	Ave	0.3211	0.3127		9.74	10.0	-2.6	30.0
Bromodichloromethane	Ave	0.4262	0.4192		9.83	10.0	-1.7	30.0
cis-1,3-Dichloropropene	Ave	0.3346	0.3352		10.0	10.0	0.2	30.0
methyl isobutyl ketone	Ave	0.3806	0.3471		9.12	10.0	-8.8	30.0
Toluene	Ave	0.5053	0.5004		9.90	10.0	-1.0	30.0
n-Octane	Ave	0.4043	0.3845		9.51	10.0	-4.9	30.0
trans-1,3-Dichloropropene	Ave	0.3599	0.3484		9.68	10.0	-3.2	30.0
1,1,2-Trichloroethane	Ave	0.2325	0.2339		10.1	10.0	0.6	30.0
Tetrachloroethene	Ave	0.5079	0.5051		9.94	10.0	-0.6	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.4089	0.3625		8.86	10.0	-11.3	30.0
Dibromochloromethane	Ave	0.5424	0.5383		9.92	10.0	-0.8	30.0
1,2-Dibromoethane	Ave	0.4658	0.4697		10.1	10.0	0.8	30.0
Chlorobenzene	Ave	0.7276	0.7252		9.96	10.0	-0.3	30.0
Ethylbenzene	Ave	1.119	1.098		9.81	10.0	-1.9	30.0
n-Nonane	Ave	0.4613	0.4430		9.60	10.0	-4.0	30.0
m,p-Xylene	Ave	0.4625	0.4585		19.8	20.0	-0.9	30.0
Xylene, o-	Ave	0.4575	0.4471		9.77	10.0	-2.3	30.0
Styrene	Ave	0.7168	0.7171		10.0	10.0	0.0	30.0
Bromoform	Ave	0.5811	0.6064		10.4	10.0	4.3	30.0
Cumene	Ave	1.352	1.315		9.72	10.0	-2.7	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6168	0.6123		9.93	10.0	-0.7	30.0
n-Propylbenzene	Ave	1.555	1.519		9.76	10.0	-2.3	30.0
1,2,3-Trichloropropane	Ave	0.4892	0.4640		9.48	10.0	-5.2	30.0
n-Decane	Ave	0.5977	0.5749		9.62	10.0	-3.8	30.0
4-Ethyltoluene	Ave	1.352	1.371		10.1	10.0	1.4	30.0
2-Chlorotoluene	Ave	1.078	1.056		9.79	10.0	-2.0	30.0
1,3,5-Trimethylbenzene	Ave	1.144	1.126		9.85	10.0	-1.5	30.0
Alpha Methyl Styrene	Ave	0.5901	0.5969		10.1	10.0	1.2	30.0
tert-Butylbenzene	Ave	1.132	1.106		9.77	10.0	-2.3	30.0
1,2,4-Trimethylbenzene	Ave	1.147	1.130		9.85	10.0	-1.5	30.0
sec-Butylbenzene	Ave	1.643	1.604		9.76	10.0	-2.4	30.0



FORM VII  
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Lab Sample ID: ICV 200-85787/19 Calibration Date: 03/20/2015 09:46  
 Instrument ID: CHX.i Calib Start Date: 03/19/2015 18:34  
 GC Column: RTX-624 ID: 0.32 (mm) Calib End Date: 03/20/2015 00:18  
 Lab File ID: 12677-019.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.452	1.435		9.88	10.0	-1.2	30.0
1,3-Dichlorobenzene	Ave	0.8560	0.8725		10.2	10.0	1.9	30.0
1,4-Dichlorobenzene	Ave	0.8578	0.8709		10.2	10.0	1.5	30.0
Benzyl chloride	Ave	0.9652	0.9621		9.97	10.0	-0.3	30.0
n-Butylbenzene	Ave	1.195	1.210		10.1	10.0	1.3	30.0
n-Undecane	Ave	0.6286	0.6424		10.2	10.0	2.2	30.0
1,2-Dichlorobenzene	Ave	0.8124	0.8215		10.1	10.0	1.1	30.0
n-Dodecane	Ave	0.5203	0.5662		10.9	10.0	8.8	30.0
1,2,4-Trichlorobenzene	Ave	0.7114	0.7297		10.3	10.0	2.6	30.0
Hexachlorobutadiene	Ave	0.7290	0.7368		10.1	10.0	1.1	30.0
Naphthalene	Ave	1.356	1.300		9.58	10.0	-4.2	30.0
1,2,3-Trichlorobenzene	Ave	0.5808	0.6344		10.9	10.0	9.2	30.0

FORM VII  
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Lab Sample ID: CCVIS 200-86294/2 Calibration Date: 04/01/2015 11:31  
 Instrument ID: CHX.i Calib Start Date: 03/19/2015 18:34  
 GC Column: RTX-624 ID: 0.32 (mm) Calib End Date: 03/20/2015 00:18  
 Lab File ID: 12901-002.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.4444	0.4293		9.66	10.0	-3.4	30.0
Dichlorodifluoromethane	Ave	2.088	2.148		10.3	10.0	2.9	30.0
Freon 22	Ave	1.012	1.024		10.1	10.0	1.2	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.040	2.166		10.6	10.0	6.2	30.0
Chloromethane	Ave	0.5544	0.5545		10.0	10.0	0.0	30.0
n-Butane	Ave	0.8508	0.8171		9.60	10.0	-4.0	30.0
Vinyl chloride	Ave	0.6616	0.6756		10.2	10.0	2.1	30.0
1,3-Butadiene	Ave	0.4400	0.4349		9.88	10.0	-1.2	30.0
Bromomethane	Ave	0.5924	0.6338		10.7	10.0	7.0	30.0
Chloroethane	Ave	0.2695	0.2674		9.92	10.0	-0.8	30.0
Isopentane	Ave	0.5053	0.4285		8.48	10.0	-15.2	30.0
Bromoethene (Vinyl Bromide)	Ave	0.8814	0.9510		10.8	10.0	7.9	30.0
Trichlorofluoromethane	Ave	2.253	2.341		10.4	10.0	3.9	30.0
n-Pentane	Ave	1.025	0.9877		9.64	10.0	-3.6	30.0
Ethanol	Ave	0.2829	0.2839		15.1	15.0	0.3	30.0
Ethyl ether	Ave	0.4851	0.4886		10.1	10.0	0.7	30.0
Acrolein	Ave	0.2235	0.2242		10.0	10.0	0.3	30.0
Freon TF	Ave	1.731	1.804		10.4	10.0	4.2	30.0
1,1-Dichloroethene	Ave	0.8148	0.8478		10.4	10.0	4.0	30.0
Acetone	Ave	0.9172	0.8706		9.49	10.0	-5.1	30.0
Carbon disulfide	Ave	2.070	2.154		10.4	10.0	4.1	30.0
Isopropyl alcohol	Ave	0.8608	0.9551		11.1	10.0	11.0	30.0
3-Chloropropene	Ave	0.7357	0.6329		8.60	10.0	-14.0	30.0
Acetonitrile	Ave	0.4057	0.4153		10.2	10.0	2.4	30.0
Methylene Chloride	Ave	0.7576	0.7034		9.28	10.0	-7.1	30.0
tert-Butyl alcohol	Ave	1.404	1.527		10.9	10.0	8.8	30.0
Methyl tert-butyl ether	Ave	2.307	2.299		9.97	10.0	-0.3	30.0
trans-1,2-Dichloroethene	Ave	1.068	1.062		9.94	10.0	-0.5	30.0
Acrylonitrile	Ave	0.4896	0.4881		9.97	10.0	-0.3	30.0
n-Hexane	Ave	1.121	1.062		9.47	10.0	-5.2	30.0
1,1-Dichloroethane	Ave	1.410	1.411		10.0	10.0	0.1	30.0
Vinyl acetate	Ave	1.688	1.620		9.60	10.0	-4.0	30.0
cis-1,2-Dichloroethene	Ave	1.027	1.040		10.1	10.0	1.3	30.0
Methyl Ethyl Ketone	Ave	0.4906	0.4547		9.27	10.0	-7.3	30.0
Ethyl acetate	Ave	0.0768	0.0782		10.2	10.0	1.8	30.0
Tetrahydrofuran	Ave	0.1418	0.1470		10.4	10.0	3.7	30.0
Chloroform	Ave	1.938	1.936		9.99	10.0	-0.1	30.0
Cyclohexane	Ave	0.2547	0.2623		10.3	10.0	3.0	30.0
1,1,1-Trichloroethane	Ave	0.3842	0.4011		10.4	10.0	4.4	30.0
Carbon tetrachloride	Ave	0.4208	0.4396		10.4	10.0	4.5	30.0

FORM VII  
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Lab Sample ID: CCVIS 200-86294/2 Calibration Date: 04/01/2015 11:31  
 Instrument ID: CHX.i Calib Start Date: 03/19/2015 18:34  
 GC Column: RTX-624 ID: 0.32 (mm) Calib End Date: 03/20/2015 00:18  
 Lab File ID: 12901-002.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.8455	0.8463		10.0	10.0	0.0	30.0
Benzene	Ave	0.5853	0.6039		10.3	10.0	3.2	30.0
1,2-Dichloroethane	Ave	0.2200	0.2202		10.0	10.0	0.1	30.0
n-Heptane	Ave	0.2794	0.2635		9.43	10.0	-5.7	30.0
n-Butanol	Ave	0.1017	0.1064		10.5	10.0	4.6	30.0
Trichloroethene	Ave	0.2791	0.2784		9.97	10.0	-0.2	30.0
1,2-Dichloropropane	Ave	0.2093	0.1994		9.53	10.0	-4.7	30.0
Methyl methacrylate	Ave	0.2147	0.2004		9.33	10.0	-6.7	30.0
1,4-Dioxane	Ave	0.1033	0.1167		11.3	10.0	12.9	30.0
Dibromomethane	Ave	0.3211	0.3159		9.84	10.0	-1.6	30.0
Bromodichloromethane	Ave	0.4262	0.4212		9.88	10.0	-1.2	30.0
cis-1,3-Dichloropropene	Ave	0.3346	0.3198		9.56	10.0	-4.4	30.0
methyl isobutyl ketone	Ave	0.3806	0.3513		9.23	10.0	-7.7	30.0
Toluene	Ave	0.5053	0.5020		9.93	10.0	-0.6	30.0
n-Octane	Ave	0.4043	0.3705		9.16	10.0	-8.4	30.0
trans-1,3-Dichloropropene	Ave	0.3599	0.3298		9.16	10.0	-8.4	30.0
1,1,2-Trichloroethane	Ave	0.2325	0.2351		10.1	10.0	1.1	30.0
Tetrachloroethene	Ave	0.5079	0.5063		9.97	10.0	-0.3	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.4089	0.3760		9.20	10.0	-8.0	30.0
Dibromochloromethane	Ave	0.5424	0.5501		10.1	10.0	1.4	30.0
1,2-Dibromoethane	Ave	0.4658	0.4788		10.3	10.0	2.8	30.0
Chlorobenzene	Ave	0.7276	0.7247		9.96	10.0	-0.4	30.0
Ethylbenzene	Ave	1.119	1.127		10.1	10.0	0.7	30.0
n-Nonane	Ave	0.4613	0.4414		9.56	10.0	-4.3	30.0
m,p-Xylene	Ave	0.4625	0.4689		20.3	20.0	1.4	30.0
Xylene, o-	Ave	0.4575	0.4547		9.94	10.0	-0.6	30.0
Styrene	Ave	0.7168	0.7266		10.1	10.0	1.4	30.0
Bromoform	Ave	0.5811	0.5923		10.2	10.0	1.9	30.0
Cumene	Ave	1.352	1.350		9.98	10.0	-0.2	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6168	0.6301		10.2	10.0	2.2	30.0
n-Propylbenzene	Ave	1.555	1.612		10.4	10.0	3.7	30.0
1,2,3-Trichloropropane	Ave	0.4892	0.4879		9.97	10.0	-0.3	30.0
n-Decane	Ave	0.5977	0.5894		9.86	10.0	-1.4	30.0
4-Ethyltoluene	Ave	1.352	1.423		10.5	10.0	5.2	30.0
2-Chlorotoluene	Ave	1.078	1.126		10.4	10.0	4.5	30.0
1,3,5-Trimethylbenzene	Ave	1.144	1.177		10.3	10.0	3.0	30.0
Alpha Methyl Styrene	Ave	0.5901	0.6116		10.4	10.0	3.6	30.0
tert-Butylbenzene	Ave	1.132	1.156		10.2	10.0	2.2	30.0
1,2,4-Trimethylbenzene	Ave	1.147	1.196		10.4	10.0	4.2	30.0
sec-Butylbenzene	Ave	1.643	1.714		10.4	10.0	4.3	30.0

FORM VII  
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Lab Sample ID: CCVIS 200-86294/2 Calibration Date: 04/01/2015 11:31  
 Instrument ID: CHX.i Calib Start Date: 03/19/2015 18:34  
 GC Column: RTX-624 ID: 0.32 (mm) Calib End Date: 03/20/2015 00:18  
 Lab File ID: 12901-002.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.452	1.511		10.4	10.0	4.1	30.0
1,3-Dichlorobenzene	Ave	0.8560	0.9147		10.7	10.0	6.9	30.0
1,4-Dichlorobenzene	Ave	0.8578	0.9196		10.7	10.0	7.2	30.0
Benzyl chloride	Ave	0.9652	0.9873		10.2	10.0	2.3	30.0
n-Undecane	Ave	0.6286	0.6672		10.6	10.0	6.1	30.0
n-Butylbenzene	Ave	1.195	1.331		11.1	10.0	11.3	30.0
1,2-Dichlorobenzene	Ave	0.8124	0.8611		10.6	10.0	6.0	30.0
n-Dodecane	Ave	0.5203	0.5908		11.4	10.0	13.5	30.0
1,2,4-Trichlorobenzene	Ave	0.7114	0.7910		11.1	10.0	11.2	30.0
Hexachlorobutadiene	Ave	0.7290	0.7722		10.6	10.0	5.9	30.0
Naphthalene	Ave	1.356	1.530		11.3	10.0	12.9	30.0
1,2,3-Trichlorobenzene	Ave	0.5808	0.7165		12.3	10.0	23.4	30.0

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 200-86294/4  
 Matrix: Air Lab File ID: 12901-004.D  
 Analysis Method: TO-15 Date Collected: \_\_\_\_\_  
 Sample wt/vol: 200 (mL) Date Analyzed: 04/01/2015 13:09  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
75-71-8	Dichlorodifluoromethane	120.91	0.50	U	0.50	
75-45-6	Freon 22	86.47	0.50	U	0.50	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	0.20	U	0.20	
74-87-3	Chloromethane	50.49	0.50	U	0.50	
106-97-8	n-Butane	58.12	0.50	U	0.50	
75-01-4	Vinyl chloride	62.50	0.20	U	0.20	
106-99-0	1,3-Butadiene	54.09	0.20	U	0.20	
74-83-9	Bromomethane	94.94	0.20	U	0.20	
75-00-3	Chloroethane	64.52	0.50	U	0.50	
593-60-2	Bromoethene (Vinyl Bromide)	106.96	0.20	U	0.20	
75-69-4	Trichlorofluoromethane	137.37	0.20	U	0.20	
76-13-1	Freon TF	187.38	0.20	U	0.20	
75-35-4	1,1-Dichloroethene	96.94	0.20	U	0.20	
67-64-1	Acetone	58.08	5.0	U	5.0	
67-63-0	Isopropyl alcohol	60.10	5.0	U	5.0	
75-15-0	Carbon disulfide	76.14	0.50	U	0.50	
107-05-1	3-Chloropropene	76.53	0.50	U	0.50	
75-09-2	Methylene Chloride	84.93	0.50	U	0.50	
75-65-0	tert-Butyl alcohol	74.12	5.0	U	5.0	
1634-04-4	Methyl tert-butyl ether	88.15	0.20	U	0.20	
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.20	
110-54-3	n-Hexane	86.17	0.20	U	0.20	
75-34-3	1,1-Dichloroethane	98.96	0.20	U	0.20	
78-93-3	Methyl Ethyl Ketone	72.11	0.50	U	0.50	
156-59-2	cis-1,2-Dichloroethene	96.94	0.20	U	0.20	
67-66-3	Chloroform	119.38	0.20	U	0.20	
109-99-9	Tetrahydrofuran	72.11	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	133.41	0.20	U	0.20	
110-82-7	Cyclohexane	84.16	0.20	U	0.20	
56-23-5	Carbon tetrachloride	153.81	0.20	U	0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	0.20	U	0.20	
71-43-2	Benzene	78.11	0.20	U	0.20	
107-06-2	1,2-Dichloroethane	98.96	0.20	U	0.20	
142-82-5	n-Heptane	100.21	0.20	U	0.20	
79-01-6	Trichloroethene	131.39	0.20	U	0.20	

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 200-86294/4  
 Matrix: Air Lab File ID: 12901-004.D  
 Analysis Method: TO-15 Date Collected: \_\_\_\_\_  
 Sample wt/vol: 200 (mL) Date Analyzed: 04/01/2015 13:09  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
80-62-6	Methyl methacrylate	100.12	0.50	U	0.50
78-87-5	1,2-Dichloropropane	112.99	0.20	U	0.20
123-91-1	1,4-Dioxane	88.11	5.0	U	5.0
75-27-4	Bromodichloromethane	163.83	0.20	U	0.20
10061-01-5	cis-1,3-Dichloropropene	110.97	0.20	U	0.20
108-10-1	methyl isobutyl ketone	100.16	0.50	U	0.50
108-88-3	Toluene	92.14	0.20	U	0.20
10061-02-6	trans-1,3-Dichloropropene	110.97	0.20	U	0.20
79-00-5	1,1,2-Trichloroethane	133.41	0.20	U	0.20
127-18-4	Tetrachloroethene	165.83	0.20	U	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	0.50	U	0.50
124-48-1	Dibromochloromethane	208.29	0.20	U	0.20
106-93-4	1,2-Dibromoethane	187.87	0.20	U	0.20
108-90-7	Chlorobenzene	112.56	0.20	U	0.20
100-41-4	Ethylbenzene	106.17	0.20	U	0.20
179601-23-1	m,p-Xylene	106.17	0.50	U	0.50
95-47-6	Xylene, o-	106.17	0.20	U	0.20
100-42-5	Styrene	104.15	0.20	U	0.20
75-25-2	Bromoform	252.75	0.20	U	0.20
98-82-8	Cumene	120.19	0.20	U	0.20
79-34-5	1,1,2,2-Tetrachloroethane	167.85	0.20	U	0.20
103-65-1	n-Propylbenzene	120.19	0.20	U	0.20
622-96-8	4-Ethyltoluene	120.20	0.20	U	0.20
108-67-8	1,3,5-Trimethylbenzene	120.20	0.20	U	0.20
95-49-8	2-Chlorotoluene	126.59	0.20	U	0.20
98-06-6	tert-Butylbenzene	134.22	0.20	U	0.20
95-63-6	1,2,4-Trimethylbenzene	120.20	0.20	U	0.20
135-98-8	sec-Butylbenzene	134.22	0.20	U	0.20
99-87-6	4-Isopropyltoluene	134.22	0.20	U	0.20
541-73-1	1,3-Dichlorobenzene	147.00	0.20	U	0.20
106-46-7	1,4-Dichlorobenzene	147.00	0.20	U	0.20
100-44-7	Benzyl chloride	126.58	0.20	U	0.20
104-51-8	n-Butylbenzene	134.22	0.20	U	0.20
95-50-1	1,2-Dichlorobenzene	147.00	0.20	U	0.20

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 200-86294/4  
 Matrix: Air Lab File ID: 12901-004.D  
 Analysis Method: TO-15 Date Collected: \_\_\_\_\_  
 Sample wt/vol: 200 (mL) Date Analyzed: 04/01/2015 13:09  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
120-82-1	1,2,4-Trichlorobenzene	181.45	0.50	U	0.50	
87-68-3	Hexachlorobutadiene	260.76	0.20	U	0.20	
91-20-3	Naphthalene	128.17	0.50	U	0.50	

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 200-86294/4  
 Matrix: Air Lab File ID: 12901-004.D  
 Analysis Method: TO-15 Date Collected: \_\_\_\_\_  
 Sample wt/vol: 200 (mL) Date Analyzed: 04/01/2015 13:09  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
75-71-8	Dichlorodifluoromethane	120.91	2.5	U	2.5
75-45-6	Freon 22	86.47	1.8	U	1.8
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.4	U	1.4
74-87-3	Chloromethane	50.49	1.0	U	1.0
106-97-8	n-Butane	58.12	1.2	U	1.2
75-01-4	Vinyl chloride	62.50	0.51	U	0.51
106-99-0	1,3-Butadiene	54.09	0.44	U	0.44
74-83-9	Bromomethane	94.94	0.78	U	0.78
75-00-3	Chloroethane	64.52	1.3	U	1.3
593-60-2	Bromoethene (Vinyl Bromide)	106.96	0.87	U	0.87
75-69-4	Trichlorofluoromethane	137.37	1.1	U	1.1
76-13-1	Freon TF	187.38	1.5	U	1.5
75-35-4	1,1-Dichloroethene	96.94	0.79	U	0.79
67-64-1	Acetone	58.08	12	U	12
67-63-0	Isopropyl alcohol	60.10	12	U	12
75-15-0	Carbon disulfide	76.14	1.6	U	1.6
107-05-1	3-Chloropropene	76.53	1.6	U	1.6
75-09-2	Methylene Chloride	84.93	1.7	U	1.7
75-65-0	tert-Butyl alcohol	74.12	15	U	15
1634-04-4	Methyl tert-butyl ether	88.15	0.72	U	0.72
156-60-5	trans-1,2-Dichloroethene	96.94	0.79	U	0.79
110-54-3	n-Hexane	86.17	0.70	U	0.70
75-34-3	1,1-Dichloroethane	98.96	0.81	U	0.81
78-93-3	Methyl Ethyl Ketone	72.11	1.5	U	1.5
156-59-2	cis-1,2-Dichloroethene	96.94	0.79	U	0.79
67-66-3	Chloroform	119.38	0.98	U	0.98
109-99-9	Tetrahydrofuran	72.11	15	U	15
71-55-6	1,1,1-Trichloroethane	133.41	1.1	U	1.1
110-82-7	Cyclohexane	84.16	0.69	U	0.69
56-23-5	Carbon tetrachloride	153.81	1.3	U	1.3
540-84-1	2,2,4-Trimethylpentane	114.23	0.93	U	0.93
71-43-2	Benzene	78.11	0.64	U	0.64
107-06-2	1,2-Dichloroethane	98.96	0.81	U	0.81
142-82-5	n-Heptane	100.21	0.82	U	0.82
79-01-6	Trichloroethene	131.39	1.1	U	1.1



FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 200-86294/4  
 Matrix: Air Lab File ID: 12901-004.D  
 Analysis Method: TO-15 Date Collected: \_\_\_\_\_  
 Sample wt/vol: 200 (mL) Date Analyzed: 04/01/2015 13:09  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
80-62-6	Methyl methacrylate	100.12	2.0	U	2.0
78-87-5	1,2-Dichloropropane	112.99	0.92	U	0.92
123-91-1	1,4-Dioxane	88.11	18	U	18
75-27-4	Bromodichloromethane	163.83	1.3	U	1.3
10061-01-5	cis-1,3-Dichloropropene	110.97	0.91	U	0.91
108-10-1	methyl isobutyl ketone	100.16	2.0	U	2.0
108-88-3	Toluene	92.14	0.75	U	0.75
10061-02-6	trans-1,3-Dichloropropene	110.97	0.91	U	0.91
79-00-5	1,1,2-Trichloroethane	133.41	1.1	U	1.1
127-18-4	Tetrachloroethene	165.83	1.4	U	1.4
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	2.0	U	2.0
124-48-1	Dibromochloromethane	208.29	1.7	U	1.7
106-93-4	1,2-Dibromoethane	187.87	1.5	U	1.5
108-90-7	Chlorobenzene	112.56	0.92	U	0.92
100-41-4	Ethylbenzene	106.17	0.87	U	0.87
179601-23-1	m,p-Xylene	106.17	2.2	U	2.2
95-47-6	Xylene, o-	106.17	0.87	U	0.87
100-42-5	Styrene	104.15	0.85	U	0.85
75-25-2	Bromoform	252.75	2.1	U	2.1
98-82-8	Cumene	120.19	0.98	U	0.98
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.4	U	1.4
103-65-1	n-Propylbenzene	120.19	0.98	U	0.98
622-96-8	4-Ethyltoluene	120.20	0.98	U	0.98
108-67-8	1,3,5-Trimethylbenzene	120.20	0.98	U	0.98
95-49-8	2-Chlorotoluene	126.59	1.0	U	1.0
98-06-6	tert-Butylbenzene	134.22	1.1	U	1.1
95-63-6	1,2,4-Trimethylbenzene	120.20	0.98	U	0.98
135-98-8	sec-Butylbenzene	134.22	1.1	U	1.1
99-87-6	4-Isopropyltoluene	134.22	1.1	U	1.1
541-73-1	1,3-Dichlorobenzene	147.00	1.2	U	1.2
106-46-7	1,4-Dichlorobenzene	147.00	1.2	U	1.2
100-44-7	Benzyl chloride	126.58	1.0	U	1.0
104-51-8	n-Butylbenzene	134.22	1.1	U	1.1
95-50-1	1,2-Dichlorobenzene	147.00	1.2	U	1.2

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 200-86294/4  
 Matrix: Air Lab File ID: 12901-004.D  
 Analysis Method: TO-15 Date Collected: \_\_\_\_\_  
 Sample wt/vol: 200 (mL) Date Analyzed: 04/01/2015 13:09  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
120-82-1	1,2,4-Trichlorobenzene	181.45	3.7	U	3.7
87-68-3	Hexachlorobutadiene	260.76	2.1	U	2.1
91-20-3	Naphthalene	128.17	2.6	U	2.6

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 200-86294/3  
 Matrix: Air Lab File ID: 12901-003.D  
 Analysis Method: TO-15 Date Collected: \_\_\_\_\_  
 Sample wt/vol: 200 (mL) Date Analyzed: 04/01/2015 12:20  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
75-71-8	Dichlorodifluoromethane	120.91	9.88		0.50
75-45-6	Freon 22	86.47	9.65		0.50
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	11.4		0.20
74-87-3	Chloromethane	50.49	9.38		0.50
106-97-8	n-Butane	58.12	9.28		0.50
75-01-4	Vinyl chloride	62.50	9.75		0.20
106-99-0	1,3-Butadiene	54.09	9.50		0.20
74-83-9	Bromomethane	94.94	10.5		0.20
75-00-3	Chloroethane	64.52	9.60		0.50
593-60-2	Bromoethene (Vinyl Bromide)	106.96	9.88		0.20
75-69-4	Trichlorofluoromethane	137.37	9.77		0.20
76-13-1	Freon TF	187.38	10.2		0.20
75-35-4	1,1-Dichloroethene	96.94	10.0		0.20
67-64-1	Acetone	58.08	9.14		5.0
67-63-0	Isopropyl alcohol	60.10	7.94		5.0
75-15-0	Carbon disulfide	76.14	11.6		0.50
107-05-1	3-Chloropropene	76.53	8.14		0.50
75-09-2	Methylene Chloride	84.93	8.95		0.50
75-65-0	tert-Butyl alcohol	74.12	8.55		5.0
1634-04-4	Methyl tert-butyl ether	88.15	9.58		0.20
156-60-5	trans-1,2-Dichloroethene	96.94	10.2		0.20
110-54-3	n-Hexane	86.17	9.89		0.20
75-34-3	1,1-Dichloroethane	98.96	9.77		0.20
78-93-3	Methyl Ethyl Ketone	72.11	8.80		0.50
156-59-2	cis-1,2-Dichloroethene	96.94	9.71		0.20
67-66-3	Chloroform	119.38	9.73		0.20
109-99-9	Tetrahydrofuran	72.11	9.85		5.0
71-55-6	1,1,1-Trichloroethane	133.41	10.1		0.20
110-82-7	Cyclohexane	84.16	10.0		0.20
56-23-5	Carbon tetrachloride	153.81	10.0		0.20
540-84-1	2,2,4-Trimethylpentane	114.23	9.51		0.20
71-43-2	Benzene	78.11	9.95		0.20
107-06-2	1,2-Dichloroethane	98.96	9.67		0.20
142-82-5	n-Heptane	100.21	9.01		0.20
79-01-6	Trichloroethene	131.39	9.60		0.20

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 200-86294/3  
 Matrix: Air Lab File ID: 12901-003.D  
 Analysis Method: TO-15 Date Collected: \_\_\_\_\_  
 Sample wt/vol: 200 (mL) Date Analyzed: 04/01/2015 12:20  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
80-62-6	Methyl methacrylate	100.12	9.11		0.50
78-87-5	1,2-Dichloropropane	112.99	9.02		0.20
123-91-1	1,4-Dioxane	88.11	8.18		5.0
75-27-4	Bromodichloromethane	163.83	9.42		0.20
10061-01-5	cis-1,3-Dichloropropene	110.97	9.23		0.20
108-10-1	methyl isobutyl ketone	100.16	8.54		0.50
108-88-3	Toluene	92.14	9.55		0.20
10061-02-6	trans-1,3-Dichloropropene	110.97	8.84		0.20
79-00-5	1,1,2-Trichloroethane	133.41	9.80		0.20
127-18-4	Tetrachloroethene	165.83	9.69		0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	100.20	8.66		0.50
124-48-1	Dibromochloromethane	208.29	9.35		0.20
106-93-4	1,2-Dibromoethane	187.87	9.86		0.20
108-90-7	Chlorobenzene	112.56	9.49		0.20
100-41-4	Ethylbenzene	106.17	9.56		0.20
179601-23-1	m,p-Xylene	106.17	19.2		0.50
95-47-6	Xylene, o-	106.17	9.24		0.20
100-42-5	Styrene	104.15	9.44		0.20
75-25-2	Bromoform	252.75	9.56		0.20
98-82-8	Cumene	120.19	9.30		0.20
79-34-5	1,1,2,2-Tetrachloroethane	167.85	9.79		0.20
103-65-1	n-Propylbenzene	120.19	9.62		0.20
622-96-8	4-Ethyltoluene	120.20	10.0		0.20
108-67-8	1,3,5-Trimethylbenzene	120.20	9.58		0.20
95-49-8	2-Chlorotoluene	126.59	9.68		0.20
98-06-6	tert-Butylbenzene	134.22	9.47		0.20
95-63-6	1,2,4-Trimethylbenzene	120.20	9.57		0.20
135-98-8	sec-Butylbenzene	134.22	9.60		0.20
99-87-6	4-Isopropyltoluene	134.22	9.54		0.20
541-73-1	1,3-Dichlorobenzene	147.00	9.89		0.20
106-46-7	1,4-Dichlorobenzene	147.00	9.81		0.20
100-44-7	Benzyl chloride	126.58	9.13		0.20
104-51-8	n-Butylbenzene	134.22	10.2		0.20
95-50-1	1,2-Dichlorobenzene	147.00	9.78		0.20

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-27300-1  
 SDG No.: Agra (200-27300)  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 200-86294/3  
 Matrix: Air Lab File ID: 12901-003.D  
 Analysis Method: TO-15 Date Collected: \_\_\_\_\_  
 Sample wt/vol: 200 (mL) Date Analyzed: 04/01/2015 12:20  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: RTX-624 ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 86294 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
120-82-1	1,2,4-Trichlorobenzene	181.45	8.62		0.50	
87-68-3	Hexachlorobutadiene	260.76	9.59		0.20	
91-20-3	Naphthalene	128.17	7.23		0.50	

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-27300-1

SDG No.: Agra (200-27300)

Instrument ID: CHX.i Start Date: 03/19/2015 16:11

Analysis Batch Number: 85787 End Date: 03/20/2015 10:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-85787/1		03/19/2015 16:11	1	12677-001.D	RTX-624 0.32 (mm)
VIBLK 200-85787/2		03/19/2015 16:56	1		RTX-624 0.32 (mm)
VIBLK 200-85787/3		03/19/2015 17:45	1		RTX-624 0.32 (mm)
IC 200-85787/4		03/19/2015 18:34	1	12677-004.D	RTX-624 0.32 (mm)
IC 200-85787/5		03/19/2015 19:23	1	12677-005.D	RTX-624 0.32 (mm)
IC 200-85787/6		03/19/2015 20:12	1	12677-006.D	RTX-624 0.32 (mm)
IC 200-85787/7		03/19/2015 21:01	1	12677-007.D	RTX-624 0.32 (mm)
ICIS 200-85787/8		03/19/2015 21:50	1	12677-008.D	RTX-624 0.32 (mm)
IC 200-85787/9		03/19/2015 22:39	1	12677-009.D	RTX-624 0.32 (mm)
IC 200-85787/10		03/19/2015 23:28	1	12677-010.D	RTX-624 0.32 (mm)
IC 200-85787/11		03/20/2015 00:18	1	12677-011.D	RTX-624 0.32 (mm)
VIBLK 200-85787/12		03/20/2015 01:07	1		RTX-624 0.32 (mm)
VIBLK 200-85787/13		03/20/2015 01:57	1		RTX-624 0.32 (mm)
VIBLK 200-85787/14		03/20/2015 02:45	1		RTX-624 0.32 (mm)
ZZZZZ		03/20/2015 03:34	1		RTX-624 0.32 (mm)
VIBLK 200-85787/16		03/20/2015 04:24	1		RTX-624 0.32 (mm)
ZZZZZ		03/20/2015 05:13	1		RTX-624 0.32 (mm)
ZZZZZ		03/20/2015 06:02	1		RTX-624 0.32 (mm)
ICV 200-85787/19		03/20/2015 09:46	1	12677-019.D	RTX-624 0.32 (mm)
ZZZZZ		03/20/2015 10:29	1		RTX-624 0.32 (mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-27300-1

SDG No.: Agra (200-27300)

Instrument ID: CHX.i Start Date: 04/01/2015 10:44

Analysis Batch Number: 86294 End Date: 04/02/2015 07:59

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-86294/1		04/01/2015 10:44	1	12901-001.D	RTX-624 0.32 (mm)
CCVIS 200-86294/2		04/01/2015 11:31	1	12901-002.D	RTX-624 0.32 (mm)
LCS 200-86294/3		04/01/2015 12:20	1	12901-003.D	RTX-624 0.32 (mm)
MB 200-86294/4		04/01/2015 13:09	1	12901-004.D	RTX-624 0.32 (mm)
ZZZZZ		04/01/2015 13:58	10		RTX-624 0.32 (mm)
ZZZZZ		04/01/2015 14:47	10		RTX-624 0.32 (mm)
200-27300-2	AGSG1D-G-37181	04/01/2015 15:36	10	12901-007.D	RTX-624 0.32 (mm)
200-27300-3	AGSG2S-G-37182	04/01/2015 16:26	10	12901-008.D	RTX-624 0.32 (mm)
200-27300-4	AGSG2D-G-37183	04/01/2015 17:15	10	12901-009.D	RTX-624 0.32 (mm)
200-27300-5	AGSG3S-G-37184	04/01/2015 18:04	10	12901-010.D	RTX-624 0.32 (mm)
200-27300-6	AGSG3D-G-37185	04/01/2015 18:52	10	12901-011.D	RTX-624 0.32 (mm)
200-27300-7	AGSG3DDUP-G-37186	04/01/2015 19:42	10	12901-012.D	RTX-624 0.32 (mm)
200-27300-8	AGBKGD-G-37187	04/01/2015 20:31	10	12901-013.D	RTX-624 0.32 (mm)
ZZZZZ		04/01/2015 21:20	2.5		RTX-624 0.32 (mm)
ZZZZZ		04/01/2015 22:09	2.5		RTX-624 0.32 (mm)
ZZZZZ		04/01/2015 22:58	2.5		RTX-624 0.32 (mm)
200-27300-1	AGSG1S-G-37180	04/01/2015 23:47	10	12901-017.D	RTX-624 0.32 (mm)
ZZZZZ		04/02/2015 00:36	1		RTX-624 0.32 (mm)
ZZZZZ		04/02/2015 01:25	1		RTX-624 0.32 (mm)
ZZZZZ		04/02/2015 02:14	1		RTX-624 0.32 (mm)
ZZZZZ		04/02/2015 03:11	0.2		RTX-624 0.32 (mm)
ZZZZZ		04/02/2015 04:08	0.2		RTX-624 0.32 (mm)
ZZZZZ		04/02/2015 05:05	0.2		RTX-624 0.32 (mm)
ZZZZZ		04/02/2015 07:59	2.99		RTX-624 0.32 (mm)

### Post-Sampling Air Canister Pressure Check Record

Client ID	TALS Job	Date	Time (Military)	Lab BP ("Hg)	Lab Temp (°C)	Pressure Gauge ID	Analyst
ARGONNE	200-27300	3/30/15	1010	29.6	22	G8	KG

Sampling Information and Return Equipment Check		Yes	No	Comments
(1) Is a Field Test Data Sheet (FTDS) or similar sampling documentation present?			✓	
(2) Is the flow controller ID used for each canister recorded?		✓		
(3) MA MCP: Check return flow rate for flow controllers			N/A	
(4) Is visible sign of damage to canister and/or flow controller (FC) present?			✓	

If damage observed, list equipment IDs and describe condition:

#### Post-Sampling Return Pressure Check

Lab ID	Canister ID	Pressure <sup>1</sup> ("Hg)	Anomaly <sup>2</sup> (Y/N)	FC ID <sup>3</sup>	FC Check <sup>4</sup> Reference	FC Return (Y/N)	Can Cert Batch ID	Comments
1	4664	-1.3	N	5888	64/47	Y	3580 12190	200ml/L
2	4388	-1.3		7215	64/49		4949 12154	
3	5877	0.0		7331	64/49		5831 121484	
4	4646	0.0		5889	64/47		4652 12238	
5	5845	0.0		5824	64/47		3813 12454	
6	5926	-1.8		5818	64/47		3647 12417	
7	4949	0.0		5823	64/47		4949 12484	
8	3848	-1.3	✓	5886	64/47	✓	5844 12403	✓
<div style="position: absolute; top: 50px; left: 50px; font-size: 2em;">                     3/30/15                      KG                 </div>								

<sup>1</sup> Criteria: Return Pressure should be between -1 and -10 ("Hg)

<sup>2</sup> If return pressure is not within criteria, initiate anomaly report.

<sup>3</sup> Record the ID of the FC used for sampling if information is provided, otherwise leave blank.

<sup>4</sup> Record the Flow Controller Set Flow Rate Logbook ID and Page number in which the original FC Check was recorded



# Shipping and Receiving Documents

**TestAmerica Burlington**  
 30 Community Drive  
 Suite 11  
 South Burlington, VT 05403  
 phone 802.660.1990 fax 802.660.1919

# Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

**TestAmerica**  
 THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

COC No: AG328151100

1 of 1 COCs

For Lab Use Only:

Walk-in Client:

Lab Sampling:

Job / SDG No.:

(See below for Add'l Items)

Sample Specific Notes:

Project Manager: Lorraine LaFreniere

Phone: (630) 252-7969

Email: lafreniere@anal.gov

Site Contact: Travis Kamler (402) 416-7255

TA Contact: Kirk Young

Analysis Turnaround Time

Standard (Specify):

Rush (Specify):

Project Name: Quarterly Remediation Monitoring

Site/Location: Agra, KS

P O # 8A727-25-167

Project Manager: Travis Kamler

Date: March 28, 2015

Carrier: FedEx

MA-APH

EPA 3C

EPA 25C / 25.3

ASTM D-1946 / 1945 / 3588

EPA 15/16

TO-3

Other (Please specify in notes section)

Sample Type

Indoor Air

Ambient Air

Soil Gas

Landfill Gas

Other (Please specify in notes section)

TO-15 (Med / Std / Low / SIM)

X

X

X

X

X

X

X

X

X

X

X

X

Canister ID

4664

4388

5877

4646

5845

5926

4949

3848

Flow Controller ID

5888

7215

7331

5889

5824

5818

5823

5886

Canister Vacuum in Field, 'Hg (Start)

-27

-29

-29

-30

-29

-29

-30

-29

Canister Vacuum in Field, 'Hg (Stop)

0

0

0

-1

0

0

0

0

Time Start

13:21

13:41

13:59

14:31

15:03

15:15

15:23

15:45

Time Stop

13:30

13:51

14:11

14:48

15:14

15:23

15:40

15:51

Sample Date(s)

3/27/15

3/27/15

3/27/15

3/27/15

3/27/15

3/27/15

3/27/15

3/27/15



200-27300 Chain of Custody

Temperature (Fahrenheit)

Interior

Ambient

42

Temperature (Fahrenheit)

Interior

Ambient

46

Special Instructions/QC Requirements & Comments:

Samples Shipped by: Travis Kamler /

Date / Time: 3/28/15 11:00

Samples Relinquished by:

Date / Time:

Relinquished by:

Date / Time:

Lab Use Only: Shipper Name:

Opened by:

Samples Received by: *[Signature]*

Date / Time: 3/30/15 0835

Received by:

Date / Time:

Received by:

Date / Time:

Condition:

TA BUR

From: (402) 416-7255  
Travis Karrier  
Argonne National Lab  
9760 S CASS AVE  
LEMONT, IL 60439

Origin ID: ENLA



Ship Date: 28MAR15  
ActWgt: 31.6 LB  
CAD: 104734835ANET3610  
Dims: 26 X 14 X 14 IN

Delivery Address Bar Code



SHIP TO: (802) 668-1998  
**Kirk Young**  
**Test America**  
**30 COMMUNITY DR**  
**STE 11**  
**SOUTH BURLINGTON, VT 05403**

BILL SENDER

Ref # 8A727-25-167  
Invoice #  
PO # Agra soil gas  
Dept #

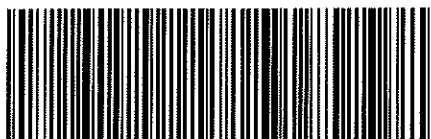
MON - 30 MAR 10:30A  
PRIORITY OVERNIGHT

TRK# 7732 3947 0291  
0201



**XH BTVA**

05403  
VT-US  
BTV



537J1878AEE4B

**After printing this label.**

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

**Warning:** Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

## Login Sample Receipt Checklist

Client: Argonne National Laboratory

Job Number: 200-27300-1  
SDG Number: Agra (200-27300)

**Login Number: 27300**  
**List Number: 1**  
**Creator: Goodrich, Kenneth L**

**List Source: TestAmerica Burlington**

Question	Answer	Comment
Radioactivity wasn't checked or is <= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	450653, 450654
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	AMBIENT
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

**Supplement 4:**

**TestAmerica Data for Argonne's Quarterly Groundwater Sampling  
on March 27, 2015**

## ANALYTICAL REPORT

Job Number: 200-27298-1

SDG Number: 27298

Job Description: Agra (200-27298)

Contract Number: 1E-30401

For:

Argonne National Laboratory

9700 South Cass Avenue

Building 203

Office B-141

Argonne, IL 60439

Attention: Ms. Esther Bowen



Approved for release.  
Kathryn A Kelly  
Project Manager I  
4/8/2015 3:14 PM

---

Kathryn A Kelly, Project Manager I  
30 Community Drive, South Burlington, VT, 05403  
kathryn.kelly@testamericainc.com  
04/08/2015

The test results in this report relate only to sample(s) as received by the laboratory. These test results were derived under a quality system that adheres to the requirements of NELAC. Pursuant to NELAC, this report may not be produced in full without written approval from the laboratory

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## CASE NARRATIVE

**Client: Argonne National Laboratory**

**Project: Agra (200-27298)**

**Report Number: 200- 27298-1**

Enclosed is the data set for the referenced project work. With the exceptions noted as flags or footnotes, standard analytical protocols were followed in performing the analytical work and the applied control limits were met.

Calculations were performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

### **Receipt**

The samples were received on 03/30/2015. Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Shipping Documentation section of this submittal. The samples, as received, were not acid preserved. On that basis, the laboratory did provide for the analysis of the samples within seven days of sample collection.

### **SOM01.2 Volatile Organics (Trace Level Water)**

A storage blank was prepared for volatile organics analysis, and stored in association with the storage of the samples. That storage blank, identified as VHBLK01, was carried through the holding period with the samples, and analyzed.

Sample AGGW2-W-36851 was analyzed at a dilution, based on the results of preliminary screening. An additional, more concentrated analysis was performed on that sample in order to provide for a lower reporting limit for those analytes that were not identified in the primary analysis. Both sets of results for the analysis of sample AGGW2-W-36851 are included in this submittal.

The analysis of the samples in this sample set did meet the technical acceptance criteria specific to DMC recoveries; although not all DMC recoveries were within the control range in each analysis. The technical acceptance criteria does provide for the recovery of up to three DMCs to fall outside of the control range in the analysis of field samples. Matrix spike and matrix spike duplicate analyses were not performed on samples in this sample set. Trace concentrations of chloromethane, bromomethane, and toluene were identified in the analysis of the method blank associated with the analytical work. The concentration of each target analyte in that analysis was below the established reporting limit, and the analysis did meet the technical acceptance criteria for a compliant method blank analysis. Trace concentrations of chloromethane, acetone, carbon tetrachloride, toluene, and m,p-xylene were identified in the analysis of the instrument blank associated with the analytical work. The concentration of each target analyte in that analysis was below the established reporting limit, and the analyses did meet the technical acceptance criteria for a compliant instrument blank analysis. Trace concentrations of chloromethane, acetone, toluene, and m,p-xylene were identified in the analysis of the storage blank associated with the sample set. The concentration of each target analyte in that analysis was below the established reporting limit, and the analyses did meet the technical acceptance criteria for a compliant storage blank analysis.

Present in the method blank, instrument blank, and storage blank analyses was a non-target constituent that represents a compound that is related to the DMC formulation. The fact that the presence of this compound is not within the laboratory's control is at issue. The derived results for that compound have been qualified with an "X" qualifier to reflect the source of the contamination.

The responses for each target analyte met the relative standard deviation criterion in the initial calibration. The response for each target analyte met the percent difference criterion in the opening continuing calibration check acquisition. The response for each target analyte met the 50.0 percent difference criterion in the closing calibration check acquisition.

The primary quantitation mass for methylcyclohexane that is specified in the Statement of Work is mass 83. The laboratory did identify a contribution to mass 83 from 1,2-dichloropropane-d<sub>6</sub>, one of the deuterated monitoring compounds (DMCs). The laboratory did change the primary quantitation mass assignment to mass 55 for the quantification of methylcyclohexane.

Manual integration was employed in deriving certain of the analytical results. The values that have been derived from manual integration are qualified on the quantitation reports. Extracted ion current profiles for each manual integration are included in the data package, and further documented at the end of this submittal.

## DATA REPORTING QUALIFIERS


Client: Argonne National Laboratory

Job Number: 200-27298-1

Sdg Number: 27298

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	E	Compound concentration exceeds the upper level of the calibration range of the instrument for that specific analysis.
	J	Indicates an Estimated Value for TICs
	J	Indicates an estimated value.
	D	Sample was analyzed at a higher dilution factor.
	X	See case narrative notes for explanation of the 'X' flag
	*	Surrogate exceeds the control limit
	B	The analyte was found in an associated blank, as well as in the sample.
	N	This flag indicates the presumptive evidence of a compound.

Regulatory Program:  DW  NPDES  RCRA  Other:

<b>Client Contact</b> Argonne National Lab 9700 S Cass Ave Lemont/IL 60439 (630) 252-7969 Phone (630) 252-5747 FAX Project Name: Quarterly Sampling Site: Agra, KS P O #: 8A727-25-167			<b>Project Manager:</b> Lorraine LaFreniere <b>Tel/Fax:</b> (630) 252-7969 Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day			<b>Site Contact:</b> Travis Kamler <b>Lab Contact:</b> Kirk Young Volatile Organic Compounds Perform MS / MSD ( Y / N ) Filtered Sample ( Y / N )			<b>Date:</b> March 28, 2015 <b>Carrier:</b> FedEx# 773239460658 <b>COC No.:</b> 1 of 1 COCs <b>AG328151130</b>		
Sample ID	Sample Date	Sample Time	Sample Type (C-Comp, G-Grab)	Matrix	# of Cont.	Sample Specific Notes					
1	03/27/15	18:02	LF	W	2	2 X 40mL for VOC					
2	03/27/15	15:35	3V	W	2	2 X 40mL for VOC					
3	03/27/15	8:00	G	W	2	2 X 40mL for VOC					
4					0						
5					0						
6					0						
7					0						
8					0						
9					0						
10					0						
11					0						
12					0						
<b>Preservation Used:</b> 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other _____ <b>Possible Hazard Identification:</b> Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.						200-27298 Chain of Custody 					
<b>Special Instructions/QC Requirements &amp; Comments:</b>						<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months					
<b>Custody Seal No.:</b> TCW <b>Relinquished by:</b> Travis Kamler <b>Relinquished by:</b> _____ <b>Relinquished by:</b> _____						<b>Company:</b> T.A. Burlington <b>Company:</b> _____ <b>Company:</b> _____					
<b>Cooler Temp. (°C):</b> Obs'd: _____ Corrd: _____ <b>Therm ID No.:</b> _____						<b>Date/Time:</b> 3/28/15 11:30 <b>Date/Time:</b> 3/30/15 0835 <b>Date/Time:</b> _____ <b>Date/Time:</b> _____					

From: (402) 416-7255  
Travis Karrier  
Argonne National Lab  
9700 S CASS AVE

Origin ID: ENLA



Ship Date: 28MAR15  
Acct Wgt: 15.0 LB  
CAD: 104734835/NET3610  
Dims: 13 X 9 X 10 W

LEMONT, IL 60439

Delivery Address Bar Code



SHIP TO: (802) 660-1990  
**BILL SENDER**  
Kirk Young  
Test America  
30 COMMUNITY DR  
STE 11  
SOUTH BURLINGTON, VT 05403

Ref # 8A727-25-167  
Invoice #  
PO # Agra waters  
Dept #

MON - 30 MAR 10:30A  
PRIORITY OVERNIGHT

TRK# 7732 3946 0658

0201



**XH BTVA**

05403  
VT-US  
BTV



637118784EE48

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TestAmerica Burlington  
INTERNAL CHAIN OF CUSTODY LOG (ICOC)

Project Information: NEA  
 Log In #: 200-27298 Method: SOM01.2 Trace 3/13/15  
 Client: ARGONNE LAB IDs: 200-27298-1 to 4

Samples associated with this log-in were placed into storage on 3/30/2015 0940 by: Ken Goodrich  
 (Date) (Time<sup>2</sup>) Sample Custodian Signature [Signature]

Storage Location: VA14 Specify storage location (refrigerator, freezer ID or lab location) for original sample containers  
 Storage Condition:  Refrigeration  Frozen  Ambient

Sample Type		Lab ID(s)	Transfer Date	Transfer Time <sup>2</sup>	Purpose of Transfer		Relinquished By:	Received By:	Storage Location Prepared Sample <sup>1</sup>
Original	Prepared <sup>1</sup>				Prep	Analysis			
<u>1</u>	<u>200-27298-1 to 4</u>		<u>3/30/15</u>	<u>1600</u>		<u>X</u>	<u>[Signature]</u>	<u>[Signature]</u>	<u>Screen</u>
<u>2</u>	<u>1</u>		<u>3/30/15</u>	<u>1616</u>			<u>[Signature]</u>	<u>[Signature]</u>	<u>Screen</u>
<u>3</u>	<u>ALL</u>		<u>4/1/15</u>	<u>1104</u>		<u>2</u>	<u>[Signature]</u>	<u>[Signature]</u>	<u>analysis</u>
<u>4</u>	<u>↓</u>		<u>↓</u>	<u>1327</u>			<u>[Signature]</u>	<u>[Signature]</u>	<u>storage</u>

<sup>1</sup> Extract, digestate, or any other prepared sample that is no longer in original sample container  
<sup>2</sup> Military Time

# Shipping and Receiving Documents

## Login Sample Receipt Checklist

Client: Argonne National Laboratory

Job Number: 200-27298-1

SDG Number: 27298

**Login Number: 27298**

**List Source: TestAmerica Burlington**

**List Number: 1**

**Creator: Goodrich, Kenneth L**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	450655, 450656
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.6°C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## Sample Login Acknowledgement

## Job 200-27298-1

<b>Client Job Description:</b>	Agra (200-27298)	<b>Report To:</b>	Argonne National Laboratory
<b>Purchase Order #:</b>	1E-30401		Jorge Alvarado
<b>Work Order #:</b>	1E-30401		9700 South Cass Avenue
<b>Project Manager:</b>	Kirk F Young		Building 203
<b>Job Due Date:</b>	4/13/2015		Office B-141
<b>Job TAT:</b>	14 Days		Argonne, IL 60439
<b>Max Deliverable Level:</b>	IV	<b>Bill To:</b>	Argonne National Laboratory
			Accounts Payable
<b>Earliest Deliverable Due:</b>	4/13/2015		Chief Financial Offices
			9700 S. Cass Ave.
			Building 201
			Argonne, IL 60439

## Login 200-27298

<b>Sample Receipt:</b>	3/30/2015 8:35:00 AM	<b>Number of Coolers:</b>	1
<b>Method of Delivery:</b>	FedEx Priority Overnight	<b>Cooler Temperature(s) (C°):</b>	1.6;

Lab Sample #	Client Sample ID	Date Sampled	Matrix	Rpt Basis	Dry / Wet **
Method	Method Description / Work Location				
<b>200-27298-1</b>	<b>AGKMW3-W-36847</b>	<b>3/27/2015 6:02:00 PM</b>	<b>Water</b>		
SOM01.2_Vol_Tr	SOM01.2 Trace Volatile Organics / In-Lab			Total	Wet
<b>200-27298-2</b>	<b>AGGW2-W-36851</b>	<b>3/27/2015 3:35:00 PM</b>	<b>Water</b>		
SOM01.2_Vol_Tr	SOM01.2 Trace Volatile Organics / In-Lab			Total	Wet
<b>200-27298-3</b>	<b>AGQCTB-W-37178</b>	<b>3/27/2015 8:00:00 AM</b>	<b>Water</b>		
SOM01.2_Vol_Tr	SOM01.2 Trace Volatile Organics / In-Lab			Total	Wet
<b>200-27298-4</b>	<b>VHBLK01</b>	<b>3/30/2015 12:00:00 AM</b>	<b>Water</b>		
SOM01.2_Vol_Tr	SOM01.2 Trace Volatile Organics / In-Lab			Total	Wet

\* Method on-hold

\*\* Wet/Dry indicates whether the reported results will be corrected for moisture content based on sample Wet weight or Dry weight.

04/08/2015 of 1

## METHODOLOGY SUMMARY

Laboratory: TestAmerica Laboratories

Project No:

Location: South Burlington, Vermont

SDG No: 27298

### **VOA**

Volatile Organics Trace - USEPA CLP SOM01.2

2A - FORM II VOA-1  
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: TESTAMERICA BURLINGTON

Contract: 8E-00302

Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_

SDG No.: 27298

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC1 (VCL) #	VDMC2 (CLA) #	VDMC3 (DCE) #	VDMC4 (BUT) #	VDMC5 (CLF) #	VDMC6 (DCA) #	VDMC7 (BEN) #
01	VBLKDE	84	101	84	104	101	109	113
02	AGGW2-W-36851D L	80	96	80	96	96	103	112
03	AGQCTB-W-37178	86	104	88	107	103	111	118
04	AGKMW3-W-36847	84	103	91	137	105	111	115
05	AGGW2-W-36851	85	103	85	106	102	114	123
06	VHBLK01	85	101	85	108	103	111	114

		QC LIMITS
VDMC1	(VCL) = Vinyl Chloride-d3	(65-131)
VDMC2	(CLA) = Chloroethane-d5	(71-131)
VDMC3	(DCE) = 1,1-Dichloroethene-d2	(55-104)
VDMC4	(BUT) = 2-Butanone-d5	(49-155)
VDMC5	(CLF) = Chloroform-d	(78-121)
VDMC6	(DCA) = 1,2-Dichloroethane-d4	(78-129)
VDMC7	(BEN) = Benzene-d6	(77-124)

# Column to be used to flag recovery values  
\* Values outside of contract required QC limits

2B - FORM II VOA-2  
 WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: TESTAMERICA BURLINGTON

Contract: 8E-00302

Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_

SDG No.: 27298

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC8 (DPA) #	VDMC9 (TOL) #	VDMC10 (TDP) #	VDMC11 (HEX) #	VDMC12 (TCA) #	VDMC13 (DCZ) #	OTHER	TOT OUT
01	VBLKDE	108	108	105	109	98	110		0
02	AGGW2-W-36851D L	104	106	101	99	92	108		0
03	AGQCTB-W-37178	111	113	108	108	96	111		0
04	AGKMW3-W-36847	109	112	106	140 *	98	114		1
05	AGGW2-W-36851	113	112	112	112	101	114		0
06	VHBLK01	110	109	108	110	99	116		0

		<u>QC LIMITS</u>
VDMC8	(DPA) = 1,2-Dichloropropane-d6	(79-124)
VDMC9	(TOL) = Toluene-d8	(77-121)
VDMC10	(TDP) = trans-1,3-Dichloropropene-d4	(73-121)
VDMC11	(HEX) = 2-Hexanone-d5	(28-135)
VDMC12	(TCA) = 1,1,2,2-Tetrachloroethane-d2	(73-125)
VDMC13	(DCZ) = 1,2-Dichlorobenzene-d4	(80-131)

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

4A - FORM IV VOA  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKDE

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Lab File ID: 12903\_006.D Lab Sample ID: MB 200-86297/6  
 Instrument ID: CHD.i  
 Matrix: (SOIL/SED/WATER) Water Date Analyzed: 04/01/2015  
 Level: (TRACE or LOW/MED) TRACE Time Analyzed: 1240  
 GC Column: DB-624 ID: 0.20 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	AGGW2-W-3685 1DL	200-27298-2	12903_007. D	1305
02	AGQCTB-W-371 78	200-27298-3	12903_008. D	1330
03	AGKMW3-W-368 47	200-27298-1	12903_009. D	1354
04	AGGW2-W-3685 1	200-27298-2	12903_012. D	1513
05	VIBLKDX	VIBLK 200-86297/13	12903_013. D	1538
06	VHBLK01	200-27298-4	12903_016. D	1652

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_

5A - FORM V VOA  
 VOLATILE ORGANICS INSTRUMENT  
 PERFORMANCE CHECK  
 BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFBDN

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Lab File Id: 12252\_001.D BFB Injection Date: 02/23/2015  
 Instrument Id: CHD.i BFB Injection Time: 1219  
 GC Column: DB-624 ID: 0.20 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.8
75	30.0 - 80.0% of mass 95	57.6
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0 ( 0)1
174	50.0 - 120% of mass 95	85.9
175	5.0 - 9.0% of mass 174	5.9 ( 6.9)1
176	95.0 - 101% of mass 174	83.6 ( 97.3)1
177	5.0 - 9.0% of mass 176	5.4 ( 6.5)2

1 - Value is %mass 174

2 - Value is %mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0.5DN	IC 200-84788/5	12252_005.D	02/23/2015	1354
02	VSTD001DN	IC 200-84788/6	12252_006.D	02/23/2015	1418
03	VSTD005DN	ICIS 200-84788/7	12252_007.D	02/23/2015	1443
04	VSTD010DN	IC 200-84788/8	12252_008.D	02/23/2015	1508
05	VSTD020DN	IC 200-84788/9	12252_009.D	02/23/2015	1532

5A - FORM V VOA  
 VOLATILE ORGANICS INSTRUMENT  
 PERFORMANCE CHECK  
 BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFBDE

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Lab File Id: 12903\_002.D BFB Injection Date: 04/01/2015  
 Instrument Id: CHD.i BFB Injection Time: 1104  
 GC Column: DB-624 ID: 0.20 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.8
75	30.0 - 80.0% of mass 95	56.2
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0 ( 0 )1
174	50.0 - 120% of mass 95	85.3
175	5.0 - 9.0% of mass 174	6.1 ( 7.1 )1
176	95.0 - 101% of mass 174	81.9 ( 96.0 )1
177	5.0 - 9.0% of mass 176	5.2 ( 6.3 )2

1 - Value is %mass 174

2 - Value is %mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD005DE	CCVIS 200-86297/4	12903_004.D	04/01/2015	1151
02	VBLKDE	MB 200-86297/6	12903_006.D	04/01/2015	1240
03	AGGW2-W-36 851DL	200-27298-2	12903_007.D	04/01/2015	1305
04	AGQCTB-W-3 7178	200-27298-3	12903_008.D	04/01/2015	1330
05	AGKMW3-W-3 6847	200-27298-1	12903_009.D	04/01/2015	1354
06	AGGW2-W-36 851	200-27298-2	12903_012.D	04/01/2015	1513
07	VIBLKDX	VIBLK 200-86297/13	12903_013.D	04/01/2015	1538
08	VHBLK01	200-27298-4	12903_016.D	04/01/2015	1652
09	VSTD005ED	CCVC 200-86297/22	12903_022.D	04/01/2015	1920

8A - FORM VIII VOA  
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 02/23/2015 02/23/2015  
 EPA Sample No. (VSTD#####): VSTD005DE Date Analyzed: 04/01/2015  
 Lab File ID (Standard): 12903\_004.D Time Analyzed: 1151  
 Instrument ID: CHD.i Heated Purge: (Y/N) N

	IS1 (CBZ)		IS2 (DFB)		IS3 (DCB)						
	AREA	#	RT	#	AREA	#	RT	#			
12 HOUR STD	326223		9.34		375665		5.97		189085		12.16
UPPER LIMIT	456712		9.67		525931		6.30		264719		12.49
LOWER LIMIT	195734		9.01		225399		5.64		113451		11.83
EPA SAMPLE NO.											
01 VBLKDE	306117		9.34		365362		5.97		152414		12.17
02 AGGW2-W-36851D L	329743		9.34		401607		5.97		155126		12.17
03 AGQCTB-W-37178	316066		9.34		379622		5.98		154157		12.17
04 AGKMW3-W-36847	324221		9.34		384038		5.97		151259		12.17
05 AGGW2-W-36851	344248		9.34		415151		5.97		166989		12.17
06 VIBLKDX	335318		9.34		402225		5.97		158410		12.17
07 VHBLK01	353158		9.34		415790		5.97		168348		12.17

IS1 (CBZ) = Chlorobenzene-d5  
 IS2 (DFB) = 1,4-Difluorobenzene  
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 140% (Trace Volatiles) of internal standard area  
 AREA LOWER LIMIT = 60% (Trace Volatiles) of internal standard area  
 RT UPPER LIMIT = + 0.33 (Trace Volatiles) minutes of internal standard RT  
 RT LOWER LIMIT = - 0.33 (Trace Volatiles) minutes of internal standard RT

# Column used to flag values outside contract required QC limits with an asterisk.



Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-27298-2  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 12903\_012.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: 03/30/2015  
 % Moisture: not dec. Date Analyzed: 04/01/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 46.2  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	<u>Q</u>
75-71-8	Dichlorodifluoromethane	23	U
74-87-3	Chloromethane	2.7	J B
75-01-4	Vinyl chloride	23	U
74-83-9	Bromomethane	23	U
75-00-3	Chloroethane	23	U
75-69-4	Trichlorofluoromethane	23	U
75-35-4	1,1-Dichloroethene	23	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	23	U
67-64-1	Acetone	36	J
75-15-0	Carbon disulfide	23	U
79-20-9	Methyl acetate	23	U
75-09-2	Methylene Chloride	23	U
156-60-5	trans-1,2-Dichloroethene	23	U
1634-04-4	Methyl tert-butyl ether	23	U
75-34-3	1,1-Dichloroethane	23	U
156-59-2	cis-1,2-Dichloroethene	23	U
78-93-3	2-Butanone	230	U
74-97-5	Bromochloromethane	23	U
67-66-3	Chloroform	24	U
71-55-6	1,1,1-Trichloroethane	23	U
110-82-7	Cyclohexane	23	U
56-23-5	Carbon tetrachloride	3900	E
71-43-2	Benzene	23	U
107-06-2	1,2-Dichloroethane	23	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-27298-2  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 12903\_012.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: 03/30/2015  
 % Moisture: not dec. Date Analyzed: 04/01/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 46.2  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	<u>Q</u>
79-01-6	Trichloroethene	23	U
108-87-2	Methylcyclohexane	23	U
78-87-5	1,2-Dichloropropane	23	U
75-27-4	Bromodichloromethane	23	U
10061-01-5	cis-1,3-Dichloropropene	23	U
108-10-1	4-Methyl-2-pentanone	230	U
108-88-3	Toluene	0.44	J B
10061-02-6	trans-1,3-Dichloropropene	23	U
79-00-5	1,1,2-Trichloroethane	23	U
127-18-4	Tetrachloroethene	23	U
591-78-6	2-Hexanone	230	U
124-48-1	Dibromochloromethane	23	U
106-93-4	1,2-Dibromoethane	23	U
108-90-7	Chlorobenzene	23	U
100-41-4	Ethylbenzene	23	U
95-47-6	o-Xylene	23	U
179601-23-1	m,p-Xylene	0.22	J
100-42-5	Styrene	23	U
75-25-2	Bromoform	23	U
98-82-8	Isopropylbenzene	23	U
79-34-5	1,1,2,2-Tetrachloroethane	23	U
541-73-1	1,3-Dichlorobenzene	23	U
106-46-7	1,4-Dichlorobenzene	23	U
95-50-1	1,2-Dichlorobenzene	23	U
96-12-8	1,2-Dibromo-3-Chloropropane	23	U
120-82-1	1,2,4-Trichlorobenzene	23	U
87-61-6	1,2,3-Trichlorobenzene	23	U

1J - FORM I VOA-TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

AGGW2-W-36851

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-27298-2  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 12903\_012.D  
 Level: (TRACE or LOW/MED) TRACE Date Received: 03/30/2015  
 % Moisture: not dec. Date Analyzed: 04/01/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 46.2  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	4.50	74	J
02		Unknown	7.30	140	J B X
03	541-05-9	Cyclotrisiloxane, hexamethyl-	8.23	79	J B N
04	556-67-2	Cyclotetrasiloxane, octamethyl-	11.05	56	J B N
05	E966796 <sup>1</sup>	Total Alkanes	N/A		

<sup>1</sup>EPA-designated Registry Number.

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-27298-2  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 12903\_007.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: 03/30/2015  
 % Moisture: not dec. Date Analyzed: 04/01/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 220.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	<u>Q</u>
75-71-8	Dichlorodifluoromethane	110	U
74-87-3	Chloromethane	11	J D B
75-01-4	Vinyl chloride	110	U
74-83-9	Bromomethane	8.6	J D B
75-00-3	Chloroethane	110	U
75-69-4	Trichlorofluoromethane	110	U
75-35-4	1,1-Dichloroethene	110	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	110	U
67-64-1	Acetone	1100	U
75-15-0	Carbon disulfide	110	U
79-20-9	Methyl acetate	110	U
75-09-2	Methylene Chloride	110	U
156-60-5	trans-1,2-Dichloroethene	110	U
1634-04-4	Methyl tert-butyl ether	110	U
75-34-3	1,1-Dichloroethane	110	U
156-59-2	cis-1,2-Dichloroethene	110	U
78-93-3	2-Butanone	1100	U
74-97-5	Bromochloromethane	110	U
67-66-3	Chloroform	26	J D
71-55-6	1,1,1-Trichloroethane	110	U
110-82-7	Cyclohexane	110	U
56-23-5	Carbon tetrachloride	3400	D
71-43-2	Benzene	110	U
107-06-2	1,2-Dichloroethane	110	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-27298-2  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 12903\_007.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: 03/30/2015  
 % Moisture: not dec. Date Analyzed: 04/01/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 220.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	110	U
108-87-2	Methylcyclohexane	110	U
78-87-5	1,2-Dichloropropane	110	U
75-27-4	Bromodichloromethane	110	U
10061-01-5	cis-1,3-Dichloropropene	110	U
108-10-1	4-Methyl-2-pentanone	1100	U
108-88-3	Toluene	1.9	J D B
10061-02-6	trans-1,3-Dichloropropene	110	U
79-00-5	1,1,2-Trichloroethane	110	U
127-18-4	Tetrachloroethene	110	U
591-78-6	2-Hexanone	1100	U
124-48-1	Dibromochloromethane	110	U
106-93-4	1,2-Dibromoethane	110	U
108-90-7	Chlorobenzene	110	U
100-41-4	Ethylbenzene	110	U
95-47-6	o-Xylene	110	U
179601-23-1	m,p-Xylene	110	U
100-42-5	Styrene	110	U
75-25-2	Bromoform	110	U
98-82-8	Isopropylbenzene	110	U
79-34-5	1,1,2,2-Tetrachloroethane	110	U
541-73-1	1,3-Dichlorobenzene	110	U
106-46-7	1,4-Dichlorobenzene	110	U
95-50-1	1,2-Dichlorobenzene	110	U
96-12-8	1,2-Dibromo-3-Chloropropane	110	U
120-82-1	1,2,4-Trichlorobenzene	110	U
87-61-6	1,2,3-Trichlorobenzene	110	U

1J - FORM I VOA-TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

AGGW2-W-36851DL

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-27298-2  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 12903\_007.D  
 Level: (TRACE or LOW/MED) TRACE Date Received: 03/30/2015  
 % Moisture: not dec. \_\_\_\_\_ Date Analyzed: 04/01/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 220.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	4.50	190	D J
02		Unknown	7.30	590	B X D J
03	541-05-9	Cyclotrisiloxane, hexamethyl-	8.23	340	B D J N
04	556-67-2	Cyclotetrasiloxane, octamethyl-	11.05	280	B D J N
05	E966796 <sup>1</sup>	Total Alkanes	N/A		

<sup>1</sup>EPA-designated Registry Number.

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-27298-1  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 12903\_009.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: 03/30/2015  
 % Moisture: not dec. Date Analyzed: 04/01/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	<u>Q</u>
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-27298-1  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 12903\_009.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: 03/30/2015  
 % Moisture: not dec. Date Analyzed: 04/01/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.024	J B
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.10	J
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.012	J
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U



1J - FORM I VOA-TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

AGKMW3-W-36847

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-27298-1  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 12903\_009.D  
 Level: (TRACE or LOW/MED) TRACE Date Received: 03/30/2015  
 % Moisture: not dec. \_\_\_\_\_ Date Analyzed: 04/01/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	7.31	2.9	J B X
02	541-05-9	Cyclotrisiloxane, hexamethyl-	8.23	0.75	J B N
03	E966796 <sup>1</sup>	Total Alkanes	N/A		

<sup>1</sup>EPA-designated Registry Number.

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-27298-3  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 12903\_008.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: 03/30/2015  
 % Moisture: not dec. Date Analyzed: 04/01/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	<u>Q</u>
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.042	J B
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-27298-3  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 12903\_008.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: 03/30/2015  
 % Moisture: not dec. Date Analyzed: 04/01/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
79-01-6	Trichloroethene		0.065	J
108-87-2	Methylcyclohexane		0.50	U
78-87-5	1,2-Dichloropropane		0.50	U
75-27-4	Bromodichloromethane		0.50	U
10061-01-5	cis-1,3-Dichloropropene		0.50	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		0.098	J B
10061-02-6	trans-1,3-Dichloropropene		0.50	U
79-00-5	1,1,2-Trichloroethane		0.50	U
127-18-4	Tetrachloroethene		0.50	U
591-78-6	2-Hexanone		5.0	U
124-48-1	Dibromochloromethane		0.50	U
106-93-4	1,2-Dibromoethane		0.50	U
108-90-7	Chlorobenzene		0.50	U
100-41-4	Ethylbenzene		0.0089	J
95-47-6	o-Xylene		0.054	J
179601-23-1	m,p-Xylene		0.020	J
100-42-5	Styrene		0.50	U
75-25-2	Bromoform		0.50	U
98-82-8	Isopropylbenzene		0.50	U
79-34-5	1,1,2,2-Tetrachloroethane		0.50	U
541-73-1	1,3-Dichlorobenzene		0.50	U
106-46-7	1,4-Dichlorobenzene		0.50	U
95-50-1	1,2-Dichlorobenzene		0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane		0.50	U
120-82-1	1,2,4-Trichlorobenzene		0.50	U
87-61-6	1,2,3-Trichlorobenzene		0.50	U

1J - FORM I VOA-TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

AGQCTB-W-37178

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-27298-3  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 12903\_008.D  
 Level: (TRACE or LOW/MED) TRACE Date Received: 03/30/2015  
 % Moisture: not dec. \_\_\_\_\_ Date Analyzed: 04/01/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	4.50	0.90	J
02		Unknown	7.31	2.9	J B X
03	541-05-9	Cyclotrisiloxane, hexamethyl-	8.23	2.0	J B N
04	556-67-2	Cyclotetrasiloxane, octamethyl-	11.05	1.4	J B N
05	E966796 <sup>1</sup>	Total Alkanes	N/A	3.2	J

<sup>1</sup>EPA-designated Registry Number.

6A - FORM VI VOA-1  
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Instrument ID: CHD.i Calibration Date(s): 02/23/2015 02/23/2015  
 Heated Purge: (Y/N) N Calibration Time(s): 1354 1532  
 Purge Volume: 25.0 (mL)  
 GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

LAB FILE ID: \_\_\_\_\_ RRF<sub>0.5</sub> = 12252\_005.D RRF<sub>1.0</sub> = 12252\_006.D  
 RRF<sub>5.0</sub> = 12252\_007.D RRF<sub>10</sub> = 12252\_008.D RRF<sub>20</sub> = 12252\_009.D

COMPOUND	RRF <sub>0.5</sub>	RRF <sub>1.0</sub>	RRF <sub>5.0</sub>	RRF <sub>10</sub>	RRF <sub>20</sub>	RRF	%RSD
Dichlorodifluoromethane	0.715	0.739	0.741	0.754	0.710	0.732	2.5
Chloromethane	0.427	0.416	0.400	0.442	0.388	0.415	5.1
Vinyl chloride	0.366	0.383	0.396	0.403	0.421	0.394	5.3
Bromomethane	0.117	0.140	0.144	0.162	0.171	0.147	14.0
Chloroethane	0.261	0.240	0.225	0.219	0.225	0.234	7.3
Trichlorofluoromethane	0.810	0.769	0.796	0.787	0.783	0.789	1.9
1,1-Dichloroethene	0.277	0.255	0.283	0.271	0.283	0.274	4.3
1,1,2-Trichloro- 1,2,2-trifluoroethane	0.339	0.317	0.349	0.362	0.340	0.342	4.8
Acetone	0.029	0.025	0.024	0.024	0.025	0.025	7.7
Carbon disulfide	0.741	0.661	0.776	0.803	0.808	0.758	8.0
Methyl acetate	0.053	0.052	0.048	0.049	0.049	0.050	4.1
Methylene Chloride	0.270	0.249	0.239	0.227	0.228	0.243	7.3
trans-1,2-Dichloroethene	0.278	0.292	0.298	0.298	0.314	0.296	4.4
Methyl tert-butyl ether	0.301	0.303	0.333	0.372	0.371	0.336	10.0
1,1-Dichloroethane	0.554	0.522	0.566	0.574	0.596	0.562	4.8
cis-1,2-Dichloroethene	0.288	0.266	0.291	0.293	0.304	0.289	4.9
2-Butanone	0.033	0.028	0.031	0.034	0.036	0.032	9.1
Bromochloromethane	0.089	0.085	0.087	0.098	0.096	0.091	6.2
Chloroform	0.574	0.558	0.590	0.589	0.578	0.578	2.3
1,1,1-Trichloroethane	0.724	0.642	0.717	0.727	0.718	0.706	5.1
Cyclohexane	0.522	0.528	0.685	0.697	0.642	0.615	14.0
Carbon tetrachloride	0.629	0.636	0.693	0.715	0.668	0.668	5.5
Benzene	1.329	1.346	1.422	1.378	1.399	1.375	2.8
1,2-Dichloroethane	0.303	0.274	0.306	0.306	0.307	0.299	4.8
Trichloroethene	0.341	0.346	0.381	0.430	0.359	0.371	9.7
Methylcyclohexane	0.494	0.513	0.596	0.608	0.538	0.550	9.1

Report 1,4-Dioxane for Low-Medium VOA analysis only

6B - FORM VI VOA-2  
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Instrument ID: CHD.i Calibration Date(s): 02/23/2015 02/23/2015  
 Heated Purge: (Y/N) N Calibration Time(s): 1354 1532  
 Purge Volume: 25.0 (mL)  
 GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

LAB FILE ID: \_\_\_\_\_ RRF<sub>0.5</sub> = 12252\_005.D RRF<sub>1.0</sub> = 12252\_006.D  
 RRF<sub>5.0</sub> = 12252\_007.D RRF<sub>10</sub> = 12252\_008.D RRF<sub>20</sub> = 12252\_009.D

COMPOUND	RRF <sub>0.5</sub>	RRF <sub>1.0</sub>	RRF <sub>5.0</sub>	RRF <sub>10</sub>	RRF <sub>20</sub>	RRF	%RSD
1,2-Dichloropropane	0.293	0.261	0.285	0.294	0.278	0.282	4.8
Bromodichloromethane	0.322	0.310	0.361	0.368	0.359	0.344	7.6
cis-1,3-Dichloropropene	0.330	0.313	0.425	0.424	0.416	0.382	14.0
4-Methyl-2-pentanone	0.065	0.072	0.092	0.099	0.090	0.083	17.0
Toluene	1.361	1.453	1.635	1.701	1.630	1.556	9.2
trans-1,3-Dichloropropene	0.235	0.236	0.302	0.340	0.330	0.289	17.0
1,1,2-Trichloroethane	0.209	0.144	0.146	0.149	0.145	0.159	18.0
Tetrachloroethene	0.396	0.376	0.391	0.430	0.393	0.397	5.0
2-Hexanone	0.052	0.052	0.063	0.070	0.065	0.060	13.0
Dibromochloromethane	0.157	0.155	0.185	0.211	0.208	0.183	15.0
1,2-Dibromoethane	0.126	0.113	0.133	0.141	0.133	0.129	8.0
Chlorobenzene	0.978	0.946	1.010	1.074	1.008	1.003	4.7
Ethylbenzene	1.735	1.745	2.186	2.228	1.990	1.977	12.0
o-Xylene	0.547	0.586	0.734	0.784	0.742	0.679	16.0
m,p-Xylene	0.630	0.660	0.800	0.844	0.787	0.744	13.0
Styrene	0.785	0.861	1.105	1.157	1.124	1.006	17.0
Bromoform	0.119	0.131	0.148	0.165	0.172	0.147	15.0
Isopropylbenzene	1.669	1.813	2.349	2.392	2.237	2.092	16.0
1,1,2,2-Tetrachloroethane	0.123	0.125	0.133	0.151	0.144	0.135	9.1
1,3-Dichlorobenzene	1.395	1.416	1.601	1.694	1.628	1.547	8.6
1,4-Dichlorobenzene	1.614	1.536	1.640	1.661	1.582	1.607	3.1
1,2-Dichlorobenzene	1.223	1.205	1.331	1.360	1.293	1.283	5.2
1,2-Dibromo-3-Chloropropane	0.035	0.037	0.036	0.042	0.041	0.038	8.0
1,2,4-Trichlorobenzene	0.681	0.651	0.792	0.883	0.885	0.779	14.0
1,2,3-Trichlorobenzene	0.456	0.453	0.541	0.604	0.604	0.532	14.0

6C - FORM VI VOA-3  
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Instrument ID: CHD.i Calibration Date(s): 02/23/2015 02/23/2015  
 Heated Purge: (Y/N) N Calibration Time(s): 1354 1532  
 Purge Volume: 25.0 (mL)  
 GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

LAB FILE ID: \_\_\_\_\_ RRF<sub>0.5</sub> = 12252\_005.D RRF<sub>1.0</sub> = 12252\_006.D  
 RRF<sub>5.0</sub> = 12252\_007.D RRF<sub>10</sub> = 12252\_008.D RRF<sub>20</sub> = 12252\_009.D

COMPOUND	RRF <sub>0.5</sub>	RRF <sub>1.0</sub>	RRF <sub>5.0</sub>	RRF <sub>10</sub>	RRF <sub>20</sub>	RRF	%RSD
Vinyl Chloride-d3	0.310	0.316	0.333	0.342	0.360	0.332	6.1
Chloroethane-d5	0.257	0.207	0.249	0.239	0.229	0.236	8.2
1,1-Dichloroethene-d2	0.650	0.638	0.701	0.647	0.657	0.659	3.8
2-Butanone-d5	0.029	0.027	0.031	0.031	0.032	0.030	6.4
Chloroform-d	0.612	0.576	0.610	0.606	0.603	0.601	2.4
1,2-Dichloroethane-d4	0.227	0.226	0.250	0.247	0.254	0.241	5.4
Benzene-d6	1.248	1.251	1.297	1.294	1.258	1.270	1.9
1,2-Dichloropropane-d6	0.325	0.306	0.296	0.306	0.318	0.310	3.7
Toluene-d8	1.158	1.221	1.410	1.381	1.347	1.303	8.3
trans-1,3-Dichloropropene-d4	0.216	0.190	0.263	0.283	0.293	0.249	18.0
2-Hexanone-d5	0.019	0.019	0.025	0.029	0.029	0.024	20.0
1,1,2,2-Tetrachloroethane-d2	0.125	0.131	0.135	0.152	0.140	0.136	7.4
1,2-Dichlorobenzene-d4	0.787	0.781	0.792	0.832	0.762	0.791	3.3

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

7A - FORM VII VOA-1  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Instrument ID: CHD.i Calibration Date: 04/01/2015 Time: 1151  
 Lab File Id: 12903\_004.D Init. Calib. Date(s): 02/23/2015 02/23/2015  
 EPA Sample No. (VSTD####): VSTD005DE Init. Calib. Time(s): 1354 1532  
 Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)  
 Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF5.0	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.732	0.764	0.010	4.5	40.0
Chloromethane	0.415	0.471	0.010	13.6	40.0
Vinyl chloride	0.394	0.431	0.100	9.6	30.0
Bromomethane	0.147	0.166	0.100	13.2	30.0
Chloroethane	0.234	0.238	0.010	1.8	40.0
Trichlorofluoromethane	0.789	0.798	0.010	1.2	40.0
1,1-Dichloroethene	0.274	0.284	0.100	3.7	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.342	0.357	0.010	4.5	40.0
Acetone	0.025	0.025	0.010	-0.8	40.0
Carbon disulfide	0.758	0.808	0.010	6.6	40.0
Methyl acetate	0.050	0.056	0.010	10.6	40.0
Methylene Chloride	0.243	0.244	0.010	0.4	40.0
trans-1,2-Dichloroethene	0.296	0.299	0.010	1.1	40.0
Methyl tert-butyl ether	0.336	0.358	0.010	6.7	40.0
1,1-Dichloroethane	0.562	0.575	0.200	2.2	30.0
cis-1,2-Dichloroethene	0.289	0.294	0.010	1.9	40.0
2-Butanone	0.032	0.035	0.010	8.8	40.0
Bromochloromethane	0.091	0.097	0.050	6.3	30.0
Chloroform	0.578	0.605	0.200	4.7	30.0
1,1,1-Trichloroethane	0.706	0.757	0.100	7.2	30.0
Cyclohexane	0.615	0.681	0.010	10.8	40.0
Carbon tetrachloride	0.668	0.699	0.100	4.6	30.0
Benzene	1.375	1.471	0.400	7.0	30.0
1,2-Dichloroethane	0.299	0.325	0.100	8.7	30.0
Trichloroethene	0.371	0.414	0.300	11.4	30.0
Methylcyclohexane	0.550	0.607	0.010	10.4	40.0

Report 1,4-Dioxane for Low/Medium VOA analysis only



7B - FORM VII VOA-2  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Instrument ID: CHD.i Calibration Date: 04/01/2015 Time: 1151  
 Lab File Id: 12903\_004.D Init. Calib. Date(s): 02/23/2015 02/23/2015  
 EPA Sample No. (VSTD####): VSTD005DE Init. Calib. Time(s): 1354 1532  
 Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)  
 Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF5.0	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.282	0.292	0.010	3.7	40.0
Bromodichloromethane	0.344	0.373	0.200	8.5	30.0
cis-1,3-Dichloropropene	0.382	0.435	0.200	14.1	30.0
4-Methyl-2-pentanone	0.083	0.093	0.010	10.9	40.0
Toluene	1.556	1.645	0.400	5.7	30.0
trans-1,3-Dichloropropene	0.289	0.321	0.100	11.4	30.0
1,1,2-Trichloroethane	0.159	0.155	0.100	-2.0	30.0
Tetrachloroethene	0.397	0.406	0.100	2.4	30.0
2-Hexanone	0.060	0.066	0.010	9.5	40.0
Dibromochloromethane	0.183	0.201	0.100	9.8	30.0
1,2-Dibromoethane	0.129	0.134	0.010	3.4	40.0
Chlorobenzene	1.003	1.023	0.500	2.0	30.0
Ethylbenzene	1.977	2.076	0.100	5.0	30.0
o-Xylene	0.679	0.718	0.300	5.9	30.0
m,p-Xylene	0.744	0.795	0.300	6.8	30.0
Styrene	1.006	1.094	0.300	8.7	30.0
Bromoform	0.147	0.163	0.050	11.1	30.0
Isopropylbenzene	2.092	2.235	0.010	6.8	40.0
1,1,2,2-Tetrachloroethane	0.135	0.144	0.100	6.3	30.0
1,3-Dichlorobenzene	1.547	1.565	0.400	1.2	30.0
1,4-Dichlorobenzene	1.607	1.577	0.400	-1.9	30.0
1,2-Dichlorobenzene	1.283	1.303	0.400	1.6	30.0
1,2-Dibromo-3-Chloropropane	0.038	0.037	0.010	-3.7	40.0
1,2,4-Trichlorobenzene	0.779	0.733	0.200	-5.9	30.0
1,2,3-Trichlorobenzene	0.532	0.485	0.200	-8.7	30.0

7C - FORM VII VOA-3  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Instrument ID: CHD.i Calibration Date: 04/01/2015 Time: 1151  
 Lab File Id: 12903\_004.D Init. Calib. Date(s): 02/23/2015 02/23/2015  
 EPA Sample No. (VSTD####): VSTD005DE Init. Calib. Time(s): 1354 1532  
 Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)  
 Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF5.0	MIN RRF	%D	MAX %D
Vinyl Chloride-d3	0.332	0.307	0.010	-7.6	30.0
Chloroethane-d5	0.236	0.249	0.010	5.3	40.0
1,1-Dichloroethene-d2	0.659	0.726	0.010	10.3	30.0
2-Butanone-d5	0.030	0.031	0.010	5.4	40.0
Chloroform-d	0.601	0.645	0.010	7.3	30.0
1,2-Dichloroethane-d4	0.241	0.257	0.010	6.6	30.0
Benzene-d6	1.270	1.404	0.010	10.5	30.0
1,2-Dichloropropane-d6	0.310	0.348	0.010	12.2	40.0
Toluene-d8	1.303	1.423	0.010	9.2	30.0
trans-1,3-Dichloropropene-d4	0.249	0.282	0.010	13.1	30.0
2-Hexanone-d5	0.024	0.027	0.010	9.6	40.0
1,1,2,2-Tetrachloroethane-d2	0.136	0.144	0.010	5.4	30.0
1,2-Dichlorobenzene-d4	0.791	0.793	0.010	0.3	30.0

Report 1,4-Dioxane-d8 for Low/Medium VOA analysis only

7A - FORM VII VOA-1  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Instrument ID: CHD.i Calibration Date: 04/01/2015 Time: 1920  
 Lab File Id: 12903\_022.D Init. Calib. Date(s): 02/23/2015 02/23/2015  
 EPA Sample No. (VSTD####): VSTD005ED Init. Calib. Time(s): 1354 1532  
 Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)  
 Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF5.0	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.732	0.655	0.010	-10.5	50.0
Chloromethane	0.415	0.425	0.010	2.5	50.0
Vinyl chloride	0.394	0.397	0.010	0.8	50.0
Bromomethane	0.147	0.173	0.010	17.7	50.0
Chloroethane	0.234	0.231	0.010	-1.1	50.0
Trichlorofluoromethane	0.789	0.773	0.010	-1.9	50.0
1,1-Dichloroethene	0.274	0.274	0.010	0.1	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.342	0.326	0.010	-4.7	50.0
Acetone	0.025	0.024	0.010	-5.9	50.0
Carbon disulfide	0.758	0.728	0.010	-4.0	50.0
Methyl acetate	0.050	0.063	0.010	26.0	50.0
Methylene Chloride	0.243	0.244	0.010	0.7	50.0
trans-1,2-Dichloroethene	0.296	0.301	0.010	1.6	50.0
Methyl tert-butyl ether	0.336	0.343	0.010	2.1	50.0
1,1-Dichloroethane	0.562	0.571	0.010	1.6	50.0
cis-1,2-Dichloroethene	0.289	0.299	0.010	3.7	50.0
2-Butanone	0.032	0.035	0.010	9.0	50.0
Bromochloromethane	0.091	0.094	0.010	2.8	50.0
Chloroform	0.578	0.597	0.010	3.3	50.0
1,1,1-Trichloroethane	0.706	0.751	0.010	6.4	50.0
Cyclohexane	0.615	0.657	0.010	6.8	50.0
Carbon tetrachloride	0.668	0.681	0.010	1.9	50.0
Benzene	1.375	1.478	0.010	7.5	50.0
1,2-Dichloroethane	0.299	0.314	0.010	5.0	50.0
Trichloroethene	0.371	0.397	0.010	6.9	50.0
Methylcyclohexane	0.550	0.550	0.010	-0.1	50.0

Report 1,4-Dioxane for Low/Medium VOA analysis only

7B - FORM VII VOA-2  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Instrument ID: CHD.i Calibration Date: 04/01/2015 Time: 1920  
 Lab File Id: 12903\_022.D Init. Calib. Date(s): 02/23/2015 02/23/2015  
 EPA Sample No. (VSTD####): VSTD005ED Init. Calib. Time(s): 1354 1532  
 Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)  
 Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF5.0	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.282	0.291	0.010	3.3	50.0
Bromodichloromethane	0.344	0.369	0.010	7.3	50.0
cis-1,3-Dichloropropene	0.382	0.418	0.010	9.6	50.0
4-Methyl-2-pentanone	0.083	0.094	0.010	12.5	50.0
Toluene	1.556	1.651	0.010	6.1	50.0
trans-1,3-Dichloropropene	0.289	0.312	0.010	8.2	50.0
1,1,2-Trichloroethane	0.159	0.148	0.010	-6.8	50.0
Tetrachloroethene	0.397	0.389	0.010	-2.1	50.0
2-Hexanone	0.060	0.067	0.010	10.8	50.0
Dibromochloromethane	0.183	0.197	0.010	7.5	50.0
1,2-Dibromoethane	0.129	0.133	0.010	3.1	50.0
Chlorobenzene	1.003	0.997	0.010	-0.6	50.0
Ethylbenzene	1.977	2.049	0.010	3.6	50.0
o-Xylene	0.679	0.704	0.010	3.8	50.0
m,p-Xylene	0.744	0.782	0.010	5.1	50.0
Styrene	1.006	1.085	0.010	7.8	50.0
Bromoform	0.147	0.159	0.010	8.1	50.0
Isopropylbenzene	2.092	2.183	0.010	4.3	50.0
1,1,2,2-Tetrachloroethane	0.135	0.144	0.010	6.6	50.0
1,3-Dichlorobenzene	1.547	1.484	0.010	-4.1	50.0
1,4-Dichlorobenzene	1.607	1.552	0.010	-3.4	50.0
1,2-Dichlorobenzene	1.283	1.300	0.010	1.4	50.0
1,2-Dibromo-3-Chloropropane	0.038	0.035	0.010	-9.0	50.0
1,2,4-Trichlorobenzene	0.779	0.622	0.010	-20.1	50.0
1,2,3-Trichlorobenzene	0.532	0.449	0.010	-15.6	50.0

7C - FORM VII VOA-3  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Instrument ID: CHD.i Calibration Date: 04/01/2015 Time: 1920  
 Lab File Id: 12903\_022.D Init. Calib. Date(s): 02/23/2015 02/23/2015  
 EPA Sample No. (VSTD####): VSTD005ED Init. Calib. Time(s): 1354 1532  
 Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)  
 Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF5.0	MIN RRF	%D	MAX %D
Vinyl Chloride-d3	0.332	0.289	0.010	-12.9	50.0
Chloroethane-d5	0.236	0.237	0.010	0.5	50.0
1,1-Dichloroethene-d2	0.659	0.700	0.010	6.3	50.0
2-Butanone-d5	0.030	0.032	0.010	5.7	50.0
Chloroform-d	0.601	0.645	0.010	7.3	50.0
1,2-Dichloroethane-d4	0.241	0.255	0.010	5.8	50.0
Benzene-d6	1.270	1.402	0.010	10.4	50.0
1,2-Dichloropropane-d6	0.310	0.336	0.010	8.2	50.0
Toluene-d8	1.303	1.419	0.010	8.9	50.0
trans-1,3-Dichloropropene-d4	0.249	0.272	0.010	9.2	50.0
2-Hexanone-d5	0.024	0.027	0.010	11.7	50.0
1,1,2,2-Tetrachloroethane-d2	0.136	0.145	0.010	6.5	50.0
1,2-Dichlorobenzene-d4	0.791	0.792	0.010	0.1	50.0

Report 1,4-Dioxane-d8 for Low/Medium VOA analysis only

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: MB 200-86297/6  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 12903\_006.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: \_\_\_\_\_  
 % Moisture: not dec. Date Analyzed: 04/01/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	<u>Q</u>
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.071	J
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.046	J
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: MB 200-86297/6  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 12903\_006.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: \_\_\_\_\_  
 % Moisture: not dec. Date Analyzed: 04/01/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.0099	J
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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EPA SAMPLE NO.

VBLKDE

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: MB 200-86297/6  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 12903\_006.D  
 Level: (TRACE or LOW/MED) TRACE Date Received: \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_ Date Analyzed: 04/01/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	4.50	1.4	J
02		Unknown	7.30	2.9	J X
03	541-05-9	Cyclotrisiloxane, hexamethyl-	8.23	2.1	J N
04	556-67-2	Cyclotetrasiloxane, octamethyl-	11.05	1.6	J N
05	E966796 <sup>1</sup>	Total Alkanes	N/A		

<sup>1</sup>EPA-designated Registry Number.



Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-27298-4  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 12903\_016.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: \_\_\_\_\_  
 % Moisture: not dec. Date Analyzed: 04/01/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.070	J B
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	0.67	J
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-27298-4  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 12903\_016.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: \_\_\_\_\_  
 % Moisture: not dec. Date Analyzed: 04/01/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.0094	J B
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.0056	J
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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EPA SAMPLE NO.

VHBLK01

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-27298-4  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 12903\_016.D  
 Level: (TRACE or LOW/MED) TRACE Date Received: \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_ Date Analyzed: 04/01/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	4.50	0.80	J
02		Unknown	7.31	2.9	J B X
03	541-05-9	Cyclotrisiloxane, hexamethyl-	8.23	1.3	J B N
04		Unknown	11.05	1.2	J
05	E966796 <sup>1</sup>	Total Alkanes	N/A		

<sup>1</sup>EPA-designated Registry Number.

VIBLKDX

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: VIBLK 200-86297/13  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 12903\_013.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: \_\_\_\_\_  
 % Moisture: not dec. Date Analyzed: 04/01/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	<u>Q</u>
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.054	J B
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U B
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	1.0	J
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.027	J
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: VIBLK 200-86297/13  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 12903\_013.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: \_\_\_\_\_  
 % Moisture: not dec. Date Analyzed: 04/01/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.0097	J B
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.0068	J
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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EPA SAMPLE NO.

VIBLKDX

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 27298  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: VIBLK 200-86297/13  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 12903\_013.D  
 Level: (TRACE or LOW/MED) TRACE Date Received: \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_ Date Analyzed: 04/01/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	4.50	1.2	J
02		Unknown	7.31	2.8	J B X
03	541-05-9	Cyclotrisiloxane, hexamethyl-	8.23	1.6	J B N
04	556-67-2	Cyclotetrasiloxane, octamethyl-	11.05	1.3	J B N
05	E966796 <sup>1</sup>	Total Alkanes	N/A		

<sup>1</sup>EPA-designated Registry Number.

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-27298-1

SDG No.: 27298

Instrument ID: CHD.i Start Date: 02/23/2015 12:19

Analysis Batch Number: 84788 End Date: 02/23/2015 16:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-84788/1		02/23/2015 12:19	1	12252_001.D	DB-624 0.2 (mm)
VIBLK 200-84788/2		02/23/2015 12:40	1		DB-624 0.2 (mm)
VIBLK 200-84788/3		02/23/2015 13:04	1		DB-624 0.2 (mm)
ZZZZZ		02/23/2015 13:29	1		DB-624 0.2 (mm)
IC 200-84788/5		02/23/2015 13:54	1	12252_005.D	DB-624 0.2 (mm)
IC 200-84788/6		02/23/2015 14:18	1	12252_006.D	DB-624 0.2 (mm)
ICIS 200-84788/7		02/23/2015 14:43	1	12252_007.D	DB-624 0.2 (mm)
IC 200-84788/8		02/23/2015 15:08	1	12252_008.D	DB-624 0.2 (mm)
IC 200-84788/9		02/23/2015 15:32	1	12252_009.D	DB-624 0.2 (mm)
VIBLK 200-84788/10		02/23/2015 15:57	1		DB-624 0.2 (mm)
VIBLK 200-84788/11		02/23/2015 16:22	1		DB-624 0.2 (mm)

## GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica BurlingtonJob No.: 200-27298-1SDG No.: 27298Instrument ID: CHD.iStart Date: 04/01/2015 10:55Analysis Batch Number: 86297End Date: 04/01/2015 19:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		04/01/2015 10:55	1		DB-624 0.2 (mm)
BFB 200-86297/2		04/01/2015 11:04	1	12903_002.D	DB-624 0.2 (mm)
ZZZZZ		04/01/2015 11:27	1		DB-624 0.2 (mm)
CCVIS 200-86297/4		04/01/2015 11:51	1	12903_004.D	DB-624 0.2 (mm)
VIBLK 200-86297/5		04/01/2015 12:16	1		DB-624 0.2 (mm)
MB 200-86297/6		04/01/2015 12:40	1	12903_006.D	DB-624 0.2 (mm)
200-27298-2 DL	AGGW2-W-36851 DL	04/01/2015 13:05	220	12903_007.D	DB-624 0.2 (mm)
200-27298-3	AGQCTB-W-37178	04/01/2015 13:30	1	12903_008.D	DB-624 0.2 (mm)
200-27298-1	AGKMW3-W-36847	04/01/2015 13:54	1	12903_009.D	DB-624 0.2 (mm)
ZZZZZ		04/01/2015 14:19	2.63		DB-624 0.2 (mm)
ZZZZZ		04/01/2015 14:44	1		DB-624 0.2 (mm)
200-27298-2	AGGW2-W-36851	04/01/2015 15:13	46.2	12903_012.D	DB-624 0.2 (mm)
VIBLK 200-86297/13		04/01/2015 15:38	1	12903_013.D	DB-624 0.2 (mm)
ZZZZZ		04/01/2015 16:02	1		DB-624 0.2 (mm)
VIBLK 200-86297/15		04/01/2015 16:27	1		DB-624 0.2 (mm)
200-27298-4	VHBLK01	04/01/2015 16:52	1	12903_016.D	DB-624 0.2 (mm)
ZZZZZ		04/01/2015 17:17	1		DB-624 0.2 (mm)
ZZZZZ		04/01/2015 17:41	1		DB-624 0.2 (mm)
ZZZZZ		04/01/2015 18:06	1		DB-624 0.2 (mm)
ZZZZZ		04/01/2015 18:31	1		DB-624 0.2 (mm)
ZZZZZ		04/01/2015 18:55	1		DB-624 0.2 (mm)
CCVC 200-86297/22		04/01/2015 19:20	1	12903_022.D	DB-624 0.2 (mm)
CCVC 200-86297/23		04/01/2015 19:45	1		DB-624 0.2 (mm)



## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-27298-1SDG No.: 27298Instrument ID: CHD.i Analysis Batch Number: 84788Lab Sample ID: IC 200-84788/5 Client Sample ID: \_\_\_\_\_Date Analyzed: 02/23/15 13:54 Lab File ID: 12252\_005.D GC Column: DB-624 ID: 0.2 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,2-Trichloroethane	8.23	Baseline Event	phillipsm	02/24/15 14:56
1,2-Dibromo-3-Chloropropane	13.45	Peak not found by the data system	wilburj	02/23/15 14:44

Lab Sample ID: IC 200-84788/6 Client Sample ID: \_\_\_\_\_Date Analyzed: 02/23/15 14:18 Lab File ID: 12252\_006.D GC Column: DB-624 ID: 0.2 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dibromo-3-Chloropropane	13.44	Peak not found by the data system	wilburj	02/23/15 14:50

Lab Sample ID: ICIS 200-84788/7 Client Sample ID: \_\_\_\_\_Date Analyzed: 02/23/15 14:43 Lab File ID: 12252\_007.D GC Column: DB-624 ID: 0.2 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloropropane-d6	6.42	Baseline Event	wilburj	02/24/15 10:45

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-27298-1SDG No.: 27298Instrument ID: CHD.i Analysis Batch Number: 86297Lab Sample ID: CCVIS 200-86297/4 Client Sample ID: \_\_\_\_\_Date Analyzed: 04/01/15 11:51 Lab File ID: 12903\_004.D GC Column: DB-624 ID: 0.2 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.54	Baseline Event	wilburj	04/01/15 12:38

Lab Sample ID: CCVC 200-86297/22 Client Sample ID: \_\_\_\_\_Date Analyzed: 04/01/15 19:20 Lab File ID: 12903\_022.D GC Column: DB-624 ID: 0.2 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloropropane-d6	6.42	Baseline Event	wilburj	04/02/15 10:29

REAGENT TRACEABILITY CROSS-REFERENCE

Lab Name: TestAmerica Burlington Job No.: 200-27298-1

SDG No.: 27298

Reagent Container	Reagent ID	Reagent Description	Preparation Date	Expiration Date
750681	VMBFBw_00017	BFB TUNE 25 PPM	12/22/2014	06/22/2015
765490	VMSOMTRISw_00096	SOM TR ISTD 20 PPM	02/23/2015	03/23/2015
765492	VMSOMTRCALw_00086	SOM TR CAL 20 PPM	02/20/2015	03/20/2015
773506	VMSOMTRISw_00097	SOM TR ISTD 20 PPM	03/24/2015	04/24/2015
773507	VMSOMTRSUw_00090	SOM TR DMC 20 PPM	03/24/2015	04/24/2015
773508	VMSOMTRCALw_00087	SOM TR CAL 20 PPM	03/24/2015	04/24/2015

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington

Job No.: 200-27298-1

SDG No.: 27298

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VMBFBw_00017	06/22/15	12/22/14	METHANOL, Lot 125253	25 mL	VMBFBs_00014	125 uL	BFB	25 ug/mL
.VMBFBs 00014	12/22/15		RESTEK, Lot A0106759		(Purchased Reagent)		BFB	5000 ug/mL
VMSOMTRCALw_00086	03/20/15	02/20/15	METHANOL, Lot 143090	4000 uL	VM8260CALbs_00169	40 uL	Bromomethane	20 ug/mL
							Chloroethane	20 ug/mL
							Chloromethane	20 ug/mL
							Dichlorodifluoromethane	20 ug/mL
							Trichlorofluoromethane	20 ug/mL
							Vinyl chloride	20 ug/mL
					VMSOMCALas_00025	40 uL	1,1,1-Trichloroethane	20 ug/mL
							1,1,2,2-Tetrachloroethane	20 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	20 ug/mL
							1,1,2-Trichloroethane	20 ug/mL
							1,1-Dichloroethane	20 ug/mL
							1,1-Dichloroethene	20 ug/mL
							1,2,3-Trichlorobenzene	20 ug/mL
							1,2,4-Trichlorobenzene	20 ug/mL
							1,2-Dibromo-3-Chloropropane	20 ug/mL
							1,2-Dibromoethane	20 ug/mL
							1,2-Dichlorobenzene	20 ug/mL
							1,2-Dichloroethane	20 ug/mL
							1,2-Dichloropropane	20 ug/mL
							1,3-Dichlorobenzene	20 ug/mL
							1,4-Dichlorobenzene	20 ug/mL
							Benzene	20 ug/mL
							Bromochloromethane	20 ug/mL
							Bromodichloromethane	20 ug/mL
							Bromoform	20 ug/mL
							Carbon disulfide	20 ug/mL
							Carbon tetrachloride	20 ug/mL
							Chlorobenzene	20 ug/mL
							Chloroform	20 ug/mL
							cis-1,2-Dichloroethene	20 ug/mL
							cis-1,3-Dichloropropene	20 ug/mL
							Cyclohexane	20 ug/mL
							Dibromochloromethane	20 ug/mL
							Ethylbenzene	20 ug/mL
							Isopropylbenzene	20 ug/mL
							m,p-Xylene	20 ug/mL
							Methyl acetate	20 ug/mL
							Methyl tert-butyl ether	20 ug/mL
							Methylcyclohexane	20 ug/mL
							Methylene Chloride	20 ug/mL
							o-Xylene	20 ug/mL
							Styrene	20 ug/mL
							Tetrachloroethene	20 ug/mL
							Toluene	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington

Job No.: 200-27298-1

SDG No.: 27298

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,2-Dichloroethene	20 ug/mL
							trans-1,3-Dichloropropene	20 ug/mL
							Trichloroethene	20 ug/mL
					VMSOMCALbs_00030	160 uL	2-Butanone	200 ug/mL
							2-Hexanone	200 ug/mL
							4-Methyl-2-pentanone	200 ug/mL
					VMSOMSUs_00071	40 uL	Acetone	200 ug/mL
							Chloroethane-d5	20 ug/mL
					VMSOMSUs_00122	320 uL	Vinyl Chloride-d3	20 ug/mL
							2-Butanone-d5	200 ug/mL
					VMSOMSUs_00048	40 uL	2-Hexanone-d5	200 ug/mL
							1,1,2,2-Tetrachloroethane-d2	20 ug/mL
							1,1-Dichloroethene-d2	20 ug/mL
							1,2-Dichlorobenzene-d4	20 ug/mL
1,2-Dichloroethane-d4	20 ug/mL							
1,2-Dichloropropane-d6	20 ug/mL							
Benzene-d6	20 ug/mL							
Chloroform-d	20 ug/mL							
Toluene-d8	20 ug/mL							
VMTHFs_00024	400 uL	trans-1,3-Dichloropropene-d4	20 ug/mL					
.VM8260CALbs_00169	03/20/15	RESTEK, Lot A0105748	(Purchased Reagent)	Tetrahydrofuran	200 ug/mL			
				Bromomethane	2000 ug/mL			
				Chloroethane	2000 ug/mL			
				Chloromethane	2000 ug/mL			
				Dichlorodifluoromethane	2000 ug/mL			
				Trichlorofluoromethane	2000 ug/mL			
				Vinyl chloride	2000 ug/mL			
.VMSOMCALas_00025	12/15/17	Restek, Lot A0102833	(Purchased Reagent)	1,1,1-Trichloroethane	2000 ug/mL			
				1,1,2,2-Tetrachloroethane	2000 ug/mL			
				1,1,2-Trichloro-1,2,2-trifluoroethane	2000 ug/mL			
				1,1,2-Trichloroethane	2000 ug/mL			
				1,1-Dichloroethane	2000 ug/mL			
				1,1-Dichloroethene	2000 ug/mL			
				1,2,3-Trichlorobenzene	2000 ug/mL			
				1,2,4-Trichlorobenzene	2000 ug/mL			
				1,2-Dibromo-3-Chloropropane	2000 ug/mL			
				1,2-Dibromoethane	2000 ug/mL			
				1,2-Dichlorobenzene	2000 ug/mL			
				1,2-Dichloroethane	2000 ug/mL			
				1,2-Dichloropropane	2000 ug/mL			
				1,3-Dichlorobenzene	2000 ug/mL			
				1,4-Dichlorobenzene	2000 ug/mL			
				Benzene	2000 ug/mL			
				Bromochloromethane	2000 ug/mL			
				Bromodichloromethane	2000 ug/mL			
				Bromoform	2000 ug/mL			
				Carbon disulfide	2000 ug/mL			

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington

Job No.: 200-27298-1

SDG No.: 27298

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Cyclohexane	2000 ug/mL
							Dibromochloromethane	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Isopropylbenzene	2000 ug/mL
							m,p-Xylene	2000 ug/mL
							Methyl acetate	2000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylcyclohexane	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							o-Xylene	2000 ug/mL
							Styrene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							Trichloroethene	2000 ug/mL
.VMSOMCALbs_00030	10/14/15		Restek, Lot A0101160		(Purchased Reagent)		2-Butanone	5000 ug/mL
							2-Hexanone	5000 ug/mL
							4-Methyl-2-pentanone	5000 ug/mL
							Acetone	5000 ug/mL
.VMSOMSUas_00071	02/03/16		Absolute, Lot 011614		(Purchased Reagent)		Chloroethane-d5	2000 ug/mL
							Vinyl Chloride-d3	2000 ug/mL
.VMSOMSUs_00122	02/20/16		Absolute, Lot 080414		(Purchased Reagent)		2-Butanone-d5	2500 ug/mL
							2-Hexanone-d5	2500 ug/mL
.VMSOMSUcs_00048	04/09/15		Absolute, Lot 040912		(Purchased Reagent)		1,1,2,2-Tetrachloroethane-d2	2000 ug/mL
							1,1-Dichloroethene-d2	2000 ug/mL
							1,2-Dichlorobenzene-d4	2000 ug/mL
							1,2-Dichloroethane-d4	2000 ug/mL
							1,2-Dichloropropane-d6	2000 ug/mL
							Benzene-d6	2000 ug/mL
							Chloroform-d	2000 ug/mL
							Toluene-d8	2000 ug/mL
							trans-1,3-Dichloropropene-d4	2000 ug/mL
.VMTHFs 00024	01/13/16		RESTEK, Lot A099602		(Purchased Reagent)		Tetrahydrofuran	2000 ug/mL
VMSOMTRCALw_00087	04/24/15	03/24/15	METHANOL, Lot 143090	4000 uL	VM8260CALbs_00173	40 uL	Bromomethane	20 ug/mL
							Chloroethane	20 ug/mL
							Chloromethane	20 ug/mL
							Dichlorodifluoromethane	20 ug/mL
							Trichlorofluoromethane	20 ug/mL
							Vinyl chloride	20 ug/mL
					VMSOMCALas_00025	40 uL	1,1,1-Trichloroethane	20 ug/mL
							1,1,2,2-Tetrachloroethane	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington

Job No.: 200-27298-1

SDG No.: 27298

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichloro-1,2,2-trifluoroethane	20 ug/mL
							1,1,2-Trichloroethane	20 ug/mL
							1,1-Dichloroethane	20 ug/mL
							1,1-Dichloroethene	20 ug/mL
							1,2,3-Trichlorobenzene	20 ug/mL
							1,2,4-Trichlorobenzene	20 ug/mL
							1,2-Dibromo-3-Chloropropane	20 ug/mL
							1,2-Dibromoethane	20 ug/mL
							1,2-Dichlorobenzene	20 ug/mL
							1,2-Dichloroethane	20 ug/mL
							1,2-Dichloropropane	20 ug/mL
							1,3-Dichlorobenzene	20 ug/mL
							1,4-Dichlorobenzene	20 ug/mL
							Benzene	20 ug/mL
							Bromochloromethane	20 ug/mL
							Bromodichloromethane	20 ug/mL
							Bromoform	20 ug/mL
							Carbon disulfide	20 ug/mL
							Carbon tetrachloride	20 ug/mL
							Chlorobenzene	20 ug/mL
							Chloroform	20 ug/mL
							cis-1,2-Dichloroethene	20 ug/mL
							cis-1,3-Dichloropropene	20 ug/mL
							Cyclohexane	20 ug/mL
							Dibromochloromethane	20 ug/mL
							Ethylbenzene	20 ug/mL
							Isopropylbenzene	20 ug/mL
							m,p-Xylene	20 ug/mL
							Methyl acetate	20 ug/mL
							Methyl tert-butyl ether	20 ug/mL
							Methylcyclohexane	20 ug/mL
							Methylene Chloride	20 ug/mL
							o-Xylene	20 ug/mL
							Styrene	20 ug/mL
							Tetrachloroethene	20 ug/mL
							Toluene	20 ug/mL
							trans-1,2-Dichloroethene	20 ug/mL
							trans-1,3-Dichloropropene	20 ug/mL
							Trichloroethene	20 ug/mL
					VMSOMCALbs_00031	160 uL	2-Butanone	200 ug/mL
							2-Hexanone	200 ug/mL
							4-Methyl-2-pentanone	200 ug/mL
							Acetone	200 ug/mL
					VMSOMSUas_00071	40 uL	Chloroethane-d5	20 ug/mL
							Vinyl Chloride-d3	20 ug/mL
					VMSOMSUbs_00120	320 uL	2-Butanone-d5	200 ug/mL
							2-Hexanone-d5	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington

Job No.: 200-27298-1

SDG No.: 27298

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration	
					Reagent ID	Volume Added			
					VMSOMSucs_00049	40 uL	1,1,2,2-Tetrachloroethane-d2	20 ug/mL	
							1,1-Dichloroethene-d2	20 ug/mL	
							1,2-Dichlorobenzene-d4	20 ug/mL	
							1,2-Dichloroethane-d4	20 ug/mL	
							1,2-Dichloropropane-d6	20 ug/mL	
							Benzene-d6	20 ug/mL	
							Chloroform-d	20 ug/mL	
							Toluene-d8	20 ug/mL	
							trans-1,3-Dichloropropene-d4	20 ug/mL	
							VMTHFs_00024	400 uL	Tetrahydrofuran
.VM8260CALbs_00173	04/24/15		RESTEK, Lot A0105748				(Purchased Reagent)	Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL	
							Chloromethane	2000 ug/mL	
							Dichlorodifluoromethane	2000 ug/mL	
							Trichlorofluoromethane	2000 ug/mL	
							Vinyl chloride	2000 ug/mL	
.VMSOMCALas_00025	12/15/17		Restek, Lot A0102833				(Purchased Reagent)	1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL	
							1,1,2-Trichloro-1,2,2-trifluoroethane	2000 ug/mL	
							1,1,2-Trichloroethane	2000 ug/mL	
							1,1-Dichloroethane	2000 ug/mL	
							1,1-Dichloroethene	2000 ug/mL	
							1,2,3-Trichlorobenzene	2000 ug/mL	
							1,2,4-Trichlorobenzene	2000 ug/mL	
							1,2-Dibromo-3-Chloropropane	2000 ug/mL	
							1,2-Dibromoethane	2000 ug/mL	
							1,2-Dichlorobenzene	2000 ug/mL	
							1,2-Dichloroethane	2000 ug/mL	
							1,2-Dichloropropane	2000 ug/mL	
							1,3-Dichlorobenzene	2000 ug/mL	
							1,4-Dichlorobenzene	2000 ug/mL	
							Benzene	2000 ug/mL	
							Bromochloromethane	2000 ug/mL	
							Bromodichloromethane	2000 ug/mL	
							Bromoform	2000 ug/mL	
							Carbon disulfide	2000 ug/mL	
							Carbon tetrachloride	2000 ug/mL	
							Chlorobenzene	2000 ug/mL	
							Chloroform	2000 ug/mL	
							cis-1,2-Dichloroethene	2000 ug/mL	
							cis-1,3-Dichloropropene	2000 ug/mL	
							Cyclohexane	2000 ug/mL	
							Dibromochloromethane	2000 ug/mL	
							Ethylbenzene	2000 ug/mL	
							Isopropylbenzene	2000 ug/mL	
							m,p-Xylene	2000 ug/mL	
							Methyl acetate	2000 ug/mL	



REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington

Job No.: 200-27298-1

SDG No.: 27298

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl tert-butyl ether	2000 ug/mL
							Methylcyclohexane	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							o-Xylene	2000 ug/mL
							Styrene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							Trichloroethene	2000 ug/mL
.VMSOMCALbs_00031	02/03/16		Restek, Lot A0101160		(Purchased Reagent)		2-Butanone	5000 ug/mL
							2-Hexanone	5000 ug/mL
							4-Methyl-2-pentanone	5000 ug/mL
							Acetone	5000 ug/mL
.VMSOMSUas_00071	02/03/16		Absolute, Lot 011614		(Purchased Reagent)		Chloroethane-d5	2000 ug/mL
							Vinyl Chloride-d3	2000 ug/mL
.VMSOMSUsbs_00120	03/03/17		Absolute, Lot 080414		(Purchased Reagent)		2-Butanone-d5	2500 ug/mL
							2-Hexanone-d5	2500 ug/mL
.VMSOMSUcs_00049	03/03/16		Absolute, Lot 011614		(Purchased Reagent)		1,1,2,2-Tetrachloroethane-d2	2000 ug/mL
							1,1-Dichloroethene-d2	2000 ug/mL
							1,2-Dichlorobenzene-d4	2000 ug/mL
							1,2-Dichloroethane-d4	2000 ug/mL
							1,2-Dichloropropane-d6	2000 ug/mL
							Benzene-d6	2000 ug/mL
							Chloroform-d	2000 ug/mL
							Toluene-d8	2000 ug/mL
							trans-1,3-Dichloropropene-d4	2000 ug/mL
.VMTHFs_00024	01/13/16		RESTEK, Lot A099602		(Purchased Reagent)		Tetrahydrofuran	2000 ug/mL
VMSOMTRISw_00096	03/23/15	02/23/15	METHANOL, Lot 143090	4400 uL	VMSOMISs_00018	35.2 uL	1,4-Dichlorobenzene-d4	20 ug/mL
							1,4-Difluorobenzene	20 ug/mL
							Chlorobenzene-d5	20 ug/mL
.VMSOMISs_00018	09/08/15		RESTEK, Lot A090187		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							1,4-Difluorobenzene	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
VMSOMTRISw_00097	04/24/15	03/24/15	METHANOL, Lot 143090	4400 uL	VMSOMISs_00024	35.2 uL	1,4-Dichlorobenzene-d4	20 ug/mL
							1,4-Difluorobenzene	20 ug/mL
							Chlorobenzene-d5	20 ug/mL
.VMSOMISs_00024	02/17/16		RESTEK, Lot A099377		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							1,4-Difluorobenzene	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
VMSOMTRISUw_00090	04/24/15	03/24/15	METHANOL, Lot 143090	4400 uL	VMSOMSUas_00071	44 uL	Chloroethane-d5	20 ug/mL
							Vinyl Chloride-d3	20 ug/mL
					VMSOMSUsbs_00120	352 uL	2-Butanone-d5	200 ug/mL
							2-Hexanone-d5	200 ug/mL
					VMSOMSUcs_00049	44 uL	1,1,2,2-Tetrachloroethane-d2	20 ug/mL
							1,1-Dichloroethene-d2	20 ug/mL
							1,2-Dichlorobenzene-d4	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington

Job No.: 200-27298-1

SDG No.: 27298

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloroethane-d4	20 ug/mL
							1,2-Dichloropropane-d6	20 ug/mL
							Benzene-d6	20 ug/mL
							Chloroform-d	20 ug/mL
							Toluene-d8	20 ug/mL
							trans-1,3-Dichloropropene-d4	20 ug/mL
.VMSOMSUas_00071	02/03/16		Absolute, Lot 011614			(Purchased Reagent)	Chloroethane-d5	2000 ug/mL
							Vinyl Chloride-d3	2000 ug/mL
.VMSOMSUs_00120	03/03/17		Absolute, Lot 080414			(Purchased Reagent)	2-Butanone-d5	2500 ug/mL
							2-Hexanone-d5	2500 ug/mL
.VMSOMSUcs_00049	03/03/16		Absolute, Lot 011614			(Purchased Reagent)	1,1,2,2-Tetrachloroethane-d2	2000 ug/mL
							1,1-Dichloroethene-d2	2000 ug/mL
							1,2-Dichlorobenzene-d4	2000 ug/mL
							1,2-Dichloroethane-d4	2000 ug/mL
							1,2-Dichloropropane-d6	2000 ug/mL
							Benzene-d6	2000 ug/mL
							Chloroform-d	2000 ug/mL
							Toluene-d8	2000 ug/mL
							trans-1,3-Dichloropropene-d4	2000 ug/mL

**Supplement 5:**

**GreenField Report for Monthly OMM Event on April 1, 2015**



CONTRACTORS, INC.

Post Office Box 677  
Salina, Kansas 67402-0677  
Phone (785) 822-0900  
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ENVIRONMENTAL PROFESSIONALS

April 8, 2015

Lorraine M. LaFreniere, Ph.D., Manager  
Applied Geosciences and Environmental Management Section  
Environmental Science Division  
Argonne National Laboratory  
9700 South Cass Avenue, Building 203  
Argonne, Illinois 60439-4843

**RE: Former CCC/USDA Site, Main & Railroad Streets, Agra, Kansas  
Fourteenth Monthly OMM Report of the Third Scope of OMM Services**

Ms. LaFreniere,

GreenField Contractors, Inc. is submitting the attached copy of field notes from the April 1, 2015 monthly OMM event conducted at the Agra CCC/USDA remedial site. The soil vapor extraction (SVE) system was operating at a cumulative airflow rate of 195 standard cubic feet per minute (scfm) and a vacuum of 46.2 inches of water. Operating parameters were collected with SVE-1 through 3 operating. The air sparge system was operating at a pressure of 15.5 psi and cumulative airflow rate of 14.8 scfm. Operating parameters were collected with AS-1 through 3 operating. Wellhead pressures ranged from 4.27 to greater than 10 psi. Please contact me if you have any question concerning this report or the remedial project in general.

Sincerely,

A handwritten signature in black ink that reads "Melisa D. McElwee". The signature is written in a cursive, flowing style.

Melisa McElwee  
GreenField Contractors, Inc.

C: 1491 Report File

MONTHLY OPERATION MONITORING & MAINTENANCE REPORT

Facility Name: Former Agra CCC/USDA  
 Facility Address: 671 Railroad Ave  
Agra, Kansas  
 Consultant: GreenField Contractors, Inc.  
 Consultant Project Mgr: Tim Pace  
 Reporting Period: 2-27-15 thru 4-1-15  
 Days in Reporting Period: \_\_\_\_\_  
 Field Sheet Revision Date: \_\_\_\_\_

PROJ. # 1491  
 Inspector: T. Dordick  
 Inspection Date: 4-1-15  
 Inspection Time: 11:05  
 Electrical Meter Reading: 73189

VAPOR EXTRACTION/INJECTION INFORMATION			
Design Parameters for Vapor Extraction System:	250	SCFM	40 "H2O
Reporting Period Parameters:	195	SCFM	46.2 "H2O
Blower Operation:	X	Continual	Cycling
Hour Meter Reading:	44851.5	Previous	45642.3 Present
Design Parameters for Air Sparge System:	25	SCFM	12 PSI
Reporting Period Parameters:	14.8	SCFM	15.5 PSI
Blower Operation:	X	Continual	Cycling
Hour Meter Reading:	36798.5	Previous	37589.3 Present

GROUNDWATER ELEVATIONS									
Well I.D. No.	KDHE Site I.D.	Temp. Tag No.	TOC Elevation	Depth to Water (TOC)	Depth to Product (TOC)	Water Level Elevation	Free Phase Prod. Elev.	Free Phase Prod. Thick	D.O.
GW-1		423562		41.78					
GW-3		423634		41.73					
GW-4		423652		42.54					

SYSTEM DOWN TIME SUMMARY		
DATES		Explanation for Down Time
From	To	(Indicate Corrective Measures Taken)
/	/	

REMEDIATION SYSTEM MAINTENANCE RECORD			
Date of Changes	Description of Work Performed		Performed by
4-1-15	K.O. Tank	Drained	K.O. Meter: <u>Empty</u>
	Filters SVE	<u>Checked</u>	Replaced Cleaned
	A/SP Blower Grease	<u>Checked</u>	Added Cleaned
	Cleared SVE lines		Yes <u>(No)</u>
	Cleaned Flowmeters		Yes <u>(No)</u>
	Used weedeater around trailer		Yes <u>(No)</u>
	Swept trailer		<u>Yes</u> No
	Sensaphone Surge Protector		<u>Good</u> Bad
	Adjusted Air dilution:	From: <u>closed</u>	To: <u>closed</u>
	<u>Check Quarterly</u> Becker 3.60	Vane Width:	
	AIR Sparge vane measurement minimum 26 MM		

Need					
SVE Filter	Solberg				
Air Sparge Filter					

Former Agra CCC/USDA

T. Dorrel 4-1-15

Proj. # 1491

Operating Status: Arrival  On /  Off Departure  On /  Off

SVE UNIT	Pre KO Tank Vacuum ("H2O)	Pre/Post Filter Vacuum ("H2O)	Direct Air Flowrate (cfm)	Cumulative Flowrate (cfm) Sum of SVE Wells	O2 Readings (%)	CO2 Readings (%)	TPH (PID) Readings (ppm)
	46.2	57.166	closed	19.5	20.9	1.0	1.0

SVE WELL FIELD DATA

SVE WELL	Vac. @ Manifold ("H2O)	Direct Read Flowrate (cfm) 2" line	O2 Readings (%)	CO2 Readings (%)	TPH/Drager Readings (ppm)	Vac. @ Wellhead ("H2O)
SVE-1	7.4	50	20.9	1.0	1.0	3.2
SVE-2	6.6	50	20.9	1.0	1.0	2.6
SVE-3	18.0	95	20.9	1.0	1.0	6.7
SVE-4						
SVE-5						

SPARGE UNIT FIELD DATA

Operating Status: Arrival  On /  Off Departure  On /  Off

SPARGE UNIT	Pressure (psi)	Flow Rate (cfm)	Bleed Off (% Open)	Pre Air Temp. (deg. F)	Post Air Temp. (deg. F)
	15.5	14.8	closed	116°	

SPARGE WELL FIELD DATA

SPARGE WELL	Pressure @ Manifold (psi)	Pressure @ Wellhead (psi)	Direct Read Flow Rate (cfm)
AS-1	4.27	3.70	6.5
AS-2	7.64	7.07	6.5
AS-3	10+	10+	1.8
AS-4			
AS-5			

Former Agra CCC/USDA Agra, Kansas

MONTHLY SVE SCREEN EXPOSURE CALCULATION SHEET

SVE Well	Depth To Water Feet BGS (Rim)	Minus	Wellhead Vacuum (In./Ft. H2O)	Minus	Depth to Top of Screen	Equals	Length of Screen Exposed (Ft.)
SVE-1	6w-1 + 6w-4 ÷ 2 42.01	-	.27	-	20	=	21.74
SVE-2		-	.22	-	20	=	21.78
SVE-3		-	.56	-	20	=	21.45
SVE-4		-		-	20	=	
SVE-2		-		-	20	=	

NOTE: 1 PSI = 27.7 INCHES OF WATER  
 1 INCH HG = 13.6 INCHES OF WATER  
 Positive screen value equals length of screen exposed  
 Negative screen value equals length of screen flooded

Measurements Collected By T. Doran

Date Measurements Collected 4-1-15

Comments \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Former Agra CCC/USDA

MONTHLY SPARGE SCREEN EXPOSURE CALCULATION SHEET

AS Well	Depth to Water below TOC Feet	Plus / Minus	Difference in TOC Elevation Between MW- and AS Well	Adjusted SWL	Depth to Top of Sparge Screen (Ft)	Adjusted SWL Minus	Times	Calculation to Determine Amt. PSI Needed	Wellhead Pressure Needed to Overcome Water Column
AS-1		-	=		51.37	- 42.01	X	0.434 =	4.06
AS-2		-	=		58	-	X	0.434 =	6.94
AS-3		-	=		53.9	-	X	0.434 =	5.16
AS-4		-	=		58	-	X	0.434 =	6.94
AS-5		-	=		56.27	-	X	0.434 =	6.19

Measurements Collected By T. Deak

Date Measurements Collected 4-1-15

Comments



**Supplement 6:**

**GreenField Report for Quarterly OMM Event on April 30, 2015**



June 2, 2015

Lorraine M. LaFreniere, Ph.D., Manager  
Applied Geosciences and Environmental Management Section  
Environmental Science Division  
Argonne National Laboratory  
9700 South Cass Avenue, Building 203  
Argonne, Illinois 60439-4843

**RE: Former CCC/USDA Site, Main & Railroad Streets, Agra, Kansas  
Seventh Quarterly OMM Report of the Third OMM Contract**

Ms. LaFreniere,

GreenField Contractors, Inc. is submitting the attached copy of the quarterly OMM report of the referenced site. Please contact me if you have any question concerning this report or the remedial project in general.

Sincerely,

A handwritten signature in cursive script that reads "Melisa D. McElwee".

Melisa McElwee  
GreenField Contractors, Inc.

# **First Quarterly Report of the Second Scope of OMM Services**

**Former Agra Commodity Credit Corporation, United States  
Department of Agriculture Grain Storage Facility  
Agra, Kansas**

**KDHE Project Code: C6-074-00002  
Legal Description: SW ¼, SE ¼, NW ¼, S27, T3S, R16W  
Phillips County, Kansas**

**Prepared for:  
Lorraine M. LaFreniere, Ph.D., Manager  
Applied Geosciences and Environmental Management Section  
Environmental Science Division  
Argonne National Laboratory  
9700 South Cass Avenue, Building 203  
Argonne, Illinois 60439-4843**

**Submitted by:  
GreenField Contractors, Inc.  
Tim Pace, Remedial Director  
P.O. Box 677  
Salina, Kansas 67401-0677  
(785)-822-0900**

**June 2, 2015**

**GreenField Contractors, Inc.**

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## **1.0 OPERATION, MAINTENANCE AND MONITORING**

This quarterly OMM report for the USDA/CCC site located in Agra, Kansas, documents site activities from the seventh quarter of operation under the third scope of OMM services.

### **1.1 Operation and Maintenance**

Between January 23, 2015 and April 30, 2015 two monthly OMM events and one quarterly OMM events were conducted at the Agra CCC/USDA site. Vapor samples were collected from each individual SVE well line at the SVE manifold and one from the SVE effluent stack at the quarterly OMM event for laboratory analysis of carbon tetrachloride, chloroform, and 1,2 DCA. Groundwater samples were collected from onsite wells GW-1, 3, and 4 at the quarterly OMM event. General maintenance was conducted on the SVE and ASP systems as well.

#### **Soil Vapor Extraction System**

The SVE system operates SVE wells SVE-1 & 2 continuously while SVE-3, 4, & 5 are individually operated on alternating intervals. For consistency, SVE operating parameters are collected when SVE-1, 2, & 3 are operating. The SVE system operated at an average pre-filter vacuum of 46.5 inches of water and an average manifold flow rate of 183.67 cubic feet per minute (cfm) this quarter with the air dilution valve closed.

Monitoring activities on the SVE vapors included measuring total volatile organic compounds (VOC's), carbon dioxide, and oxygen concentrations on the SVE manifold and on each individual well line. Oxygen concentrations maintained 20.9 percent of extracted air. Carbon dioxide levels were at non-detectable levels. The vapor samples were collected from the SVE Effluent and the individual well lines at the SVE manifold at the quarterly OMM event. Vapor samples collected at the SVE manifold were analyzed via EPA Method TO-15 for VOC's carbon tetrachloride, chloroform, and 1,2 DCA. Carbon tetrachloride was detected in five of the six air samples collected ranging in concentration from 2.9 to 77.4 ug/m<sup>3</sup>. Chloroform and 1,2 DCA were not detected above laboratory detection limits in any of the vapor samples analyzed.

#### **Air Sparge System**

The AS system operated at an average pressure of 15.73 psi and an average cumulative airflow rate of 15.37 scfm this quarter. Wellhead pressures ranged from 3.49 psi to greater than 10 psi. Individual well line airflow rates ranged from 1.8 to 7.9 scfm.

## **1.2 Monitoring Monitoring Wells**

Groundwater samples were collected at the quarterly OMM event. The samples were analyzed for chloroform, carbon tetrachloride, and 1,2 DCA. Carbon tetrachloride was detected in the three groundwater samples ranging in concentration from 48 to 1,530 ug/L. Chloroform was also detected in all three groundwater samples ranging in concentration from 3.2 ug/L to 4.8 ug/L. 1,2 DCA was not detected in the three groundwater samples analyzed.

**Quarterly Monitoring Report**

**Facility Name:** Former Agra CCC/USDA  
**Facility Address:** 671 Railroad Ave. Agra, KS  
**Consultant:** GreenField Contractors Inc.  
**Reporting Period:** 1/23/2015 through 4/30/2015  
**Days in Reporting Period** 97

**Project #:** 1491  
**Consultant Project Mgr.:** Tim Pace  
**Number of Days SVE System Operating:** 97  
**Number of Days ASP System Operating:** 97

**Section 1 - Summary of Remedial Action**

**Groundwater:**

Pump & Treat:  Total Fluids Pumps (Electric)  Dual Phase Pumps (Electric)  
 Total Fluids Pumps (Pneumatic)  Dual Phase Pumps (Pneumatic)  
 With Off-gas Treatment  W/O Off-gas Treatment  
 Air Sparge System:

Recovery Trench(es):  NO L  ft. W  ft. D  ft.  
 No. of GW Recovery Wells:  No. of Sparge Wel  Yes  
 Startup Dates: GW Pump & Treat  Sparge  5  Off-gas Treatment

ISOC System:  No. of ISOC Wells:   
 Startup Dates: ISOC

**Water Treatment System:**  Carbon  Air Stripper Tower  Tray Stripper  
 Other (Specify):   
**Public Well Treatment System:**  Carbon  Air Stripper Tower  Tray Stripper  
 Other (Specify):   
**Disposition of Treated Water:**  Sanitary Sewer  NPDES  Reinjection  
 Other (Specify):

**Soil:**

Vapor Extraction System:  With Off-gas Treatment  W/O Off-gas Treatment:  
 No. of SVE Wells:  5  Startup Dates:  VES  Off-gas Treatment

**Comments:**

SVE and ASP wells are installed in large diameter borings(LDBs)

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**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

Project #: 1491

Continued Section 1 - Summary of Remedial Action

Major Equipment on Site:				Warr. Exp
Skimmer Pumps:	Brand _____	Type _____	Capacity _____	Date _____
Groundwater Pumps:	Brand _____	Type _____	Capacity _____	Date _____
Pre-Treatment/Filter:	Brand _____	Type _____		Date _____
Air Stripper:	Brand _____	Type _____	Capacity _____	Date _____
Enclosure Type:	Fence _____	Building _____	Skid _____	Other _____
Transfer Pumps:	Brand _____	Type _____	Capacity _____	Date _____
Air Compressor:	Brand _____	Type _____		Date _____
SVE Vacuum Pump:	Brand <u>Republic</u>	Type <u>HRB-900E</u>	Capacity _____	Date _____
Sparge Blower Pump:	Brand <u>Reitschle</u>	Type <u>DLT-40</u>	Capacity _____	Date _____
Oil/H2O Separator:	Brand _____	Type _____	Capacity _____	Date _____
Knockout Tank:	Brand <u>Ametek</u>	Type <u>M5350B</u>	Capacity <u>350 cfm</u>	Date _____
Vapor Phase Carbon:	Brand _____	Type _____		Date _____
Water Phase Carbon:	Brand _____	Type _____		Date _____
PWS Treatment Equip.	Brand _____	Type _____	Capacity _____	Date _____
Telemetry:	Model <u>Sensaphone 2000</u>	Type _____		Date _____
Off-gas Treatment Equip.:	Brand _____	Type _____	Capacity _____	Date _____
ISOC Oxygen Injection System:	Brand _____	Type _____	Capacity _____	Date _____

Facility Name: Former Agra CCC/USDA

Project #: 1491

Section 2 - Groundwater/Vapor Extraction/Injection Information

Design Air Flow Rate for Vapor Extraction System:	<u>    --    </u>	CFM	
Actual Ave. Flow Rate During 1st. Month of Operation:	<u>  255.50  </u>	CFM	
Actual Average System Flow Rate Since Start-up:	<u>  200.41  </u>	CFM	
Reporting Period Average Flow Rate:	<u>  183.67  </u>	CFM	
Blower Operation:	<u>    X    </u>	Continual	_____ Cycling
Design Air Flow Rate for Air Sparge System:	<u>  20.00  </u>	CFM	
Actual Ave. Flow Rate During 1st. Month of Operation:	<u>  19.10  </u>	CFM	
Actual Average System Flow Rate Since Start-up:	<u>  13.93  </u>	CFM	
Reporting Period Average Flow Rate:	<u>  15.37  </u>	CFM	
Blower Operation:	<u>    X    </u>	Continual	_____ Cycling





**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

**Section 7 - Ground Water Elevations**

Date: 5/29/2009

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
GW-1		39.02		NA	NA
GW-3		--		NA	NA
GW-4		39.93		NA	NA

Date: 8/28/2009

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
GW-1		39.26		NA	NA
GW-3		39.16		NA	NA
GW-4		39.85		NA	NA

Date: 11/27/2009

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
GW-1		38.22		NA	NA
GW-3		38.25		NA	NA
GW-4		39.36		NA	NA

Date: 2/25/2010

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
GW-1		37.40		NA	NA
GW-3		37.94		NA	NA
GW-4		39.44		NA	NA

Date: 5/27/2010

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
GW-1		37.97		NA	NA
GW-3		38.36		NA	NA
GW-4		39.51		NA	NA

Date: 8/27/2010

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
GW-1		37.73		NA	NA
GW-3		37.73		NA	NA
GW-4		38.96		NA	NA

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

**Section 7 - Ground Water Elevations**

Date: 11/19/2010

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
GW-1		37.78		NA	NA
GW-3		37.72		NA	NA
GW-4		39.12		NA	NA

Date: 3/1/2011

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
GW-1		39.30		NA	NA
GW-3		37.92		NA	NA
GW-4		38.05		NA	NA

Date: 5/25/2011

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
GW-1		NA		NA	NA
GW-3		NA		NA	NA
*GW-4		NA		NA	NA

\* SWL'S not collected. Wellheads under water.

Date: 10/27/2011

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		NA		NA	NA
*GW-3		NA		NA	NA
*GW-4		NA		NA	NA

\* No SWL'S. Water level indicator probe too big for 1" wells.

Date: 1/26/2012

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		37.98		NA	NA
*GW-3		38.95		NA	NA
*GW-4		39.10		NA	NA

\* No SWL'S. Water level indicator faulty.

Date: 4/26/2012

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		37.98		NA	NA
*GW-3		38.95		NA	NA
*GW-4		39.10		NA	NA

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

**Section 7 - Ground Water Elevations**

Date: 7/31/2012

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		38.40		NA	NA
*GW-3		38.40		NA	NA
*GW-4		39.30		NA	NA

Date: 10/30/2012

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		38.92		NA	NA
*GW-3		38.87		NA	NA
*GW-4		39.91		NA	NA

Date: 2/1/2013

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		39.12		NA	NA
*GW-3		39.04		NA	NA
*GW-4		40.28		NA	NA

Date: 4/26/2013

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		39.41		NA	NA
*GW-3		39.26		NA	NA
*GW-4		40.41		NA	NA

Date: 8/1/2013

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		39.93		NA	NA
*GW-3		39.79		NA	NA
*GW-4		40.20		NA	NA

Date: 10/29/2013

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		40.28		NA	NA
*GW-3		40.20		NA	NA
*GW-4		40.48		NA	NA

Date: 1/31/2014

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		40.55		NA	NA
*GW-3		40.47		NA	NA
*GW-4		40.91		NA	NA

Date: 4/30/2014

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		41.02		NA	NA
*GW-3		40.89		NA	NA
*GW-4		41.28		NA	NA

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

**Section 7 - Ground Water Elevations**

Date: 8/1/2014

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		41.27		NA	NA
*GW-3		41.21		NA	NA
*GW-4		41.59		NA	NA

Date: 10/29/2014

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		41.57		NA	NA
*GW-3		41.51		NA	NA
*GW-4		41.84		NA	NA

Date: 1/23/2015

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		41.62		NA	NA
*GW-3		41.56		NA	NA
*GW-4		41.96		NA	NA

Date: 4/30/2015

Well I.D.	Casing Elevation	Depth To Water	Water Elevation	Free Phase Product Thickness	Free Phase Product Elevation
*GW-1		41.95		NA	NA
*GW-3		41.92		NA	NA
*GW-4		42.28		NA	NA

Section 10A - Monitoring & Recovery Well Analytical  
(Use ppb units)

Method		Chloroform	Carbon tetrachloride	1,2-Dichloroethane					Volume Purged (gallons)	
Det. Level		8260B	8260B	8260B						
Well I.D.		Date								
GW-1	5/29/09	6.7	31.7	ND(1)					NA	
	8/28/09	7.7	45.9	ND(1)					NA	
	11/27/09	7.3	48.3	ND(1)					NA	
	2/25/10	4.2	35.8	ND(1)					NA	
	5/27/10	5.1	24.8	ND(1)					NA	
	8/27/10	5.4	30.3	ND(1)					NA	
	11/19/10	5.8	31.2	ND(1)					NA	
	3/1/11	5.5	39.8	ND(1)					NA	
	5/25/11	Unable to access due to rain water								
	10/27/11	5.4	34	ND(1)					NA	
	1/26/12	5.7	38.9	ND(1)					NA	
	4/26/12	5	39.3	ND(1)					NA	
	7/31/12	4.8	45	ND(1)					NA	
	10/30/12	5.7	45.6	ND(1)					NA	
	2/1/13	3.3	30.7	ND(1)					NA	
	4/26/13	5.1	56.2	ND(1)					NA	
	8/1/13	5.7	50.3	ND(1)					NA	
	10/29/13	5.7	84.6	ND(1)					NA	
	1/31/14	5.6	93.7	ND(1)					NA	
	4/30/14	5	70	ND(1)					NA	
8/1/14	5.8	76.6	ND(1)					NA		
10/29/14	4.5	66.1	ND(1)					NA		
1/23/15	6.3	82.7	ND(1)					NA		
4/30/15	4.8	48	ND(1)					NA		

Method		Chloroform	Carbon tetrachloride	1,2-Dichloroethane					Volume Purged (gallons)	
Det. Level		8260B	8260B	8260B						
Well I.D.		Date								
GW-3	5/29/09	22.7	1210	ND(1)					NA	
	8/28/09	29.4	968	ND(20)					NA	
	11/27/09	17.4	797	ND(10)					NA	
	2/25/10	15.2	733	ND(5)					NA	
	5/27/10	16	748	ND(5)					NA	
	8/27/10	17.4	913	ND(10)					NA	
	11/19/10	25.2	629	ND(10)					NA	
	3/1/11	23.3	1180	ND(1)					NA	
	5/25/11	Unable to access due to rain water								
	10/27/11	16.2	867	ND(10)					NA	
	1/26/12	17.6	857	ND(1)					NA	
	4/26/12	14.2	899	ND(10)					NA	
	7/31/12	11.6	937	ND(10)					NA	
	10/30/12	13.6	947	ND(10)					NA	
	2/1/13	3.8	84.4	ND(1)					NA	
	4/26/13	15	1870	ND(1)					NA	
	8/1/13	23.4	1110	ND(20)					NA	
	10/29/13	ND(50)	1850	ND(50)					NA	
	1/31/14	ND(20)	978	ND(20)					NA	
	4/30/14	15.1	1810	ND(10)					NA	
8/1/14	22.7	1550	ND(20)					NA		
10/29/14	15	1420	ND(1)					NA		
1/23/15	ND(20)	2270	ND(20)					NA		
4/30/15	ND(25)	1530	ND(25)					NA		

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

Project #: 1491

**Section 10A - Monitoring & Recovery Well Analytical**

(Use ppb units)

		Chloroform	Carbon tetrachloride	1,2-Dichloroethane					Volume Purged (gallons)
Method		8260B	8260B	8260B					
Det. Level		0.5	0.5	0.5					
Well I.D.	Date								
GW-4	5/29/09	2.6	78.6	ND(1)					NA
	8/28/09	4.1	154	ND(1)					NA
	11/27/09	2.9	150	ND(2)					NA
	2/25/10	3.1	228	ND(2)					NA
	5/27/10	2.5	191	ND(2)					NA
	8/27/10	1.8	70.1	ND(1)					NA
	11/19/10	1.7	77.5	ND(1)					NA
	3/1/11	2.6	184	ND(1)					NA
	5/25/11	Unable to access due to rain water							
	10/27/11	2.5	172	ND(2)					NA
	1/26/12	3.3	259	ND(1)					NA
	4/26/12	3.2	199	ND(1)					NA
	7/31/12	4.2	183	ND(1)					NA
	10/30/12	4.1	262	ND(5)					NA
	2/1/13	5.5	45.6	ND(1)					NA
	4/26/13	3.9	246	ND(1)					NA
	8/1/13	6.7	236	ND(5)					NA
	10/29/13	3.9	243	ND(1)					NA
	1/31/14	ND(5)	337	ND(5)					NA
	4/30/14	ND(5)	274	ND(5)					NA
	8/1/14	ND(5)	223	ND(5)					NA
	10/29/14	3.8	259	ND(1)					NA
	1/23/15	3.4	276	ND(2)					NA
	4/30/15	3.2	191	ND(2)					NA

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA KDHE Project Code: \_\_\_\_\_ Project #: 1491

Section 10B - Monitoring & Recovery Well Analytical - Dissolved Oxygen  
(Use mg/L units)

Well I.D.	GW-1	GW-3	GW-4						
Date									
06/23/09	3.19	NA	5.81						
08/28/09	NA	NA	NA						
11/27/09	7.05	6.48	6.71						
02/25/10	5.88	6.29	7.36						
05/27/10	3.41	2.96	3.12						
08/27/10	5.23	4.39	4.58						
11/19/10	NA	NA	NA						
03/01/11	NA	NA	NA						
05/25/11	Unable to access due to rain water								
07/31/12	4.8	5.2	4.5						
10/30/12	8.31	5.31	7.39						
04/30/14	9.24	9.07	9.11						
04/30/15	8.16	8.51	8.74						





**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

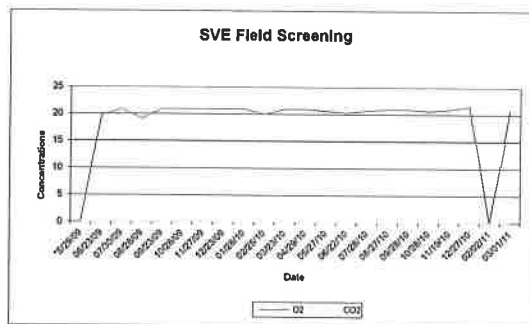
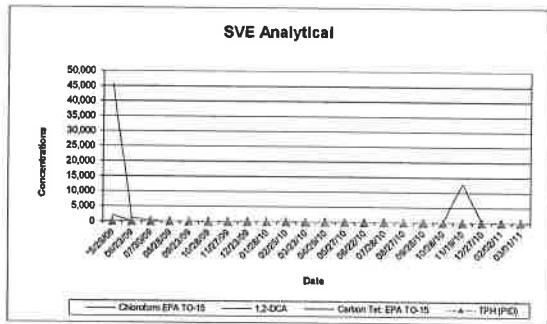
Project #: 1491

Section 15 - SVE Unit Field and Laboratory Analytical Results

**SVE Unit: Effluent**

Reporting Units	LABORATORY ANALYSIS			FIELD ANALYSIS		
	Chloroform	Carbon Tet.	1,2-DCA	O2 Readings (%)	CO2 Readings (%)	TPH (PID) Readings (ppm)
	EPA TO-15 ug/m3	EPA TO-15 ug/m3	EPA TO-15 ug/m3			
Date						
*5/29/09	2,000	46,000	ND(64)	--	--	--
06/23/09	99	1,100	ND(2.2)	19.7	0	0.2
07/30/09	26	460	ND(2.5)	20.9	0	0
08/28/09	ND(14)	40	ND(11)	19.1	0	0.2
09/23/09	--	--	--	20.9	0	0.4
10/28/09	--	--	--	20.9	0	4.1
11/27/09	8.8	182	ND(3.2)	20.9	0	0.4
12/23/09	--	--	--	20.9	0	0.8
01/28/10	--	--	--	20.9	0	0
02/25/10	12	115	ND(0.81)	20	0	2.2
03/23/10	--	--	--	20.9	0	0
04/29/10	--	--	--	20.9	0	0
05/27/10	6.8	143	ND(3.2)	20.6	0	0
06/22/10	--	--	--	20.3	0	0
07/28/10	--	--	--	20.7	0	0
08/27/10	2.9	34	ND(3.2)	20.9	0	0
09/28/10	--	--	--	20.9	0	0
10/28/10	--	--	--	20.6	0	0
11/19/10	97.2	13000	ND(3.2)	20.9	0	0
12/27/10	--	--	--	21.5	0	0
02/02/11	--	--	--	--	--	--
03/01/11	ND(3.9)	71.7	ND(3.2)	20.9	0	0.1
03/29/11	--	--	--	20.9	0	0
04/27/11	--	--	--	20.9	0	0
05/25/11	ND(3.9)	49	ND(3.2)	20.9	0	0
08/30/11	--	--	--	20.9	0	0
09/26/11	--	--	--	20.4	0	1.2
10/27/11	ND(3.9)	33	ND(3.2)	20.9	0	0.2
11/28/11	--	--	--	20.9	0	0
12/29/11	--	--	--	20.9	0	0.2
01/26/12	ND(3.9)	21	ND(3.2)	20.9	0	0.2
02/21/12	--	--	--	20.9	0	0.1
03/29/12	--	--	--	20.7	0	0
04/26/12	ND(3.9)	25	ND(3.2)	20.9	0	0.3
05/31/12	--	--	--	20.9	0	0
06/28/12	--	--	--	20.9	0	0
07/31/12	ND(3.9)	52	ND(3.2)	20.9	0	0
08/31/12	--	--	--	20.9	0	0.2
09/27/12	--	--	--	20.9	0	0
10/30/12	ND(3.9)	27	ND(3.2)	20.9	0	0
12/01/12	--	--	--	20.9	0	0
12/27/12	--	--	--	20.9	0	0

\*5/29/09 SVE/AS System Start-up



**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA Project #: 1491

**Section 15 - SVE Unit Field and Laboratory Analytical Results**

**SVE Unit: Effluent**

Date	LABORATORY ANALYSIS			FIELD ANALYSIS			
	Chloroform	Carbon Tet.	1,2-DCA	O2	CO2	TPH (PID)	
	EPA TO-15	EPA TO-15	EPA TO-15	Readings (%)	Readings (%)	Readings (ppm)	
Reporting Units	ug/m3	ug/m3	ug/m3				
02/01/13	ND(3.9)	9.4	ND(3.2)		20.9	0	0
02/28/13	--	--	--		20.9	0	0
03/26/13	--	--	--		20.9	0	0
04/26/13	ND(3.9)	20	ND(3.2)		19.8	0	0
05/30/13	--	--	--		20.9	0	0
06/27/13	--	--	--		20.5	0	0
08/01/13	ND(3.9)	48	ND(3.2)		20.9	0	0
08/31/13	--	--	--		20.9	0	0
09/27/13	--	--	--		20.9	0	0
10/29/13	ND(3.9)	38	ND(3.2)		20.5	0	0
12/02/13	--	--	--		20.9	0	0
12/28/13	--	--	--		20.9	0	0.2
01/31/14	ND(3.9)	9.4	ND(3.2)		20.9	0	0
02/26/14	--	--	--		20.9	0	0
03/27/14	--	--	--		20.6	0	0
04/30/14	ND(3.9)	15	ND(3.2)		20.9	0	0
05/27/14	--	--	--		20.9	0	0
06/26/14	--	--	--		20.9	0	0
08/01/14	ND(3.9)	63.5	ND(3.2)		20.9	0	0
08/28/14	--	--	--		20.9	0	0
09/29/14	--	--	--		20.9	0	0
10/29/14	ND(3.9)	41	ND(3.2)		20.9	0	0
11/26/14	--	--	--		20.9	0	0
12/31/14	--	--	--		20.9	0	0
01/23/15	ND(3.9)	11	ND(3.2)		20.9	0	0
02/27/15	--	--	--		20.9	0	0
04/01/15	--	--	--		20.9	0	0
04/30/15	ND(3.9)	50	ND(3.2)		20.9	0	0

Quarterly Monitoring Report									
Facility Name: <u>Former Agra CCC/USDA</u>			Project #: <u>1491</u>						
Section 17 - SVE Well Field and Laboratory Analytical Results (Report in ug/m3)									
SVE Well: <u>SVE-1</u>									
Date	LABORATORY ANALYSIS			FIELD ANALYSIS					
	Chloroform	Carbon	1,2-DCA	O2	CO2	TPH (PID)	Readings (%)	Readings (%)	Readings (ppm)
Method:	Tetrachloride								
	EPA TO-15	EPA TO-15	EPA TO-15						
05/29/09	710	5,900	ND(31)	--	--	--	--	--	--
06/23/09	11	150	ND(2.6)	19.7	0	0.2			
07/30/09	5.1	21	ND(2.4)	20.9	0	0.3			
08/28/09	5	20	ND(3.2)	19	0	0.1			
09/23/09	--	--	--	20.9	0	0.6			
10/28/09	--	--	--	20.9	0	28.1			
11/27/09	ND(3.9)	16	ND(3.2)	20.9	0	0.6			
12/23/09	--	--	--	20.9	0	3.8			
01/28/10	--	--	--	20.9	0	0			
02/25/10	2	62	ND(0.81)	20	0	3.9			
03/23/10				20.9	0	2.1			
04/29/10				20.9	0	0			
05/27/10	ND(3.9)	23	ND(3.2)	20.6	0	0			
06/22/10	--	--	--	20.3	0	0			
07/28/10	--	--	--	20.6	0	0			
08/27/10	ND(3.9)	7.5	ND(3.2)	20.9	0	0.4			
09/28/10	--	--	--	20.9	0	0.2			
10/28/10	--	--	--	20.6	0	0.2			
11/19/10	ND(3.9)	138	ND(3.2)	20.6	0	0			
12/27/10	--	--	--	21.3	0	0.2			
02/02/11	--	--	--	20.9	0	0.2			
03/01/11	ND(3.9)	42	ND(3.2)	20.9	0	0.2			
03/29/11	--	--	--	20.9	0	0.2			
04/27/11	--	--	--	20.9	0	0			
05/25/11	ND(3.9)	95	ND(3.2)	20.9	0	0			
08/30/11	--	--	--	20.9	0	0.1			
09/26/11	--	--	--	20.3	0	1.1			
10/27/11	ND(3.9)	5.6	ND(3.2)	20.9	0	0.1			
11/28/11	--	--	--	20.9	0	0.1			
12/29/11	--	--	--	20.9	0	0.4			
01/26/12	ND(3.9)	9.4	ND(3.2)	20.9	0	0.1			
02/21/12	--	--	--	20.6	0	0.6			
03/29/12	--	--	--	20.9	0	0			
04/26/12	ND(3.9)	15	ND(3.2)	20.9	0	0.5			
05/31/12	--	--	--	20.9	0	0.1			
06/28/12	--	--	--	20.9	0	0.1			
07/31/12	Sampling Error			20.9	0	0			
08/31/12	--	--	--	20.9	0	0.5			
09/27/12	--	--	--	20.9	0	0			
10/30/12	ND(3.9)	15	ND(3.2)	20.9	0	0			
12/01/12	--	--	--	20.9	0	0.5			
12/28/12	--	--	--	20.9	0	0			
02/01/13	ND(3.9)	23	ND(3.2)	20.9	0	0.2			
02/28/13	--	--	--	20.9	0	0			
03/26/13	--	--	--	20.9	0	0.1			
04/26/13	ND(3.9)	11	ND(3.2)	19.8	0	0			
05/30/13	--	--	--	20.9	0	0			
06/27/13	--	--	--	20.5	0	0			
08/01/13	ND(3.9)	13	ND(3.2)	20.9	0	0			
08/30/13	--	--	--	20.9	0	0			
09/27/13	--	--	--	20.9	0	0			
10/29/13	ND(0.98)	1.1	ND(0.81)	20.9	0	0			
12/02/13	--	--	--	20.9	0	0			
12/28/13	--	--	--	20.9	0	0			
01/31/14	ND(3.9)	8.2	ND(3.2)	20.9	0	0.4			
02/26/14	--	--	--	20.9	0	0			
03/27/14	--	--	--	20.9	0	0			
04/30/14	ND(3.9)	18	ND(3.2)	20.9	0	0			
05/27/14	--	--	--	20.9	0	0			
06/26/14	--	--	--	20.9	0	0			
08/01/14	ND(3.9)	13	ND(3.2)	20.9	0	0			
08/28/14	--	--	--	20.9	0	0			
09/29/14	--	--	--	20.9	0	0			
10/29/14	ND(3.9)	10	ND(3.2)	20.9	0	0			
11/26/14	--	--	--	20.9	0	0			
12/31/14	--	--	--	20.9	0	0			
01/23/15	ND(3.9)	11	8.5	20.9	0	0			
02/27/15	--	--	--	20.9	0	0			
04/01/15	--	--	--	20.9	0	0			
04/30/15	ND(3.9)	7.5	ND(3.2)	20.9	0	0			

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

Project #: 1491

Section 17 - SVE Well Field and Laboratory Analytical Results

SVE Well: SVE-2

(Report in ug/m3)

Date	LABORATORY ANALYSIS			FIELD ANALYSIS		
	Chloroform	Carbon Tetrachloride	1,2-DCA	O2 Readings (%)	CO2 Readings (%)	TPH (PID) Readings (ppm)
	Method: EPA TO-15	EPA TO-15	EPA TO-15			
05/29/09	480	8,800	ND(48)	--	--	--
06/23/09	17	49	ND(2.5)	19.7	0	0.3
07/30/09	5.2	26	ND(2.4)	20.9	0	0.6
08/28/09	1	5	ND(0.80)	19.2	0	0.3
09/23/09	--	--	--	20.9	0	0.7
10/28/09	--	--	--	20.9	0	26.6
11/27/09	2.1	23	ND(3.2)	20.9	0	1.2
12/23/09	--	--	--	20.9	0	5.3
01/28/10	--	--	--	20.9	0	0
02/25/10	1.6	12	ND(0.81)	19.9	0	2.6
03/23/10	--	--	--	20.6	0	2.6
04/29/10	--	--	--	20.9	0	0
05/27/10	ND(3.9)	6.3	ND(3.2)	20.7	0	0
06/22/10	--	--	--	20.4	0	0
07/28/10	--	--	--	20.7	0	0
08/27/10	ND(3.9)	3.8	ND(3.2)	20.9	0	0.4
09/28/10	--	--	--	20.9	0	0.2
10/28/10	--	--	--	20.6	0	0.2
11/19/10	55.7	12000	ND(3.2)	20.6	0	0
12/27/10	--	--	--	21.5	0	0
02/02/10	--	--	--	20.8	0	0
03/01/11	ND(3.9)	5.4	ND(3.2)	20.9	0	0.2
03/29/11	--	--	--	20.9	0	0.2
04/27/11	--	--	--	20.9	0	0
05/25/11	ND(3.9)	23	ND(3.2)	20.9	0	0
08/30/11	--	--	--	20.9	0	0
09/26/11	--	--	--	20.3	0	1.2
10/27/11	ND(3.9)	3.5	ND(3.2)	20.9	0	0.4
11/28/11	--	--	--	20.9	0	0
12/29/11	--	--	--	20.9	0	0.8
01/26/12	ND(3.9)	6.9	ND(3.2)	20.8	0	0
02/21/12	--	--	--	20.6	0	0.6
03/29/12	--	--	--	20.9	0	0.1
04/26/12	ND(3.9)	13	ND(3.2)	20.9	0	0.9
05/31/12	--	--	--	20.9	0	0
06/28/12	--	--	--	20.9	0	0
07/31/12	ND(3.9)	7.5	ND(3.2)	20.9	0	0
08/31/12	--	--	--	20.9	0	0.7
09/27/12	--	--	--	20.9	0	0
10/30/12	2.3	3.7	ND(3.2)	20.9	0	0
12/01/12	--	--	--	20.9	0	0.5
12/28/12	--	--	--	20.9	0	0
02/01/13	ND(3.9)	3.7	ND(3.2)	20.9	0	0.2
02/28/13	--	--	--	20.9	0	0
03/26/13	--	--	--	20.9	0	0
04/26/13	ND(3.9)	5.9	ND(3.2)	19.6	0	0
05/30/13	--	--	--	20.9	0	0
06/27/13	--	--	--	20.3	0	0
08/01/13	ND(3.9)	4.3	ND(3.2)	20.9	0	0
08/31/13	--	--	--	20.9	0	0
09/27/13	--	--	--	20.9	0	0
10/29/13	ND(0.98)	0.82	ND(0.81)	20.9	0	0
12/02/13	--	--	--	20.8	0	0
12/28/13	--	--	--	20.9	0	0.3
01/31/14	ND(3.9)	3.3	ND(3.2)	20.9	0	0
02/26/14	--	--	--	20.9	0	0
03/27/14	--	--	--	20.6	0	0
04/30/14	ND(3.9)	6.3	ND(3.2)	20.9	0	0
05/27/14	--	--	--	20.9	0	0
06/26/14	--	--	--	20.9	0	0
08/01/14	ND(3.9)	5.3	ND(3.2)	20.9	0	0
08/28/14	--	--	--	20.9	0	0
09/29/14	--	--	--	20.9	0	0
10/29/14	ND(3.9)	ND(5)	ND(3.2)	20.9	0	0
11/26/14	--	--	--	20.9	0	0
12/31/14	--	--	--	20.9	0	0
01/23/15	ND(3.9)	ND(5)	ND(3.2)	20.9	0	0
02/27/15	--	--	--	20.9	0	0
04/01/15	--	--	--	20.9	0	0
04/30/15	ND(3.9)	2.9	ND(3.2)	20.9	0	0

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

Project #: 1491

**Section 17 - SVE Well Field and Laboratory Analytical Results**  
(Report in ug/m3)

SVE Well: SVE-3

Date	LABORATORY ANALYSIS			FIELD ANALYSIS		
	Chloroform	Carbon	1,2-DCA	O2 Readings (%)	CO2 Readings (%)	TPH (PID) Readings (ppm)
		Tetrachloride				
Method:	EPA TO-15	EPA TO-15	EPA TO-15			
05/29/09	2,600	60,000	ND(310)	--	--	--
06/23/09	190	2,000	ND(2.5)	19.6	0	0.2
07/30/09	54	950	ND(2.4)	20.9	0	0.6
08/28/09	37	502	ND(3.2)	19.1	0	0.4
09/23/09	--	--	--	20.9	0	0.7
10/28/09	--	--	--	20.9	0	27.4
11/27/09	21	528	ND(3.2)	20.9	0	0.7
12/23/09	--	--	--	20.9	0	4.2
01/28/10	--	--	--	20.9	0	0
02/25/10	28	238	ND(1.6)	20	0	5
03/23/10	--	--	--	20.9	0	0
04/29/10	--	--	--	20.9	0	0
05/27/10	15	345	ND(3.2)	20.6	0	0
06/22/10	--	--	--	20.4	0	0.1
07/28/10	--	--	--	20.6	0	0
08/27/10	9.3	113	ND(3.2)	20.9	0	0.3
09/28/10	--	--	--	20.9	0	0.3
10/28/10	--	--	--	20.6	0	0.2
11/19/10	47	7110	ND(3.2)	20.9	0	0
12/27/10	--	--	--	21.5	0	0
02/02/11	--	--	--	20.9	0	0
03/01/11	ND(3.9)	96.2	ND(3.2)	20.9	0	0
03/29/11	--	--	--	20.9	0	0
04/27/11	--	--	--	20.9	0	0
05/25/11	ND(3.9)	5	ND(3.2)	20.9	0	0
08/30/11	--	--	--	20.9	0	0
09/23/11	--	--	--	20.4	0	1.3
10/27/11	3	165	ND(3.2)	20.9	0	0.2
11/28/11	--	--	--	20.9	0	0
12/29/11	--	--	--	20.9	0	0.1
01/26/12	ND(3.9)	46	ND(3.2)	20.9	0	0.2
02/21/12	--	--	--	20.6	0	0.8
03/29/12	--	--	--	20.5	0	0.2
04/26/12	ND(3.9)	45	ND(3.2)	20.9	0	0.3
05/31/12	--	--	--	20.5	0	0
06/28/12	--	--	--	20.9	0	0.2
07/31/12	ND(3.9)	81.8	ND(3.2)	20.9	0	0.1
08/31/12	--	--	--	20.9	0	0.7
09/27/12	--	--	--	20.9	0	0.2
10/30/12	ND(3.9)	47	ND(3.2)	20.9	0	0
12/01/12	--	--	--	20.9	0	0.8
12/28/12	--	--	--	20.9	0	0.1
02/01/13	ND(3.9)	19	ND(3.2)	20.9	0	0.3
02/28/13	--	--	--	20.5	0	0.1
03/26/13	--	--	--	20.9	0	0.2
04/26/13	ND(3.9)	39	ND(3.2)	19.9	0	0
05/30/13	--	--	--	20.9	0	0.1
06/27/13	--	--	--	20.3	0	0
08/01/13	ND(3.9)	85.5	ND(3.2)	20.9	0	0
08/30/13	--	--	--	20.9	0	0
09/27/13	--	--	--	20.9	0	0
10/29/13	ND(3.9)	90.6	ND(3.2)	20.5	0	0
12/02/13	--	--	--	20.8	0	0
12/28/13	--	--	--	20.9	0	0.4
01/31/14	ND(3.9)	47	ND(3.2)	20.9	0	0
02/26/14	--	--	--	20.9	0	0
03/27/14	--	--	--	20.9	0	0
04/30/14	ND(3.9)	60	ND(3.2)	20.9	0	0
05/27/14	--	--	--	20.9	0	0
06/26/14	--	--	--	20.9	0	0
08/01/14	ND(3.9)	150	ND(3.2)	20.9	0	0
08/28/14	--	--	--	20.9	0	0
09/29/14	--	--	--	20.9	0	0
10/29/14	ND(3.9)	83	ND(3.2)	20.9	0	0
11/26/14	--	--	--	20.9	0	0
12/31/14	--	--	--	20.9	0	0
01/23/15	ND(3.9)	89.3	ND(3.2)	20.9	0	0
02/27/15	--	--	--	20.9	0	0
04/01/15	--	--	--	20.9	0	0
04/30/15	ND(3.9)	57	ND(3.2)	20.9	0	0

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

Project #: 1491

**Section 17 - SVE Well Field and Laboratory Analytical Results**  
(Report in ug/m3)

SVE Well: SVE-4

Date	LABORATORY ANALYSIS			FIELD ANALYSIS		
	Chloroform	Carbon	1,2-DCA	O2	CO2	TPH (PID)
	EPA TO-15	Tetrachloride	EPA TO-15	Readings (%)	Readings (%)	Readings (ppm)
05/29/09	1,800	29,000	ND(160)	--	--	--
06/23/09	51	400	ND(2.5)	19.5	0	0.4
07/30/09	12	130	ND(2.3)	20.9	0	0.7
08/28/09	8	84	ND(3.2)	19.4	0	0.2
09/23/09	--	--	--	20.9	0	0.8
10/28/09	--	--	--	20.6	0	31.3
11/27/09	7.3	110	ND(3.2)	20.9	0	0.6
12/23/09	--	--	--	20.9	0	3.6
01/28/10	--	--	--	20.9	0	0
02/25/10	6.8	59	ND(0.81)	20	0	0.7
03/23/10	--	--	--	20.9	0	0
04/29/10	--	--	--	20.9	0	0
05/27/10	3.6	35	ND(3.2)	20.4	0	0
06/22/10	--	--	--	20.1	0	0.2
07/28/10	--	--	--	20.5	0	0
08/27/10	3	17	ND(3.2)	20.9	0	0.4
09/28/10	--	--	--	20.9	0	0.4
10/28/10	--	--	--	20.9	0	0.9
11/19/10	90.3	34300	ND(3.2)	20.9	0	0
12/27/10	--	--	--	21.5	0	0.2
02/02/11	--	--	--	20.9	0	0
03/01/11	ND(3.9)	25	ND(3.2)	20.9	0	0
03/29/11	--	--	--	20.9	0	0.2
04/27/11	--	--	--	20.9	0	0
05/25/11	ND(3.9)	23	ND(3.2)	20.9	0	0
08/30/11	--	--	--	20.9	0	0
09/23/11	--	--	--	20.2	0	1.8
10/27/11	ND(3.9)	17	ND(3.2)	20.9	0	0.1
11/28/11	--	--	--	20.9	0	0.1
12/29/11	--	--	--	20.9	0	0.1
01/26/12	ND(3.9)	8.8	ND(3.2)	20.8	0	0.1
02/21/12	--	--	--	20.9	0	0.8
03/29/12	--	--	--	20.8	0	0
04/26/12	ND(3.9)	8.2	ND(3.2)	20.9	0	0.3
05/31/12	--	--	--	--	--	--
06/28/12	--	--	--	--	--	--
07/31/12	ND(3.9)	18	ND(3.2)	20.9	0	0
08/31/12	--	--	--	--	--	--
09/27/12	--	--	--	--	--	--
10/30/12	ND(3.9)	8.2	ND(3.2)	20.9	0	0
12/01/12	--	--	--	--	--	--
12/28/12	--	--	--	--	--	--
02/01/13	ND(3.9)	8.2	ND(3.2)	20.9	0	0.3
02/28/13	--	--	--	Off Cycling		
03/28/13	--	--	--	Off Cycling		
04/26/13	ND(3.9)	4.4	ND(3.2)	20.2	0	0.1
05/30/13	--	--	--	--	--	--
06/27/13	--	--	--	--	--	--
08/01/13	ND(3.9)	18	ND(3.2)	20.5	0	0
08/30/13	--	--	--	--	--	--
09/27/13	--	--	--	20.9	0	0
10/29/13	ND(3.9)	14	ND(3.2)	20.4	0	0
12/02/13	--	--	--	--	--	--
12/28/13	--	--	--	--	--	--
01/31/14	ND(3.9)	13	ND(3.2)	20.9	0	0
02/26/14	--	--	--	--	--	--
03/27/14	--	--	--	--	--	--
04/30/14	ND(3.9)	20	ND(3.2)	20.9	0	0
08/01/14	ND(3.9)	28	ND(3.2)	20.9	0	0
10/29/14	ND(3.9)	13	ND(3.2)	20.9	0	0
01/23/15	ND(3.9)	12	ND(3.2)	20.9	0	0
04/30/15	ND(3.9)	20	ND(3.2)	20.9	0	0

Section 17 - SVE Well Field and Laboratory Analytical Results

SVE Well: SVE-5

(Report in ug/m3)

Date	LABORATORY ANALYSIS			FIELD ANALYSIS		
	Chloroform	Carbon	1,2-DCA	O2	CO2	TPH (PID)
	EPA TO-15	Tetrachloride EPA TO-15	EPA TO-15	Readings (%)	Readings (%)	Readings (ppm)
05/29/09	310	13,000	ND(64)	--	--	--
06/23/09	160	1,900	ND(2.4)	19.7	0	0.3
07/30/09	39	760	ND(2.4)	20.9	0	0.6
08/28/09	26	525	ND(3.2)	19.2	0	0.3
09/23/09	--	--	--	20.9	0	1.3
10/28/09	--	--	--	20.6	0	29
11/27/09	6.8	188	ND(3.2)	20.9	0	0.5
12/23/09	--	--	--	20.9	0	3.9
01/28/10	--	--	--	20.9	0	0
02/25/10	18	174	ND(0.81)	19.9	0	5.7
03/23/10	--	--	--	20.9	0	0
04/29/10	--	--	--	20.9	0	0
05/27/10	5.9	130	ND(3.2)	20.6	0	0
06/22/10	--	--	--	20.3	0	0.2
07/28/10	--	--	--	20.6	0	0.4
08/27/10	2.9	55	ND(3.2)	20.9	0	0.4
09/28/10	--	--	--	20.9	0	0.2
10/28/10	--	--	--	20.9	0	0.4
11/19/10	31	4940	ND(3.2)	20.9	0	0
12/27/10	--	--	--	21.5	0	0.2
02/02/11	--	--	--	20.9	0	0.1
03/01/11	ND(3.9)	129	ND(3.2)	20.9	0	0
03/29/11	--	--	--	20.9	0	0.2
04/27/11	--	--	--	20.9	0	0
05/25/11	3.2	125	ND(3.2)	20.5	0	0
08/30/11	--	--	--	20.9	0	0.1
09/26/11	--	--	--	20.4	0	1.3
10/27/11	ND(3.9)	18	ND(3.2)	20.9	0	0.1
11/28/11	--	--	--	20.9	0	0
12/29/11	--	--	--	20.8	0	0.3
01/26/12	ND(3.9)	18	ND(3.2)	20.8	0	0
02/21/12	--	--	--	20.9	0	0.7
03/29/12	--	--	--	20.9	0	0.1
04/26/12	2.4	36	ND(3.2)	20.9	0	0.4
05/31/12	--	--	--	OFF	OFF	OFF
06/28/12	--	--	--	OFF	OFF	OFF
07/31/12	ND(3.9)	40	ND(3.2)	20.9	0	0
08/31/12	--	--	--	--	--	--
09/27/12	--	--	--	--	--	--
10/30/12	ND(3.9)	23	ND(3.2)	20.9	0	0
12/01/12	--	--	--	NA		
12/28/12	--	--	--	NA		
02/01/13	ND(3.9)	18	ND(3.2)	20.9	0	0.2
02/28/13	--	--	--	Off Cycling		
03/26/13	--	--	--	Off Cycling		
04/26/13	ND(3.9)	4.6	ND(3.2)	20	0	0
05/30/13	--	--	--	--	--	--
06/27/13	--	--	--	--	--	--
08/01/13	ND(3.9)	49	ND(3.2)	20.8	0	0
08/30/13	--	--	--	--	--	--
09/27/13	--	--	--	20.9	0	0
10/25/13	ND(3.9)	45	ND(3.2)	20.5	0	0
12/02/13	--	--	--	--	--	--
12/28/13	--	--	--	--	--	--
01/31/14	ND(3.9)	162	ND(3.2)	20.9	0	0
02/26/14	--	--	--	--	--	--
03/27/14	--	--	--	--	--	--
04/30/14	ND(3.9)	64.8	ND(3.2)	20.9	0	0
08/01/14	ND(3.9)	96.2	ND(3.2)	20.9	0	0
10/29/14	ND(3.9)	45	ND(3.2)	20.9	0	0
01/23/15	ND(3.9)	47	ND(3.2)	20.9	0	0
04/30/15	ND(3.9)	77.4	ND(3.2)	20.9	0	0



**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

Project #: 1491

Section 18 - Air Sparge (A/S) Wells / System Operation

A/S Well: AS-1

	Manifold	Wellhead	
Parameter:	Well Pressure	Well Pressure	Flow Rate
Units:	(psi)	(psi)	(scfm)
Date			
05/29/09	5.5	4.95	5
06/23/09	5.89	5.29	3.5
07/29/09	6.11	5.25	6
08/28/09	5.86	4.13	6
09/23/09	5.91	5.04	6.9
10/28/09	5.47	4.03	9
11/27/09	5.96	5.76	3.6
12/23/09	4.97	4.29	4
01/28/10	4.77	4.56	5
02/25/10	4.95	4.72	4.9
03/23/10	4.84	4.46	4.8
04/29/10	5.47	5.31	3
05/27/10	5.69	5.14	4.2
06/22/10	6.18	5.54	5
07/28/10	1.06	0.57	4.8
08/27/10	Blower faulty. System deactivated.		
10/28/10	0.92	0.32	5.9
11/19/10	Possible broken line. Well Line deactivated.		
12/27/10	OFF		
02/02/11	5.4	4.89	3
03/01/11	5.34	NA	3
03/29/11	4.61	NA	4
04/27/11	5.47	5.01	3.3
05/25/11	5.65	NA	3.5
08/30/11	OFF		
09/26/11	OFF		
10/27/11	5.75	5.49	4
11/28/11	5.68	5.11	4
12/29/11	5.32	5.31	4
01/26/12	5.54	5.3	3
02/21/12	5.68	5.19	2.8
03/29/12	5.86	5.41	3
04/28/12	5.62	5.18	2.5
05/31/12	5.44	5.18	2
06/28/12	5.34	5.17	4
07/31/12	5.28	5.04	4
08/31/12	5.44	4.85	6
09/27/12	5.33	4.9	5
10/30/12	5.32	4.98	4
12/01/12	Needs Vanes & Filters		
02/01/13	5.14	4.86	3
02/28/13	4.73	4.36	5
03/26/13	4.59	4.4	4
04/26/13	4.91	4.79	3
05/30/13	4.91	4.55	3.5
06/27/13	4.91	4.51	4
08/01/13	4.69	4.4	3.5
08/30/13	4.67	4.24	4
09/27/13	4.54	4.26	3.8
10/29/13	4.74	4.47	3.5
12/02/13	4.4	3.96	6
12/28/13	4.73	4.55	3.5
01/31/14	4.27	4.06	3.5
02/26/14	4.16	3.82	5
03/27/14	4.38	3.94	5
04/30/14	4.31	3.9	5.3
05/27/14	4.63	3.96	5.2
06/26/14	4.52	3.93	4.9
08/01/14	4.27	3.9	5
08/28/14	4.42	3.89	5.5
09/29/14	4.36	3.8	6
10/29/14	4.37	3.69	6.7
11/26/14	4.42	3.63	7
12/31/14	4.26	3.34	6.8
01/23/15	4.17	3.57	6.6
02/27/15	4.34	3.49	7.9
04/01/15	4.27	3.7	6.5
04/30/15	4.2	3.62	6.2

Possible broken line, pad hit by tractor & moved. Took readings & turned off

Wellhead Pad Under construction

Wellhead Pad Under construction

Unable to collect wellhead pressure reading due to standing water over wellhead

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

Project #: 1491

**Section 18 - Air Sparge (A/S) Wells / System Operation**

A/S Well: **AS-2**

Parameter:	Manifold	Wellhead	Flow Rate
	Well Pressure	Well Pressure	
Units:	(psi)	(psi)	(scfm)
Date			
05/29/09	8	7.5	5
06/23/09	8.84	8.31	4
07/29/09	8.27	8.21	1.5
08/28/09	8.33	8.08	2
09/23/09	8.2	8.1	1.1
10/28/09	8.2	7.96	0.5
11/27/09	8.74	8.61	3.5
12/23/09	8.48	8.06	4
01/28/10	8.33	8.06	3.7
02/25/10	8.41	8.22	3
03/23/10	8.47	8.37	2
04/29/10	8.61	8.35	3
05/27/10	8.88	8.48	3.7
06/22/10	8.74	8.53	2.4
07/28/10	8.9	8.45	2.8
08/27/10	Blower faulty. System deactivated.		
10/28/10	8.42	8.27	3.7
11/19/10	8.92	8.61	4
12/27/10	9.13	8.65	5
02/02/11	8.76	8.41	3.7
03/01/11	2	0.54	3
03/29/11	0.44	0.11	4
04/27/11	<b>Deactivated due to no PSI at Manifold through 10-6-11</b>		
11/28/11	9.03	9	4
12/29/11	9.03	9	4
01/26/12	8.68	8.67	3
02/21/12	8.97	8.63	2.8
03/29/12	9.16	8.66	3
04/26/12	8.95	8.65	3
05/31/12	8.59	8.36	2
06/28/12	8.72	8.14	5
07/31/12	8.36	8.18	5
08/31/12	8.81	8.28	6
09/27/12	8.49	8.13	5
10/30/12	8.25	8.02	4
12/01/12	Needs Vanes & Filters		
02/01/13	8.43	8.11	3.7
02/28/13	7.98	7.59	5
03/26/13	7.68	7.3	4
04/26/13	7.96	7.82	3
05/30/13	7.86	7.47	2.5
06/27/13	8.37	7.92	4
08/01/13	7.59	7.32	4
08/31/13	7.76	7.3	4
09/27/13	7.82	7.55	4
10/29/13	7.85	7.59	3.7
12/02/13	7.8	7.38	6
12/28/13	7.87	7.79	3.5
01/31/14	7.68	7.42	3.5
02/26/14	7.67	7.29	5
03/27/14	7.87	7.45	5
04/30/14	7.89	7.38	2
05/27/14	8.05	7.43	5.2
06/26/14	7.98	7.37	5.1
08/01/14	7.93	7.27	5
08/28/14	8.61	7.38	8.5
09/29/14	8.34	7.29	8
10/29/14	8.04	7.17	7.7
11/26/14	7.78	7.09	7
12/31/14	7.37	6.76	5.5
01/23/15	7.26	6.9	5
02/27/15	7.56	6.79	7
04/01/15	7.64	7.07	6.5
04/30/15	7.52	6.98	6.2

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

Project #: 1491

**Section 18 - Air Sparge (A/S) Wells / System Operation**

A/S Well: AS-3			
Parameter:	Manifold	Wellhead	Flow Rate
Units:	Well Pressure	Well Pressure	Flow Rate
Date	(psi)	(psi)	(scfm)
05/29/09	8	7.21	5
06/23/09	7.75	6.98	4
07/29/09	8.87	8.08	5
08/28/09	8.5	8.13	7
09/23/09	8.3	7.8	5
10/28/09	8.16	7.89	3.2
11/27/09	8.86	8.8	2.2
12/23/09	7.41	7.33	4
01/28/10	7.19	6.66	4.7
02/25/10	7.15	6.78	4.8
03/25/10	6.9	6.6	5
04/29/10	7.4	7.22	3
05/27/10	7.78	7.51	4.9
06/22/10	8.71	8.27	4
07/28/10	8.96	8.27	4
08/27/10	Blower faulty. System deactivated.		
10/28/10	8.35	7.67	5
11/19/10	8.82	8.05	6.8
12/27/10	9.19	8.74	3.5
02/02/11	8.68	8.39	2
03/01/11	8	7.64	3
03/29/11	7.75	7.46	4
04/27/11	8.22	8.09	3
05/25/11	10+	NA	2.8
08/30/11	OFF		
09/26/11	OFF		
10/27/11	8	7.73	5
11/28/11	8.32	8.04	4
12/29/11	10.55	10.21	4
01/26/12	12.46	12.42	3
02/21/12	10+	10+	1.3
03/29/12	11.74	10.74	1.5
04/28/12	11.13	11	3
05/31/12	13.98	13.8	3
06/28/12	15.72	15.07	6
07/31/12	10+	10+	2
08/31/12	7.71	7.65	1
09/27/12	10+	10+	1.5
10/30/12	10+	10+	2
12/01/12	Needs Vanes & Filters		
02/01/13	10+	10+	3.2
02/28/13	10+	10+	4
03/26/13	10+	10+	2
04/26/13	10+	10+	0.5
05/30/13	10+	10+	1.5
06/27/13	10+	10+	0
08/01/13	10+	10+	<0.5
08/31/13	10+	10+	1
09/27/13	10+	10+	0.5
10/29/13	10+	10+	0.5
12/02/13	10+	10+	0
12/28/13	10+	10+	0.5
01/31/14	6.39	5.32	1
02/26/14	10+	10+	7
03/27/14	10+	10+	3
04/30/14	15.77	15.66	2
05/27/14	16.11	15.87	1.5
06/26/14	14.32	14.23	1.7
08/01/14	10+	10+	1.7
08/28/14	10+	10+	2
09/29/14	10+	10+	2
10/29/14	10+	10+	1.7
11/26/14	10+	10+	2
12/31/14	10+	10+	1.8
01/23/15	10+	10+	1.8
02/27/15	10+	10+	2
04/01/15	10+	10+	1.8
04/30/15	10+	10+	2

Unable to collect wellhead pressure reading due to standing water over wellhead

Quarterly Monitoring Report

Facility Name: Former Agra CCC/USDA

Project #: 1491

Section 18 - Air Sparge (A/S) Wells / System Operation

A/S Well: AS-4

Parameter:	Manifold Well Pressure	Wellhead Well Pressure	Flow Rate
Units:	(psi)	(psi)	(scfm)
Date			
05/29/09	9	8.56	5
06/23/09	8.41	8.16	3.7
07/29/09	8.17	8.03	1.5
08/28/09	8.38	8.14	3
09/23/09	8.05	7.95	1.5
10/28/09	8.2	7.97	1
11/27/09	8.65	8.48	3.6
12/23/09	8.29	8.16	4
01/28/10	8.32	7.81	5
02/25/10	8.37	8.01	4.5
03/23/10	8.43	8.11	4.5
04/29/10	8.48	8.25	3
05/27/10	8.34	8.25	1.8
06/22/10	8.44	8.14	3
07/28/10	8.62	7.93	2.2
08/27/10	Blower faulty. System deactivated.		
10/28/10	8.46	8.26	3.6
11/19/10	8.9	8.52	4.6
12/27/10	8.5	8.4	4
02/02/11	8.49	8.36	2
03/01/11	8.68	8.52	3
03/29/11	10+	7.89	1
04/27/11	8.58	8.28	2
05/25/11	8.71	NA	2.5
08/30/11	OFF		
09/26/11	OFF		
10/27/11	8.72	8.45	4
11/28/11	8.84	8.55	4
12/29/11	8.61	8.36	4
01/26/12	8.96	8.81	3
02/21/12	10+	8.28	2.8
03/29/12	8.89	8.09	3
04/26/12	8.65	8.19	3
05/31/12	OFF	OFF	OFF
06/28/12	OFF	OFF	OFF
07/30/12	8.25	7.76	5
08/31/12	--	--	--
09/27/12	8.54	7.76	6
10/30/12	8.88	8.1	7.75
12/01/12	Needs Vanes & Filters		
02/01/13	10+	8.16	8.5
02/28/13	Off Cycling		
03/26/13	Off Cycling		
04/26/13	7.91	7.86	2.5
05/30/13	--	--	--
06/27/13	--	--	--
08/01/13	8.75	7.18	7
08/31/13	--	--	--
09/27/13	7.51	7.35	3.5
10/29/13	7.71	7.47	3.7
12/02/13	--	--	--
12/28/13	--	--	--
01/31/14	7.61	--	4.5
04/30/14	8.39	7.23	9
08/01/14	7.95	7.03	Broken
10/29/14	8.15	6.88	10.1
01/23/14	7.63	6.72	8.8
04/30/15	7.91	6.72	9.9

Unable to collect wellhead pressure reading due to standing water over wellhead

Quarterly Monitoring Report

Facility Name: Former Agra CCC/USDA

Project #: 1491

Section 18 - Air Sparge (A/S) Wells / System Operation

A/S Well: AS-5

Parameter:	Manifold	Wellhead	Flow Rate
	Well Pressure	Well Pressure	
Units:	(psi)	(psi)	(scfm)
Date			
05/29/09	8	7.9	5
06/23/09	8.93	8.42	3
07/29/09	8.92	8.7	3.2
08/28/09	8.65	8.5	2
09/23/09	8.45	8.39	0
10/28/09	8.28	8.22	0
11/27/09	8.95	8.85	0
12/23/09	10+	8.29	1.5
01/28/10	8.47	8.44	0
02/25/10	8.51	8.5	0
03/23/10	8.59	8.57	0
04/29/10	9.96	9.64	3
05/27/10	8.96	8.8	0
06/22/10	8.84	8.79	0
07/28/10	10+	8.84	0
08/27/10	Blower faulty. System deactivated.		
10/28/10	8.55	8.43	0
11/19/10	10	8.88	0
12/27/10	9.3	8.97	3
02/02/11	10+	9.02	3.3
03/01/11	8.98	8.14	2.5
03/29/11	10+	8.96	4
04/27/11	10+	8.8	3.5
05/25/11	10+	NA	4.5
08/30/11	OFF		
09/26/11	OFF		
10/27/11	11.61	11.3	3
11/28/11	10+	10+	0
12/29/11	11.1	11.1	0
01/26/12	12.52	12.5	0.5
02/21/12	10+	10+	0.5
03/29/12	11.77	11.32	0.5
04/28/12	11.63	11.62	1
05/31/12	OFF	OFF	OFF
06/28/12	OFF	OFF	OFF
07/31/12	10+	10+	7
08/31/12	--	--	--
09/27/12	10+	10+	5
10/30/12	10+	10+	2.5
12/01/12	Needs Vanes & Filters		
02/01/13	10+	10+	2
02/28/13	Off Cycling		
03/26/13	Off Cycling		
04/26/13	10+	10+	0.5
05/30/13	--	--	--
06/27/13	--	--	--
08/01/13	10+	10+	*--
08/31/13	--	--	--
09/27/13	10+	10+	*--
10/29/13	10+	10+	0.5
12/02/13	--	--	--
01/31/14	10+	--	--
02/26/14	8.27	7.7	6.25
04/30/14	8.99	7.55	10
08/01/14	8.24	7.31	8
10/29/14	8.51	7.25	9.4
01/23/15	7.85	6.99	8
04/30/15	8.25	7.06	9.3

Unable to collect wellhead pressure reading due to standing water over wellhead

\* Flowmeter broken

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

Project #: 1491

**Section 18 - Air Sparge (A/S) Wells / System Operation**

Complete A/S System (If applicable)

Parameter:	System	Flow Rate	Bleed-Off	Pre	Post	Operation Time		
	Pressure		Valve	Air Temp.	Air Temp.	Continuous	Cycling	
Units:	(psi)	(scfm)	(%) Open	(Deg. F)	(Deg. F)	(Hours)	(Hours)	
Date								
05/29/09	8	20	Closed	--	--			
06/23/09	10.8	18.2	Closed	148	--		591.7	
07/29/09	11.4	17.2	Closed	129	--		1111.1	
08/28/09	11	20	Closed	--	--		1112.1	
09/23/09	11.3	14.5	Closed	128	--		1112.1	
10/28/09	11.4	13.7	Closed	113	--		1112.2	
11/27/09	12	12.9	Closed	119	--		1112.2	
12/23/09	14	17.5	Closed	113	--		1112.2	
01/28/10	21.7	18.4	Closed	91	--		175.7	
02/25/10	12	17.2	Closed	101	--		507.5	
03/23/10	11.6	16.3	Closed	116	--		813	
04/29/10	12.7	15	Closed	134	--		1261.1	
05/27/10	11.4	14.6	Closed	139	--		1938.6	
06/22/10	11.4	14.4	Closed	135	--		2556.5	
07/28/10	11.1	13.8	Closed	147	--		3421.3	
08/27/10	Blower faulty. System deactivated.							3954.2
10/28/10	10.8	18.2	Closed	124	--		4478.4	
11/19/10	10.4	15.4	Closed	119	--		5010.7	
12/27/10	11	15.5	Closed	110	--		5921.1	
02/02/11	10.8	14	Closed	109	--		6808.4	
03/01/11	10	16.5	Closed	120	--		7456.5	
03/29/11	11.1	17	Closed	111	--		7770.2	
04/27/11	11.1	15.8	Closed	122	--		8467.3	
05/25/11	11.9	13.3	Closed	124	--		9138.8	
08/30/11	OFF							
09/26/11	OFF							
10/27/11	13	16	Closed	126	--		9644.7	
11/28/11	13.5	16	Closed	120	--		10407.5	
12/29/11	11	16	Closed	120	--		11155.5	
01/26/12	14	12.5	Closed	104	--		11824.4	
02/21/12	14	10.2	Closed	111	--		12448.6	
03/29/12	13	11	Closed	120	--		13336.4	
04/26/12	13	12.5	Closed	127	--		14000.7	
05/31/12	16	7	Closed	110	--		14642.9	
06/28/12	18	15	Closed	150	--		15313.4	
07/31/12	16	16	Closed	140	--		16105.7	
08/31/12	19.9	13	Closed	139	--		16849.7	
09/27/12	20	11.5	Closed	118	--		17498.6	
10/30/12	20	10	Closed	110	--		18288.7	
12/01/12	Needs Vanes & Filters							
02/01/13	13.5	20.4	Closed	107	--		18671.6	
02/28/13	20	14	Closed	106	--		19317.5	
03/26/13	21	10	Closed	100	--		19939.9	
04/26/13	21	6	Closed	112	--		20687.2	
05/30/13	21.5	7.5	Closed	120	--		21499.8	
06/27/13	19	8	Closed	130	--		22171.8	
08/01/13	19	8	Closed	106	--		23014.5	
08/31/13	20	9	Closed	--	--		23706.2	
09/27/13	21	7.8	Closed	122	--		24378.7	
10/29/13	18.5	11.9	Closed	104	--		25148	
12/02/13	15	12	Closed	110	--		25963.7	
12/28/13	18.5	7.5	Closed	100	--		26587.8	
01/31/14	19	17	Closed	79	--		27405.9	
02/26/14	17	17	Closed	82	--		28027.3	
03/27/14	17.9	13	Closed	84	--		28723.8	
04/30/14	18.2	13.1	Closed	108	--		29538.2	
05/27/14	18.5	11.9	Closed	133	--		30187.8	
06/26/14	17	11.7	Closed	181	--		30896.1	
08/01/14	16.1	11.7	Closed	131	--		31765.9	
08/28/14	16.7	16	Closed	133	--		32412.5	
09/29/14	16	16	Closed	129	--		33178.4	
10/29/14	16.2	16.1	Closed	99	--		33899.2	
11/26/14	14.4	16	Closed	85	--		34569.1	
12/31/14	14.3	14.1	Closed	94	--		35412.3	
01/23/15	13.5	13.4	Closed	102	--		35964.8	
02/27/15	16.5	16.9	Closed	91	--		36798.5	
04/01/15	15.5	14.8	Closed	116	--		37589.3	
04/30/15	15.2	14.4	Closed	111	--		38288.9	

12/22/09 ASP set to run 4hours on 4 hours off.

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

Project #: 1491

Section 19 - SVE Well/Unit Vacuum Extraction Flow Rates & Totalizer / Analyzer Readings

Date	05/29/09	06/23/09	07/29/09	08/28/09	09/23/09	10/28/09	11/27/09	12/23/09	01/28/10	02/25/10	03/23/10	04/29/10
Well # / Unit #												
SV-1 Manifold Vacuum ("H2O)	34.6	34	30.2	29	27	25.7	26.3	18.2	27	30.7	29.5	32.3
SV-1 Wellhead Vacuum ("H2O)	34.6	31.6	28.2	26	24.6	22.9	24	16	24.3	23.2	28.4	30.6
SV-1 Direct Read Flow Rate (CFM)	<40	66	36	30	60	40	35	38	56	39	47	51
SV-2 Manifold Vacuum ("H2O)	32.8	34.6	31.8	30.7	29.2	29.1	29.6	26.1	30.1	34.9	31.3	31.1
SV-2 Wellhead Vacuum ("H2O)	31.1	32.9	29.3	27.5	26.7	25.4	27.9	22.5	29.8	31.8	28.9	29.4
SV-2 Direct Read Flow Rate (CFM)	<40	59	37	40	62	23	78	30	21	45	58	71
SV-3 Manifold Vacuum ("H2O)	31.5	31.6	28.2	26.6	26.1	26.9	28.3	24.4	29.5	34.2	25.7	28.9
SV-3 Wellhead Vacuum ("H2O)	29.7	38.9	24.7	23.8	23.1	24	26	19	27.9	26.6	23.4	25.9
SV-3 Direct Read Flow Rate (CFM)	<40	77	45	40	61	27	89	38	19	36	42	35
SV-4 Manifold Vacuum ("H2O)	29.2	29.1	26.9	26.6	24.6	24.9	25.5	22.2	26.8	31.9	24.2	19.7
SV-4 Wellhead Vacuum ("H2O)	28.2	25.6	23.1	21.6	21.4	21.5	22.7	18.3	21.8	27.8	20.2	17.3
SV-4 Direct Read Flow Rate (CFM)	50	47	48	50	45	42	43	45	44	47	42	35
SV-5 Manifold Vacuum ("H2O)	34.8	33.5	29.4	28.7	26.1	26	25.8	19.2	28.9	33.6	27	20.8
SV-5 Wellhead Vacuum ("H2O)	34.4	31.3	26.9	25.1	23.4	23.4	22.7	17.5	26.5	30.6	22.4	19.7
SV-5 Direct Read Flow Rate (CFM)	<40	63	33	30	40	44	42	41	14	31	40	35
Pre KO Tank Vacuum ("H2O)	46	42.9	40.5	39.4	38.9	38.4	38.9	36	39.8	45	40.1	41.4
Before Filter ("H2O)	46	48	45	44	43	43	42	39	43	48	43	45
After Filter ("H2O)	54	56	53	50	52	51	50	48	53	56	52	55
Dilution Valve (% Open)	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Cumulative Direct Read Flow Rate (scfm)	210	312	199	190	268	176	287	192	154	198	229	227
K.O. Tank -Gallons Drained Meter Reading	0	0	0	0	0	0	Drained	Drained	Drained	Drained	Drained	0













### Quarterly Monitoring Report

Facility Name: **Former Agra CCC/USDA**

Project #: **1491**

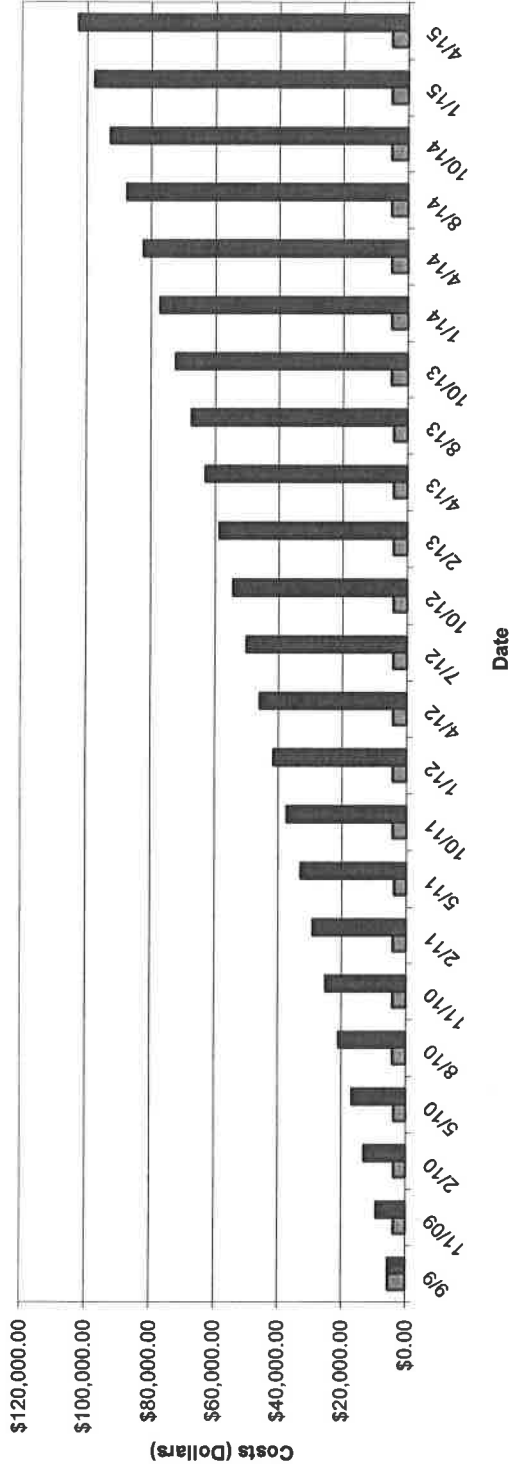
#### Section 20 - Operation & Maintenance Cost vs. Time

Date	9/9	11/09	2/10	5/10	8/10	11/10	2/11	5/11	10/11	1/12	4/12	7/12
Period Cost	\$5,461.00	\$3,781.00	\$3,781.00	\$3,781.00	\$4,144.00	\$4,144.00	\$4,144.00	\$3,759.00	\$4,285.00	\$4,285.00	\$4,285.00	\$4,286.00
Cumulative Cost	\$5,461.00	\$9,242.00	\$13,023.00	\$16,804.00	\$20,948.00	\$25,092.00	\$29,236.00	\$32,995.00	\$37,280.00	\$41,565.00	\$45,850.00	\$50,136.00

Date	10/12	2/13	4/13	8/13	10/13	1/14	4/14	8/14	10/14	1/15	4/15
Period Cost	\$4,285.00	\$4,285.00	\$4,285.00	\$4,285.00	\$5,055.00	\$5,030.00	\$5,055.00	\$5,055.00	\$5,055.00	\$5,055.00	\$5,055.00
Cumulative Cost	\$54,421.00	\$58,706.00	\$62,991.00	\$67,276.00	\$72,331.00	\$77,361.00	\$82,416.00	\$87,471.00	\$92,526.00	\$97,581.00	\$102,636.00

### OM&M Costs



**Quarterly Monitoring Report**

**Facility Name:** Former Agra CCC/USDA

**Project #:** 1491

**Section 21 - Permits**

Permit	Permit #	Original Application Date	Renewal Date
Class V Injection Well (BOW)		Granted 5/22/2009	
Flushmount Waiver		Granted 5/29/2009	
Landfarm		Granted 10/16/2008	
Notification of Soil Vapor Extraction		Recognition Letter Received 1/21/2009	

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

Project #: 1491

**Section 22 - System Operation Time (hours)**

Date	SVE #1	A/S #1
	Start-up	Tested ASP
05/29/09	NR	NR
06/23/09	600.6	591.7
07/29/09	1445.6	1111.1
08/28/09	2121.5	1112.1
*9/23/2009	2211.2	1112.1
*10/28/2009	2221.1	1112.2
*11/27/2009	2221.1	1112.2
12/23/09	2221.2	1112.2
01/28/10	357.4	175.7
02/25/10	1030	507
03/23/10	1652.6	813
04/29/10	2539.1	1261.1
05/27/10	3216.6	1938.6
06/22/10	3834.5	2556.5
07/28/10	4699.3	3421.3
08/27/10	5420.7	3954.2
09/28/10	6189.1	3954.2
10/28/10	6905.8	4478.4
11/19/10	7438.3	5010.7
12/27/10	8348.7	5921.1
02/02/11	9236	6808.4
03/01/11	9884.1	7456.5
03/29/11	10552.7	7770.2
04/27/11	11249.8	8467.3
05/25/11	11921.6	9138.8
08/30/11	14246.5	9138.9
09/26/11	14894.1	9138.9
10/27/11	15638.1	9644.7
11/28/11	16405.5	10407.5
	<b>Continued</b>	
Total Oper. Hrs. for Rept. Period	---	---
Potential Oper. Hrs for Quarter	---	---

\*Bad Hour meter SVE and ASP

**Quarterly Monitoring Report**

Facility Name: Former Agra CCC/USDA

Project #: 1491

**Section 22 - System Operation Time (hours)**

Date	SVE #1	A/S #1
	Start-up	Tested ASP
12/29/11	17153.5	11155.5
01/26/12	17822.8	11824.4
02/21/12	18446.9	12448.6
03/29/12	19334.7	13336.4
04/26/12	20005.5	14000.7
05/31/12	20820.2	14642.9
06/28/12	21490.7	15313.4
07/31/12	22283.2	16105.7
08/31/12	23027.2	16849.7
09/27/12	23676.1	17498.6
10/30/12	24466.2	18288.7
12/01/12	25235.3	18288.9
12/28/12	25881.9	18288.9
02/01/13	26724.4	18671.6
02/28/13	27370.3	19317.5
03/26/13	27992.7	19939.9
04/26/13	28740.4	20687.2
05/30/13	29553.1	21499.8
06/27/13	30225	22171.8
08/01/13	31067.8	23014.5
08/30/13	31759.5	23706.2
09/27/13	32431.9	24378.7
10/29/13	33201.2	25148
12/02/13	34016.9	25963.7
12/28/13	34641	26587.8
01/31/14	35459.1	27405.9
02/26/14	36080.5	28027.3
03/27/14	36777	28723.8
04/30/14	37591.4	29538.2
05/27/14	38241	30187.8
06/26/14	38949.2	30896.1
08/01/14	39819	31765.9
08/28/14	40465.6	32412.5
09/29/14	41231.5	33178.4
10/29/14	41952.3	33899.2
11/26/14	42622.2	34569.1
12/31/14	43465.4	35412.3
01/23/15	44017.9	35964.8
	<b>Continued</b>	
Total Oper. Hrs. for Rept. Period	0	0
Potential Oper. Hrs for Quarter	0	0

\*Bad Hour meter SVE and ASP



**Quarterly Monitoring Report**

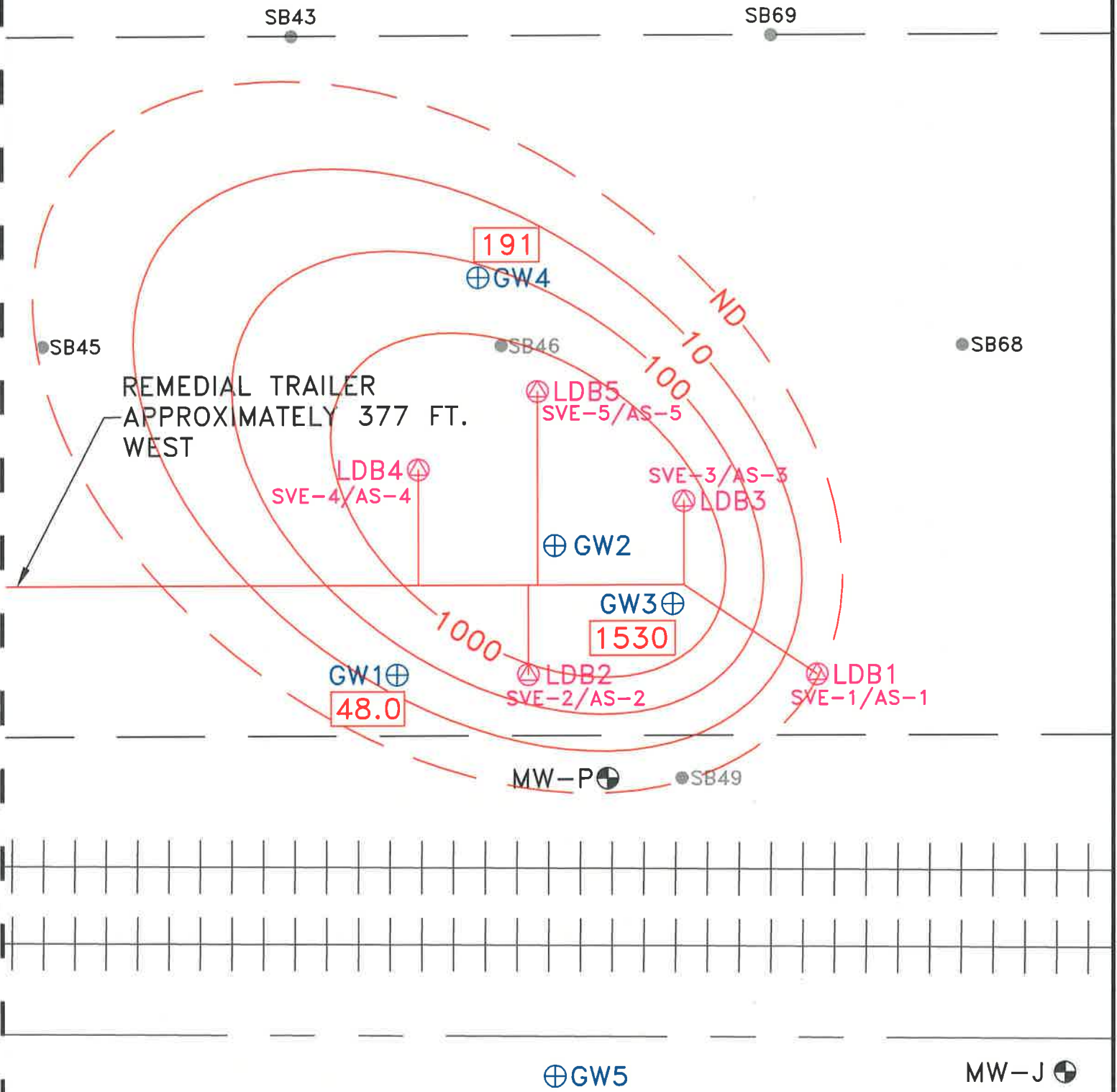
Facility Name: Former Agra CCC/USDA

Project #: 1491

**Section 22 - System Operation Time (hours)**

Date	SVE #1	A/S #1
2/27/2015	44851.5	36798.5
04/01/15	45642.3	37589.3
04/30/15	46342	38288.9
Total Oper. Hrs. for Rept. Period	2324.1	2324.1
Potential Oper. Hrs for Quarter	2328	2328

\*Bad Hour meter SVE and ASP



⊕ MONITORING WELL  
 ● 2005 INVESTIGATION LOCATION  
 ⊕ CCC/USDA MONITORING WELL  
 ⊗ LDB LOCATION  
 [123.4] CARBON TETRACHLORIDE (ppb)

0                      20'                      40'  
 ───────────────────┬──────────────────┬──────────────────  
 SCALE: 1" = 20'

## GEOCORE INC.

P.O. BOX 386                      (785) 826-1616                      SALINA, KANSAS

<small>FIGURE 2:</small> <b>CARBON TETRACHLORIDE IN GROUNDWATER</b> <small>SAMPLED: 04/30/15</small>	<b>GEOCORE PROJECT</b> NO. 1491
SITE: FORMER CCC / USDA	DATE: 07/15/09
LOCATION: AGRA, KANSAS	SCALE: N/A
ADDRESS: RAILROAD AVENUE & MAIN STREET	DRAWING #: NA
CLIENT: GREENFIELD CONTRACTORS, INC.	DRAFTER: JAM
LEGAL: SW, SE, NW	KDHE#: C6 074 00002
SEC 27, T3S, R16W	AGRA.DWG

SB43

SB69

3.2  
⊕GW4

●SB45

●SB46

●SB68

REMEDIAL TRAILER  
APPROXIMATELY 377 FT.  
WEST

LDB4  
SVE-4/AS-4

LDB5  
SVE-5/AS-5

SVE-3/AS-3  
LDB3

⊕GW2

4.8  
⊕GW1

GW3  
ND

LDB2  
SVE-2/AS-2

LDB1  
SVE-1/AS-1

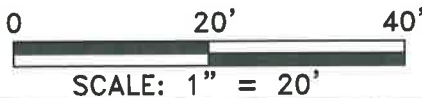
MW-P

●SB49

⊕GW5

MW-J

- ⊕ MONITORING WELL
- 2005 INVESTIGATION LOCATION
- ⊕ CCC/USDA MONITORING WELL
- ⊗ LDB LOCATION
- 123.4 CHLOROFORM (ppb)



# GEOCORE INC.

P.O. BOX 386

(785) 826-1616

SALINA, KANSAS

FIGURE 3:  
CHLOROFORM IN GROUNDWATER  
SAMPLED: 04/30/15

GEOCORE PROJECT  
NO. 1491

SITE: FORMER CCC / USDA

DATE: 07/15/09

LOCATION: AGRA, KANSAS

SCALE: N/A

ADDRESS: RAILROAD AVENUE & MAIN STREET

DRAWING #: NA

CLIENT: GREENFIELD CONTRACTORS, INC.

DRAFTER: JAM

LEGAL: SW, SE, NW

KDHE#: C6 074 00002

SEC 27, T3S, R16W

AGRA.DWG



SB43

SB69

ND  
⊕GW4

●SB45

●SB46

●SB68

REMEDIAL TRAILER  
APPROXIMATELY 377 FT.  
WEST

LDB4  
SVE-4/AS-4

LDB5  
SVE-5/AS-5

SVE-3/AS-3  
LDB3

⊕GW2

ND  
⊕GW1

GW3⊕

ND

LDB2  
SVE-2/AS-2

LDB1  
SVE-1/AS-1



MW-P

●SB49

⊕GW5

MW-J

⊕ MONITORING WELL  
 ● 2005 INVESTIGATION LOCATION  
 ⊕ CCC/USDA MONITORING WELL  
 ⊕ LDB LOCATION  
 123.4 1,2 DCA (ppb)

SCALE: 1" = 20'

# GEOCORE INC.

P.O. BOX 386

(785) 826-1616

SALINA, KANSAS

FIGURE 41  
1,2 DCA IN GROUNDWATER  
SAMPLED: 04/30/15

GEOCORE PROJECT  
NO. 1491

SITE: FORMER CCC / USDA

DATE: 07/15/09

LOCATION: AGRA, KANSAS

SCALE: N/A

ADDRESS: RAILROAD AVENUE & MAIN STREET

DRAWING #: NA

CLIENT: GREENFIELD CONTRACTORS, INC.

DRAFTER: JAM

LEGAL: SW, SE, NW

KDHE#: C6 074 00002

SEC 27, T3S, R16W

AGRA.DWG



## **APPENDIX 1**

# **LABORATORY INFORMATION**

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Technical Report for

GeoCore, Inc.-Remediation  
AGRA CCC/USDA, Agra, KS

1491

Accutest Job Number: FA24071

Sampling Date: 04/30/15

Report to:

GeoCore, Inc  
2775 Arnold Ave Suite D  
Salina, KS 67401  
jgsbhardt@geocore.net; boentrich@geocore.net;  
dcori@geocore.net  
ATTN: Brad Oentrich

Total number of pages in report: 19



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Client Service contact: Sue Bell 407-425-6700

Certifications: FL (E983510), LA (03951), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001)  
DoD ELAP (LA-B L2229), CA (2937), TX (T104704404), PA (68-03573), VA (460177),  
AK, AR, GA, KY, MA, NV, OK, UT, WA

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Test results relate only to samples analyzed.

### Sample Summary

GeoCore, Inc.-Remediation  
 AGRA CCC/USDA, Agra, KS  
 Project No: 1491

Job No: FA24071

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA24071-1	04/30/15	12:20 TD	05/02/15	AQ	Ground Water	GW-1
FA24071-2	04/30/15	13:00 TD	05/02/15	AQ	Ground Water	GW-3
FA24071-3	04/30/15	12:40 TD	05/02/15	AQ	Ground Water	GW-4

### Summary of Hits

Job Number: FA24071  
 Account: GeoCore, Inc.-Remediation  
 Project: AGRA CCC/USDA, Agra, KS  
 Collected: 04/30/15

Lab Sample ID	Analyte	Client Sample ID	Result/Qual	RL	MDL	Units	Method
FA24071-1		GW-1					
	Carbon Tetrachloride <sup>a</sup>		48.0	1.0		ug/l	SW846 8260B
	Chloroform <sup>a</sup>		4.8	1.0		ug/l	SW846 8260B
FA24071-2		GW-3					
	Carbon Tetrachloride		25.0	25		ug/l	SW846 8260B
FA24071-3		GW-4					
	Carbon Tetrachloride <sup>b</sup>		191	5.0		ug/l	SW846 8260B
	Chloroform <sup>b</sup>		3.2	2.0		ug/l	SW846 8260B

(a) Sample was not preserved to a pH < 2; reported results are considered minimum values.  
 (b) Sample was not preserved to a pH < 2.

Client Sample ID: GW-1  
 Lab Sample ID: FA24071-1  
 Matrix: AQ - Ground Water  
 Method: SW846 8260B  
 Project: AGRA CCC/USDA, Agra, KS

Date Sampled: 04/30/15  
 Date Received: 05/02/15  
 Percent Solids: n/a

Sample Results

Run #1 <sup>a</sup> Run #2	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
	I29638.D	1	05/08/15	DP	n/a	n/a	V1712

Purge Volume  
 Run #1 5.0 ml  
 Run #2

Report of Analysis

VOA SPECIAL LIST

CAS No.	Compound	Result	RL	Units	Q
56-23-5	Carbon Tetrachloride	48.0	1.0	ug/l	
67-66-3	Chloroform	4.8	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
1868-53-7	Dibromofluoromethane	98%		83-118%	
17060-07-0	1,2-Dichloroethane-D4	97%		79-125%	
2037-26-5	Toluene-D8	102%		85-112%	
460-00-4	4-Bromofluorobenzene	106%		83-118%	

(a) Sample was not preserved to a pH < 2, reported results are considered minimum values.

ND = Not detected  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



### Report of Analysis

Client Sample ID: GW-3  
 Lab Sample ID: FA24071-2  
 Matrix: AQ - Ground Water  
 Method: SW846 8260B  
 Project: AGRAC CCC/USDA, Agra, KS

Date Sampled: 04/30/15  
 Date Received: 05/02/15  
 Percent Solids: n/a

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P32465.D	25	05/11/15	KM	n/a	n/a	VP1209
Run #2							

Purge Volume

Run #1	5.0 ml
Run #2	

VOA SPECIAL LIST

CAS No.	Compound	Result	RL	Units	Q
56-23-5	Carbon Tetrachloride	1530	25	ug/l	
67-66-3	Chloroform	ND	25	ug/l	
107-06-2	1,2-Dichloroethane	ND	25	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
1868-53-7	Dibromofluoromethane	100%		83-118%	
17060-07-0	1,2-Dichloroethane-D4	101%		79-125%	
2037-26-5	Toluene-D8	100%		85-112%	
460-00-4	4-Bromofluorobenzene	104%		83-118%	

ND = Not detected  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

### Report of Analysis

Client Sample ID: GW-4  
 Lab Sample ID: FA24071-3  
 Matrix: AQ - Ground Water  
 Method: SW846 8260B  
 Project: AGRAC CCC/USDA, Agra, KS

Date Sampled: 04/30/15  
 Date Received: 05/02/15  
 Percent Solids: n/a

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P32466.D	2	05/11/15	KM	n/a	n/a	VP1209
Run #2	I29640.D	5	05/08/15	DP	n/a	n/a	VT712

Purge Volume

Run #1	5.0 ml
Run #2	5.0 ml

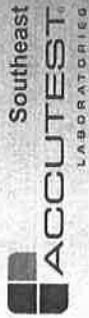
VOA SPECIAL LIST

CAS No.	Compound	Result	RL	Units	Q
56-23-5	Carbon Tetrachloride	191 <sup>b</sup>	5.0	ug/l	
67-66-3	Chloroform	3.2	2.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
1868-53-7	Dibromofluoromethane	100%	98%	83-118%	
17060-07-0	1,2-Dichloroethane-D4	101%	98%	79-125%	
2037-26-5	Toluene-D8	100%	102%	85-112%	
460-00-4	4-Bromofluorobenzene	104%	106%	83-118%	

(a) Sample was not preserved to a pH < 2.  
 (b) Result is from Run# 2

ND = Not detected  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

**ACCUTEST LABORATORIES**  
 4402 Vandalia Blvd., Suite C-13, Omaha, NE 68111  
 TEL: 407-425-0700 • FAX: 407-425-0707  
 www.accutest.com

**Chain of Custody**  
 2176 Arnold Ave Ste D  
 Sallis, Kansas 67401  
 Brad Chemich  
 785-825-1616  
 bchemich@accutest.com  
 bchemich@accutest.com

Client Name: Agca Accusist  
 Site: KS  
 Order #: 10-A  
 Order Date: 09/29/11

Accounting Order # 14240711  
 Account Job # 14240711  
 Order # 14240711

Client Reference: 14240711

Field ID / Point of Collection: 14240711

Approved By: [Signature]

10 Days Standard  
 7 Day RUSH  
 5 Day RUSH  
 3 Day EMERGENCY  
 2 Day EMERGENCY  
 1 Day EMERGENCY  
 OTHER

Approved By: [Signature]

19 Days Standard  
 7 Day RUSH  
 5 Day RUSH  
 3 Day EMERGENCY  
 2 Day EMERGENCY  
 1 Day EMERGENCY  
 OTHER

Commercial, K (RESULTS ONLY)  
 Commercial, P (RESULTS PLUS CO)  
 RMT (SALIVARY)  
 RLT (SALIVARY)

Prepackaged by: FX  
 Received by: FX  
 Date/Time: 10/20/11

Prepackaged by: FX  
 Received by: FX  
 Date/Time: 10/20/11

Lab Use Only: Outbox Seal in Place: Y N Temp Blank Provided: Y N Preserved when Applicable: Y N Total # of Cores: 6

**ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION**

ACCUTEST'S JOB NUMBER: FA24071 CLIENT: GEORGE PROJECT: AGRA ccc/OSDA  
 DATE/TIME RECEIVED: 05/02/15 10:30 (MM/DD/YYYY 2400) NUMBER OF COOLERS RECEIVED: 1  
 METHOD OF DELIVERY: FEDX UPS ACCUTEST COURIER DELIVERY OTHER: \_\_\_\_\_  
 AIRBILL NUMBER: 8063 884 1035

**COOLER INFORMATION**  
 CUSTODY SEAL NOT PRESENT OR NOT INTACT  
 CHAIN OF CUSTODY NOT RECEIVED (COC)  
 ANALYSIS REQUESTED IS UNCLEAR OR MISSING  
 SAMPLE DATES OR TIMES UNCLEAR OR MISSING  
 TEMPERATURE CRITERIA NOT MET

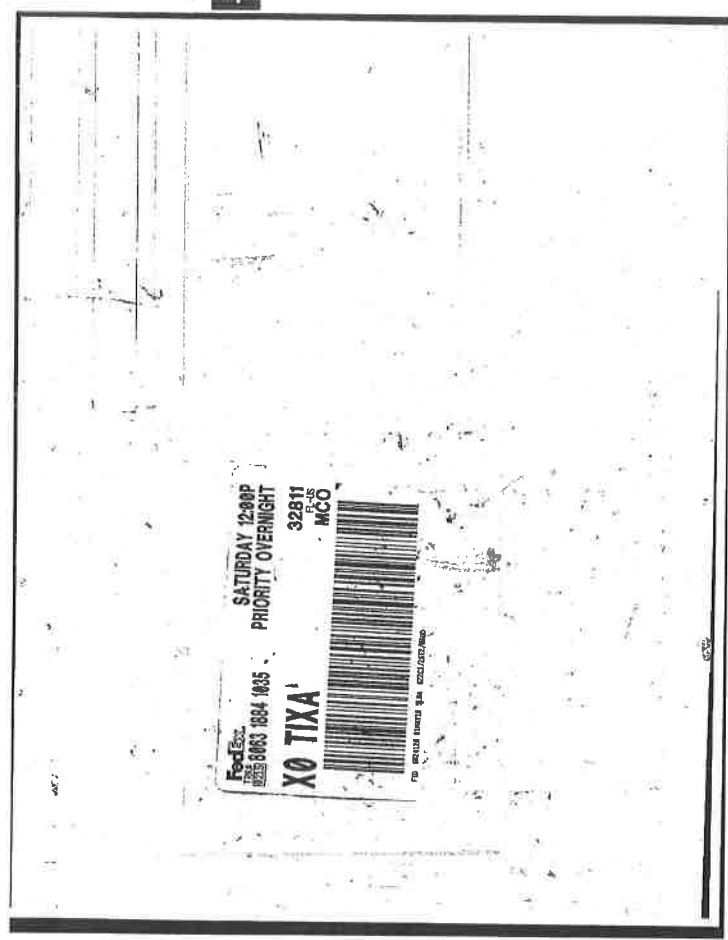
**TEMPERATURE INFORMATION**  
 IR THERM ID: # / CORR. FACTOR: 0.2  
 OBSERVED TEMP: \_\_\_\_\_  
 CORRECTED TEMP: 1.8  
**SAMPLE INFORMATION**  
 INCORRECT NUMBER OF CONTAINERS USED  
 SAMPLE RECEIVED IMPROPERLY PRESERVED  
 INSUFFICIENT VOLUME FOR ANALYSIS  
 FA TEST/TIMES ON COC DO NOT MATCH SAMPLE LABEL  
 ID'S ON COC DO NOT MATCH LABEL  
 VOC VIALS HAVE HEADSPACE (MACHO BUBBLES)  
 BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED  
 NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED  
 UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS  
 SAMPLE CONTAINERS RECEIVED BROKEN  
 SRS FIELD KITS NOT RECEIVED WITHIN 48 HOURS  
 BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS  
 % SOLIDS JAR NOT RECEIVED  
 RESIDUAL CHLORINE PRESENT  
 (APPLICABLE TO EPA 809 SERIES OR NORTH CAROLINA ORGANIC)  
 RESIDUAL CHLORINE \_\_\_\_\_ OTHER (ppm) 465-239010

**TRIP BLANK INFORMATION**  
 TRIP BLANK PROVIDED  
 TRIP BLANK NOT PROVIDED  
 TRIP BLANK NOT ON COC  
 TRIP BLANK INTACT  
 TRIP BLANK NOT INTACT  
 RECEIVED WATER TRIP BLANK  
 RECEIVED SOIL TRIP BLANK

**MISC. INFORMATION**  
 NUMBER OF ENCODERS: 25 GRAM \_\_\_\_\_  
 NUMBER OF SAS FIELD KITS? \_\_\_\_\_  
 NUMBER OF LAB FILTERED METALS? \_\_\_\_\_  
 pH PAPER LOT# \_\_\_\_\_ WIDE RANGE \_\_\_\_\_ A88172 \_\_\_\_\_ NARROW RANGE HC2175A OTHER (ppm) \_\_\_\_\_  
 SUMMARY OF COMMENTS: \_\_\_\_\_

TECHNICIAN SIGNATURE/DATE: [Signature] 5/15/15 REVIEWER SIGNATURE/DATE: [Signature] 5-8-15  
 NF-1074 receipt confirmation 102914.xls

FA24071: Chain of Custody  
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FA24071: Chain of Custody  
Page 3 of 3

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA24071  
 Account: GCOREKSR GeoCore, Inc. Remediation  
 Project: AGRA CCC/USDA, Agra, KS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VT1712-MB	I29631.D	1	05/08/15	DP	n/a	n/a	VT1712

The QC reported here applies to the following samples:

FA24071-1, FA24071-3

Method: SW846 8260B

CAS No.	Compound	Result	RL	Units	Q
56-23-5	Carbon Tetrachloride	ND	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
CAS No.	Surrogate Recoveries			Limits	
1888-53-7	Dibromofluoromethane	98%		83-118%	
17060-07-0	1,2-Dichloroethane-D4	100%		79-125%	
2037-26-5	Toluene-D8	101%		85-112%	
460-00-4	4-Bromofluorobenzene	106%		83-118%	

**Method Blank Summary**

Job Number: FA24071  
 Account: GCOREKSR GeoCore, Inc.-Remediation  
 Project: AGRA CCC/USDA, Agra, KS

Page 1 of 1

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP1209-MB	P32455.D	1	05/11/15	KM	n/a	n/a	VP1209

The QC reported here applies to the following samples:

FA24071-2, FA24071-3

Method: SW846 8260B

5.1.2

5

CAS No.	Compound	Result	RL	Units	Q
56-23-5	Carbon Tetrachloride	ND	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
CAS No.	Surrogate Recoveries	Limits			
1868-53-7	Dibromofluoromethane	99%			83-118%
17060-07-0	1,2-Dichloroethane-D4	100%			79-125%
2037-26-5	Toluene-D8	99%			85-112%
460-00-4	4-Bromofluorobenzene	102%			83-118%

**Blank Spike Summary**

Job Number: FA24071  
 Account: GCOREKSR GeoCore, Inc.-Remediation  
 Project: AGRA CCC/USDA, Agra, KS

Page 1 of 1

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VT1712-RS *	I29629.D	1	05/08/15	DP	n/a	n/a	VT1712

The QC reported here applies to the following samples:

FA24071-1, FA24071-3

Method: SW846 8260B

5.2.1

5

CAS No.	Compound	Spike	BSP	BSP	Limits
		ug/l	ug/l	%	
56-23-5	Carbon Tetrachloride	25	22.1	88	76-136
67-66-3	Chloroform	25	23.2	93	80-124
107-06-2	1,2-Dichloroethane	25	24.9	100	75-125
CAS No.	Surrogate Recoveries	Limits			
1868-53-7	Dibromofluoromethane	97%			83-118%
17060-07-0	1,2-Dichloroethane-D4	102%			79-125%
2037-26-5	Toluene-D8	105%			85-112%
460-00-4	4-Bromofluorobenzene	106%			83-118%

(a) No MSD available for this run.

\* = Outside of Control Limits.

**Blank Spike Summary**

Job Number: FA24071  
 Account: GCOREKSR GeoCore, Inc.-Remediation  
 Project: AGRA CCC/USDA, Agra, KS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP1209-BS	P32453.D	1	05/11/15	KM	n/a	n/a	VP1209

The QC reported here applies to the following samples:

FA24071-2, FA24071-3

Method: SW846 8260B

5.2.2

5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
56-23-5	Carbon Tetrachloride	25	24.0	96	76-136
67-66-3	Chloroform	25	22.7	91	80-124
107-06-2	1,2-Dichloroethane	25	21.9	88	75-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	99%	79-125%
2037-26-5	Toluene-D8	101%	85-112%
460-00-4	4-Bromofluorobenzene	102%	83-118%

\* = Outside of Control Limits.

**Matrix Spike Summary**

Job Number: FA24071  
 Account: GCOREKSR GeoCore, Inc.-Remediation  
 Project: AGRA CCC/USDA, Agra, KS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D70206-1MS	I29646.D	1	05/08/15	DP	n/a	n/a	V1712
D70206-1	I29632.D	1	05/08/15	DP	n/a	n/a	V1712

The QC reported here applies to the following samples:

FA24071-1, FA24071-3

Method: SW846 8260B

5.3.1

5

CAS No.	Compound	D70206-1 ug/l	Spike ug/l	MS ug/l	MS %	Limits
56-23-5	Carbon Tetrachloride	ND	25	21.0	84	76-136
67-66-3	Chloroform	ND	25	23.2	93	80-124
107-06-2	1,2-Dichloroethane	ND	25	23.1	92	75-125

CAS No.	Surrogate Recoveries	MS	D70206-1 Limits
1868-53-7	Dibromofluoromethane	101%	92%
17060-07-0	1,2-Dichloroethane-D4	99%	93%
2037-26-5	Toluene-D8	100%	103%
460-00-4	4-Bromofluorobenzene	100%	107%

\* = Outside of Control Limits.

**Matrix Spike/Matrix Spike Duplicate Summary**

Job Number: FA24071

Account: GCOREKSR GeoCore, Inc-Remediation

Project: AGRA CCC/USDA, Agra, KS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA24071-2MS	P32467.D	25	05/11/15	KM	n/a	n/a	VP1209
FA24071-2MSD	P32468.D	25	05/11/15	KM	n/a	n/a	VP1209
FA24071-2	P32465.D	25	05/11/15	KM	n/a	n/a	VP1209

5.4.1

5

The QC reported here applies to the following samples:

Method: SW846 8260B

FA24071-2, FA24071-3

CAS No.	Compound	FA24071-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
56-23-5	Carbon Tetrachloride	1530	625	2050	83	625	2050	83	0	0	76-136/23
67-66-3	Chloroform	17.5	625	556	86	625	568	88	2	2	80-124/15
107-06-2	1,2-Dichloroethane	ND	625	539	86	625	555	89	3	3	75-125/14
CAS No.	Surrogate Recoveries	MS	MSD	FA24071-2	Limits						
1868-53-7	Dibromofluoromethane	99%	102%	100%	83-118%						
17060-07-0	1,2-Dichloroethane-D4	101%	99%	101%	79-125%						
2037-26-5	Toluene-D8	100%	100%	100%	85-112%						
460-00-4	4-Bromofluorobenzene	102%	101%	104%	83-118%						

\* = Outside of Control Limits.

Technical Report for

GeoCore, Inc.  
Agra CCC/USDA

1491

Accutest Job Number: JB93844

Sampling Date: 04/30/15

Report to:

GeoCore, Inc.  
2775 Arnold Avenue P.O. Box 386  
Salina, KS 67401  
boentrich@geocore.net; jgebhardt@geocore.net  
ATTN: Brad Oentrich

Total number of pages in report: 31



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Client Service contact: Marty Vitanza 732-329-0200

Certifications: NJ(12129), NY(10883), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TN, VA, WV, DoD ELAP (L-A-B L248)

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**Summary of Hits**  
 Job Number: JB93844  
 Account: GeoCore, Inc.  
 Project: Agra CCC/USDA  
 Collected: 04/30/15

**Sample Summary**

GeoCore, Inc. Job No: JB93844  
 Agra CCC/USDA  
 Project No: 1491

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
JB93844-1	04/30/15	10:20 TD	05/04/15	AIR Ambient Air Grab	SVE-1
JB93844-2	04/30/15	10:30 TD	05/04/15	AIR Ambient Air Grab	SVE-2
JB93844-3	04/30/15	10:40 TD	05/04/15	AIR Ambient Air Grab	SVE-3
JB93844-4	04/30/15	11:00 TD	05/04/15	AIR Ambient Air Grab	SVE-4
JB93844-5	04/30/15	11:10 TD	05/04/15	AIR Ambient Air Grab	SVE-5
JB93844-6	04/30/15	10:50 TD	05/04/15	AIR Ambient Air Grab	SVE MANIFOLD

Lab Sample ID	Analyte	Client Sample ID	Result/Qual	RL	MDL	Units	Method
JB93844-1	Carbon tetrachloride	SVE-1	1.2	0.80	0.098	ppbv	TO-15
	Carbon tetrachloride		7.5	5.0	0.62	ug/m3	TO-15
JB93844-2	Carbon tetrachloride	SVE-2	0.46 J	0.80	0.098	ppbv	TO-15
	Carbon tetrachloride		2.9 J	5.0	0.62	ug/m3	TO-15
JB93844-3	Carbon tetrachloride	SVE-3	9.1	0.80	0.098	ppbv	TO-15
	Carbon tetrachloride		57	5.0	0.62	ug/m3	TO-15
JB93844-4	Carbon tetrachloride	SVE-4	3.1	0.80	0.098	ppbv	TO-15
	Carbon tetrachloride		20	5.0	0.62	ug/m3	TO-15
JB93844-5	Carbon tetrachloride	SVE-5	12.3	0.80	0.098	ppbv	TO-15
	Carbon tetrachloride		77.4	5.0	0.62	ug/m3	TO-15
JB93844-6	Carbon tetrachloride	SVE MANIFOLD	8.0	0.80	0.098	ppbv	TO-15
	Carbon tetrachloride		50	5.0	0.62	ug/m3	TO-15

Client Sample ID: SVE-1  
 Lab Sample ID: JB93844-1  
 Matrix: AIR - Ambient Air Grab  
 Method: TO-15  
 Project: Agra CCC/USDA

Date Sampled: 04/30/15  
 Date Received: 05/04/15  
 Percent Solids: n/a

Summa ID: A727

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	5W11383.D	1	05/05/15	ML	n/a	n/a	V5W446

Run #1	Initial Volume
Run #2	100 ml

VOA Special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-66-3	119.4	Chloroform	ND	0.80	0.12	ppbv	ND	ND	3.9	0.59	ug/m3
56-23-5	153.8	Carbon tetrachloride	1.2	0.80	0.098	ppbv	7.5	5.0	5.0	0.62	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.10	ppbv	ND	ND	3.2	0.40	ug/m3
CAS No.	Surrogate Recoveries		Run# 1	Run# 2	Limits						
460-00-4	4-Bromofluorobenzene		100%		65-128%						

Sample Results

Report of Analysis

ND = Not detected  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SVE-2  
 Lab Sample ID: JB93844-2  
 Matrix: AIR - Ambient Air Grab Summa ID: A726  
 Method: TO-15  
 Project: Agra CCC/USDA

Date Sampled: 04/30/15  
 Date Received: 05/04/15  
 Percent Solids: n/a

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch  
 Run #1 5W11385.D 1 05/05/15 ML n/a n/a V5W446  
 Run #2

Initial Volume  
 Run #1 100 ml  
 Run #2

VOA Special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-66-3	119.4	Chloroform	ND	0.80	0.12	ppbv	ND	ND	3.9	0.59	ug/m3
56-23-5	153.8	Carbon tetrachloride	0.46	0.80	0.098	ppbv	J	2.9	5.0	0.62	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.10	ppbv	ND	ND	3.2	0.40	ug/m3
CAS No.	Surrogate Recoveries		Run# 1	Run# 2	Limits						
460-00-4	4-Bromofluorobenzene		100%		65-128%						

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value  
 RL = Reporting Limit B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SVE-3  
 Lab Sample ID: JB93844-3  
 Matrix: AIR - Ambient Air Grab Summa ID: A802  
 Method: TO-15  
 Project: Agra CCC/USDA

Date Sampled: 04/30/15  
 Date Received: 05/04/15  
 Percent Solids: n/a

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch  
 Run #1 5W11386.D 1 05/05/15 ML n/a n/a V5W446  
 Run #2

Initial Volume  
 Run #1 100 ml  
 Run #2

VOA Special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-66-3	119.4	Chloroform	ND	0.80	0.12	ppbv	ND	ND	3.9	0.59	ug/m3
56-23-5	153.8	Carbon tetrachloride	9.1	0.80	0.098	ppbv	57	5.0	5.0	0.62	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.10	ppbv	ND	ND	3.2	0.40	ug/m3
CAS No.	Surrogate Recoveries		Run# 1	Run# 2	Limits						
460-00-4	4-Bromofluorobenzene		98%		65-128%						

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value  
 RL = Reporting Limit B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SVE-4  
 Lab Sample ID: JB93844-4  
 Matrix: AIR - Ambient Air Grab Summa ID: A594  
 Method: TO-15  
 Project: Agra CCC/USDA

Date Sampled: 04/30/15  
 Date Received: 05/04/15  
 Percent Solids: n/a

File ID: 5W11387.D  
 DF: 1  
 Analyzed: 05/05/15  
 By: ML  
 Prep Date: n/a  
 Prep Batch: n/a  
 Analytical Batch: V5W446

Initial Volume  
 Run #1: 100 ml  
 Run #2:

VOA Special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-86-3	119.4	Chloroform	ND	0.80	0.12	ppbv	ND	3.9	0.59	0.59	ug/m3
56-23-5	153.8	Carbon tetrachloride	3.1	0.80	0.098	ppbv	20	5.0	0.62	0.62	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.10	ppbv	ND	3.2	0.40	0.40	ug/m3
CAS No.		Surrogate Recoveries	Run# 1	Run# 2	Limits						
460-00-4		4-Bromofluorobenzene	98%		65-128%						

ND = Not detected  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

MDL = Method Detection Limit  
 MDL = Method Detection Limit  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SVE-5  
 Lab Sample ID: JB93844-5  
 Matrix: AIR - Ambient Air Grab Summa ID: A1143  
 Method: TO-15  
 Project: Agra CCC/USDA

Date Sampled: 04/30/15  
 Date Received: 05/04/15  
 Percent Solids: n/a

File ID: 5W11388.D  
 DF: 1  
 Analyzed: 05/05/15  
 By: ML  
 Prep Date: n/a  
 Prep Batch: n/a  
 Analytical Batch: V5W446

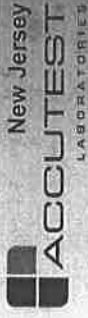
Initial Volume  
 Run #1: 100 ml  
 Run #2:

VOA Special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-86-3	119.4	Chloroform	ND	0.80	0.12	ppbv	ND	3.9	0.59	0.59	ug/m3
56-23-5	153.8	Carbon tetrachloride	12.3	0.80	0.098	ppbv	77.4	5.0	0.62	0.62	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.10	ppbv	ND	3.2	0.40	0.40	ug/m3
CAS No.		Surrogate Recoveries	Run# 1	Run# 2	Limits						
460-00-4		4-Bromofluorobenzene	97%		65-128%						

ND = Not detected  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

MDL = Method Detection Limit  
 MDL = Method Detection Limit  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



Accutest Laboratories

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Report of Analysis

Client Sample ID: SVE MANIFOLD  
 Lab Sample ID: JB93844-6  
 Matrix: AIR - Ambient Air Grab Summa ID: A407  
 Method: TO-15  
 Project: Agra CCC/USDA

Date Sampled: 04/30/15  
 Date Received: 05/04/15  
 Percent Solids: n/a

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5W11389.D	1	05/05/15	ML	n/a	n/a	V3W446
Run #2							

Initial Volume  
 Run #1 100 ml  
 Run #2

VOA Special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-66-3	119.4	Chloroform	ND	0.80	0.12	ppbv	ND	ND	3.9	0.59	ug/m3
56-23-5	153.8	Carbon tetrachloride	8.0	0.80	0.098	ppbv	50	ND	5.0	0.62	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.10	ppbv	ND	ND	3.2	0.40	ug/m3
CAS No.		Surrogate Recoveries	Run# 1	Run# 2	Limits						
460-00-4		4-Bromofluorobenzene	98%		65-128%						

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Summa Canister and Flow Controller Log

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value  
 RL = Reporting Limit B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound





4.2 4

Summa Canister and Flow Controller Log

Job Number: JB93844  
 Account: GCKSS GeoCore, Inc.  
 Project: Agra CCC/USDA  
 Received: 05/04/15

SUMMA CANISTERS												
Shipping			Receiving									
Summa ID	Vac L	Date Out	By	SCC Batch	SCC FileID	Sample Number	Date In	By	Vac "Hg	Pres psig	Final Dil psig	Dil Fact
A727	1	29.4	04/20/15	RD	CP7684	5W11013.D JB93844-1	05/04/15	RD	2.5			1
A726	1	29.4	04/20/15	RD	CP7684	3W47035.D JB93844-2	05/04/15	RD	2.5			1
A802	1	29.4	04/20/15	RD	CP7684	5W11013.D JB93844-3	05/04/15	RD	3.5			1
A594	1	29.4	04/20/15	RD	CP7684	5W11013.D JB93844-4	05/04/15	RD	4			1
A1143	1	29.4	04/20/15	RD	CP7684	5W11013.D JB93844-5	05/04/15	RD	4			1
A407	1	29.4	04/20/15	RD	CP7684	3W47035.D JB93844-6	05/04/15	RD	2.5			1

Accutest Bottle Order (6):

MV-1/28/2014-10

Prep Date 04/20/15 Room Temp(F) 70 Bar Pres "Hg 29.92

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Surrogate Recovery Summaries

**Method Blank Summary**

Job Number: JB93844  
 Account: GCKSS GeoCore, Inc.  
 Project: Agra CCC/USDA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W446-MB	5W11381.D	1	05/05/15	ML	n/a	n/a	V5W446

5.1.1

5

The QC reported here applies to the following samples:

JB93844-1, JB93844-2, JB93844-3, JB93844-4, JB93844-5, JB93844-6

Method: TO-15

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-66-3	Chloroform	ND	0.20	0.031	ppbv	ND	ND	0.98	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.025	ppbv	ND	ND	1.3	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.026	ppbv	ND	ND	0.81	ug/m3

CAS No. Surrogate Recoveries Limits

460-00-4 4-Bromofluorobenzene 99% 65-128%

**Method Blank Summary**

Job Number: JB93844  
 Account: GCKSS GeoCore, Inc.  
 Project: Agra CCC/USDA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W431-MB	5W11009.D	1	04/16/15	ML	n/a	n/a	V5W431

5.1.2

5

The QC reported here applies to the following samples:

V5W431-SCC

Method: TO-15

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-66-3	Chloroform	ND	0.20	0.031	ppbv	ND	ND	0.98	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.025	ppbv	ND	ND	1.3	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.026	ppbv	ND	ND	0.81	ug/m3

CAS No. Surrogate Recoveries Limits

460-00-4 4-Bromofluorobenzene 99% 65-128%



**Method Blank Summary**

Job Number: JB93844  
 Account: GCKSS GeoCore, Inc.  
 Project: Agra CCC/USDA

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Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3W1785-MB	3W47034.D	1	04/17/15	YMH	n/a	n/a	V3W1785

The QC reported here applies to the following samples:

V3W1785-SCC

Method: TO-15

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-66-3	Chloroform	ND	0.20	0.031	ppbv	ND	ND	0.98	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.025	ppbv	ND	ND	1.3	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.026	ppbv	ND	ND	0.81	ug/m3

CAS No. Surrogate Recoveries

460-00-4 4-Bromofluorobenzene 86% 65-128%

CAS No. Surrogate Recoveries

460-00-4 4-Bromofluorobenzene 102% 101% 65-128%

**Blank Spike/Blank Spike Duplicate Summary**

Job Number: JB93844  
 Account: GCKSS GeoCore, Inc.  
 Project: Agra CCC/USDA

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Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W446-BS	5W11378.D	1	05/05/15	ML	n/a	n/a	V5W446
V5W446-BSD	5W11379.D	1	05/05/15	ML	n/a	n/a	V5W446

The QC reported here applies to the following samples:

JB93844-1, JB93844-2, JB93844-3, JB93844-4, JB93844-5, JB93844-6

Method: TO-15

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	Limits Rec/RPD
67-66-3	Chloroform	10	9.3	93	9.9	99	70-130/30
56-23-5	Carbon tetrachloride	10	9.5	95	10.0	100	70-130/30
107-06-2	1,2-Dichloroethane	10	9.1	91	9.7	97	70-130/30

CAS No. Surrogate Recoveries

460-00-4 4-Bromofluorobenzene 102% 101% 65-128%

5.1.3

5

5.2.1

5

\* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JB93844  
 Account: GCKSS GeoCore, Inc.  
 Project: Agra CCC/USDA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W431-RS	5W11006.D	1	04/16/15	ML	n/a	n/a	V5W431
V5W431-BSD	5W11007.D	1	04/16/15	ML	n/a	n/a	V5W431

5.2.2

5

The QC reported here applies to the following samples:

Method: TO-15

V5W431-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-66-3	Chloroform	10	9.8	98	9.8	98	0	70-130/30
56-23-5	Carbon tetrachloride	10	10	100	9.9	99	1	70-130/30
107-06-2	1,2-Dichloroethane	10	9.2	92	9.2	92	0	70-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	104%	106%	65-128%

\* = Outside of Control Limits.



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Blank Spike/Blank Spike Duplicate Summary

Job Number: JB93844  
 Account: GCKSS GeoCore, Inc.  
 Project: Agra CCC/USDA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3W1785-RS	3W47031.D	1	04/17/15	YMH	n/a	n/a	V3W1785
V3W1785-BSD	3W47032.D	1	04/17/15	YMH	n/a	n/a	V3W1785

5.2.3

5

The QC reported here applies to the following samples:

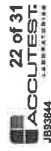
Method: TO-15

V3W1785-SCC

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-66-3	Chloroform	10	10.4	104	10.2	102	2	70-130/30
56-23-5	Carbon tetrachloride	10	10.3	103	10.3	103	0	70-130/30
107-06-2	1,2-Dichloroethane	10	11.0	110	10.8	108	2	70-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	106%	105%	65-128%

\* = Outside of Control Limits.



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**Duplicate Summary**

Job Number: JB93844  
 Account: GCKSS GeoCore, Inc.  
 Project: Agra CCC/USDA

Page 1 of 1

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JB93844-1DUP	5W11384.D	1	05/05/15	ML	n/a	n/a	V5W446
JB93844-1	5W11383.D	1	05/05/15	ML	n/a	n/a	V5W446

The QC reported here applies to the following samples:

JB93844-1, JB93844-2, JB93844-3, JB93844-4, JB93844-5, JB93844-6

Method: TO-15

CAS No.	Compound	JB93844-1 ppbv	Q	DUP ppbv	JB93844-1 Limits
67-66-3	Chloroform	ND	ND	nc	12
56-23-5	Carbon tetrachloride	1.2	0	nc	10
107-06-2	1,2-Dichloroethane	ND	ND	nc	20
CAS No.	Surrogate Recoveries	DUP	JB93844-1	Limits	
460-00-4	4-Bromofluorobenzene	98%	100%	65-128%	

\* = Outside of Control Limits.

**Summa Cleaning Certification**

Job Number: JB93844  
 Account: GCKSS GeoCore, Inc.  
 Project: Agra CCC/USDA

Page 1 of 1

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W431-SCC	5W11013.D	1	04/16/15	ML	n/a	n/a	V5W431

The QC reported here (Summa A727) applies to the following samples:

Batch CP7684 cleaned 04/09/15: JB93844-1(A727), JB93844-3(A802), JB93844-4(A594), JB93844-5(A1143)

Method: TO-15

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-66-3	Chloroform	ND	0.20	0.031	ppbv	ND	ND	0.98	ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.025	ppbv	ND	ND	1.3	ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.026	ppbv	ND	ND	0.81	ug/m3
CAS No.	Surrogate Recoveries	Limits							
460-00-4	4-Bromofluorobenzene	98%	65-128%						

**Summa Cleaning Certification**

Job Number: JB93844  
 Account: GCKSS GeoCore, Inc.  
 Project: Agra CCC/USDA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3W1785-SCC	3W47035.D	1	04/17/15	YMH	n/a	n/a	V3W1785

The QC reported here (Summa A685) applies to the following samples: Method: TO-15

Batch CP7694 cleaned 04/14/15: JB93844-2(A726), JB93844-6(A407)

CAS No.	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
67-66-3	Chloroform	ND	0.20	0.031	ppbv	ND	0.98		ug/m3
56-23-5	Carbon tetrachloride	ND	0.20	0.025	ppbv	ND	1.3		ug/m3
107-06-2	1,2-Dichloroethane	ND	0.20	0.026	ppbv	ND	0.81		ug/m3

CAS No. Surrogate Recoveries Limits

480-00-4 4-Bromofluorobenzene 86% 65-128%

**Instrument Performance Check (BFB)**

Job Number: JB93844  
 Account: GCKSS GeoCore, Inc.  
 Project: Agra CCC/USDA

Sample:	V3W1782-BFB	Injection Date:	04/14/15
Lab File ID:	3W46966.D	Injection Time:	16:36
Instrument ID:	GCM53W		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	16821	16.3	Pass
75	30.0 - 66.0% of mass 95	43120	46.8	Pass
95	Base peak, 100% relative abundance	92125	100.0	Pass
96	5.0 - 9.0% of mass 95	6189	6.72	Pass
173	Less than 2.0% of mass 174	0	0.00	Pass
174	50.0 - 120.0% of mass 95	81181	88.1	Pass
175	4.0 - 9.01% of mass 174	6140	6.66	Pass
176	93.0 - 101.0% of mass 174	79888	86.7	Pass
177	5.0 - 9.0% of mass 176	5212	5.66	Pass

(a) Value is % of mass 174  
 (b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3W1782-IC1782	3W46967.D	04/14/15	17:16	00:40	Initial cal 10
V3W1782-IC1782	3W46968.D	04/14/15	17:56	01:20	Initial cal 5
V3W1782-IC1782	3W46969.D	04/14/15	18:36	02:00	Initial cal 0.5
ZZZZZ	3W46970.D	04/14/15	19:16	02:40	(unrelated sample)
V3W1782-IC1782	3W46970.D	04/14/15	19:16	02:40	Initial cal 0.2
V3W1782-IC1782	3W46971.D	04/14/15	19:56	03:20	Initial cal 20
V3W1782-IC1782	3W46972.D	04/14/15	20:37	04:01	Initial cal 15
ZZZZZ	3W46974.D	04/14/15	21:56	05:20	(unrelated sample)
V3W1782-IC1782	3W46974.D	04/14/15	21:56	05:20	Initial cal 0.1
ZZZZZ	3W46975.D	04/14/15	22:36	06:00	(unrelated sample)
V3W1782-IC1782	3W46975.D	04/14/15	22:36	06:00	Initial cal 0.04
V3W1782-IC1782	3W46976.D	04/14/15	23:17	06:41	Initial cal 30
V3W1782-IC1782	3W46978.D	04/15/15	00:38	08:02	Initial cal 40
V3W1782-ICV1782	3W46980.D	04/15/15	01:57	09:21	Initial cal verification 10

**Instrument Performance Check (BFB)**

Job Number: JB93844  
 Account: GCKSS GeoCore, Inc.  
 Project: Agra CCC/USDA

Sample: V3W1785-BFB  
 Lab File ID: 3W47029.D  
 Instrument ID: GCMS3W  
 Injection Date: 04/17/15  
 Injection Time: 10:04

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	22133	19.2	Pass
75	30.0 - 66.0% of mass 95	54928	47.7	Pass
95	Base peak, 100% relative abundance	115069	100.0	Pass
96	5.0 - 9.0% of mass 95	7710	6.70	Pass
173	Less than 2.0% of mass 174	0	(0.00) a	Pass
174	50.0 - 120.0% of mass 95	103093	89.6	Pass
175	4.0 - 9.01% of mass 174	7657	6.65	Pass
176	93.0 - 101.0% of mass 174	100213	87.1	Pass
177	5.0 - 9.0% of mass 176	6862	5.96	Pass

(a) Value is % of mass 174  
 (b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3W1785-CC1782	3W47030.D	04/17/15	10:54	00:50	Continuing cal 10
V3W1785-BS	3W47031.D	04/17/15	11:34	01:30	Blank Spike
V3W1785-BSD	3W47032.D	04/17/15	12:13	02:09	Blank Spike Duplicate
V3W1785-MB	3W47034.D	04/17/15	13:37	03:33	Method Blank
V3W1785-SCC	3W47035.D	04/17/15	14:18	04:14	Summa Cleaning Certification
ZZZZZZ	3W47036.D	04/17/15	15:35	05:31	(unrelated sample)
ZZZZZZ	3W47037.D	04/17/15	16:15	06:11	(unrelated sample)
ZZZZZZ	3W47038.D	04/17/15	16:54	06:50	(unrelated sample)
JB92621-4	3W47039.D	04/17/15	17:34	07:30	(used for QC only; not part of job JB93844)
JB92621-4DUP	3W47040.D	04/17/15	18:13	08:09	Duplicate
ZZZZZZ	3W47041.D	04/17/15	18:53	08:49	(unrelated sample)
ZZZZZZ	3W47043.D	04/17/15	20:14	10:10	(unrelated sample)
ZZZZZZ	3W47044.D	04/17/15	20:53	10:49	(unrelated sample)
ZZZZZZ	3W47045.D	04/17/15	21:33	11:29	(unrelated sample)
ZZZZZZ	3W47046.D	04/17/15	22:12	12:08	(unrelated sample)
ZZZZZZ	3W47047.D	04/17/15	22:52	12:48	(unrelated sample)
ZZZZZZ	3W47048.D	04/17/15	23:33	13:29	(unrelated sample)
ZZZZZZ	3W47049.D	04/18/15	00:12	14:08	(unrelated sample)
ZZZZZZ	3W47050.D	04/18/15	00:52	14:48	(unrelated sample)
ZZZZZZ	3W47053.D	04/18/15	02:52	16:48	(unrelated sample)
ZZZZZZ	3W47054.D	04/18/15	03:32	17:28	(unrelated sample)

(a) Value is % of mass 174  
 (b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V5W419-IC419	5W10668.D	04/02/15	07:47	00:41	Initial cal 0.04
ZZZZZZ	5W10668.D	04/02/15	07:47	00:41	(unrelated sample)
V5W419-IC419	5W10669.D	04/02/15	08:28	01:22	Initial cal 0.1
ZZZZZZ	5W10669.D	04/02/15	08:28	01:22	(unrelated sample)
V5W419-IC419	5W10670.D	04/02/15	09:10	02:04	Initial cal 0.2
ZZZZZZ	5W10670.D	04/02/15	09:10	02:04	(unrelated sample)
V5W419-IC419	5W10671.D	04/02/15	09:52	02:46	Initial cal 0.5
ZZZZZZ	5W10671.D	04/02/15	09:52	02:46	(unrelated sample)
V5W419-IC419	5W10672.D	04/02/15	10:33	03:27	Initial cal 5
ZZZZZZ	5W10672.D	04/02/15	10:33	03:27	(unrelated sample)
V5W419-IC419	5W10673.D	04/02/15	11:15	04:09	Initial cal 10
ZZZZZZ	5W10673.D	04/02/15	11:15	04:09	(unrelated sample)
V5W419-IC419	5W10674.D	04/02/15	11:57	04:51	Initial cal 20
ZZZZZZ	5W10674.D	04/02/15	11:57	04:51	(unrelated sample)
V5W419-IC419	5W10675.D	04/02/15	12:41	05:35	Initial cal 30
ZZZZZZ	5W10675.D	04/02/15	12:41	05:35	(unrelated sample)
V5W419-ICV419	5W10677.D	04/02/15	14:10	07:04	Initial cal 40
ZZZZZZ	5W10677.D	04/02/15	14:10	07:04	(unrelated sample)
V5W419-ICV419	5W10679.D	04/02/15	15:35	08:29	Initial cal verification 10
ZZZZZZ	5W10679.D	04/02/15	15:35	08:29	(unrelated sample)

(a) Value is % of mass 174  
 (b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

**Instrument Performance Check (BFB)**

Job Number: JB93844  
 Account: GCKSS GeoCore, Inc.  
 Project: Agra CCC/USDA

Sample: V5W419-BFB  
 Lab File ID: 5W10667.D  
 Instrument ID: GCMS3W  
 Injection Date: 04/02/15  
 Injection Time: 07:06

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	27296	15.6	Pass
75	30.0 - 66.0% of mass 95	76888	44.1	Pass
95	Base peak, 100% relative abundance	174507	100.0	Pass
96	5.0 - 9.0% of mass 95	11427	6.55	Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) a
174	50.0 - 120.0% of mass 95	146005	83.7	Pass
175	4.0 - 9.0% of mass 174	10579	6.06	Pass
176	93.0 - 101.0% of mass 174	142315	81.6	Pass
177	5.0 - 9.0% of mass 176	9281	5.32	Pass

(a) Value is % of mass 174  
 (b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Instrument Performance Check (BFB)

Job Number: JB93844  
 Account: GCKSS GeoCore, Inc.  
 Project: Agra CCC/USDA

Sample: V5W431-BFB  
 Lab File ID: 5W11004.D  
 Instrument ID: GCMSSW

Injection Date: 04/16/15  
 Injection Time: 06:59

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	19866	14.5	Pass
75	30.0 - 66.0% of mass 95	58389	42.7	Pass
95	Base peak, 100% relative abundance	136597	100.0	Pass
96	5.0 - 9.0% of mass 95	8886	6.51	Pass
173	Less than 2.0% of mass 174	0	(0.00) a	Pass
174	50.0 - 120.0% of mass 95	126781	92.8	Pass
175	4.0 - 9.01% of mass 174	9421	(7.43) a	Pass
176	93.0 - 101.0% of mass 174	122938	90.0	Pass
177	5.0 - 9.0% of mass 176	8013	(6.52) b	Pass

(a) Value is % of mass 174  
 (b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID	Pass/Fail
ZZZZZZ	5W11004.D	04/16/15	06:59	00:00	(unrelated sample)	Pass
V5W431-CC419	5W11005.D	04/16/15	07:47	00:48	Continuing cal 10	Pass
V5W431-BS	5W11006.D	04/16/15	08:29	01:30	Blank Spike	Pass
V5W431-BSD	5W11007.D	04/16/15	09:17	02:18	Blank Spike Duplicate	Pass
V5W431-MB	5W11009.D	04/16/15	10:47	03:48	Method Blank	Pass
ZZZZZZ	5W11010.D	04/16/15	11:29	04:30	(unrelated sample)	Pass
V5W431-SCC	5W11011.D	04/16/15	13:06	06:07	Summa Cleaning Certification	Pass
V5W431-SCC	5W11013.D	04/16/15	14:37	07:38	Summa Cleaning Certification	Pass
ZZZZZZ	5W11014.D	04/16/15	15:18	08:19	(unrelated sample)	Pass
ZZZZZZ	5W11015.D	04/16/15	16:00	09:01	(unrelated sample)	Pass
ZZZZZZ	5W11016.D	04/16/15	16:40	09:41	(unrelated sample)	Pass
ZZZZZZ	5W11017.D	04/16/15	17:21	10:22	(unrelated sample)	Pass
JB92468-1	5W11019.D	04/16/15	18:48	11:49	(used for QC only; not part of job JB93844)	Pass
JB92468-1DUP	5W11020.D	04/16/15	19:30	12:31	Duplicate	Pass
ZZZZZZ	5W11021.D	04/16/15	20:12	13:13	(unrelated sample)	Pass
ZZZZZZ	5W11022.D	04/16/15	20:55	13:56	(unrelated sample)	Pass
ZZZZZZ	5W11023.D	04/16/15	21:38	14:39	(unrelated sample)	Pass

Instrument Performance Check (BFB)

Job Number: JB93844  
 Account: GCKSS GeoCore, Inc.  
 Project: Agra CCC/USDA

Sample: V5W446-BFB  
 Lab File ID: 5W11376.D  
 Instrument ID: GCMSSW

Injection Date: 05/05/15  
 Injection Time: 06:40

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	8.0 - 40.0% of mass 95	26170	15.8	Pass
75	30.0 - 66.0% of mass 95	73530	44.4	Pass
95	Base peak, 100% relative abundance	165717	100.0	Pass
96	5.0 - 9.0% of mass 95	10930	6.60	Pass
173	Less than 2.0% of mass 174	0	(0.00) a	Pass
174	50.0 - 120.0% of mass 95	157184	94.9	Pass
175	4.0 - 9.01% of mass 174	11821	7.13	Pass
176	93.0 - 101.0% of mass 174	152682	92.1	Pass
177	5.0 - 9.0% of mass 176	9874	5.96	Pass

(a) Value is % of mass 174  
 (b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID	Pass/Fail
V5W446-CC419	5W11377.D	05/05/15	07:29	00:49	Continuing cal 10	Pass
V5W446-BS	5W11378.D	05/05/15	08:12	01:32	Blank Spike	Pass
V5W446-BSD	5W11379.D	05/05/15	08:54	02:14	Blank Spike Duplicate	Pass
V5W446-MB	5W11381.D	05/05/15	10:24	03:44	Method Blank	Pass
ZZZZZZ	5W11382.D	05/05/15	11:06	04:26	(unrelated sample)	Pass
JB93844-1	5W11383.D	05/05/15	11:48	05:08	SVE-1	Pass
JB93844-1DUP	5W11384.D	05/05/15	12:30	05:50	Duplicate	Pass
JB93844-2	5W11385.D	05/05/15	13:33	06:53	SVE-2	Pass
JB93844-3	5W11386.D	05/05/15	14:16	07:36	SVE-3	Pass
JB93844-4	5W11387.D	05/05/15	14:59	08:19	SVE-4	Pass
JB93844-5	5W11388.D	05/05/15	15:42	09:02	SVE-5	Pass
JB93844-6	5W11389.D	05/05/15	16:24	09:44	SVE MANIFOLD	Pass

**Volatile Surrogate Recovery Summary**

Job Number: JB93844  
 Account: GCKSS GeoCore, Inc.  
 Project: Agra CCC/USDA

Method: TO-15 Matrix: AIR

Samples and QC shown here apply to the above method

5.6.1 **5**

Lab Sample ID	Lab File ID	S1
JB93844-1	5W11383.D	100
JB93844-2	5W11385.D	100
JB93844-3	5W11386.D	98
JB93844-4	5W11387.D	98
JB93844-5	5W11388.D	97
JB93844-6	5W11389.D	98
JB93844-IDUP	5W11384.D	98
V3W1785-SCC	3W47035.D	86
V5W431-SCC	5W11013.D	98
V5W446-BS	5W11378.D	102
V5W446-BSD	5W11379.D	101
V5W446-MB	5W11381.D	99
V3W1785-BS	3W47031.D	106
V3W1785-BSD	3W47032.D	105
V3W1785-MB	3W47034.D	86
V5W431-BS	5W11006.D	104
V5W431-BSD	5W11007.D	106
V5W431-MB	5W11009.D	99

Surrogate Compounds Recovery Limits

S1 = 4-Bromofluorobenzene 65-128%

**APPENDIX 2**

**FIELD NOTES**

**AND**

**SUPPORTING DOCUMENTATION**



Facility Name: Former Agra CCC/USDA  
 Facility Address: 671 Railroad Ave, Agra, Kansas  
 Consultant: GreenField Contractors, Inc.  
 Reporting Period: 4-1-15 thru 4-30-15  
 Days In Reporting Period: \_\_\_\_\_  
 Field Sheet Revision Date: \_\_\_\_\_

Operating Status: Arrive On Off Departure On Off  
 Pre KO Tank Vacuum (H2O) 45.6  
 Pre/Post Filter Vacuum (H2O) 57.1  
 Show On Air Flowrate (cfm) closed  
 Cumulative Flowrate Sum of SVE Wells 176  
 O2 Readings (%) 20.9  
 TPH (PID) Readings (ppm) 1.0

Inspector: Tom Deak  
 Inspection Date: 4-30-15  
 Inspection Time: 14:45  
 Electrical Meter Reading: 78176

SVE UNIT	Vac @ Manifold (H2O)	Direct Read Flowrate (cfm) 2" line	O2 Readings (%)	CO2 Readings (%)	TPH/Crager Readings (ppm)	Vac @ Wellhead (H2O)
SVE-1	7.1	50	20.9	1.0	1.0	2.9
SVE-2	7.3	50	20.9	1.0	1.0	3.3
SVE-3	16.7	76	20.9	1.0	1.0	7.5
SVE-4						
SVE-5						

Design Parameters for Vapor Extraction System:  
 Reporting Period Parameters:  
 Blower Operation:  
 Hour Meter Reading:  
 Design Parameters for Air Sparge System:  
 Reporting Period Parameters:  
 Blower Operation:  
 Hour Meter Reading:

Operating Status: Arrive On Off Departure On Off

SPARGE UNIT	Pressure (psi)	Flow Rate (cfm)	Bleed Off (% Open)	Pre Air Temp (deg. F)	Post Air Temp (deg. F)
	15.2	14.4	closed	111	

SPARGE WELL FIELD DATA

SPARGE WELL	Pressure @ Manifold (psi)	Flow Rate (cfm)	Direct Read Flow Rate (cfm)
AS-1	4.20	3.62	6.2
AS-2	7.52	6.98	6.2
AS-3	10+	10+	2.0
AS-4			
AS-5			

SPARGE UNIT FIELD DATA

SPARGE UNIT	Pressure @ Manifold (psi)	Flow Rate (cfm)	Bleed Off (% Open)	Pre Air Temp (deg. F)	Post Air Temp (deg. F)
	15.2	14.4	closed	111	

SPARGE WELL FIELD DATA

SPARGE WELL	Pressure @ Manifold (psi)	Flow Rate (cfm)	Direct Read Flow Rate (cfm)
AS-1	4.20	3.62	6.2
AS-2	7.52	6.98	6.2
AS-3	10+	10+	2.0
AS-4			
AS-5			

GROUNDWATER ELEVATIONS

Well I.D.	Temp. (50-55)	Depth to Water (TOD)	Water Level Elevation	Free Phase Prod. Elev.	Free Phase Prod. Thick.	D.O.
GW-1	42.3	41.45	41.45			
GW-3	42.3	41.45	41.45			
GW-4	42.3	41.45	41.45			

SYSTEM DOWN TIME SUMMARY  
 Explanation for Down Time (Indicate Corrective Measures Taken)

REMEDATION SYSTEM MAINTENANCE RECORD

Date of Changes	Description of Work Performed	Performed by
4-30-15	K.O. Tank Drained Filters SVE Replaced A/S Blower Grease Added Cleaned SVE lines Yes Cleaned Flowmeters Yes Used wendelater around trailer Yes Sweep trailer Yes Sensaphone Surge Protector Good Adjusted Air dilution: From: closed To: closed	EMDB T. Deak

Check: Quantity  
 Becker: 3 60

AIR Sparge vane measurement minimum 28 MM

SVE Filter Solberg  
 Air Sparge Filter

Design Parameters for Vapor Extraction System:  
 Reporting Period Parameters:  
 Blower Operation:  
 Hour Meter Reading:  
 Design Parameters for Air Sparge System:  
 Reporting Period Parameters:  
 Blower Operation:  
 Hour Meter Reading:

AGRA CCCIUSDA WELL INFORMATION <u>Tiberck</u>							Project # 1481	
Well	Total Depth (feet)	Permanent Tag Number	Temporary Tag Number	DATE: 4:30-15	SWL	Sample Time	Dissolved Oxygen (mg/L)	Volume Purged (Gallons)
GW-1			423955		41.95	11:20	8.16	1.0
GW-3			423752		41.92	13:00	8.51	1.0
GW-4			423558		42.28	12:40	8.74	1.0

Accutest QUARTERLY Accutest Quote # B56/2009/546  
 Sample Analysis: Carbon Tetrachloride, Chloroform, and 1,2 DCA (8260)  
 Record Dissolved Oxygen reading Quarterly

5-4-2  
 Pre KO Pre/Post Filter/Vac. Nil. Accu. Flow 193 20.9 10 10 10 10  
 38.1 51 58 closed 193 20.9 10 10 10 10  
 VE-1 man/Vac Flow 22 CO2 TPH Well/Vac. 2.6  
 5.9 44 20.9 10 10 2.6  
 VE-2 6.2 44 20.9 10 10 3.2  
 1E-4 23.5 105 20.9 10 10 9.5

PSI Flow bil. Pre/Post Temp  
 10.8 17.9 closed 114°  
 man PSI Flow  
 3.96 3.65 4.5  
 7.13 6.95 3.5  
 7.91 6.72 9.9  
 Pre KO. Pre/Post Filter/Vac bil. Flow  
 38.9 50 57 closed 191 20.9 10 10  
 man/Vac Flow 22 CO2 TPH Well/Vac.  
 5.7 44 20.9 10 10 2.6  
 6.1 44 20.9 10 10 3.0  
 23.5 103 20.9 10 10 8.3  
 PSI Flow bil. Pre/Post Temp  
 10.9 17.5 closed 109°  
 man PSI Flow  
 3.97 3.65 4.7  
 1.1 1.1 1.1

Tiberck 4:30-15 AGRA CCCIUSDA AIR SAMPLES INFORMATION			
Well	Time Collected		
SVE-1	10:20	A727	
SVE-2	10:30	A726	
SVE-3	10:40	A802	
SVE-4	11:00	A594	
SVE-5	11:10	A1143	
SVE Manifold	10:50	A407	

Columbia Analytical Service QUARTERLY  
 Collect one Summa Canister sample from each SVE Manifold leg and one from the overall SVE manifold. 6 total. Analyze for Carbon Tetrachloride, Chloroform, & 1,2 DCA via TO-15.

MONTHLY SVE SCREEN EXPOSURE CALCULATION SHEET

SVE Well	Depth To Water Feet BGS (Rim)	Wellhead Vacuum (in./FT H <sub>2</sub> O)	Minus	Depth to Top of Screen	Equals	Length of Screen Exposed (FL)
SVE-1	$600 - 1 + 60 - 4 + 2 = 42.12$	24	-	20	=	21.88
SVE-2		28	-	20	=	21.84
SVE-3		63	-	20	=	21.49
SVE-4		29	-	20	=	21.33
SVE-2		69	-	20	=	21.43

NOTE:  
 1 PSI = 2.77 INCHES OF WATER  
 1 INCH HG = 13.6 INCHES OF WATER  
 Positive screen value equals length of screen exposed  
 Negative screen value equals length of screen flooded

Measurements Collected By: J. Doak

Date Measurements Collected: 4-30-15

Comments

MONTHLY SPARGE SCREEN EXPOSURE CALCULATION SHEET

AS Well	Depth to Top of Sparge Screen (FT)	Adjusted SWL	Adjusted SWL Minus	Thins	Calculation to Determine Amt. PSI Needed	Wellhead Pressure Needed to Overcome Water Column
AS-1	51.37	42.12	X	0.634	=	4.01
AS-2	58		X	0.634	=	6.89
AS-3	53.9		X	0.634	=	5.11
AS-4	58		X	0.634	=	6.89
AS-5	56.37		X	0.634	=	6.14

Measurements Collected By: J. Doak

Date Measurements Collected: 4-30-15

Comments

Project Name: Former Aggra CCC/USDA / Aggr. Ks.  
 Project Code: 1491

# EQUIPMENT BUILDING LOG-IN SHEET

ANYONE ENTERING THIS BUILDING FOR ANY REASON MUST MAKE A LOG ENTRY  
 \*If you do not know where the hour meters are located or how to read them, you make leave this space blank.\*

Printed Name	Company/Agency	Date	Status ON/OFF	*Hour Meter Reading for each Piece of Equipment	Reason for Visit	Comments
Tim Borch	Geolore	1/3/15	on/off	15VE-49017.9		Draind KA 15110-61644 disclosed
Tim Borch	Geolore	2/3/15	on/off	15VE-49485.5		Repacked Ks, Vases & Filters disclosed
Tim Borch	Geolore	4/1/15	on/off	15VE-45672.3		Draind KCP disclosed
Tim Borch	Geolore	4/1/15	on/off	3AS-37589.3		KE empty disclosed
Tim Borch	Geolore	4/30/15	on/off	15VE-46392.0		KE empty disclosed
Tim Borch	Geolore	4/30/15	on/off	3AS-38288.9		KE empty 14145-78176 disclosed

Ref: NV-1/28/2014-10 Date: 20Apr15  
 SHIPPING: 0.00  
 SPECIAL: 0.00  
 Hgt: 14.25 LBS  
 HANDLING: 0.00  
 DV: 1000.00 TOTAL: 0.00

## CHAIN OF

### Air Sampling Field Data Sheet

ACQUEST LABORATORIES

Company Name: Aggra CCC/USDA State: KS Zip: 66508  
 Project Name: Aggra CCC/USDA  
 Street: Aggra  
 City: Aggra  
 E-mail: Aggra  
 Project # 1491  
 Client Purchase Order # 1491

Standard TO-15 Reporting List  
 Urban Attach outside  
 Chloroform + 12xct

Field ID / Point of Collection	Air Type	Sampling Equipment Info	Start Sampling Information	Stop Sampling Information
SVC-1	Indoor (Ball Valve)	Canister Serial # <u>4737</u>	Date <u>4/20/15</u> Time <u>10:30</u>	Date <u>4/20/15</u> Time <u>10:30</u>
SVC-2	Indoor (Ball Valve)	Canister Serial # <u>4726</u>	Date <u>4/20/15</u> Time <u>10:40</u>	Date <u>4/20/15</u> Time <u>10:40</u>
SVC-3	Indoor (Ball Valve)	Canister Serial # <u>4803</u>	Date <u>4/20/15</u> Time <u>11:00</u>	Date <u>4/20/15</u> Time <u>11:00</u>
SVC-4	Indoor (Ball Valve)	Canister Serial # <u>4594</u>	Date <u>4/20/15</u> Time <u>11:10</u>	Date <u>4/20/15</u> Time <u>11:10</u>
SVC-5	Indoor (Ball Valve)	Canister Serial # <u>4143</u>	Date <u>4/20/15</u> Time <u>10:50</u>	Date <u>4/20/15</u> Time <u>10:50</u>
SVC - Monitor Field	Indoor (Ball Valve)	Canister Serial # <u>4407</u>	Date <u>4/20/15</u> Time <u>10:50</u>	Date <u>4/20/15</u> Time <u>10:50</u>

Received By: EdFx Date Time: 4/20/15 12:41  
 Received By: EdFx Date Time: 4/20/15 12:41  
 Received By: EdFx Date Time: 4/20/15 12:41  
 Received By: EdFx Date Time: 4/20/15 12:41



MONTHLY OPERATION MONITORING & MAINTENANCE REPORT

Former Agra CCC/USDA  
 671 Railroad Ave  
 Agra, Kansas  
 GreenField Contractors, Inc.  
 Tim Pice  
 2-27-15 thru 4-1-15

Facility Name:  
 Facility Address:  
 Consultant:  
 Consultant Project Mgr:  
 Reporting Period:  
 Days in Reporting Period:  
 Field Sheet Revision Date:

Operating Status: Arrival (On) / Off, Departure (On) / Off  
 Pre KO Tank Vacuum (H2O) 46.2, 57.166, closed  
 Oxygen Air Flowrate (cfm) 19.5, 20.9  
 Cumulative Flowrate (cfm) 19.5, 20.9  
 O2 Readings (%) 20.9, 20.9, 20.9  
 TPH (PID) Readings (ppm) 1.0, 1.0, 1.0

Proj. # 1481  
 Inspector: Tim Pice  
 Inspection Date: 4-1-15  
 Inspection Time: 11:05  
 Electrical Meter Reading: 73189

VAPOR EXTRACTION/INJECTION INFORMATION

Well ID	Temp	TOC	Depth to Water (ft)	Water Level Elevation	Free Phase Prod. Elev.	Free Phase Prod. Thick.	D.O.
GW-1	43.567	41.73	41.73				0.0
GW-3	43.634	41.73					
GW-4	43.652	42.24					

Design Parameters for Vapor Extraction System:  
 Reporting Period Parameters:  
 Blower Operation:  
 Hour Meter Reading: 44851.5

Design Parameters for Air Sparge System:  
 Reporting Period Parameters:  
 Blower Operation:  
 Hour Meter Reading: 36798.5

SPARGE UNTLEFIELD DATA

SPARGE UNIT	Pressure (psi)	Flow Rate (cfm)	Bleed Off (% Open)	Pre Air Temp (deg. F)	Post Air Temp (deg. F)
AS-1	15.5	14.8	closed	116°	

SPARGE WELL FIELD DATA

SPARGE WELL	Pressure @ Manifold (psi)	Flow Rate (cfm)	Direct Read Wellhead (psi)	Direct Read Flow Rate (cfm)
AS-1	4.27	3.70	6.5	6.5
AS-2	7.64	7.07	6.5	6.5
AS-3	10+	10+	1.8	
AS-4				
AS-5				

SYSTEM DOWN TIME SUMMARY

Explanation for Down Time (Indicate Corrective Measures Taken)

DATE	From	To	Reason
4-1-15			

REMEDATION SYSTEM MAINTENANCE RECORD

Description of Work Performed	Performed by
K.O. Tank Drained	Empty
Filters SVE Replaced	T. Dorch
A/SP Blower Grease Added	
Cleaned SVE lines	Yes
Cleaned Flowmeters	Yes
Used weedwater around trailer	Yes
Swept trailer	Yes
Sensaphone Surge Protector	Yes
Adjusted Air dilution	Front: closed, To: closed

Check Quarterly Vane Width: Becker 3.60

AIR Sparge vane measurement minimum 25 MM

SVE Filter	Solberg	Need
Air Sparge Filter		

Former Agra CCC/USDA Agra, Kansas

MONTHLY SVE SCREEN EXPOSURE CALCULATION SHEET

SVE Well	Depth To Water Feet BGS (Rim)	Wellhead Vacuum (in./FL H <sub>2</sub> O)	Minus	Depth to Top of Screen	Length of Screen Exposed (Ft.)
SVE-1	6-11 + 6-4 + 2 52.01	27		20	21.74
SVE-2		22		20	21.78
SVE-3		56		20	21.45
SVE-4				20	
SVE-2				20	

NOTE:  
 1 PSI = 2.77 INCHES OF WATER  
 1 INCH HG = 13.6 INCHES OF WATER  
 Positive screen value equals length of screen exposed  
 Negative screen value equals length of screen flooded

Measurements Collected By: T. Deak

Date Measurements Collected: 4-1-15

Comments

Former Agra CCC/USDA

MONTHLY SPARGE SCREEN EXPOSURE CALCULATION SHEET

AS Well	Depth to Water below TOC Feet	Plus / Minus	Difference in TOC Elevation Between MW- and AS Well	Adjusted SWL Equals	Depth to Top of Sparge Screen (Ft.)	Minus	Adjusted SWL	Times	Calculation to Determine PSI Needed	Water Column Needed	Water Column
AS-1	51.37	-			51.37	-	42.0	X	0.634		4.06
AS-2	58	-			58	-		X	0.634		6.94
AS-3	53.9	-			53.9	-		X	0.634		5.16
AS-4	58	-			58	-		X	0.634		6.94
AS-5	58.27	-			58.27	-		X	0.634		6.19

Measurements Collected By: T. Deak

Date Measurements Collected: 4-1-15

Comments

MONTHLY OPERATION MONITORING & MAINTENANCE REPORT

13CM

Former Agra CCC/USDA

Proj. # 1481

Facility Name: Former Agra CCC/USDA  
 Facility Address: 671 Railroad Ave, Agra, Kansas  
 Consultant: GreenField Contractors, Inc.  
 Consultant Project Mgr: Tim Pace  
 Reporting Period: 5-23-15 thru 2-27-15

PROJ. # 1481  
 Inspector: Tim Dorch  
 Inspection Date: 2-27-15  
 Inspection Time: 11:15  
 Electrical Meter Reading: 67549

VAPOR EXTRACTION/INJECTION INFORMATION

Design Parameters for Vapor Extraction System:  
 Reporting Period Parameters: 250 SCFM "H2O 40  
 180 SCFM "H2O 47.7 Cycling  
 X Continual Previous 49851.5 Present  
 44017.9  
 Design Parameters for Air Sparge System:  
 Reporting Period Parameters: 25 SCFM 12 PSI  
 16.9 SCFM 16.5 PSI  
 35964.8 SCFM Previous 36788.5 Present

GROUNDWATER ELEVATIONS

Well ID	Temp. (F)	TCU Elevation	Depth to Water Level	Water Level Elevation	Free Phase Prod. Elev.	Free Phase Prod. Thick.	D/G
GW-1	41.87	41.87	41.87				
GW-3	41.84	41.84					
GW-4	43.69	42.11					

SYSTEM DOWN TIME SUMMARY

DATE	From	To	Explanation for Down Time (Indicate Corrective Measures Taken)

REMEDATION SYSTEM MAINTENANCE RECORD

Date of Change	Description of Work Performed	Performed by
2-27-15	K.O. Tank: Replaced Filters SVE: Replaced ASP Blower Grease: Added Cleared SVE lines: Yes Cleared Flowmeters: Yes Used wedge/tear around trailer: Yes Swept trailer: Yes Sensaphone Surge Protector: Bad Adjusted Air dilution: From: closed To: closed	Tim Dorch

Check Quarterly Vane Width: Becker 3.60

SVE Filter	Silberg	Need
Air Sparge Filter		

Operating Status: Arrival On/Off, Pre/Post, Checkin Air, Departure On/Off

SVE UNIT	Pre KO Tank Vacuum ("H2O)	Pre/Post Filter Vacuum ("H2O)	Checkin Air Flowrate (cfm)	Cumulative Flowrate (cfm) Sum of SVE Wells	O2 Readings (%)	TPH/Drager Readings (ppm)	CO2 Readings (%)	TPH (PID) Readings (ppm)
	47.7	60.67	closed	180	20.9	20.9	1.0	1.0

SVE WELL FIELD DATA

SVE WELL	Vac @ Manifold ("H2O)	Direct Read Flowrate (cfm) 2" line	O2 Readings (%)	CO2 Readings (%)	TPH/Drager Readings (ppm)	Vac @ Wellhead ("H2O)
SVE-1	3.0	50	20.9	1.0	1.0	2.5
SVE-2	6.8	50	20.9	1.0	1.0	2.2
SVE-3	17.8	80	20.9	1.0	1.0	8.9
SVE-4						
SVE-5						

SPARGE UNIT-FIELD DATA

Operating Status: Arrival On/Off, Departure On/Off

SPARGE UNIT	Pressure (psi)	Flow Rate (cfm)	Bleed Off (% Open)	Pre Air Temp. (deg. F)	Post Air Temp. (deg. F)
	16.5	16.9	closed	91°	

SPARGE WELL FIELD DATA

SPARGE WELL	Pressure @ Manifold (psi)	Pressure @ Wellhead (psi)	Direct Read Flow Rate (cfm)
AS-1	4.34	3.49	7.9
AS-2	7.56	6.79	7.0
AS-3	10+	10+	2.0
AS-4			
AS-5			



Former Agra CCC/USDA Agra, Kansas

MONTHLY SVE SCREEN EXPOSURE CALCULATION SHEET

SVE Well	Depth To Water Feet BGS (Rim)	Wellhead Vacuum (in./Ft. H <sub>2</sub> O)	Minus	Depth to Top of Screen	Length of Screen Exposed (FT.)
SVE-1	64-1 + 64-1 + 2 41.99	21		20	21.78
SVE-2		18		20	21.81
SVE-3		21		20	21.25
SVE-4				20	
SVE-2				20	

NOTE:  
 1 PSI = 27.7 INCHES OF WATER  
 1 INCH HG = 13.6 INCHES OF WATER  
 Positive screen value equals length of screen exposed  
 Negative screen value equals length of screen flooded

Measurements Collected By: T. Deak  
 Date Measurements Collected: 2-27-15

Comments:

Former Agra CCC/USDA

MONTHLY SPARGE SCREEN EXPOSURE CALCULATION SHEET

AS Well	Depth to Water below TOC Feet	Plus / Minus	Difference in TOC Elevation Between MV- and AS Well	Adjusted SWL	Depth to Top of Sparge Screen (FT)	Adjusted SWL Minus	Adjusted SWL	Times	Calculated to Determine Amt. PSI Needed	Estimated Pressure Needed to Flow Water Column
AS-1	51.37	-			51.37	-	41.99	X	0.654	41.07
AS-2	58	-			58	-		X	0.634	6.95
AS-3	53.9	-			53.9	-		X	0.634	5.17
AS-4	59	-			59	-		X	0.634	6.95
AS-5	58.27	-			58.27	-		X	0.634	6.20

Measurements Collected By: T. Deak

Date Measurements Collected: 2-27-15

Comments:

**Supplement 7:**

**GreenField Report for Monthly OMM Event on May 30, 2015**



CONTRACTORS, INC.

Post Office Box 677  
Salina, Kansas 67402-0677  
Phone (785) 822-0900  
Fax (785) 826-9508

ENVIRONMENTAL PROFESSIONALS

June 2, 2015

Lorraine M. LaFreniere, Ph.D., Manager  
Applied Geosciences and Environmental Management Section  
Environmental Science Division  
Argonne National Laboratory  
9700 South Cass Avenue, Building 203  
Argonne, Illinois 60439-4843

**RE: Former CCC/USDA Site, Main & Railroad Streets, Agra, Kansas  
Fifteenth Monthly OMM Report of the Third Scope of OMM Services**

Ms. LaFreniere,

GreenField Contractors, Inc. is submitting the attached copy of field notes from the May 30, 2015 monthly OMM event conducted at the Agra CCC/USDA remedial site. The soil vapor extraction (SVE) system was operating at a cumulative airflow rate of 175 standard cubic feet per minute (scfm) and a vacuum of 48.9 inches of water. Operating parameters were collected with SVE-1 through 3 operating. The air sparge system was operating at a pressure of 15.5 psi and cumulative airflow rate of 14.3 scfm. Operating parameters were collected with AS-1 through 3 operating. Wellhead pressures ranged from 3.63 to greater than 10 psi. Please contact me if you have any question concerning this report or the remedial project in general.

Sincerely,

A handwritten signature in black ink that reads "Melisa D. McElwee". The signature is written in a cursive style.

Melisa McElwee  
GreenField Contractors, Inc.

C: 1491 Report File

MONTHLY OPERATION MONITORING & MAINTENANCE REPORT

Facility Name: Former Agra CCC/USDA  
 Facility Address: 671 Railroad Ave  
Agra, Kansas

PROJ. # 1491

Consultant: GreenField Contractors, Inc.  
 Consultant Project Mgr: Tim Pace

Inspector: Tim Deak

Reporting Period: 4-30-15 thru 5-30-15

Inspection Date: 5-30-15

Days in Reporting Period: \_\_\_\_\_

Inspection Time: 11:20

Field Sheet Revision Date: \_\_\_\_\_

Electrical Meter Reading: 83285

VAPOR EXTRACTION/INJECTION INFORMATION				
Design Parameters for Vapor Extraction System:	250	SCFM	40	"H2O
Reporting Period Parameters:	<u>175</u>	SCFM	<u>48.9</u>	"H2O
Blower Operation:	X	Continual		Cycling
Hour Meter Reading:	<u>46342.0</u>	Previous	<u>47058.7</u>	Present
Design Parameters for Air Sparge System:	25	SCFM	12	PSI
Reporting Period Parameters:	<u>14.3</u>	SCFM	<u>15.5</u>	PSI
Blower Operation:	X	Continual		Cycling
Hour Meter Reading:	<u>38288.9</u>	Previous	<u>39005.6</u>	Present

GROUNDWATER ELEVATIONS									
Well I.D. No.	KDHE Site I.D.	Temp. Tag No.	TOC Elevation	Depth to Water (TOC)	Depth to Product (TOC)	Water Level Elevation	Free Phase Prod. Elev.	Free Phase Prod. Thick.	D.O.
GW-1		<u>403012</u>		<u>42.08</u>					
GW-3		<u>413981</u>		<u>42.09</u>					
GW-4		<u>423769</u>		<u>41.79</u>					

SYSTEM DOWN TIME SUMMARY		
DATES		Explanation for Down Time
From	To	(Indicate Corrective Measures Taken)
<u>5-30-15</u>	<u>5-30-15</u>	

REMEDIATION SYSTEM MAINTENANCE RECORD				
Date of Changes	Description of Work Performed			Performed by
<u>5-30-15</u>	K.O. Tank	Drained	K.O. Meter:	<u>(Empty)</u>
	Filters SVE	<u>Checked</u>	Replaced	Cleaned
	A/SP Blower Grease	<u>Checked</u>	Added	Cleaned
	Cleared SVE lines		Yes	<u>(No)</u>
	Cleaned Flowmeters		Yes	<u>(No)</u>
	Used weedeater around trailer		<u>(Yes)</u>	No
	Swept trailer		<u>(Yes)</u>	No
	Sensaphone Surge Protector		<u>(Good)</u>	Bad
	Adjusted Air dilution:	From: <u>closed</u>	To: <u>closed</u>	
	<u>Check Quarterly</u> Becker 3.60	Vane Width:		

Need				
SVE Filter	Solberg			
Air Sparge Filter				

T. Dorch 530-15

Former Agra CCC/USDA

Proj. # 1491

Operating Status: Arrival On/Off Departure On/Off

SVE UNIT	Pre KO Tank Vacuum ("H2O)	Pre/Post Filter Vacuum ("H2O)	Station Air Flowrate (cfm)	Cumulative Flowrate (cfm) Sum of SVE Wells	O2 Readings (%)	CO2 Readings (%)	TPH (PID) Readings (ppm)
	48.9	60/66	closed	175	20.9	.0	.0

SVE WELL FIELD DATA

SVE WELL	Vac. @ Manifold ("H2O)	Direct Read Flowrate (cfm) 2" line	O2 Readings (%)	CO2 Readings (%)	TPH/Drager Readings (ppm)	Vac. @ Wellhead ("H2O)
SVE-1	9.3	50	20.9	.0	.0	4.8
SVE-2	10.2	50	20.9	.0	.0	5.4
SVE-3	20.2	75	20.9	.0	.0	10.9
SVE-4						
SVE-5						

SPARGE UNIT FIELD DATA

Operating Status: Arrival On/Off Departure On/Off

SPARGE UNIT	Pressure (psi)	Flow Rate (cfm)	Bleed Off (% Open)	Pre Air Temp. (deg. F)	Post Air Temp. (deg. F)
	15.5	14.3	closed	112°	

SPARGE WELL FIELD DATA

SPARGE WELL	Pressure @ Manifold (psi)	Pressure @ Wellhead (psi)	Direct Read Flow Rate (cfm)
AS-1	4.33	3.63	6.3
AS-2	7.70	7.01	6.0
AS-3	10+	10+	2.0
AS-4			
AS-5			

Former Agra CCC/USDA Agra, Kansas

MONTHLY SVE SCREEN EXPOSURE CALCULATION SHEET

SVE Well	Depth To Water Feet BGS (Rim)	Minus	Wellhead Vacuum (In./Ft. H2O)	Minus	Depth to Top of Screen	Equals	Length of Screen Exposed (Ft.)
SVE-1	6w-1 + 6w-4 41.94	-	.4	-	20	=	21.54
SVE-2		-	.45	-	20	=	21.49
SVE-3		-	.91	-	20	=	21.03
SVE-4		-		-	20	=	
SVE-2		-		-	20	=	

NOTE: 1 PSI = 27.7 INCHES OF WATER  
 1 INCH HG = 13.6 INCHES OF WATER  
 Positive screen value equals length of screen exposed  
 Negative screen value equals length of screen flooded

Measurements Collected By T. Dech

Date Measurements Collected 5-30-15

Comments \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Former Agra CCC/USDA

MONTHLY SPARGE SCREEN EXPOSURE CALCULATION SHEET

AS Well	Depth to Water below TOC Feet	Plus / Minus	Difference in TOC Elevation Between MW- and AS Well	Adjusted SWL	Depth to Top of Sparge Screen (Ft)	Adjusted SWL	Times	Calculation to Determine Amt. PSI Needed	Wellhead Pressure Needed to Overcome Water Column
AS-1	-	=			51.37	- 41.94	X	0.434 =	4.09
AS-2	-	=			58	-	X	0.434 =	6.57
AS-3	-	=			53.9	-	X	0.434 =	5.19
AS-4	-	=			58	-	X	0.434 =	6.97
AS-5	-	=			56.27	-	X	0.434 =	6.22

Measurements Collected By T. Deak

Date Measurements Collected 5-30-15

Comments

**Supplement 8:**

**GreenField Report for Monthly OMM Event on June 29, 2015**





July 8, 2015

Lorraine M. LaFreniere, Ph.D., Manager  
Applied Geosciences and Environmental Management Section  
Environmental Science Division  
Argonne National Laboratory  
9700 South Cass Avenue, Building 203  
Argonne, Illinois 60439-4843

**RE: Former CCC/USDA Site, Main & Railroad Streets, Agra, Kansas  
Sixteenth Monthly OMM Report of the Third Scope of OMM Services**

Ms. LaFreniere,

GreenField Contractors, Inc. is submitting the attached copy of field notes from the June 29, 2015 monthly OMM event conducted at the Agra CCC/USDA remedial site. The soil vapor extraction (SVE) system was operating at a cumulative airflow rate of 175 standard cubic feet per minute (scfm) and a vacuum of 46.1 inches of water. Operating parameters were collected with SVE-1 through 3 operating. The air sparge system was operating at a pressure of 14.3 psi and cumulative airflow rate of 13.9 scfm. Operating parameters were collected with AS-1 through 3 operating. Wellhead pressures ranged from 3.92 to greater than 10 psi. Please contact me if you have any question concerning this report or the remedial project in general.

Sincerely,

Melisa McElwee  
GreenField Contractors, Inc.

MONTHLY OPERATION MONITORING & MAINTENANCE REPORT

Facility Name: Former Agra CCC/USDA  
 Facility Address: 671 Railroad Ave  
Agra, Kansas

PROJ. # 1491

Consultant: GreenField Contractors, Inc.

Inspector: Tim Dorck

Consultant Project Mgr: Tim Pace

Reporting Period: 5-30-15 thru 6-29-15

Inspection Date: 6-29-15

Days in Reporting Period: \_\_\_\_\_

Inspection Time: 10:40

Field Sheet Revision Date: \_\_\_\_\_

Electrical Meter Reading: 88463

VAPOR EXTRACTION/INJECTION INFORMATION			
Design Parameters for Vapor Extraction System:	<u>250</u>	SCFM	<u>40</u> "H2O
Reporting Period Parameters:	<u>175</u>	SCFM	<u>46.1</u> "H2O
Blower Operation:	<u>X</u>	Continual	Cycling
Hour Meter Reading:	<u>47058.7</u>	Previous	<u>47778.0</u> Present
Design Parameters for Air Sparge System:	<u>25</u>	SCFM	<u>12</u> PSI
Reporting Period Parameters:	<u>13.9</u>	SCFM	<u>14.3</u> PSI
Blower Operation:	<u>X</u>	Continual	Cycling
Hour Meter Reading:	<u>39005.6</u>	Previous	<u>39725.0</u> Present

GROUNDWATER ELEVATIONS									
Well I.D. No.	KDHE Site I.D.	Temp. Tag No.	TOC Elevation	Depth to Water (TOC)	Depth to Product (TOC)	Water Level Elevation	Free Phase Prod. Elev.	Free Phase Prod. Thick	D.O.
GW-1		<u>423150</u>		<u>42.18</u>					
GW-3		<u>423157</u>		<u>42.14</u>					
GW-4		<u>423089</u>		<u>42.27</u>					

SYSTEM DOWN TIME SUMMARY		
DATES		Explanation for Down Time
From	To	(Indicate Corrective Measures Taken)
<u>        </u>	<u>        </u>	

REMEDIATION SYSTEM MAINTENANCE RECORD				
Date of Changes	Description of Work Performed			Performed by
<u>6-29-15</u>	K.O. Tank	Drained	K.O. Meter:	<u>Empty</u>
	Filters SVE	<u>Checked</u>	Replaced	Cleaned
	A/SP Blower Grease	<u>Checked</u>	Added	Cleaned
	Cleared SVE lines		Yes	<u>No</u>
	Cleaned Flowmeters		Yes	<u>No</u>
	Used weedeater around trailer		<u>Yes</u>	No
	Swept trailer		<u>Yes</u>	No
	Sensaphone Surge Protector		<u>Good</u>	Bad
	Adjusted Air dilution:	From: <u>closed</u>	To: <u>closed</u>	
	<u>Check Quarterly</u> Becker 3.60	Vane Width:		
	AIR Sparge vane measurement minimum 26 MM			
Need				
SVE Filter	Solberg			
Air Sparge Filter				

7. Dorel 6-29-15

Former Agra CCC/USDA

Proj. # 1491

Operating Status: Arrival On / Off Departure On / Off

SVE UNIT	Pre KO Tank Vacuum ("H2O)	Pre/Post Filter Vacuum ("H2O)	Suction Air Flowrate (cfm)	Cumulative Flowrate (cfm) Sum of SVE Wells	O2 Readings (%)	CO2 Readings (%)	TPH (PID) Readings (ppm)
	46.1	57.64	closed	175	20.9	10	10

SVE WELL FIELD DATA

SVE WELL	Vac. @ Manifold ("H2O)	Direct Read Flowrate (cfm) 2" line	O2 Readings (%)	CO2 Readings (%)	TPH/Drager Readings (ppm)	Vac. @ Wellhead ("H2O)
SVE-1	7.8	50	20.9	10	10	4.0
SVE-2	7.7	50	20.9	10	10	3.9
SVE-3	17.6	75	20.9	10	10	8.6
SVE-4						
SVE-5						

SPARGE UNIT FIELD DATA

Operating Status: Arrival On / Off Departure On / Off

SPARGE UNIT	Pressure (psi)	Flow Rate (cfm)	Bleed Off (% Open)	Pre Air Temp. (deg. F)	Post Air Temp. (deg. F)
	14.3	13.9	closed	115°	

SPARGE WELL FIELD DATA

SPARGE WELL	Pressure @ Manifold (psi)	Pressure @ Wellhead (psi)	Direct Read Flow Rate (cfm)
AS-1	3.92	3.36	6.1
AS-2	7.49	6.96	5.8
AS-3	10+	10+	2.0
AS-4			
AS-5			

Former Agra CCC/USDA Agra, Kansas

MONTHLY SVE SCREEN EXPOSURE CALCULATION SHEET

SVE Well	Depth To Water Feet BGS (Rim)	Wellhead Vacuum (In./Ft. H2O)	Depth to Top of Screen	Length of Screen Exposed (Ft.)
SVE-1	$6W-1 + 6W-4 \div 2 = 42.23$	.33	20	21.9
SVE-2		.33	20	21.9
SVE-3		.72	20	21.51
SVE-4			20	
SVE-2			20	

NOTE: 1 PSI = 27.7 INCHES OF WATER  
 1 INCH HG = 13.6 INCHES OF WATER  
 Positive screen value equals length of screen exposed  
 Negative screen value equals length of screen flooded

Measurements Collected By T. Doral

Date Measurements Collected 6-29-15

Comments \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Former Agra CCC/USDA

MONTHLY SPARGE SCREEN EXPOSURE CALCULATION SHEET

AS Well	Depth to Water below TOC Feet	Plus / Minus	Difference in TOC Elevation Between MW- and AS Well	Equals	Adjusted SWL	Depth to Top of Sparge Screen (Ft)	Minus	Adjusted SWL	Times	Calculation to Determine Amt. PSI Needed	Equals	Wellhead Pressure Needed to Overcome Water Column
AS-1		-		=		51.37	-	42.23	X	0.434	=	3.97
AS-2		-		=		58	-		X	0.434	=	6.84
AS-3		-		=		53.9	-		X	0.434	=	5.06
AS-4		-		=		58	-		X	0.434	=	6.84
AS-5		-		=		56.27	-		X	0.434	=	6.09

Measurements Collected By T. Doran

Date Measurements Collected: 6-29-15

Comments

**Supplement 9:**

**TestAmerica Data for Argonne's Quarterly Groundwater Sampling  
on June 30, 2015**

## ANALYTICAL REPORT

Job Number: 200-28712-1

SDG Number: 28712

Job Description: Agra (200-28712)

Contract Number: 1E-30401

For:

Argonne National Laboratory

9700 South Cass Avenue

Building 203

Office B-141

Argonne, IL 60439

Attention: Ms. Esther Bowen



Approved for release.  
Kathryn A Kelly  
Project Manager I  
7/21/2015 4:03 PM

---

Kathryn A Kelly, Project Manager I  
30 Community Drive, South Burlington, VT, 05403  
kathryn.kelly@testamericainc.com  
07/21/2015

The test results in this report relate only to sample(s) as received by the laboratory. These test results were derived under a quality system that adheres to the requirements of NELAC. Pursuant to NELAC, this report may not be produced in full without written approval from the laboratory

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## **CASE NARRATIVE**

**Client: Argonne National Laboratory**

**Project: Agra (200-28712)**

**Report Number: 200-28712-1**

Enclosed is the data set for the referenced project work. With the exceptions noted as flags or footnotes, standard analytical protocols were followed in performing the analytical work and the applied control limits were met.

Calculations were performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

### **Receipt**

The samples were received on 07/2/2015. Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Shipping Documentation section of this submittal. The samples, as received, were not acid preserved. On that basis, the laboratory did provide for the analysis of the samples within seven days of sample collection.

### **SOM01.2 Volatile Organics (Trace Level Water)**

A storage blank was prepared for volatile organics analysis, and stored in association with the storage of the samples. That storage blank, identified as VHBLK01, was carried through the holding period with the samples, and analyzed.

Sample AGGW4-W-37194 was analyzed at a 21-fold dilution. An additional, more concentrated analysis was performed on samples AGGW4-W-37194 in order to provide for lower reporting limits for those analytes that were not identified in the primary analyses. Both sets of results for the analyses of the samples in question are included in this submittal.

Each of the analyses associated with the sample set exhibited an acceptable internal standard performance. The analysis of the samples in this sample set did meet the technical acceptance criteria specific to DMC recoveries; although not all DMC recoveries were within the control range in each analysis. The technical acceptance criteria does provide for the recovery. Matrix spike and matrix spike duplicate analyses were not performed on samples in this sample set. A trace concentration of Methylene Chloride was identified in the analyses of the method blank associated with the analytical work. The concentration of each target analyte in those analyses was below the established reporting limit, and the analyses did meet the technical acceptance criteria for a compliant method blank analysis. A trace concentration of toluene was identified in the analysis of the instrument blanks associated with the analytical work. The concentration of each target analyte in that analysis was below the established reporting limit, and the analysis did meet the technical acceptance criteria for a compliant instrument blank analysis. The analysis of the storage blank associated with the sample set was free of analyte contamination. Present in the method blank, instrument blank, and storage blank analyses was a non-target constituent that represents a compound that is related to the DMC formulation. The fact that the presence of this

compound is not within the laboratory's control is at issue. The derived results for that compound have been qualified with an "X" qualifier to reflect the source of the contamination.

The responses for each of the target analytes met the relative standard deviation criterion in the initial calibration. The response for each target analyte met the percent difference criterion in the opening/continuing calibration check acquisition. The response for each target analyte met the 50.0 percent difference criterion in the closing calibration check acquisition.

The primary quantitation mass for methylcyclohexane that is specified in the Statement of Work is mass 83. The laboratory did identify a contribution to mass 83 from 1,2-dichloropropane-d<sub>6</sub>, one of the deuterated monitoring compounds (DMCs). The laboratory did change the primary quantitation mass assignment to mass 55 for the quantification of methylcyclohexane.

Manual integration was employed in deriving certain of the analytical results. The values that have been derived from manual integration are qualified on the quantitation reports. Extracted ion current profiles for each manual integration are included in the data package, and further documented at the end of this submittal.

## DATA REPORTING QUALIFIERS

Client: Argonne National Laboratory

Job Number: 200-28712-1

Sdg Number: 28712

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	E	Compound concentration exceeds the upper level of the calibration range of the instrument for that specific analysis.
	J	Indicates an Estimated Value for TICs
	J	Indicates an estimated value.
	D	Sample was analyzed at a higher dilution factor.
	X	See case narrative notes for explanation of the 'X' flag
	*	Surrogate is outside acceptance limits.
	B	The analyte was found in an associated blank, as well as in the sample.
	N	This flag indicates the presumptive evidence of a compound.

Regulatory Program:  DW  NPDES  RCRA  Other:

<b>Client Contact</b>		<b>Project Manager: Lorraine LaFreniere</b>		<b>Date: July 1, 2015</b>		<b>COC No: AG71151710</b>	
<b>Argonne National Lab</b>		<b>Tel/Fax: (630) 252-7969</b>		<b>Carrier: FedEx# 773964516551</b>		<b>1 of 1 COCs</b>	
<b>9700 S. Cass Ave</b>		<b>Analysis Turnaround Time</b>		<b>Lab Contact: Kathryn Kelly</b>		<b>For Lab Use Only:</b>	
<b>Lemont/IL/60439</b>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS		<b>Walk-in Client:</b>		<b>Lab Sampling:</b>	
<b>(630) 252-7969 Phone</b>		TAT if different from Below		<b>Job / SDG No.:</b>		<b>Sampler:</b>	
<b>(630) 252-5747 FAX</b>		<input type="checkbox"/> 2 weeks		<b>Sample Specific Notes:</b>			
<b>Project Name: Quarterly Sampling</b>		<input type="checkbox"/> 1 week		2 X 40mL for VOC			
<b>Site: Agra, KS</b>		<input type="checkbox"/> 2 days		2 X 40mL for VOC			
<b>P O # 8A727-25-167</b>		<input type="checkbox"/> 1 day		2 X 40mL for VOC			
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)
						Volatile Organic Compounds	
1 AGMWJ-W-37189	06/30/15	17:15	LF	W	2	2	2
2 AGGW4-W-37194	06/30/15	15:30	3V	W	2	2	2
3 AGQCTB-W-37199	06/30/15	10:00	G	W	2	2	2
4					0		
5					0		
6					0		
7					0		
8					0		
9					0		
10					0		
11					0		
12					0		



**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**

Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months

Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown

**Special Instructions/QC Requirements & Comments:**

Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other

Cooler Temp. (°C): Obs'd: \_\_\_\_\_ Corrd: \_\_\_\_\_ Therm ID No.: \_\_\_\_\_

Custody Seal Intact:  Yes  No  
Company: TCW

Relinquished by: Travis Kamler  
Date/Time: 7/1/15 17:10

Relinquished by: *[Signature]*  
Date/Time: 7/2/15 1030

Relinquished by: \_\_\_\_\_  
Date/Time: \_\_\_\_\_

Received in Laboratory by: \_\_\_\_\_  
Date/Time: \_\_\_\_\_

From: (402) 416-7255  
Travis Kamler  
Argonne National Lab  
9700 S CASS AVE  
LEMONT, IL 60439

Origin ID: ENLA



Ship Date: 01JUL15  
ActWgt: 15.0 LB  
CAD: 104734835/INET3610  
Dims: 13 X 9 X 10 IN

Delivery Address Bar Code



SHIP TO: (802) 660-1990  
**BILL SENDER**  
**Kathryn Kelly**  
**Test America**  
**30 COMMUNITY DR**  
**STE 11**  
**SOUTH BURLINGTON, VT 05403**

Ref # 8A727-25-167  
Invoice #  
PO # Agra waters  
Dept #

THU - 02 JUL 10:30A  
PRIORITY OVERNIGHT

TRK# 7739 6451 6551

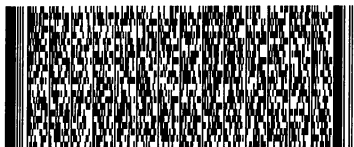
0201

05403

VT-US

BTVA

**XH BTVA**



537J31A15/EE4B

**After printing this label:**

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

**Warning:** Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

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TestAmerica Burlington  
INTERNAL CHAIN OF CUSTODY LOG (ICOC)

Project Information:  
 Log In #: 200-28712 Method: SOM01.2\_Vol\_Tr  
 Client: Argonne LAB IDs: 200-28712-1 through 4

Samples associated with this log-in were placed into storage on 7/2/2015 10:35 by: Steph Bourdeau  
 (Date) (Time<sup>2</sup>) Sample Custodian Signature

Storage Location: VB12 Specify storage location (refrigerator, freezer ID or lab location) for original sample containers

Storage Condition:  Refrigeration  Frozen  Ambient

Sample Type		Lab ID(s)	Transfer Date	Transfer Time <sup>2</sup>	Purpose of Transfer		Relinquished By:	Received By:	Storage Location Prepared Sample <sup>1</sup>
Original	Prepared <sup>1</sup>				Prep	Analysis			
✓		28712-14	7/1/15	1245	✓		[Signature]	[Signature]	SC room
	✓		7/1/15	1300		✓	[Signature]	[Signature]	store
φ		AUC	7/6/15	1710	φ		[Signature]	[Signature]	analysis
φ			↓	1830		φ	[Signature]	[Signature]	storage

<sup>1</sup> Extract, digestate, or any other prepared sample that is no longer in original sample container

<sup>2</sup> Military Time

# Shipping and Receiving Documents



# Login Sample Receipt Checklist

Client: Argonne National Laboratory

Job Number: 200-28712-1

SDG Number: 28712

**Login Number: 28712**

**List Source: TestAmerica Burlington**

**List Number: 1**

**Creator: Poucher, Stephanie A**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	No numbers
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.8°C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## METHODOLOGY SUMMARY

Laboratory: TestAmerica Laboratories

Project No:

Location: South Burlington, Vermont

SDG No: 28712

### **VOA**

Volatile Organics Trace - USEPA CLP SOM01.2

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-28712-1SDG No.: 28712Instrument ID: CHD.i Analysis Batch Number: 90394Lab Sample ID: IC 200-90394/7 Client Sample ID: \_\_\_\_\_Date Analyzed: 06/29/15 13:49 Lab File ID: 14426\_007.D GC Column: DB-624 ID: 0.2 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dibromo-3-Chloropropane	13.44	Assign Peak	wilburj	06/29/15 14:14

Lab Sample ID: IC 200-90394/8 Client Sample ID: \_\_\_\_\_Date Analyzed: 06/29/15 14:14 Lab File ID: 14426\_008.D GC Column: DB-624 ID: 0.2 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.64	Baseline	wilburj	06/29/15 14:57
1,2-Dibromo-3-Chloropropane	13.44	Assign Peak	wilburj	06/29/15 14:59

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-28712-1

SDG No.: 28712

Instrument ID: CHD.i Analysis Batch Number: 90694

Lab Sample ID: MB 200-90694/6 Client Sample ID: \_\_\_\_\_

Date Analyzed: 07/06/15 15:32 Lab File ID: 14535\_006.D GC Column: DB-624 ID: 0.2 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	3.20	Assign Peak	wilburj	07/15/15 19:27

2A - FORM II VOA-1  
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: TESTAMERICA BURLINGTON

Contract: 8E-00302

Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_

SDG No.: 28712

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC1 (VCL) #	VDMC2 (CLA) #	VDMC3 (DCE) #	VDMC4 (BUT) #	VDMC5 (CLF) #	VDMC6 (DCA) #	VDMC7 (BEN) #
01	VBLKDU	130	122	88	122	106	119	109
02	AGMWJ-W-37189	133 *	125	88	131	106	115	110
03	AGGW4-W-37194D L	126	121	85	115	101	113	109
04	AGGW4-W-37194	131	122	85	112	104	117	110
05	AGQCTB-W-37199	133 *	127	91	117	107	118	113
06	VHBLK01	130	126	85	109	103	112	108

		<u>QC LIMITS</u>
VDMC1	(VCL) = Vinyl Chloride-d3	(65-131)
VDMC2	(CLA) = Chloroethane-d5	(71-131)
VDMC3	(DCE) = 1,1-Dichloroethene-d2	(55-104)
VDMC4	(BUT) = 2-Butanone-d5	(49-155)
VDMC5	(CLF) = Chloroform-d	(78-121)
VDMC6	(DCA) = 1,2-Dichloroethane-d4	(78-129)
VDMC7	(BEN) = Benzene-d6	(77-124)

# Column to be used to flag recovery values  
\* Values outside of contract required QC limits

2B - FORM II VOA-2  
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: TESTAMERICA BURLINGTON

Contract: 8E-00302

Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_

SDG No.: 28712

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC8 (DPA) #	VDMC9 (TOL) #	VDMC10 (TDP) #	VDMC11 (HEX) #	VDMC12 (TCA) #	VDMC13 (DCZ) #	OTHER	TOT OUT
01	VBLKDU	107	108	116	127	108	119		0
02	AGMWJ-W-37189	112	108	117	131	102	119		1
03	AGGW4-W-37194D L	106	107	113	118	100	116		0
04	AGGW4-W-37194	107	110	113	116	104	121		0
05	AGQCTB-W-37199	108	111	117	126	109	116		1
06	VHBLK01	107	110	114	116	100	121		0

	QC LIMITS
VDMC8 (DPA) = 1,2-Dichloropropane-d6	(79-124)
VDMC9 (TOL) = Toluene-d8	(77-121)
VDMC10 (TDP) = trans-1,3-Dichloropropene-d4	(73-121)
VDMC11 (HEX) = 2-Hexanone-d5	(28-135)
VDMC12 (TCA) = 1,1,2,2-Tetrachloroethane-d2	(73-125)
VDMC13 (DCZ) = 1,2-Dichlorobenzene-d4	(80-131)

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

4A - FORM IV VOA  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKDU

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Lab File ID: 14535\_006.D Lab Sample ID: MB 200-90694/6  
 Instrument ID: CHD.i  
 Matrix: (SOIL/SED/WATER) Water Date Analyzed: 07/06/2015  
 Level: (TRACE or LOW/MED) TRACE Time Analyzed: 1532  
 GC Column: DB-624 ID: 0.20 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	AGMWJ-W-3718 9	200-28712-1	14535_013. D	1844
02	AGGW4-W-3719 4DL	200-28712-2	14535_014. D	1909
03	AGGW4-W-3719 4	200-28712-2	14535_015. D	1934
04	VIBLKDG	VIBLK 200-90694/16	14535_016. D	1959
05	AGQCTB-W-371 99	200-28712-3	14535_017. D	2024
06	VHBLK01	200-28712-4	14535_018. D	2049

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_

5A - FORM V VOA  
VOLATILE ORGANICS INSTRUMENT  
PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFBDO

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
Lab File Id: 14426\_001.D BFB Injection Date: 06/29/2015  
Instrument Id: CHD.i BFB Injection Time: 1123  
GC Column: DB-624 ID: 0.20 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.3
75	30.0 - 80.0% of mass 95	64.3
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	0.4 ( 0.3)1
174	50.0 - 120% of mass 95	117
175	5.0 - 9.0% of mass 174	9.0 ( 7.6)1
176	95.0 - 101% of mass 174	112 ( 95.7)1
177	5.0 - 9.0% of mass 176	7.8 ( 6.9)2

1 - Value is %mass 174                      2 - Value is %mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0.5DQ	IC 200-90394/7	14426_007.D	06/29/2015	1349
02	VSTD001DQ	IC 200-90394/8	14426_008.D	06/29/2015	1414
03	VSTD005DQ	ICIS 200-90394/9	14426_009.D	06/29/2015	1439
04	VSTD010DQ	IC 200-90394/10	14426_010.D	06/29/2015	1504
05	VSTD020DQ	IC 200-90394/11	14426_011.D	06/29/2015	1529



5A - FORM V VOA  
VOLATILE ORGANICS INSTRUMENT  
PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFBDU

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
Lab File Id: 14535\_002.D BFB Injection Date: 07/06/2015  
Instrument Id: CHD.i BFB Injection Time: 1317  
GC Column: DB-624 ID: 0.20 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.8
75	30.0 - 80.0% of mass 95	60.4
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	1.1 ( 0.9)1
174	50.0 - 120% of mass 95	115
175	5.0 - 9.0% of mass 174	9.0 ( 7.8)1
176	95.0 - 101% of mass 174	112 ( 97.2)1
177	5.0 - 9.0% of mass 176	7.5 ( 6.7)2

1 - Value is %mass 174                      2 - Value is %mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD005DU	CCVIS 200-90694/4	14535_004.D	07/06/2015	1442
02	VBLKDU	MB 200-90694/6	14535_006.D	07/06/2015	1532
03	AGMWJ-W-37 189	200-28712-1	14535_013.D	07/06/2015	1844
04	AGGW4-W-37 194DL	200-28712-2	14535_014.D	07/06/2015	1909
05	AGGW4-W-37 194	200-28712-2	14535_015.D	07/06/2015	1934
06	VIBLKDG	VIBLK 200-90694/16	14535_016.D	07/06/2015	1959
07	AGQCTB-W-3 7199	200-28712-3	14535_017.D	07/06/2015	2024
08	VHBLK01	200-28712-4	14535_018.D	07/06/2015	2049
09	VSTD005UD	CCVC 200-90694/19	14535_019.D	07/06/2015	2114

8A - FORM VIII VOA  
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 06/29/2015 06/29/2015  
 EPA Sample No. (VSTD#####): VSTD005DU Date Analyzed: 07/06/2015  
 Lab File ID (Standard): 14535\_004.D Time Analyzed: 1442  
 Instrument ID: CHD.i Heated Purge: (Y/N) N

	IS1 (CBZ)		IS2 (DFB)		IS3 (DCB)						
	AREA	#	RT	#	AREA	#	RT	#			
12 HOUR STD	249993		9.34		285410		5.97		166407		12.15
UPPER LIMIT	349990		9.67		399574		6.30		232970		12.48
LOWER LIMIT	149996		9.01		171246		5.64		99844		11.82
EPA SAMPLE NO.											
01 VBLKDU	236949		9.34		273848		5.97		140752		12.15
02 AGMWJ-W-37189	233115		9.34		270386		5.97		131752		12.15
03 AGGW4-W-37194D L	238281		9.34		280472		5.97		134182		12.15
04 AGGW4-W-37194	229620		9.34		269279		5.97		128587		12.15
05 VIPLKDG	230240		9.34		273568		5.97		133081		12.15
06 AGQCTB-W-37199	223272		9.34		256314		5.97		135628		12.15
07 VHBLK01	223109		9.34		265381		5.97		123471		12.15

IS1 (CBZ) = Chlorobenzene-d5  
 IS2 (DFB) = 1,4-Difluorobenzene  
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 140% (Trace Volatiles) of internal standard area  
 AREA LOWER LIMIT = 60% (Trace Volatiles) of internal standard area  
 RT UPPER LIMIT = + 0.33 (Trace Volatiles) minutes of internal standard RT  
 RT LOWER LIMIT = - 0.33 (Trace Volatiles) minutes of internal standard RT

# Column used to flag values outside contract required QC limits with an asterisk.

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-28712-2  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 14535\_015.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: 07/02/2015  
 % Moisture: not dec. Date Analyzed: 07/06/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 4.2  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg)ug/L	Q
75-71-8	Dichlorodifluoromethane	2.1	U
74-87-3	Chloromethane	0.23	J
75-01-4	Vinyl chloride	2.1	U
74-83-9	Bromomethane	2.1	U
75-00-3	Chloroethane	2.1	U
75-69-4	Trichlorofluoromethane	2.1	U
75-35-4	1,1-Dichloroethene	2.1	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.1	U
67-64-1	Acetone	21	U
75-15-0	Carbon disulfide	2.1	U
79-20-9	Methyl acetate	2.1	U
75-09-2	Methylene Chloride	2.1	U
156-60-5	trans-1,2-Dichloroethene	2.1	U
1634-04-4	Methyl tert-butyl ether	2.1	U
75-34-3	1,1-Dichloroethane	2.1	U
156-59-2	cis-1,2-Dichloroethene	2.1	U
78-93-3	2-Butanone	21	U
74-97-5	Bromochloromethane	2.1	U
67-66-3	Chloroform	3.9	U
71-55-6	1,1,1-Trichloroethane	2.1	U
110-82-7	Cyclohexane	2.1	U
56-23-5	Carbon tetrachloride	360	E
71-43-2	Benzene	2.1	U
107-06-2	1,2-Dichloroethane	2.1	U

1B - FORM I VOA-2  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AGGW4-W-37194

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-28712-2  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 14535\_015.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: 07/02/2015  
 % Moisture: not dec. Date Analyzed: 07/06/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 4.2  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg)ug/L	Q
79-01-6	Trichloroethene	2.1	U
108-87-2	Methylcyclohexane	2.1	U
78-87-5	1,2-Dichloropropane	2.1	U
75-27-4	Bromodichloromethane	2.1	U
10061-01-5	cis-1,3-Dichloropropene	2.1	U
108-10-1	4-Methyl-2-pentanone	21	U
108-88-3	Toluene	0.068	J B
10061-02-6	trans-1,3-Dichloropropene	2.1	U
79-00-5	1,1,2-Trichloroethane	2.1	U
127-18-4	Tetrachloroethene	2.1	U
591-78-6	2-Hexanone	21	U
124-48-1	Dibromochloromethane	2.1	U
106-93-4	1,2-Dibromoethane	2.1	U
108-90-7	Chlorobenzene	2.1	U
100-41-4	Ethylbenzene	2.1	U
95-47-6	o-Xylene	2.1	U
179601-23-1	m,p-Xylene	2.1	U
100-42-5	Styrene	2.1	U
75-25-2	Bromoform	2.1	U
98-82-8	Isopropylbenzene	2.1	U
79-34-5	1,1,2,2-Tetrachloroethane	2.1	U
541-73-1	1,3-Dichlorobenzene	2.1	U
106-46-7	1,4-Dichlorobenzene	2.1	U
95-50-1	1,2-Dichlorobenzene	2.1	U
96-12-8	1,2-Dibromo-3-Chloropropane	2.1	U
120-82-1	1,2,4-Trichlorobenzene	2.1	U
87-61-6	1,2,3-Trichlorobenzene	2.1	U

1J - FORM I VOA-TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

AGGW4-W-37194

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-28712-2  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 14535\_015.D  
 Level: (TRACE or LOW/MED) TRACE Date Received: 07/02/2015  
 % Moisture: not dec. \_\_\_\_\_ Date Analyzed: 07/06/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 4.2  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	7.30	12	J B X
02	556-67-2	Cyclotetrasiloxane, octamethyl-	11.04	2.4	J N B
03	E9667961	Total Alkanes	N/A		

<sup>1</sup>EPA-designated Registry Number.

1A - FORM I VOA-1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AGGW4-W-37194DL

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-28712-2  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 14535\_014.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: 07/02/2015  
 % Moisture: not dec. Date Analyzed: 07/06/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 21.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg)ug/L	Q
75-71-8	Dichlorodifluoromethane	11	U
74-87-3	Chloromethane	11	U
75-01-4	Vinyl chloride	11	U
74-83-9	Bromomethane	11	U
75-00-3	Chloroethane	11	U
75-69-4	Trichlorofluoromethane	11	U
75-35-4	1,1-Dichloroethene	11	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11	U
67-64-1	Acetone	110	U
75-15-0	Carbon disulfide	11	U
79-20-9	Methyl acetate	11	U
75-09-2	Methylene Chloride	11	U
156-60-5	trans-1,2-Dichloroethene	11	U
1634-04-4	Methyl tert-butyl ether	11	U
75-34-3	1,1-Dichloroethane	11	U
156-59-2	cis-1,2-Dichloroethene	11	U
78-93-3	2-Butanone	110	U
74-97-5	Bromochloromethane	11	U
67-66-3	Chloroform	3.6	J D
71-55-6	1,1,1-Trichloroethane	11	U
110-82-7	Cyclohexane	11	U
56-23-5	Carbon tetrachloride	320	D
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	11	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AGGW4-W-37194DL

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-28712-2  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 14535\_014.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: 07/02/2015  
 % Moisture: not dec. Date Analyzed: 07/06/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 21.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg)ug/L	Q
79-01-6	Trichloroethene	11	U
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
108-10-1	4-Methyl-2-pentanone	110	U
108-88-3	Toluene	0.28	J D B
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	110	U
124-48-1	Dibromochloromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
95-47-6	o-Xylene	11	U
179601-23-1	m,p-Xylene	11	U
100-42-5	Styrene	11	U
75-25-2	Bromoform	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-Chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
87-61-6	1,2,3-Trichlorobenzene	11	U

1J - FORM I VOA-TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

AGGW4-W-37194DL

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-28712-2  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 14535\_014.D  
 Level: (TRACE or LOW/MED) TRACE Date Received: 07/02/2015  
 % Moisture: not dec. \_\_\_\_\_ Date Analyzed: 07/06/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 21.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	7.30	62	J D B X
02	E966796 <sup>1</sup>	Total Alkanes	N/A		

<sup>1</sup>EPA-designated Registry Number.



1A - FORM I VOA-1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AGMWJ-W-37189

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-28712-1  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 14535\_013.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: 07/02/2015  
 % Moisture: not dec. Date Analyzed: 07/06/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg)ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	15	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AGMWJ-W-37189

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-28712-1  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 14535\_013.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: 07/02/2015  
 % Moisture: not dec. Date Analyzed: 07/06/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg)ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.016	J B
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

AGMWJ-W-37189

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-28712-1  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 14535\_013.D  
 Level: (TRACE or LOW/MED) TRACE Date Received: 07/02/2015  
 % Moisture: not dec. \_\_\_\_\_ Date Analyzed: 07/06/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	7.29	3.0	J B X
02		Unknown	8.22	0.73	J B
03		Unknown	11.04	0.70	J B
04	E9667961	Total Alkanes	N/A		

<sup>1</sup>EPA-designated Registry Number.

1A - FORM I VOA-1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AGQCTB-W-37199

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-28712-3  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 14535\_017.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: 07/02/2015  
 % Moisture: not dec. Date Analyzed: 07/06/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg)ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	3.4	J
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.083	J
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AGQCTB-W-37199

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-28712-3  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 14535\_017.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: 07/02/2015  
 % Moisture: not dec. Date Analyzed: 07/06/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg)ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.23	J B
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.014	J
95-47-6	o-Xylene	0.060	J
179601-23-1	m,p-Xylene	0.029	J
100-42-5	Styrene	0.043	J
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.031	J
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

AGQCTB-W-37199

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-28712-3  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 14535\_017.D  
 Level: (TRACE or LOW/MED) TRACE Date Received: 07/02/2015  
 % Moisture: not dec. \_\_\_\_\_ Date Analyzed: 07/06/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	7.29	3.1	J B X
02	541-05-9	Cyclotrisiloxane, hexamethyl-	8.22	1.6	J N B
03	556-67-2	Cyclotetrasiloxane, octamethyl-	11.04	1.2	J N B
04	E9667961	Total Alkanes	N/A		

<sup>1</sup>EPA-designated Registry Number.

6A - FORM VI VOA-1  
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Instrument ID: CHD.i Calibration Date(s): 06/29/2015 06/29/2015  
 Heated Purge: (Y/N) N Calibration Time(s): 1349 1529  
 Purge Volume: 25.0 (mL)  
 GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

COMPOUND	RRF0.5	RRF1.0	RRF5.0	RRF10	RRF20	RRF	%RSD
Dichlorodifluoromethane	0.465	0.501	0.521	0.547	0.543	0.515	6.6
Chloromethane	0.370	0.345	0.286	0.298	0.281	0.316	12.4
Vinyl chloride	0.301	0.308	0.322	0.337	0.339	0.321	5.3
Bromomethane	0.099	0.091	0.125	0.166	0.209	0.138	35.8
Chloroethane	0.182	0.210	0.195	0.228	0.233	0.210	10.2
Trichlorofluoromethane	0.772	0.829	0.881	0.901	0.889	0.854	6.3
1,1-Dichloroethene	0.267	0.288	0.291	0.335	0.338	0.304	10.2
1,1,2-Trichloro- 1,2,2-trifluoroethane	0.377	0.375	0.377	0.418	0.412	0.392	5.4
Acetone	0.021	0.022	0.020	0.022	0.021	0.021	3.2
Carbon disulfide	0.568	0.623	0.672	0.696	0.698	0.652	8.5
Methyl acetate	0.039	0.041	0.038	0.035	0.034	0.038	6.9
Methylene Chloride	0.185	0.205	0.202	0.211	0.207	0.202	5.0
trans-1,2-Dichloroethene	0.211	0.248	0.273	0.291	0.294	0.264	13.1
Methyl tert-butyl ether	0.242	0.309	0.365	0.390	0.393	0.340	18.9
1,1-Dichloroethane	0.400	0.436	0.481	0.494	0.508	0.464	9.7
cis-1,2-Dichloroethene	0.194	0.231	0.264	0.278	0.282	0.250	14.9
2-Butanone	0.018	0.022	0.025	0.026	0.025	0.023	15.3
Bromochloromethane	0.070	0.094	0.094	0.106	0.103	0.094	15.0
Chloroform	0.456	0.566	0.603	0.624	0.611	0.572	12.0
1,1,1-Trichloroethane	0.658	0.758	0.837	0.869	0.895	0.803	12.0
Cyclohexane	0.302	0.419	0.482	0.500	0.512	0.443	19.5
Carbon tetrachloride	0.632	0.759	0.832	0.855	0.880	0.792	12.7
Benzene	0.968	1.158	1.212	1.238	1.250	1.165	10.0
1,2-Dichloroethane	0.282	0.311	0.355	0.371	0.347	0.333	10.8
Trichloroethene	0.348	0.357	0.392	0.406	0.417	0.384	7.9
Methylcyclohexane	0.343	0.413	0.458	0.483	0.497	0.439	14.2

Report 1,4-Dioxane for Low-Medium VOA analysis only

6B - FORM VI VOA-2  
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Instrument ID: CHD.i Calibration Date(s): 06/29/2015 06/29/2015  
 Heated Purge: (Y/N) N Calibration Time(s): 1349 1529  
 Purge Volume: 25.0 (mL)  
 GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

COMPOUND	RRF0.5	RRF1.0	RRF5.0	RRF10	RRF20	RRF	%RSD
LAB FILE ID: _____	RRF0.5 = <u>14426_007.D</u>	RRF1.0 = <u>14426_008.D</u>					
RRF5.0 = <u>14426_009.D</u>	RRF10 = <u>14426_010.D</u>	RRF20 = <u>14426_011.D</u>					
1,2-Dichloropropane	0.164	0.190	0.209	0.208	0.213	0.197	10.3
Bromodichloromethane	0.286	0.360	0.406	0.418	0.420	0.378	15.0
cis-1,3-Dichloropropene	0.236	0.282	0.377	0.401	0.408	0.341	22.6
4-Methyl-2-pentanone	0.040	0.055	0.071	0.075	0.074	0.063	24.2
Toluene	1.048	1.361	1.509	1.550	1.588	1.411	15.6
trans-1,3-Dichloropropene	0.151	0.221	0.298	0.327	0.338	0.267	29.8
1,1,2-Trichloroethane	0.116	0.131	0.138	0.140	0.138	0.133	7.5
Tetrachloroethene	0.405	0.441	0.459	0.489	0.498	0.459	8.2
2-Hexanone	0.032	0.044	0.053	0.055	0.054	0.048	20.0
Dibromochloromethane	0.145	0.181	0.229	0.242	0.245	0.209	21.0
1,2-Dibromoethane	0.100	0.111	0.137	0.141	0.139	0.126	14.9
Chlorobenzene	0.813	0.910	0.998	1.011	1.032	0.953	9.6
Ethylbenzene	1.356	1.741	2.012	2.087	2.159	1.871	17.6
o-Xylene	0.428	0.552	0.680	0.723	0.757	0.628	21.7
m,p-Xylene	0.519	0.689	0.769	0.794	0.826	0.719	17.1
Styrene	0.625	0.897	1.072	1.108	1.144	0.969	22.1
Bromoform	0.134	0.142	0.171	0.185	0.186	0.164	15.0
Isopropylbenzene	1.341	1.830	2.286	2.408	2.535	2.080	23.6
1,1,2,2-Tetrachloroethane	0.093	0.120	0.123	0.126	0.128	0.118	12.0
1,3-Dichlorobenzene	1.086	1.273	1.505	1.595	1.727	1.437	17.9
1,4-Dichlorobenzene	1.369	1.504	1.548	1.598	1.681	1.540	7.5
1,2-Dichlorobenzene	1.093	1.152	1.279	1.329	1.358	1.242	9.3
1,2-Dibromo-3-Chloropropane	0.015	0.033	0.035	0.039	0.041	0.033	31.5
1,2,4-Trichlorobenzene	0.550	0.635	0.806	0.910	0.991	0.778	23.7
1,2,3-Trichlorobenzene	0.372	0.464	0.577	0.647	0.694	0.551	24.0



6C - FORM VI VOA-3  
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Instrument ID: CHD.i Calibration Date(s): 06/29/2015 06/29/2015  
 Heated Purge: (Y/N) N Calibration Time(s): 1349 1529  
 Purge Volume: 25.0 (mL)  
 GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

LAB FILE ID: _____	RRF0.5 = <u>14426_007.D</u>	RRF1.0 = <u>14426_008.D</u>
RRF5.0 = <u>14426_009.D</u>	RRF10 = <u>14426_010.D</u>	RRF20 = <u>14426_011.D</u>

COMPOUND	RRF0.5	RRF1.0	RRF5.0	RRF10	RRF20	RRF	%RSD
Vinyl Chloride-d3	0.252	0.288	0.279	0.290	0.291	0.280	5.8
Chloroethane-d5	0.222	0.243	0.256	0.267	0.273	0.252	8.1
1,1-Dichloroethene-d2	0.620	0.677	0.724	0.778	0.774	0.715	9.4
2-Butanone-d5	0.017	0.019	0.024	0.025	0.025	0.022	16.9
Chloroform-d	0.542	0.612	0.657	0.680	0.668	0.632	8.9
1,2-Dichloroethane-d4	0.232	0.252	0.295	0.304	0.287	0.274	11.1
Benzene-d6	0.919	1.119	1.207	1.221	1.242	1.142	11.6
1,2-Dichloropropane-d6	0.200	0.214	0.242	0.248	0.248	0.231	9.6
Toluene-d8	0.994	1.216	1.351	1.369	1.429	1.272	13.6
trans-1,3-Dichloropropene-d4	0.170	0.195	0.270	0.293	0.307	0.247	24.7
2-Hexanone-d5	0.013	0.017	0.023	0.025	0.024	0.020	25.2
1,1,2,2-Tetrachloroethane-d2	0.105	0.109	0.122	0.128	0.132	0.119	9.9
1,2-Dichlorobenzene-d4	0.792	0.748	0.809	0.852	0.882	0.817	6.4

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

7A - FORM VII VOA-1  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Instrument ID: CHD.i Calibration Date: 07/06/2015 Time: 1442  
 Lab File Id: 14535\_004.D Init. Calib. Date(s): 06/29/2015 06/29/2015  
 EPA Sample No. (VSTD####): VSTD005DU Init. Calib. Time(s): 1349 1529  
 Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20(mm) Length: 25 (m)  
 Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF5.0	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.515	0.577	0.010	12.0	40.0
Chloromethane	0.316	0.290	0.010	-8.3	40.0
Vinyl chloride	0.321	0.361	0.100	12.4	30.0
Bromomethane	0.138	0.186	0.100	34.9	30.0
Chloroethane	0.210	0.249	0.010	18.6	40.0
Trichlorofluoromethane	0.854	0.958	0.010	12.2	40.0
1,1-Dichloroethene	0.304	0.350	0.100	15.3	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.392	0.446	0.010	13.8	40.0
Acetone	0.021	0.025	0.010	16.8	40.0
Carbon disulfide	0.652	0.708	0.010	8.6	40.0
Methyl acetate	0.038	0.040	0.010	7.4	40.0
Methylene Chloride	0.202	0.225	0.010	11.1	40.0
trans-1,2-Dichloroethene	0.264	0.288	0.010	9.5	40.0
Methyl tert-butyl ether	0.340	0.413	0.010	21.7	40.0
1,1-Dichloroethane	0.464	0.495	0.200	6.9	30.0
cis-1,2-Dichloroethene	0.250	0.277	0.010	10.9	40.0
2-Butanone	0.023	0.028	0.010	20.4	40.0
Bromochloromethane	0.094	0.110	0.050	17.3	30.0
Chloroform	0.572	0.645	0.200	12.8	30.0
1,1,1-Trichloroethane	0.803	0.894	0.100	11.3	30.0
Cyclohexane	0.443	0.492	0.010	11.1	40.0
Carbon tetrachloride	0.792	0.899	0.100	13.5	30.0
Benzene	1.165	1.229	0.400	5.4	30.0
1,2-Dichloroethane	0.333	0.395	0.100	18.6	30.0
Trichloroethene	0.384	0.407	0.300	5.9	30.0
Methylcyclohexane	0.439	0.475	0.010	8.3	40.0

Report 1,4-Dioxane for Low/Medium VOA analysis only

7B - FORM VII VOA-2  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Instrument ID: CHD.i Calibration Date: 07/06/2015 Time: 1442  
 Lab File Id: 14535\_004.D Init. Calib. Date(s): 06/29/2015 06/29/2015  
 EPA Sample No. (VSTD####): VSTD005DU Init. Calib. Time(s): 1349 1529  
 Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20(mm) Length: 25 (m)  
 Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF5.0	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.197	0.209	0.010	6.5	40.0
Bromodichloromethane	0.378	0.429	0.200	13.4	30.0
cis-1,3-Dichloropropene	0.341	0.416	0.200	22.1	30.0
4-Methyl-2-pentanone	0.063	0.079	0.010	25.5	40.0
Toluene	1.411	1.558	0.400	10.4	30.0
trans-1,3-Dichloropropene	0.267	0.348	0.100	30.4	30.0
1,1,2-Trichloroethane	0.133	0.145	0.100	9.0	30.0
Tetrachloroethene	0.459	0.500	0.100	9.1	30.0
2-Hexanone	0.048	0.059	0.010	24.2	40.0
Dibromochloromethane	0.209	0.258	0.100	23.6	30.0
1,2-Dibromoethane	0.126	0.146	0.010	16.2	40.0
Chlorobenzene	0.953	1.037	0.500	8.8	30.0
Ethylbenzene	1.871	2.075	0.100	10.9	30.0
o-Xylene	0.628	0.719	0.300	14.4	30.0
m,p-Xylene	0.719	0.796	0.300	10.7	30.0
Styrene	0.969	1.130	0.300	16.6	30.0
Bromoform	0.164	0.200	0.050	22.2	30.0
Isopropylbenzene	2.080	2.391	0.010	15.0	40.0
1,1,2,2-Tetrachloroethane	0.118	0.134	0.100	13.7	30.0
1,3-Dichlorobenzene	1.437	1.616	0.400	12.4	30.0
1,4-Dichlorobenzene	1.540	1.633	0.400	6.0	30.0
1,2-Dichlorobenzene	1.242	1.366	0.400	9.9	30.0
1,2-Dibromo-3-Chloropropane	0.033	0.041	0.010	24.7	40.0
1,2,4-Trichlorobenzene	0.778	0.918	0.200	18.0	30.0
1,2,3-Trichlorobenzene	0.551	0.695	0.200	26.1	30.0

7C - FORM VII VOA-3  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Instrument ID: CHD.i Calibration Date: 07/06/2015 Time: 1442  
 Lab File Id: 14535\_004.D Init. Calib. Date(s): 06/29/2015 06/29/2015  
 EPA Sample No. (VSTD####): VSTD005DU Init. Calib. Time(s): 1349 1529  
 Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20(mm) Length: 25 (m)  
 Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF5.0	MIN RRF	%D	MAX %D
Vinyl Chloride-d3	0.280	0.312	0.010	11.5	30.0
Chloroethane-d5	0.252	0.276	0.010	9.6	40.0
1,1-Dichloroethene-d2	0.715	0.806	0.010	12.8	30.0
2-Butanone-d5	0.022	0.026	0.010	20.9	40.0
Chloroform-d	0.632	0.698	0.010	10.5	30.0
1,2-Dichloroethane-d4	0.274	0.316	0.010	15.3	30.0
Benzene-d6	1.142	1.239	0.010	8.5	30.0
1,2-Dichloropropane-d6	0.231	0.250	0.010	8.3	40.0
Toluene-d8	1.272	1.411	0.010	10.9	30.0
trans-1,3-Dichloropropene-d4	0.247	0.306	0.010	23.9	30.0
2-Hexanone-d5	0.020	0.026	0.010	27.8	40.0
1,1,2,2-Tetrachloroethane-d2	0.119	0.137	0.010	15.2	30.0
1,2-Dichlorobenzene-d4	0.817	0.871	0.010	6.6	30.0

Report 1,4-Dioxane-d8 for Low/Medium VOA analysis only

7A - FORM VII VOA-1  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Instrument ID: CHD.i Calibration Date: 07/06/2015 Time: 2114  
 Lab File Id: 14535\_019.D Init. Calib. Date(s): 06/29/2015 06/29/2015  
 EPA Sample No. (VSTD####): VSTD005UD Init. Calib. Time(s): 1349 1529  
 Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20(mm) Length: 25 (m)  
 Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF5.0	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.515	0.551	0.010	7.0	50.0
Chloromethane	0.316	0.272	0.010	-13.9	50.0
Vinyl chloride	0.321	0.328	0.010	2.1	50.0
Bromomethane	0.138	0.155	0.010	12.4	50.0
Chloroethane	0.210	0.223	0.010	6.5	50.0
Trichlorofluoromethane	0.854	0.932	0.010	9.1	50.0
1,1-Dichloroethene	0.304	0.340	0.010	11.9	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.392	0.418	0.010	6.8	50.0
Acetone	0.021	0.026	0.010	21.2	50.0
Carbon disulfide	0.652	0.650	0.010	-0.2	50.0
Methyl acetate	0.038	0.040	0.010	6.1	50.0
Methylene Chloride	0.202	0.211	0.010	4.4	50.0
trans-1,2-Dichloroethene	0.264	0.283	0.010	7.3	50.0
Methyl tert-butyl ether	0.340	0.410	0.010	20.7	50.0
1,1-Dichloroethane	0.464	0.483	0.010	4.2	50.0
cis-1,2-Dichloroethene	0.250	0.274	0.010	9.6	50.0
2-Butanone	0.023	0.026	0.010	12.7	50.0
Bromochloromethane	0.094	0.106	0.010	13.3	50.0
Chloroform	0.572	0.628	0.010	9.8	50.0
1,1,1-Trichloroethane	0.803	0.879	0.010	9.5	50.0
Cyclohexane	0.443	0.469	0.010	5.9	50.0
Carbon tetrachloride	0.792	0.882	0.010	11.4	50.0
Benzene	1.165	1.199	0.010	2.9	50.0
1,2-Dichloroethane	0.333	0.383	0.010	14.8	50.0
Trichloroethene	0.384	0.397	0.010	3.4	50.0
Methylcyclohexane	0.439	0.471	0.010	7.5	50.0

Report 1,4-Dioxane for Low/Medium VOA analysis only

7B - FORM VII VOA-2  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Instrument ID: CHD.i Calibration Date: 07/06/2015 Time: 2114  
 Lab File Id: 14535\_019.D Init. Calib. Date(s): 06/29/2015 06/29/2015  
 EPA Sample No. (VSTD####): VSTD005UD Init. Calib. Time(s): 1349 1529  
 Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20(mm) Length: 25 (m)  
 Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF5.0	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.197	0.210	0.010	6.6	50.0
Bromodichloromethane	0.378	0.420	0.010	11.1	50.0
cis-1,3-Dichloropropene	0.341	0.394	0.010	15.6	50.0
4-Methyl-2-pentanone	0.063	0.078	0.010	23.5	50.0
Toluene	1.411	1.530	0.010	8.4	50.0
trans-1,3-Dichloropropene	0.267	0.338	0.010	26.7	50.0
1,1,2-Trichloroethane	0.133	0.151	0.010	13.9	50.0
Tetrachloroethene	0.459	0.486	0.010	6.1	50.0
2-Hexanone	0.048	0.057	0.010	18.7	50.0
Dibromochloromethane	0.209	0.241	0.010	15.4	50.0
1,2-Dibromoethane	0.126	0.150	0.010	19.0	50.0
Chlorobenzene	0.953	1.024	0.010	7.5	50.0
Ethylbenzene	1.871	2.044	0.010	9.2	50.0
o-Xylene	0.628	0.711	0.010	13.2	50.0
m,p-Xylene	0.719	0.788	0.010	9.6	50.0
Styrene	0.969	1.113	0.010	14.9	50.0
Bromoform	0.164	0.179	0.010	9.6	50.0
Isopropylbenzene	2.080	2.315	0.010	11.3	50.0
1,1,2,2-Tetrachloroethane	0.118	0.129	0.010	9.3	50.0
1,3-Dichlorobenzene	1.437	1.576	0.010	9.7	50.0
1,4-Dichlorobenzene	1.540	1.636	0.010	6.2	50.0
1,2-Dichlorobenzene	1.242	1.369	0.010	10.2	50.0
1,2-Dibromo-3-Chloropropane	0.033	0.042	0.010	28.4	50.0
1,2,4-Trichlorobenzene	0.778	0.851	0.010	9.4	50.0
1,2,3-Trichlorobenzene	0.551	0.633	0.010	14.9	50.0

7C - FORM VII VOA-3  
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Instrument ID: CHD.i Calibration Date: 07/06/2015 Time: 2114  
 Lab File Id: 14535\_019.D Init. Calib. Date(s): 06/29/2015 06/29/2015  
 EPA Sample No. (VSTD####): VSTD005UD Init. Calib. Time(s): 1349 1529  
 Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20(mm) Length: 25 (m)  
 Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF5.0	MIN RRF	%D	MAX %D
Vinyl Chloride-d3	0.280	0.282	0.010	0.8	50.0
Chloroethane-d5	0.252	0.268	0.010	6.4	50.0
1,1-Dichloroethene-d2	0.715	0.787	0.010	10.1	50.0
2-Butanone-d5	0.022	0.026	0.010	17.4	50.0
Chloroform-d	0.632	0.673	0.010	6.5	50.0
1,2-Dichloroethane-d4	0.274	0.312	0.010	13.9	50.0
Benzene-d6	1.142	1.223	0.010	7.1	50.0
1,2-Dichloropropane-d6	0.231	0.232	0.010	0.8	50.0
Toluene-d8	1.272	1.383	0.010	8.8	50.0
trans-1,3-Dichloropropene-d4	0.247	0.297	0.010	20.5	50.0
2-Hexanone-d5	0.020	0.025	0.010	22.8	50.0
1,1,2,2-Tetrachloroethane-d2	0.119	0.141	0.010	18.6	50.0
1,2-Dichlorobenzene-d4	0.817	0.865	0.010	6.0	50.0

Report 1,4-Dioxane-d8 for Low/Medium VOA analysis only

1A - FORM I VOA-1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKDU

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: MB 200-90694/6  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 14535\_006.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_ Date Analyzed: 07/06/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg)ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene Chloride	0.11	J
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only



1B - FORM I VOA-2  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKDU

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: MB 200-90694/6  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 14535\_006.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: \_\_\_\_\_  
 % Moisture: not dec. Date Analyzed: 07/06/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg)ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.0093	J
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKDU

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: MB 200-90694/6  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 14535\_006.D  
 Level: (TRACE or LOW/MED) TRACE Date Received: \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_ Date Analyzed: 07/06/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	7.29	3.0	J X
02	541-05-9	Cyclotrisiloxane, hexamethyl-	8.22	0.87	J N
03	556-67-2	Cyclotetrasiloxane, octamethyl-	11.04	0.86	J N
04	E9667961	Total Alkanes	N/A		

<sup>1</sup>EPA-designated Registry Number.

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-28712-4  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 14535\_018.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: \_\_\_\_\_  
 % Moisture: not dec. Date Analyzed: 07/06/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg)ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-28712-4  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 14535\_018.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_ Date Analyzed: 07/06/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg)ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VHBLK01

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-28712-4  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 14535\_018.D  
 Level: (TRACE or LOW/MED) TRACE Date Received: \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_ Date Analyzed: 07/06/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	7.29	2.9	J B X
02		Unknown	8.22	0.70	J B
03	556-67-2	Cyclotetrasiloxane, octamethyl-	11.04	0.70	J N B
04	E9667961	Total Alkanes	N/A		

<sup>1</sup>EPA-designated Registry Number.

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: VIBLK 200-90694/16  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 14535\_016.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: \_\_\_\_\_  
 % Moisture: not dec. Date Analyzed: 07/06/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg)ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

1B - FORM I VOA-2  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VIBLKDG

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: VIBLK 200-90694/16  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 14535\_016.D  
 Level: (TRACE/LOW/MED) TRACE Date Received: \_\_\_\_\_  
 % Moisture: not dec. Date Analyzed: 07/06/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg)ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.011	J B
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VIBLKDG

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302  
 Lab Code: STLV Case No.: AGRA Mod. Ref No.: \_\_\_\_\_ SDG No.: 28712  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: VIBLK 200-90694/16  
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 14535\_016.D  
 Level: (TRACE or LOW/MED) TRACE Date Received: \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_ Date Analyzed: 07/06/2015  
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	7.29	2.9	J X B
02	541-05-9	Cyclotrisiloxane, hexamethyl-	8.22	1.6	J N B
03	556-67-2	Cyclotetrasiloxane, octamethyl-	11.04	1.5	J N B
04	E9667961	Total Alkanes	N/A		

<sup>1</sup>EPA-designated Registry Number.



GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-28712-1

SDG No.: 28712

Instrument ID: CHD.i Analysis Batch Number: 90394

Lab Sample ID: IC 200-90394/7 Client Sample ID: \_\_\_\_\_

Date Analyzed: 06/29/15 13:49 Lab File ID: 14426\_007.D GC Column: DB-624 ID: 0.2 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dibromo-3-Chloropropane	13.44	Assign Peak	wilburj	06/29/15 14:14

Lab Sample ID: IC 200-90394/8 Client Sample ID: \_\_\_\_\_

Date Analyzed: 06/29/15 14:14 Lab File ID: 14426\_008.D GC Column: DB-624 ID: 0.2 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.64	Baseline	wilburj	06/29/15 14:57
1,2-Dibromo-3-Chloropropane	13.44	Assign Peak	wilburj	06/29/15 14:59

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-28712-1

SDG No.: 28712

Instrument ID: CHD.i Analysis Batch Number: 90694

Lab Sample ID: MB 200-90694/6 Client Sample ID: \_\_\_\_\_

Date Analyzed: 07/06/15 15:32 Lab File ID: 14535\_006.D GC Column: DB-624 ID: 0.2 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	3.20	Assign Peak	wilburj	07/15/15 19:27

REAGENT TRACEABILITY CROSS-REFERENCE

Lab Name: TestAmerica Burlington

Job No.: 200-28712-1

SDG No.: 28712

Reagent Container	Reagent ID	Reagent Description	Preparation Date	Expiration Date
804535	VMSOMTRSUw_00094	SOM TR DMC 20 PPM	06/15/2015	07/15/2015
804536	VMSOMTRCALw_00091	SOM TR CAL 20 PPM	06/15/2015	07/15/2015
807558	VMBFBw_00018	BFB TUNE 25 PPM	06/23/2015	12/22/2015
809829	VMSOMTRISw_00101	SOM TR ISTD 20 PPM	06/27/2015	07/27/2015

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington

Job No.: 200-28712-1

SDG No.: 28712

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
<b>VMFBw_00018</b>	12/22/15	06/23/15	METHANOL, Lot 147358	25 mL	VMFBFs_00014	125 uL	BFB	25 ug/mL
.VMFBFs_00014	12/22/15		RESTEK, Lot A0106759		(Purchased Reagent)		BFB	5000 ug/mL
<b>VMSOMTRCALw_00091</b>	07/15/15	06/15/15	METHANOL, Lot 147358	4000 uL	VM8260CALbs_00180	40 uL	Bromomethane	20 ug/mL
							Chloroethane	20 ug/mL
							Chloromethane	20 ug/mL
							Dichlorodifluoromethane	20 ug/mL
							Trichlorofluoromethane	20 ug/mL
							Vinyl chloride	20 ug/mL
					VMSOMCALas_00022	40 uL	1,1,1-Trichloroethane	20 ug/mL
							1,1,2,2-Tetrachloroethane	20 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	20 ug/mL
							1,1,2-Trichloroethane	20 ug/mL
							1,1-Dichloroethane	20 ug/mL
							1,1-Dichloroethene	20 ug/mL
							1,2,3-Trichlorobenzene	20 ug/mL
							1,2,4-Trichlorobenzene	20 ug/mL
							1,2-Dibromo-3-Chloropropane	20 ug/mL
							1,2-Dibromoethane	20 ug/mL
							1,2-Dichlorobenzene	20 ug/mL
							1,2-Dichloroethane	20 ug/mL
							1,2-Dichloropropane	20 ug/mL
							1,3-Dichlorobenzene	20 ug/mL
							1,4-Dichlorobenzene	20 ug/mL
							Benzene	20 ug/mL
							Bromochloromethane	20 ug/mL
							Bromodichloromethane	20 ug/mL
							Bromoform	20 ug/mL
							Carbon disulfide	20 ug/mL
							Carbon tetrachloride	20 ug/mL
							Chlorobenzene	20 ug/mL
							Chloroform	20 ug/mL
							cis-1,2-Dichloroethene	20 ug/mL
							cis-1,3-Dichloropropene	20 ug/mL
							Cyclohexane	20 ug/mL
							Dibromochloromethane	20 ug/mL
							Ethylbenzene	20 ug/mL
							Isopropylbenzene	20 ug/mL
							m,p-Xylene	20 ug/mL
							Methyl acetate	20 ug/mL
							Methyl tert-butyl ether	20 ug/mL
							Methylcyclohexane	20 ug/mL
							Methylene Chloride	20 ug/mL
							o-Xylene	20 ug/mL
							Styrene	20 ug/mL
							Tetrachloroethene	20 ug/mL
							Toluene	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington

Job No.: 200-28712-1

SDG No.: 28712

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,2-Dichloroethene	20 ug/mL
							trans-1,3-Dichloropropene	20 ug/mL
							Trichloroethene	20 ug/mL
					VMSOMCALbs_00032	160 uL	2-Butanone	200 ug/mL
							2-Hexanone	200 ug/mL
							4-Methyl-2-pentanone	200 ug/mL
							Acetone	200 ug/mL
					VMSOMSUas_00074	40 uL	Chloroethane-d5	20 ug/mL
							Vinyl Chloride-d3	20 ug/mL
					VMSOMSSubs_00126	320 uL	2-Butanone-d5	200 ug/mL
							2-Hexanone-d5	200 ug/mL
					VMSOMSUcs_00050	40 uL	1,1,2,2-Tetrachloroethane-d2	20 ug/mL
							1,1-Dichloroethene-d2	20 ug/mL
							1,2-Dichlorobenzene-d4	20 ug/mL
							1,2-Dichloroethane-d4	20 ug/mL
							1,2-Dichloropropane-d6	20 ug/mL
							Benzene-d6	20 ug/mL
							Chloroform-d	20 ug/mL
							Toluene-d8	20 ug/mL
							trans-1,3-Dichloropropene-d4	20 ug/mL
.VM8260CALbs_00180	06/13/16		RESTEK, Lot A0109529			(Purchased Reagent)	Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
.VMSOMCALas_00022	03/25/16		Restek, Lot A0102833			(Purchased Reagent)	1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,2,3-Trichlorobenzene	2000 ug/mL
							1,2,4-Trichlorobenzene	2000 ug/mL
							1,2-Dibromo-3-Chloropropane	2000 ug/mL
							1,2-Dibromoethane	2000 ug/mL
							1,2-Dichlorobenzene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,3-Dichlorobenzene	2000 ug/mL
							1,4-Dichlorobenzene	2000 ug/mL
							Benzene	2000 ug/mL
							Bromochloromethane	2000 ug/mL
							Bromodichloromethane	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington

Job No.: 200-28712-1

SDG No.: 28712

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobenzene	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Cyclohexane	2000 ug/mL
							Dibromochloromethane	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Isopropylbenzene	2000 ug/mL
							m,p-Xylene	2000 ug/mL
							Methyl acetate	2000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylcyclohexane	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							o-Xylene	2000 ug/mL
							Styrene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							Trichloroethene	2000 ug/mL
.VMSOMCALbs_00032	04/27/16		Restek, Lot A0101160		(Purchased Reagent)		2-Butanone	5000 ug/mL
							2-Hexanone	5000 ug/mL
							4-Methyl-2-pentanone	5000 ug/mL
							Acetone	5000 ug/mL
.VMSOMSUas_00074	04/29/16		Absolute, Lot 072214		(Purchased Reagent)		Chloroethane-d5	2000 ug/mL
							Vinyl Chloride-d3	2000 ug/mL
.VMSOMSUbs_00126	06/13/16		Absolute, Lot 080414		(Purchased Reagent)		2-Butanone-d5	2500 ug/mL
							2-Hexanone-d5	2500 ug/mL
.VMSOMSUcs_00050	04/27/16		Absolute, Lot 011614		(Purchased Reagent)		1,1,2,2-Tetrachloroethane-d2	2000 ug/mL
							1,1-Dichloroethene-d2	2000 ug/mL
							1,2-Dichlorobenzene-d4	2000 ug/mL
							1,2-Dichloroethane-d4	2000 ug/mL
							1,2-Dichloropropane-d6	2000 ug/mL
							Benzene-d6	2000 ug/mL
							Chloroform-d	2000 ug/mL
							Toluene-d8	2000 ug/mL
							trans-1,3-Dichloropropene-d4	2000 ug/mL
VMSOMTRISw_00101	07/27/15	06/27/15	METHANOL, Lot 147538	4400 uL	VMSOMISS_00024	35.2 uL	1,4-Dichlorobenzene-d4	20 ug/mL
							1,4-Difluorobenzene	20 ug/mL
							Chlorobenzene-d5	20 ug/mL
.VMSOMISS_00024	02/17/16		RESTEK, Lot A099377		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							1,4-Difluorobenzene	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
VMSOMTRSUw_00094	07/15/15	06/15/15	METHANOL, Lot 147358	4400 uL	VMSOMSUas_00074	44 uL	Chloroethane-d5	20 ug/mL
							Vinyl Chloride-d3	20 ug/mL
					VMSOMSUbs_00126	352 uL	2-Butanone-d5	200 ug/mL
							2-Hexanone-d5	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington

Job No.: 200-28712-1

SDG No.: 28712

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					VMSOMSUcs_00050	44 uL	1,1,2,2-Tetrachloroethane-d2	20 ug/mL
							1,1-Dichloroethene-d2	20 ug/mL
							1,2-Dichlorobenzene-d4	20 ug/mL
							1,2-Dichloroethane-d4	20 ug/mL
							1,2-Dichloropropane-d6	20 ug/mL
							Benzene-d6	20 ug/mL
							Chloroform-d	20 ug/mL
							Toluene-d8	20 ug/mL
							trans-1,3-Dichloropropene-d4	20 ug/mL
.VMSOMSUas_00074	04/29/16		Absolute, Lot 072214		(Purchased Reagent)		Chloroethane-d5	2000 ug/mL
							Vinyl Chloride-d3	2000 ug/mL
.VMSOMSUbs_00126	06/13/16		Absolute, Lot 080414		(Purchased Reagent)		2-Butanone-d5	2500 ug/mL
							2-Hexanone-d5	2500 ug/mL
.VMSOMSUcs_00050	04/27/16		Absolute, Lot 011614		(Purchased Reagent)		1,1,2,2-Tetrachloroethane-d2	2000 ug/mL
							1,1-Dichloroethene-d2	2000 ug/mL
							1,2-Dichlorobenzene-d4	2000 ug/mL
							1,2-Dichloroethane-d4	2000 ug/mL
							1,2-Dichloropropane-d6	2000 ug/mL
							Benzene-d6	2000 ug/mL
							Chloroform-d	2000 ug/mL
							Toluene-d8	2000 ug/mL
							trans-1,3-Dichloropropene-d4	2000 ug/mL

**Supplement 10:**  
**Daily Telemetry Reports**



Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/01/15

Time: 03:32:05PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/02/15

Time: 03:32:13PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/03/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/04/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/05/15

Time: 03:32:30PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/06/15

Time: 03:32:30PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE O/Load		OFF	OK				
ASP O/Load		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/07/15

Time: 03:31:59PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/08/15

Time: 03:32:13PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		



Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/09/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/10/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OUnload		OFF	OK				
ASP OUnload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/11/15

Time: 03:32:13PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/12/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/13/15

Time: 03:32:13PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OUnload		OFF	OK				
ASP OUnload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/14/15

Time: 03:32:33PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/15/15

Time: 03:32:17PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/16/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		



Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/17/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/18/15

Time: 03:32:16PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/19/15

Time: 03:41:40PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OUnload		OFF	OK				
ASP OUnload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.2 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/20/15

Time: 03:32:16PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/21/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OUnload		OFF	OK				
ASP OUnload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/22/15

Time: 03:32:33PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/23/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/24/15

Time: 03:32:30PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		



Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/25/15

Time: 03:32:17PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/26/15

Time: 03:32:13PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.2 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/27/15

Time: 03:32:36PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.2 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/28/15

Time: 03:32:30PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE O/Load		OFF	OK				
ASP O/Load		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.2 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/29/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/30/15

Time: 03:32:42PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 01/31/15

Time: 03:32:16PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/01/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.0		



Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/02/15

Time: 03:32:16PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.0		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/03/15

Time: 03:32:33PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.1		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/04/15

Time: 03:32:13PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.3		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/05/15

Time: 03:32:33PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.3		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/06/15

Time: 03:31:27PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.3		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/07/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/08/15

Time: 03:32:13PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.2 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/09/15

Time: 03:32:16PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		



Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/10/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/11/15

Time: 03:32:17PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/12/15

Time: 03:32:17PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/13/15

Time: 03:32:17PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.2 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/14/15

Time: 03:32:30PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/15/15

Time: 03:32:41PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/16/15

Time: 03:32:16PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/17/15

Time: 03:32:16PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		



Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/18/15

Time: 03:32:31PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/19/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OUnload		OFF	OK				
ASP OUnload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/20/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/21/15

Time: 03:32:13PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/22/15

Time: 03:32:32PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/23/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OUnload		OFF	OK				
ASP OUnload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/24/15

Time: 03:32:16PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/25/15

Time: 03:32:16PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		



Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/26/15

Time: 03:32:47PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/27/15

Time: 03:32:16PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 02/28/15

Time: 03:32:30PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.0		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/01/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OUnload		OFF	OK				
ASP OUnload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.1		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/02/15

Time: 03:32:43PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.2		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/03/15

Time: 03:32:43PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.2		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/04/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.2		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/05/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.2		



Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/06/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.2 V			0.0	0.2		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/07/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE O/Load		OFF	OK				
ASP O/Load		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/08/15

Time: 03:32:13PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.2 U			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/09/15

Time: 03:32:13PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.2 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/10/15

Time: 03:33:05PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/11/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/12/15

Time: 03:32:33PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/13/15

Time: 03:32:28PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		



Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/14/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/15/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/16/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/17/15

Time: 03:32:03PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/18/15

Time: 03:32:13PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.2 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/19/15

Time: 03:32:16PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/21/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/22/15

Time: 03:32:31PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		



Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/20/15

Time: 03:32:17PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/23/15

Time: 03:32:35PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.2 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/24/15

Time: 03:32:17PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/25/15

Time: 03:32:33PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/26/15

Time: 03:32:30PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE O/Load		OFF	OK				
ASP O/Load		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/27/15

Time: 03:32:08PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE Ouload		OFF	OK				
ASP Ouload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/28/15

Time: 03:32:16PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/29/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.2 V			0.1	0.2		



Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/30/15

Time: 03:32:04PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OUnload		OFF	OK				
ASP OUnload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 03/31/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/01/15

Time: 03:32:30PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/02/15

Time: 03:32:28PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OUnload		OFF	OK				
ASP OUnload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 U			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/03/15

Time: 03:32:30PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/04/15

Time: 03:32:33PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.2 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/05/15

Time: 03:32:16PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OUnload		OFF	OK				
ASP OUnload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/06/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		



Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/07/15

Time: 03:32:01PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.2 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/08/15

Time: 03:32:17PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/09/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 U			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/10/15

Time: 03:32:35PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/11/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.2 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/12/15

Time: 03:32:28PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/13/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE O/Load		OFF	OK				
ASP O/Load		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/14/15

Time: 03:32:30PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		



Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/15/15

Time: 03:31:23PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/16/15

Time: 03:32:16PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/17/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/18/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 U			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/19/15

Time: 03:32:56PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/20/15

Time: 03:32:13PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.2 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/21/15

Time: 03:32:33PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/22/15

Time: 03:32:30PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.2 V			0.0	0.4		



Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/23/15

Time: 03:32:13PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OUnload		OFF	OK				
ASP OUnload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/24/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 U			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/26/15

Time: 03:32:17PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/25/15

Time: 03:32:13PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE O/Load		OFF	OK				
ASP O/Load		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.2 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/27/15

Time: 03:32:16PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/28/15

Time: 03:32:30PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/29/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 04/30/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		



Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/01/15

Time: 03:32:32PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/02/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 U			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/03/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/04/15

Time: 03:32:13PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OUload		OFF	OK				
ASP OUload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/05/15

Time: 03:32:04PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE O/Load		OFF	OK				
ASP O/Load		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/06/15

Time: 03:32:16PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/07/15

Time: 03:32:13PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/08/15

Time: 03:32:48PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		



Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/09/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/10/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.2 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/11/15

Time: 03:32:30PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.2 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/12/15

Time: 03:32:30PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/13/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.2 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/14/15

Time: 03:32:13PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/15/15

Time: 03:32:17PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/16/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.2 V			0.0	0.4		



Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/17/15

Time: 03:32:13PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/18/15

Time: 03:32:57PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/19/15

Time: 03:32:34PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.0 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/20/15

Time: 03:32:17PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/21/15

Time: 03:32:13PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/22/15

Time: 03:32:34PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/23/15

Time: 03:32:17PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.1 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/24/15

Time: 03:32:30PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.2 V			0.0	0.4		



Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/25/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/26/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/27/15

Time: 03:32:04PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/28/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/29/15

Time: 03:32:13PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/30/15

Time: 03:32:33PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 05/31/15

Time: 03:32:29PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 U			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/01/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		



Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/02/15

Time: 03:32:16PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OUnload		OFF	OK				
ASP OUnload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 U			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/03/15

Time: 03:33:25PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/04/15

Time: 03:40:39PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OUnload		OFF	OK				
ASP OUnload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/05/15

Time: 03:32:16PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/06/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/07/15

Time: 03:32:38PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/08/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/09/15

Time: 03:33:02PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		



Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/10/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/11/15

Time: 03:32:16PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/12/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.2 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/13/15

Time: 03:32:17PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 U			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/14/15

Time: 03:32:13PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/15/15

Time: 03:32:35PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/16/15

Time: 03:32:33PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OUload		OFF	OK				
ASP OUload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/17/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		



Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/18/15

Time: 03:32:13PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OUload		OFF	OK				
ASP OUload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/19/15

Time: 03:32:38PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/20/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/21/15

Time: 03:32:19PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OUload		OFF	OK				
ASP OUload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/22/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/23/15

Time: 03:32:13PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/24/15

Time: 03:32:34PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SUE OVload		OFF	OK				
ASP OVload		OFF	OK				
SUE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/25/15

Time: 03:32:12PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.3 V			0.0	0.4		



Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/26/15

Time: 03:36:50PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/27/15

Time: 03:32:13PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/28/15

Time: 03:32:16PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/29/15

Time: 03:32:17PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

Sensaphone 2000 Status Report

From: Agra CCC/USDA

at: 917856382233

Date: 06/30/15

Time: 03:32:34PM

INPUT NAME	VALUE	STATUS	STATE	MIN	MAX	LOLIM	HILIM
SVE OVload		OFF	OK				
ASP OVload		OFF	OK				
SVE Motor		RUNNING	OK				
ASP Motor		RUNNING	OK				
K.O. Tank		OFF	OK				
Input 6		OPEN	OK				
Input 7		OPEN	OK				
Agra CCC/USDA		OPEN	OK				
AC Power	1.0	ON	OK				
Battery	0.4 V			0.0	0.4		

**Supplement 11:**

**Automatically Recorded Air Pressures in Soil Gas Wells and Local  
Barometric Pressure**

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

Date/Time	Pressure (psi)						
	Atmospheric	SG1S	SG2S	SG3S	SG1D	SG2D	SG3D
1/1/15 0:00	13.892	13.903	13.850	13.783	13.882	13.905	13.908
1/1/15 2:00	13.859	13.873	13.825	13.756	13.847	13.873	13.874
1/1/15 4:00	13.851	13.864	13.812	13.745	13.841	13.864	13.867
1/1/15 6:00	13.833	13.847	13.793	13.725	13.822	13.845	13.847
1/1/15 8:00	13.828	13.838	13.789	13.719	13.816	13.841	13.844
1/1/15 10:00	13.832	13.843	13.788	13.722	13.820	13.844	13.847
1/1/15 12:00	13.823	13.839	13.787	13.719	13.814	13.838	13.841
1/1/15 14:00	13.793	13.808	13.757	13.690	13.782	13.808	13.810
1/1/15 16:00	13.790	13.801	13.747	13.681	13.779	13.803	13.805
1/1/15 18:00	13.791	13.805	13.751	13.685	13.782	13.804	13.808
1/1/15 20:00	13.806	13.813	13.763	13.695	13.793	13.819	13.821
1/1/15 22:00	13.806	13.817	13.764	13.696	13.796	13.819	13.822
1/2/15 0:00	13.811	13.824	13.769	13.702	13.801	13.824	13.827
1/2/15 2:00	13.813	13.824	13.774	13.706	13.800	13.825	13.828
1/2/15 4:00	13.814	13.825	13.770	13.704	13.803	13.827	13.830
1/2/15 6:00	13.812	13.823	13.769	13.703	13.800	13.823	13.827
1/2/15 8:00	13.821	13.832	13.778	13.711	13.809	13.834	13.836
1/2/15 10:00	13.827	13.838	13.784	13.717	13.815	13.839	13.842
1/2/15 12:00	13.818	13.830	13.778	13.709	13.808	13.831	13.834
1/2/15 14:00	13.782	13.797	13.747	13.679	13.772	13.799	13.800
1/2/15 16:00	13.768	13.784	13.729	13.663	13.761	13.785	13.787
1/2/15 18:00	13.762	13.778	13.724	13.657	13.755	13.778	13.782
1/2/15 20:00	13.751	13.762	13.713	13.642	13.741	13.766	13.769
1/2/15 22:00	13.740	13.753	13.697	13.631	13.733	13.756	13.760
1/3/15 0:00	13.732	13.749	13.693	13.625	13.722	13.746	13.748
1/3/15 2:00	13.712	13.724	13.670	13.607	13.701	13.726	13.728
1/3/15 4:00	13.698	13.712	13.660	13.592	13.687	13.711	13.714
1/3/15 6:00	13.683	13.689	13.634	13.567	13.667	13.690	13.693
1/3/15 8:00	13.673	13.680	13.628	13.562	13.658	13.684	13.686
1/3/15 10:00	13.670	13.683	13.629	13.562	13.660	13.683	13.686
1/3/15 12:00	13.669	13.683	13.631	13.564	13.660	13.682	13.685
1/3/15 14:00	13.644	13.658	13.608	13.540	13.635	13.660	13.664
1/3/15 16:00	13.660	13.672	13.615	13.551	13.651	13.674	13.678
1/3/15 18:00	13.761	13.769	13.710	13.648	13.749	13.772	13.777
1/3/15 20:00	13.806	13.814	13.758	13.695	13.792	13.818	13.822
1/3/15 22:00	13.848	13.857	13.800	13.738	13.835	13.858	13.863
1/4/15 0:00	13.883	13.895	13.837	13.772	13.873	13.896	13.900
1/4/15 2:00	13.894	13.904	13.852	13.787	13.883	13.909	13.913
1/4/15 4:00	13.931	13.942	13.885	13.821	13.920	13.944	13.947
1/4/15 6:00	13.950	13.959	13.906	13.838	13.938	13.961	13.965
1/4/15 8:00	13.973	13.981	13.927	13.861	13.960	13.985	13.989
1/4/15 10:00	14.013	14.021	13.964	13.899	14.001	14.025	14.027
1/4/15 12:00	14.023	14.039	13.984	13.917	14.015	14.038	14.041
1/4/15 14:00	14.000	14.014	13.961	13.895	13.991	14.017	14.019
1/4/15 16:00	14.002	14.018	13.959	13.895	13.995	14.019	14.021
1/4/15 18:00	14.015	14.029	13.971	13.906	14.007	14.030	14.034
1/4/15 20:00	14.018	14.035	13.984	13.916	14.011	14.035	14.039
1/4/15 22:00	14.028	14.045	13.989	13.922	14.022	14.046	14.048
1/5/15 0:00	14.052	14.065	14.009	13.942	14.041	14.064	14.067
1/5/15 2:00	14.051	14.068	14.012	13.948	14.044	14.068	14.070

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

Pressure (psi)							
Date/Time	Atmospheric	SG1S	SG2S	SG3S	SG1D	SG2D	SG3D
1/5/15 4:00	14.044	14.059	14.006	13.939	14.038	14.062	14.063
1/5/15 6:00	14.020	14.038	13.983	13.916	14.015	14.037	14.040
1/5/15 8:00	13.985	14.002	13.949	13.883	13.977	14.003	14.005
1/5/15 10:00	13.943	13.959	13.909	13.839	13.935	13.959	13.962
1/5/15 12:00	13.903	13.921	13.871	13.802	13.897	13.920	13.923
1/5/15 14:00	13.829	13.845	13.790	13.725	13.823	13.849	13.851
1/5/15 16:00	13.801	13.817	13.768	13.699	13.794	13.819	13.820
1/5/15 18:00	13.799	13.817	13.763	13.696	13.792	13.815	13.818
1/5/15 20:00	13.825	13.835	13.782	13.716	13.813	13.837	13.840
1/5/15 22:00	13.842	13.852	13.798	13.731	13.832	13.855	13.859
1/6/15 0:00	13.886	13.893	13.837	13.770	13.874	13.896	13.900
1/6/15 2:00	13.930	13.937	13.885	13.820	13.918	13.942	13.947
1/6/15 4:00	13.977	13.985	13.929	13.862	13.962	13.985	13.989
1/6/15 6:00	13.991	14.006	13.948	13.883	13.985	14.009	14.011
1/6/15 8:00	14.006	14.018	13.965	13.896	13.995	14.020	14.021
1/6/15 10:00	14.014	14.031	13.974	13.910	14.006	14.030	14.033
1/6/15 12:00	14.001	14.020	13.969	13.899	13.996	14.019	14.021
1/6/15 14:00	13.958	13.977	13.925	13.858	13.953	13.979	13.980
1/6/15 16:00	13.937	13.956	13.898	13.833	13.933	13.955	13.959
1/6/15 18:00	13.932	13.945	13.890	13.825	13.921	13.942	13.947
1/6/15 20:00	13.956	13.961	13.910	13.845	13.939	13.964	13.968
1/6/15 22:00	14.001	14.009	13.954	13.887	13.988	14.011	14.014
1/7/15 0:00	14.060	14.070	14.014	13.948	14.047	14.071	14.074
1/7/15 2:00	14.098	14.107	14.055	13.988	14.085	14.111	14.113
1/7/15 4:00	14.137	14.151	14.092	14.029	14.128	14.152	14.155
1/7/15 6:00	14.169	14.180	14.122	14.057	14.157	14.179	14.184
1/7/15 8:00	14.192	14.202	14.151	14.083	14.180	14.205	14.208
1/7/15 10:00	14.233	14.246	14.192	14.126	14.224	14.247	14.251
1/7/15 12:00	14.250	14.265	14.210	14.143	14.242	14.264	14.268
1/7/15 14:00	14.220	14.234	14.184	14.116	14.211	14.236	14.239
1/7/15 16:00	14.201	14.219	14.164	14.097	14.196	14.219	14.221
1/7/15 18:00	14.179	14.196	14.143	14.073	14.174	14.196	14.199
1/7/15 20:00	14.138	14.152	14.099	14.033	14.127	14.154	14.155
1/7/15 22:00	14.090	14.106	14.056	13.988	14.084	14.107	14.110
1/8/15 0:00	14.031	14.050	14.000	13.930	14.026	14.048	14.051
1/8/15 2:00	13.953	13.969	13.921	13.851	13.944	13.969	13.971
1/8/15 4:00	13.896	13.910	13.858	13.791	13.887	13.911	13.914
1/8/15 6:00	13.819	13.838	13.796	13.724	13.813	13.835	13.837
1/8/15 8:00	13.764	13.779	13.730	13.662	13.753	13.778	13.780
1/8/15 10:00	13.769	13.781	13.728	13.660	13.760	13.785	13.786
1/8/15 12:00	13.762	13.781	13.726	13.659	13.757	13.778	13.782
1/8/15 14:00	13.753	13.764	13.714	13.646	13.742	13.768	13.770
1/8/15 16:00	13.776	13.781	13.728	13.663	13.765	13.789	13.794
1/8/15 18:00	13.837	13.843	13.787	13.723	13.824	13.846	13.852
1/8/15 20:00	13.898	13.889	13.845	13.781	13.871	13.907	13.913
1/8/15 22:00	13.948	13.950	13.899	13.836	13.932	13.960	13.964
1/9/15 0:00	13.967	13.978	13.921	13.859	13.956	13.979	13.984
1/9/15 2:00	13.996	13.993	13.950	13.885	13.974	14.009	14.012
1/9/15 4:00	14.015	14.020	13.972	13.906	14.001	14.028	14.032
1/9/15 6:00	14.014	14.028	13.975	13.908	14.005	14.028	14.031



TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

Date/Time	Pressure (psi)						
	Atmospheric	SG1S	SG2S	SG3S	SG1D	SG2D	SG3D
1/9/15 8:00	14.013	14.010	13.970	13.903	13.991	14.025	14.028
1/9/15 10:00	14.031	14.039	13.989	13.922	14.018	14.046	14.049
1/9/15 12:00	14.033	14.047	13.995	13.927	14.024	14.047	14.050
1/9/15 14:00	13.995	13.998	13.959	13.891	13.976	14.012	14.014
1/9/15 16:00	13.979	13.988	13.940	13.874	13.968	13.995	13.997
1/9/15 18:00	13.972	13.988	13.934	13.868	13.964	13.987	13.991
1/9/15 20:00	13.966	13.965	13.925	13.857	13.944	13.979	13.982
1/9/15 22:00	13.948	13.958	13.911	13.843	13.938	13.964	13.967
1/10/15 0:00	13.921	13.934	13.883	13.815	13.910	13.934	13.937
1/10/15 2:00	13.893	13.895	13.853	13.787	13.874	13.907	13.908
1/10/15 4:00	13.868	13.877	13.828	13.761	13.855	13.881	13.884
1/10/15 6:00	13.824	13.836	13.784	13.716	13.813	13.836	13.839
1/10/15 8:00	13.804	13.806	13.763	13.696	13.785	13.817	13.819
1/10/15 10:00	13.805	13.810	13.762	13.694	13.791	13.817	13.819
1/10/15 12:00	13.787	13.804	13.752	13.685	13.781	13.803	13.806
1/10/15 14:00	13.756	13.761	13.724	13.655	13.739	13.774	13.776
1/10/15 16:00	13.742	13.750	13.702	13.635	13.730	13.756	13.760
1/10/15 18:00	13.752	13.765	13.710	13.645	13.743	13.766	13.771
1/10/15 20:00	13.764	13.761	13.722	13.654	13.740	13.777	13.780
1/10/15 22:00	13.767	13.775	13.726	13.661	13.755	13.782	13.786
1/11/15 0:00	13.765	13.780	13.726	13.659	13.757	13.780	13.784
1/11/15 2:00	13.756	13.755	13.714	13.647	13.735	13.769	13.771
1/11/15 4:00	13.762	13.770	13.720	13.654	13.749	13.776	13.779
1/11/15 6:00	13.752	13.765	13.711	13.645	13.741	13.764	13.767
1/11/15 8:00	13.751	13.752	13.711	13.643	13.731	13.764	13.766
1/11/15 10:00	13.766	13.771	13.719	13.654	13.751	13.777	13.780
1/11/15 12:00	13.771	13.785	13.730	13.662	13.763	13.785	13.788
1/11/15 14:00	13.757	13.754	13.715	13.648	13.735	13.770	13.773
1/11/15 16:00	13.765	13.771	13.720	13.655	13.751	13.779	13.782
1/11/15 18:00	13.795	13.808	13.751	13.686	13.787	13.809	13.813
1/11/15 20:00	13.845	13.842	13.802	13.736	13.821	13.858	13.861
1/11/15 22:00	13.887	13.889	13.837	13.773	13.872	13.899	13.903
1/12/15 0:00	13.920	13.930	13.873	13.808	13.907	13.930	13.934
1/12/15 2:00	13.944	13.940	13.900	13.832	13.921	13.955	13.958
1/12/15 4:00	13.980	13.990	13.941	13.875	13.970	13.995	13.999
1/12/15 6:00	13.997	14.008	13.953	13.887	13.986	14.009	14.012
1/12/15 8:00	14.018	14.018	13.977	13.910	13.998	14.031	14.034
1/12/15 10:00	14.045	14.052	14.000	13.935	14.032	14.057	14.060
1/12/15 12:00	14.056	14.070	14.018	13.950	14.049	14.072	14.074
1/12/15 14:00	14.036	14.041	14.000	13.934	14.019	14.054	14.055
1/12/15 16:00	14.023	14.033	13.983	13.916	14.011	14.039	14.042
1/12/15 18:00	14.027	14.041	13.986	13.920	14.018	14.041	14.044
1/12/15 20:00	14.035	14.036	13.996	13.927	14.015	14.050	14.052
1/12/15 22:00	14.044	14.054	14.005	13.937	14.033	14.059	14.062
1/13/15 0:00	14.042	14.056	14.004	13.937	14.035	14.057	14.061
1/13/15 2:00	14.031	14.035	13.992	13.924	14.014	14.046	14.048
1/13/15 4:00	14.029	14.040	13.990	13.922	14.019	14.045	14.047
1/13/15 6:00	14.008	14.027	13.974	13.907	14.002	14.026	14.028
1/13/15 8:00	14.001	14.006	13.961	13.894	13.985	14.017	14.019
1/13/15 10:00	13.998	14.010	13.959	13.892	13.987	14.013	14.015

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

Date/Time	Pressure (psi)						
	Atmospheric	SG1S	SG2S	SG3S	SG1D	SG2D	SG3D
1/13/15 12:00	13.996	14.011	13.958	13.891	13.990	14.012	14.015
1/13/15 14:00	13.963	13.970	13.927	13.860	13.949	13.981	13.982
1/13/15 16:00	13.942	13.954	13.906	13.837	13.931	13.958	13.960
1/13/15 18:00	13.936	13.952	13.896	13.831	13.929	13.951	13.955
1/13/15 20:00	13.941	13.943	13.899	13.832	13.923	13.956	13.958
1/13/15 22:00	13.937	13.948	13.897	13.831	13.926	13.952	13.954
1/14/15 0:00	13.934	13.948	13.894	13.828	13.926	13.948	13.952
1/14/15 2:00	13.922	13.925	13.882	13.814	13.906	13.938	13.940
1/14/15 4:00	13.912	13.922	13.873	13.805	13.902	13.927	13.930
1/14/15 6:00	13.898	13.913	13.859	13.792	13.889	13.912	13.916
1/14/15 8:00	13.902	13.905	13.860	13.794	13.884	13.916	13.917
1/14/15 10:00	13.898	13.907	13.857	13.790	13.887	13.911	13.915
1/14/15 12:00	13.900	13.917	13.862	13.795	13.895	13.917	13.920
1/14/15 14:00	13.864	13.870	13.830	13.762	13.848	13.881	13.884
1/14/15 16:00	13.844	13.855	13.805	13.738	13.833	13.860	13.862
1/14/15 18:00	13.845	13.858	13.804	13.738	13.837	13.859	13.863
1/14/15 20:00	13.841	13.843	13.803	13.734	13.821	13.855	13.857
1/14/15 22:00	13.833	13.844	13.795	13.728	13.821	13.847	13.850
1/15/15 0:00	13.838	13.844	13.791	13.724	13.826	13.849	13.852
1/15/15 2:00	13.825	13.828	13.785	13.717	13.807	13.838	13.840
1/15/15 4:00	13.821	13.831	13.779	13.713	13.811	13.835	13.838
1/15/15 6:00	13.819	13.831	13.776	13.710	13.807	13.831	13.834
1/15/15 8:00	13.831	13.836	13.789	13.723	13.816	13.846	13.848
1/15/15 10:00	13.857	13.866	13.813	13.746	13.847	13.871	13.874
1/15/15 12:00	13.870	13.885	13.830	13.764	13.862	13.885	13.888
1/15/15 14:00	13.849	13.853	13.813	13.746	13.832	13.865	13.867
1/15/15 16:00	13.849	13.858	13.805	13.739	13.836	13.862	13.865
1/15/15 18:00	13.848	13.859	13.805	13.739	13.838	13.860	13.863
1/15/15 20:00	13.843	13.845	13.803	13.735	13.824	13.859	13.860
1/15/15 22:00	13.844	13.853	13.801	13.735	13.831	13.857	13.860
1/16/15 0:00	13.837	13.850	13.796	13.729	13.828	13.851	13.855
1/16/15 2:00	13.822	13.823	13.783	13.713	13.801	13.835	13.835
1/16/15 4:00	13.810	13.820	13.771	13.702	13.800	13.825	13.827
1/16/15 6:00	13.797	13.813	13.758	13.692	13.790	13.813	13.816
1/16/15 8:00	13.781	13.785	13.741	13.674	13.764	13.796	13.797
1/16/15 10:00	13.765	13.776	13.722	13.656	13.754	13.779	13.782
1/16/15 12:00	13.756	13.774	13.721	13.651	13.751	13.773	13.776
1/16/15 14:00	13.723	13.729	13.688	13.620	13.706	13.739	13.740
1/16/15 16:00	13.696	13.707	13.658	13.590	13.685	13.711	13.713
1/16/15 18:00	13.676	13.690	13.637	13.569	13.667	13.690	13.693
1/16/15 20:00	13.672	13.675	13.634	13.563	13.653	13.687	13.687
1/16/15 22:00	13.657	13.673	13.618	13.555	13.649	13.676	13.677
1/17/15 0:00	13.642	13.653	13.597	13.531	13.631	13.654	13.655
1/17/15 2:00	13.637	13.641	13.603	13.533	13.619	13.653	13.653
1/17/15 4:00	13.640	13.647	13.597	13.529	13.627	13.653	13.655
1/17/15 6:00	13.656	13.667	13.612	13.546	13.646	13.668	13.671
1/17/15 8:00	13.691	13.687	13.645	13.578	13.668	13.701	13.701
1/17/15 10:00	13.732	13.740	13.684	13.618	13.719	13.745	13.747
1/17/15 12:00	13.784	13.792	13.739	13.671	13.772	13.795	13.798
1/17/15 14:00	13.778	13.782	13.741	13.672	13.760	13.794	13.793

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
1/17/15 16:00	13.780	13.788	13.736	13.668	13.766	13.792	13.794
1/17/15 18:00	13.793	13.806	13.749	13.684	13.785	13.806	13.809
1/17/15 20:00	13.799	13.805	13.761	13.691	13.782	13.813	13.813
1/17/15 22:00	13.805	13.816	13.762	13.697	13.796	13.821	13.822
1/18/15 0:00	13.802	13.815	13.759	13.691	13.793	13.815	13.817
1/18/15 2:00	13.786	13.791	13.748	13.679	13.769	13.801	13.801
1/18/15 4:00	13.776	13.791	13.741	13.672	13.767	13.793	13.794
1/18/15 6:00	13.749	13.763	13.708	13.641	13.740	13.763	13.765
1/18/15 8:00	13.746	13.745	13.701	13.631	13.725	13.755	13.756
1/18/15 10:00	13.733	13.749	13.696	13.627	13.726	13.750	13.752
1/18/15 12:00	13.731	13.746	13.690	13.623	13.723	13.746	13.748
1/18/15 14:00	13.714	13.721	13.676	13.607	13.696	13.727	13.727
1/18/15 16:00	13.722	13.730	13.676	13.609	13.709	13.734	13.736
1/18/15 18:00	13.735	13.746	13.691	13.624	13.725	13.746	13.749
1/18/15 20:00	13.743	13.749	13.703	13.634	13.727	13.757	13.757
1/18/15 22:00	13.741	13.752	13.698	13.631	13.732	13.757	13.758
1/19/15 0:00	13.749	13.762	13.705	13.638	13.740	13.763	13.764
1/19/15 2:00	13.741	13.747	13.703	13.633	13.724	13.756	13.754
1/19/15 4:00	13.734	13.744	13.695	13.624	13.722	13.747	13.748
1/19/15 6:00	13.719	13.732	13.680	13.611	13.709	13.732	13.734
1/19/15 8:00	13.724	13.729	13.684	13.616	13.708	13.739	13.739
1/19/15 10:00	13.740	13.745	13.695	13.625	13.725	13.751	13.753
1/19/15 12:00	13.758	13.773	13.718	13.652	13.750	13.772	13.775
1/19/15 14:00	13.747	13.750	13.705	13.636	13.730	13.760	13.759
1/19/15 16:00	13.746	13.752	13.702	13.633	13.731	13.757	13.757
1/19/15 18:00	13.751	13.762	13.705	13.639	13.740	13.761	13.764
1/19/15 20:00	13.761	13.766	13.719	13.651	13.745	13.775	13.776
1/19/15 22:00	13.765	13.776	13.724	13.657	13.755	13.780	13.782
1/20/15 0:00	13.766	13.780	13.724	13.657	13.758	13.779	13.783
1/20/15 2:00	13.777	13.778	13.731	13.662	13.759	13.788	13.789
1/20/15 4:00	13.784	13.792	13.742	13.672	13.771	13.796	13.798
1/20/15 6:00	13.782	13.799	13.743	13.676	13.775	13.798	13.800
1/20/15 8:00	13.798	13.803	13.756	13.690	13.782	13.811	13.812
1/20/15 10:00	13.807	13.817	13.765	13.697	13.798	13.824	13.825
1/20/15 12:00	13.819	13.834	13.778	13.712	13.811	13.834	13.836
1/20/15 14:00	13.802	13.809	13.765	13.696	13.788	13.818	13.819
1/20/15 16:00	13.792	13.802	13.751	13.684	13.780	13.805	13.808
1/20/15 18:00	13.797	13.808	13.752	13.686	13.787	13.808	13.812
1/20/15 20:00	13.805	13.811	13.763	13.695	13.790	13.819	13.821
1/20/15 22:00	13.816	13.826	13.772	13.707	13.806	13.830	13.833
1/21/15 0:00	13.830	13.842	13.785	13.720	13.821	13.842	13.846
1/21/15 2:00	13.836	13.842	13.795	13.727	13.821	13.850	13.851
1/21/15 4:00	13.848	13.858	13.804	13.738	13.837	13.862	13.864
1/21/15 6:00	13.848	13.862	13.808	13.741	13.840	13.862	13.865
1/21/15 8:00	13.869	13.874	13.825	13.758	13.853	13.882	13.884
1/21/15 10:00	13.879	13.889	13.837	13.770	13.868	13.892	13.895
1/21/15 12:00	13.889	13.904	13.848	13.782	13.880	13.903	13.906
1/21/15 14:00	13.869	13.878	13.832	13.764	13.855	13.885	13.886
1/21/15 16:00	13.862	13.874	13.821	13.755	13.851	13.876	13.879
1/21/15 18:00	13.873	13.886	13.830	13.765	13.865	13.886	13.890

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

Date/Time	Pressure (psi)						
	Atmospheric	SG1S	SG2S	SG3S	SG1D	SG2D	SG3D
1/21/15 20:00	13.902	13.904	13.855	13.789	13.885	13.913	13.915
1/21/15 22:00	13.919	13.929	13.877	13.811	13.908	13.934	13.936
1/22/15 0:00	13.931	13.944	13.890	13.824	13.923	13.944	13.948
1/22/15 2:00	13.931	13.938	13.892	13.824	13.915	13.945	13.947
1/22/15 4:00	13.949	13.959	13.906	13.840	13.938	13.962	13.965
1/22/15 6:00	13.960	13.973	13.918	13.852	13.952	13.973	13.977
1/22/15 8:00	13.965	13.972	13.925	13.857	13.951	13.980	13.982
1/22/15 10:00	13.972	13.983	13.930	13.863	13.962	13.987	13.989
1/22/15 12:00	13.977	13.994	13.940	13.872	13.970	13.993	13.995
1/22/15 14:00	13.940	13.950	13.906	13.836	13.928	13.956	13.957
1/22/15 16:00	13.911	13.923	13.873	13.805	13.902	13.927	13.929
1/22/15 18:00	13.901	13.915	13.861	13.795	13.892	13.915	13.918
1/22/15 20:00	13.898	13.906	13.858	13.790	13.884	13.913	13.915
1/22/15 22:00	13.893	13.905	13.854	13.786	13.883	13.908	13.910
1/23/15 0:00	13.889	13.904	13.848	13.782	13.882	13.904	13.907
1/23/15 2:00	13.869	13.875	13.830	13.761	13.854	13.883	13.885
1/23/15 4:00	13.855	13.867	13.816	13.748	13.846	13.870	13.872
1/23/15 6:00	13.831	13.844	13.790	13.724	13.822	13.844	13.847
1/23/15 8:00	13.814	13.821	13.775	13.707	13.800	13.829	13.830
1/23/15 10:00	13.808	13.818	13.766	13.698	13.797	13.821	13.823
1/23/15 12:00	13.799	13.815	13.760	13.693	13.793	13.815	13.817
1/23/15 14:00	13.768	13.779	13.731	13.664	13.757	13.784	13.785
1/23/15 16:00	13.754	13.767	13.710	13.643	13.742	13.767	13.769
1/23/15 18:00	13.763	13.771	13.720	13.654	13.753	13.775	13.779
1/23/15 20:00	13.785	13.794	13.741	13.675	13.770	13.798	13.800
1/23/15 22:00	13.793	13.807	13.752	13.687	13.783	13.809	13.812
1/24/15 0:00	13.800	13.809	13.757	13.691	13.792	13.813	13.817
1/24/15 2:00	13.795	13.806	13.754	13.688	13.782	13.810	13.813
1/24/15 4:00	13.786	13.800	13.743	13.678	13.775	13.800	13.802
1/24/15 6:00	13.777	13.788	13.738	13.672	13.771	13.793	13.796
1/24/15 8:00	13.766	13.780	13.727	13.661	13.753	13.782	13.784
1/24/15 10:00	13.749	13.763	13.707	13.641	13.739	13.764	13.767
1/24/15 12:00	13.735	13.750	13.701	13.634	13.731	13.753	13.756
1/24/15 14:00	13.691	13.707	13.656	13.590	13.679	13.707	13.709
1/24/15 16:00	13.658	13.672	13.619	13.552	13.644	13.669	13.671
1/24/15 18:00	13.659	13.665	13.614	13.548	13.648	13.670	13.675
1/24/15 20:00	13.661	13.671	13.618	13.552	13.646	13.675	13.677
1/24/15 22:00	13.656	13.668	13.613	13.546	13.645	13.670	13.673
1/25/15 0:00	13.675	13.682	13.632	13.566	13.665	13.688	13.692
1/25/15 2:00	13.681	13.693	13.641	13.575	13.666	13.696	13.698
1/25/15 4:00	13.700	13.714	13.656	13.591	13.688	13.713	13.715
1/25/15 6:00	13.717	13.723	13.672	13.607	13.707	13.729	13.733
1/25/15 8:00	13.736	13.745	13.691	13.626	13.719	13.748	13.751
1/25/15 10:00	13.755	13.768	13.708	13.645	13.744	13.768	13.771
1/25/15 12:00	13.778	13.787	13.734	13.670	13.771	13.792	13.798
1/25/15 14:00	13.786	13.794	13.741	13.676	13.769	13.797	13.800
1/25/15 16:00	13.782	13.796	13.737	13.674	13.769	13.795	13.798
1/25/15 18:00	13.796	13.803	13.754	13.688	13.786	13.808	13.813
1/25/15 20:00	13.797	13.807	13.754	13.689	13.781	13.810	13.813
1/25/15 22:00	13.800	13.812	13.755	13.690	13.789	13.813	13.816

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

Date/Time	Pressure (psi)						
	Atmospheric	SG1S	SG2S	SG3S	SG1D	SG2D	SG3D
1/26/15 0:00	13.793	13.803	13.754	13.687	13.786	13.807	13.811
1/26/15 2:00	13.776	13.788	13.740	13.673	13.762	13.792	13.794
1/26/15 4:00	13.759	13.775	13.720	13.654	13.750	13.774	13.777
1/26/15 6:00	13.747	13.756	13.707	13.640	13.739	13.761	13.765
1/26/15 8:00	13.751	13.759	13.706	13.640	13.734	13.763	13.765
1/26/15 10:00	13.767	13.782	13.725	13.659	13.756	13.780	13.783
1/26/15 12:00	13.771	13.779	13.729	13.662	13.763	13.784	13.790
1/26/15 14:00	13.766	13.775	13.724	13.659	13.749	13.777	13.781
1/26/15 16:00	13.762	13.771	13.712	13.649	13.744	13.769	13.772
1/26/15 18:00	13.769	13.769	13.720	13.654	13.754	13.775	13.780
1/26/15 20:00	13.776	13.787	13.735	13.669	13.761	13.790	13.793
1/26/15 22:00	13.788	13.799	13.743	13.679	13.776	13.801	13.804
1/27/15 0:00	13.788	13.794	13.743	13.677	13.778	13.799	13.803
1/27/15 2:00	13.788	13.800	13.750	13.683	13.773	13.802	13.804
1/27/15 4:00	13.786	13.801	13.745	13.680	13.775	13.800	13.803
1/27/15 6:00	13.780	13.787	13.738	13.672	13.770	13.792	13.797
1/27/15 8:00	13.785	13.794	13.740	13.675	13.768	13.797	13.801
1/27/15 10:00	13.787	13.801	13.743	13.678	13.775	13.800	13.803
1/27/15 12:00	13.778	13.790	13.742	13.675	13.771	13.794	13.798
1/27/15 14:00	13.752	13.763	13.712	13.647	13.735	13.765	13.768
1/27/15 16:00	13.732	13.745	13.688	13.623	13.718	13.742	13.746
1/27/15 18:00	13.725	13.725	13.676	13.610	13.708	13.729	13.734
1/27/15 20:00	13.718	13.729	13.676	13.611	13.703	13.731	13.734
1/27/15 22:00	13.710	13.722	13.668	13.603	13.699	13.725	13.728
1/28/15 0:00	13.703	13.711	13.661	13.596	13.694	13.715	13.720
1/28/15 2:00	13.695	13.706	13.654	13.589	13.680	13.708	13.711
1/28/15 4:00	13.679	13.696	13.640	13.575	13.669	13.694	13.698
1/28/15 6:00	13.668	13.674	13.625	13.559	13.659	13.680	13.686
1/28/15 8:00	13.674	13.681	13.626	13.562	13.656	13.684	13.688
1/28/15 10:00	13.673	13.691	13.631	13.567	13.663	13.687	13.690
1/28/15 12:00	13.671	13.676	13.627	13.560	13.659	13.681	13.687
1/28/15 14:00	13.646	13.658	13.607	13.541	13.628	13.659	13.662
1/28/15 16:00	13.647	13.656	13.599	13.534	13.630	13.655	13.658
1/28/15 18:00	13.668	13.666	13.615	13.549	13.651	13.672	13.678
1/28/15 20:00	13.709	13.713	13.658	13.594	13.689	13.718	13.721
1/28/15 22:00	13.744	13.755	13.696	13.633	13.731	13.755	13.759
1/29/15 0:00	13.779	13.783	13.732	13.667	13.770	13.790	13.795
1/29/15 2:00	13.833	13.841	13.789	13.724	13.816	13.845	13.848
1/29/15 4:00	13.875	13.885	13.826	13.763	13.862	13.886	13.892
1/29/15 6:00	13.895	13.902	13.852	13.786	13.886	13.908	13.913
1/29/15 8:00	13.929	13.938	13.885	13.820	13.912	13.942	13.944
1/29/15 10:00	13.962	13.977	13.919	13.855	13.953	13.978	13.981
1/29/15 12:00	13.978	13.988	13.936	13.871	13.970	13.993	13.998
1/29/15 14:00	13.974	13.987	13.935	13.869	13.960	13.988	13.991
1/29/15 16:00	13.968	13.984	13.925	13.861	13.959	13.983	13.987
1/29/15 18:00	13.974	13.981	13.932	13.865	13.963	13.985	13.990
1/29/15 20:00	13.986	13.997	13.944	13.879	13.971	14.000	14.002
1/29/15 22:00	13.986	14.001	13.947	13.880	13.977	14.002	14.005
1/30/15 0:00	13.989	13.997	13.947	13.880	13.981	14.002	14.007
1/30/15 2:00	13.985	13.997	13.944	13.879	13.970	13.999	14.001

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

Date/Time	Pressure (psi)						
	Atmospheric	SG1S	SG2S	SG3S	SG1D	SG2D	SG3D
1/30/15 4:00	13.982	13.996	13.937	13.873	13.970	13.996	13.999
1/30/15 6:00	13.975	13.983	13.933	13.867	13.966	13.988	13.992
1/30/15 8:00	13.969	13.982	13.930	13.864	13.954	13.983	13.986
1/30/15 10:00	13.960	13.975	13.919	13.853	13.950	13.973	13.977
1/30/15 12:00	13.949	13.961	13.911	13.846	13.943	13.965	13.970
1/30/15 14:00	13.910	13.925	13.876	13.808	13.898	13.926	13.928
1/30/15 16:00	13.887	13.905	13.845	13.781	13.877	13.903	13.905
1/30/15 18:00	13.878	13.891	13.842	13.776	13.872	13.894	13.899
1/30/15 20:00	13.874	13.887	13.834	13.769	13.860	13.889	13.892
1/30/15 22:00	13.875	13.888	13.833	13.768	13.865	13.890	13.893
1/31/15 0:00	13.862	13.871	13.822	13.755	13.855	13.876	13.880
1/31/15 2:00	13.841	13.854	13.805	13.739	13.827	13.856	13.859
1/31/15 4:00	13.820	13.838	13.781	13.716	13.809	13.835	13.838
1/31/15 6:00	13.795	13.804	13.757	13.690	13.788	13.809	13.813
1/31/15 8:00	13.776	13.789	13.738	13.673	13.761	13.790	13.793
1/31/15 10:00	13.771	13.787	13.725	13.662	13.761	13.784	13.788
1/31/15 12:00	13.756	13.764	13.714	13.649	13.748	13.769	13.774
1/31/15 14:00	13.717	13.732	13.682	13.616	13.703	13.732	13.735
1/31/15 16:00	13.692	13.706	13.649	13.585	13.681	13.705	13.709
1/31/15 18:00	13.674	13.683	13.635	13.569	13.664	13.687	13.691
1/31/15 20:00	13.666	13.675	13.623	13.558	13.647	13.676	13.680
1/31/15 22:00	13.658	13.668	13.613	13.549	13.644	13.668	13.673
2/1/15 0:00	13.661	13.661	13.614	13.549	13.650	13.669	13.676
2/1/15 2:00	13.684	13.686	13.632	13.571	13.658	13.690	13.694
2/1/15 4:00	13.700	13.716	13.655	13.593	13.684	13.711	13.717
2/1/15 6:00	13.741	13.751	13.695	13.630	13.735	13.756	13.762
2/1/15 8:00	13.785	13.791	13.734	13.671	13.772	13.795	13.800
2/1/15 10:00	13.820	13.823	13.770	13.706	13.802	13.827	13.832
2/1/15 12:00	13.851	13.855	13.795	13.735	13.835	13.855	13.864
2/1/15 14:00	13.858	13.854	13.808	13.742	13.834	13.865	13.869
2/1/15 16:00	13.871	13.874	13.819	13.757	13.856	13.879	13.887
2/1/15 18:00	13.890	13.902	13.842	13.779	13.878	13.898	13.906
2/1/15 20:00	13.915	13.910	13.863	13.797	13.891	13.921	13.925
2/1/15 22:00	13.924	13.931	13.879	13.815	13.909	13.934	13.939
2/2/15 0:00	13.924	13.934	13.876	13.813	13.911	13.932	13.938
2/2/15 2:00	13.914	13.914	13.871	13.802	13.891	13.922	13.924
2/2/15 4:00	13.908	13.911	13.857	13.794	13.888	13.915	13.918
2/2/15 6:00	13.879	13.888	13.834	13.770	13.866	13.885	13.891
2/2/15 8:00	13.852	13.848	13.803	13.736	13.829	13.861	13.862
2/2/15 10:00	13.846	13.852	13.806	13.737	13.830	13.855	13.858
2/2/15 12:00	13.829	13.841	13.782	13.720	13.817	13.837	13.842
2/2/15 14:00	13.792	13.795	13.753	13.683	13.772	13.804	13.805
2/2/15 16:00	13.764	13.773	13.722	13.656	13.752	13.777	13.781
2/2/15 18:00	13.767	13.774	13.715	13.653	13.752	13.773	13.779
2/2/15 20:00	13.782	13.786	13.741	13.671	13.764	13.794	13.797
2/2/15 22:00	13.789	13.797	13.745	13.679	13.773	13.799	13.803
2/3/15 0:00	13.784	13.797	13.741	13.677	13.772	13.793	13.799
2/3/15 2:00	13.787	13.785	13.740	13.672	13.764	13.796	13.798
2/3/15 4:00	13.754	13.762	13.714	13.646	13.739	13.765	13.768
2/3/15 6:00	13.740	13.755	13.701	13.636	13.731	13.752	13.756

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

Date/Time	Pressure (psi)						
	Atmospheric	SG1S	SG2S	SG3S	SG1D	SG2D	SG3D
2/3/15 8:00	13.729	13.730	13.686	13.618	13.708	13.740	13.742
2/3/15 10:00	13.715	13.720	13.671	13.604	13.700	13.725	13.728
2/3/15 12:00	13.712	13.724	13.666	13.603	13.704	13.724	13.730
2/3/15 14:00	13.700	13.702	13.659	13.590	13.680	13.711	13.714
2/3/15 16:00	13.696	13.693	13.640	13.580	13.672	13.697	13.706
2/3/15 18:00	13.712	13.710	13.646	13.591	13.687	13.701	13.718
2/3/15 20:00	13.718	13.701	13.656	13.594	13.681	13.714	13.724
2/3/15 22:00	13.743	13.736	13.683	13.626	13.716	13.739	13.751
2/4/15 0:00	13.748	13.756	13.693	13.637	13.732	13.746	13.761
2/4/15 2:00	13.745	13.733	13.689	13.626	13.708	13.741	13.750
2/4/15 4:00	13.747	13.746	13.692	13.632	13.724	13.749	13.759
2/4/15 6:00	13.785	13.785	13.718	13.664	13.764	13.778	13.792
2/4/15 8:00	13.842	13.819	13.768	13.707	13.804	13.835	13.844
2/4/15 10:00	13.900	13.895	13.834	13.777	13.876	13.899	13.909
2/4/15 12:00	13.946	13.953	13.882	13.829	13.929	13.945	13.957
2/4/15 14:00	13.950	13.939	13.895	13.830	13.916	13.950	13.957
2/4/15 16:00	13.956	13.954	13.903	13.842	13.935	13.959	13.969
2/4/15 18:00	13.967	13.974	13.909	13.853	13.951	13.967	13.979
2/4/15 20:00	13.987	13.974	13.926	13.863	13.954	13.985	13.992
2/4/15 22:00	13.984	13.984	13.933	13.871	13.962	13.987	13.995
2/5/15 0:00	13.978	13.984	13.922	13.864	13.962	13.977	13.989
2/5/15 2:00	13.963	13.955	13.913	13.848	13.934	13.966	13.972
2/5/15 4:00	13.948	13.951	13.900	13.837	13.928	13.954	13.961
2/5/15 6:00	13.921	13.933	13.872	13.812	13.907	13.924	13.935
2/5/15 8:00	13.905	13.899	13.856	13.791	13.875	13.908	13.912
2/5/15 10:00	13.894	13.898	13.849	13.784	13.876	13.900	13.907
2/5/15 12:00	13.872	13.885	13.821	13.762	13.861	13.878	13.888
2/5/15 14:00	13.843	13.840	13.795	13.729	13.816	13.848	13.854
2/5/15 16:00	13.814	13.817	13.766	13.704	13.795	13.819	13.828
2/5/15 18:00	13.798	13.805	13.745	13.685	13.782	13.799	13.811
2/5/15 20:00	13.795	13.784	13.740	13.675	13.762	13.796	13.801
2/5/15 22:00	13.793	13.788	13.739	13.679	13.767	13.793	13.802
2/6/15 0:00	13.785	13.789	13.728	13.670	13.767	13.782	13.795
2/6/15 2:00	13.765	13.753	13.712	13.645	13.728	13.763	13.768
2/6/15 4:00	13.747	13.747	13.694	13.635	13.721	13.747	13.757
2/6/15 6:00	13.735	13.744	13.680	13.624	13.718	13.735	13.747
2/6/15 8:00	13.731	13.717	13.678	13.610	13.694	13.730	13.735
2/6/15 10:00	13.728	13.726	13.676	13.615	13.704	13.730	13.738
2/6/15 12:00	13.736	13.741	13.679	13.621	13.719	13.735	13.747
2/6/15 14:00	13.733	13.720	13.677	13.616	13.706	13.731	13.739
2/6/15 16:00	13.715	13.688	13.648	13.578	13.695	13.712	13.715
2/6/15 18:00	13.705	13.693	13.647	13.581	13.693	13.703	13.708
2/6/15 20:00	13.696	13.697	13.640	13.579	13.674	13.700	13.698
2/6/15 22:00	13.684	13.667	13.627	13.558	13.671	13.691	13.693
2/7/15 0:00	13.672	13.663	13.616	13.551	13.666	13.676	13.681
2/7/15 2:00	13.652	13.647	13.589	13.528	13.633	13.660	13.658
2/7/15 4:00	13.634	13.622	13.582	13.512	13.622	13.641	13.643
2/7/15 6:00	13.621	13.621	13.573	13.509	13.614	13.625	13.629
2/7/15 8:00	13.617	13.624	13.568	13.506	13.596	13.623	13.622
2/7/15 10:00	13.619	13.611	13.570	13.502	13.611	13.629	13.632

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
2/7/15 12:00	13.616	13.602	13.554	13.490	13.609	13.620	13.626
2/7/15 14:00	13.602	13.592	13.534	13.472	13.571	13.597	13.595
2/7/15 16:00	13.595	13.583	13.541	13.469	13.572	13.590	13.592
2/7/15 18:00	13.610	13.605	13.557	13.491	13.590	13.601	13.607
2/7/15 20:00	13.615	13.632	13.575	13.513	13.596	13.621	13.621
2/7/15 22:00	13.627	13.616	13.574	13.505	13.617	13.635	13.638
2/8/15 0:00	13.634	13.637	13.589	13.523	13.625	13.637	13.642
2/8/15 2:00	13.635	13.643	13.586	13.524	13.617	13.642	13.641
2/8/15 4:00	13.643	13.650	13.608	13.538	13.632	13.650	13.654
2/8/15 6:00	13.669	13.681	13.633	13.567	13.663	13.673	13.678
2/8/15 8:00	13.686	13.708	13.651	13.589	13.669	13.695	13.694
2/8/15 10:00	13.713	13.718	13.676	13.606	13.703	13.719	13.723
2/8/15 12:00	13.730	13.729	13.679	13.614	13.721	13.732	13.738
2/8/15 14:00	13.724	13.719	13.662	13.599	13.701	13.728	13.727
2/8/15 16:00	13.721	13.715	13.674	13.603	13.706	13.724	13.727
2/8/15 18:00	13.742	13.746	13.697	13.633	13.727	13.739	13.745
2/8/15 20:00	13.759	13.777	13.720	13.656	13.740	13.765	13.763
2/8/15 22:00	13.781	13.789	13.748	13.678	13.770	13.787	13.790
2/9/15 0:00	13.799	13.814	13.766	13.700	13.794	13.805	13.810
2/9/15 2:00	13.816	13.830	13.774	13.710	13.800	13.825	13.825
2/9/15 4:00	13.826	13.820	13.780	13.709	13.817	13.836	13.838
2/9/15 6:00	13.828	13.833	13.785	13.719	13.823	13.834	13.839
2/9/15 8:00	13.834	13.849	13.793	13.730	13.817	13.843	13.843
2/9/15 10:00	13.841	13.838	13.797	13.727	13.831	13.849	13.852
2/9/15 12:00	13.841	13.838	13.789	13.723	13.836	13.848	13.853
2/9/15 14:00	13.814	13.806	13.749	13.687	13.796	13.821	13.821
2/9/15 16:00	13.785	13.768	13.727	13.657	13.775	13.793	13.796
2/9/15 18:00	13.768	13.770	13.722	13.657	13.761	13.772	13.778
2/9/15 20:00	13.768	13.782	13.725	13.663	13.753	13.777	13.777
2/9/15 22:00	13.774	13.775	13.734	13.664	13.763	13.781	13.785
2/10/15 0:00	13.770	13.770	13.723	13.657	13.765	13.777	13.781
2/10/15 2:00	13.754	13.764	13.708	13.645	13.739	13.764	13.763
2/10/15 4:00	13.751	13.752	13.710	13.641	13.743	13.762	13.765
2/10/15 6:00	13.748	13.756	13.707	13.642	13.747	13.758	13.763
2/10/15 8:00	13.751	13.761	13.704	13.643	13.736	13.762	13.761
2/10/15 10:00	13.755	13.748	13.706	13.636	13.749	13.767	13.769
2/10/15 12:00	13.752	13.746	13.697	13.632	13.747	13.758	13.764
2/10/15 14:00	13.731	13.726	13.670	13.608	13.713	13.740	13.739
2/10/15 16:00	13.716	13.703	13.663	13.594	13.704	13.722	13.725
2/10/15 18:00	13.720	13.726	13.678	13.611	13.709	13.720	13.727
2/10/15 20:00	13.737	13.752	13.697	13.634	13.718	13.743	13.743
2/10/15 22:00	13.769	13.771	13.730	13.660	13.759	13.777	13.779
2/11/15 0:00	13.794	13.813	13.766	13.700	13.791	13.801	13.807
2/11/15 2:00	13.829	13.855	13.798	13.734	13.809	13.835	13.834
2/11/15 4:00	13.871	13.876	13.835	13.766	13.861	13.881	13.882
2/11/15 6:00	13.896	13.912	13.866	13.799	13.890	13.900	13.906
2/11/15 8:00	13.927	13.946	13.890	13.827	13.908	13.934	13.934
2/11/15 10:00	13.945	13.945	13.904	13.834	13.936	13.955	13.958
2/11/15 12:00	13.955	13.961	13.914	13.849	13.950	13.962	13.968
2/11/15 14:00	13.945	13.947	13.891	13.829	13.929	13.955	13.955



TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

Pressure (psi)							
Date/Time	Atmospheric	SG1S	SG2S	SG3S	SG1D	SG2D	SG3D
2/11/15 16:00	13.925	13.921	13.880	13.810	13.917	13.936	13.939
2/11/15 18:00	13.921	13.921	13.873	13.808	13.914	13.927	13.932
2/11/15 20:00	13.916	13.927	13.872	13.808	13.902	13.927	13.926
2/11/15 22:00	13.931	13.939	13.899	13.828	13.918	13.937	13.940
2/12/15 0:00	13.959	13.966	13.918	13.852	13.956	13.968	13.973
2/12/15 2:00	13.971	13.997	13.942	13.878	13.955	13.981	13.980
2/12/15 4:00	13.997	13.996	13.955	13.886	13.989	14.007	14.010
2/12/15 6:00	14.004	14.014	13.966	13.900	13.999	14.011	14.016
2/12/15 8:00	14.010	14.027	13.973	13.908	13.994	14.020	14.019
2/12/15 10:00	14.014	14.006	13.966	13.896	14.009	14.027	14.029
2/12/15 12:00	13.998	13.993	13.945	13.880	14.001	14.015	14.019
2/12/15 14:00	13.964	13.952	13.895	13.833	13.953	13.979	13.978
2/12/15 16:00	13.916	13.903	13.862	13.794	13.911	13.930	13.932
2/12/15 18:00	13.891	13.893	13.845	13.779	13.886	13.899	13.904
2/12/15 20:00	13.878	13.884	13.829	13.764	13.864	13.889	13.888
2/12/15 22:00	13.870	13.858	13.818	13.748	13.863	13.882	13.884
2/13/15 0:00	13.846	13.844	13.796	13.730	13.842	13.856	13.860
2/13/15 2:00	13.835	13.839	13.784	13.721	13.821	13.847	13.845
2/13/15 4:00	13.823	13.818	13.778	13.707	13.815	13.833	13.836
2/13/15 6:00	13.822	13.826	13.779	13.713	13.818	13.831	13.835
2/13/15 8:00	13.832	13.847	13.791	13.727	13.816	13.842	13.840
2/13/15 10:00	13.851	13.853	13.812	13.743	13.841	13.860	13.861
2/13/15 12:00	13.860	13.857	13.810	13.744	13.856	13.869	13.874
2/13/15 14:00	13.844	13.844	13.788	13.725	13.826	13.851	13.851
2/13/15 16:00	13.828	13.816	13.775	13.706	13.817	13.835	13.838
2/13/15 18:00	13.822	13.820	13.772	13.707	13.811	13.824	13.829
2/13/15 20:00	13.820	13.834	13.777	13.715	13.805	13.829	13.829
2/13/15 22:00	13.820	13.814	13.773	13.704	13.810	13.829	13.832
2/14/15 0:00	13.812	13.815	13.766	13.701	13.809	13.822	13.826
2/14/15 2:00	13.800	13.810	13.755	13.692	13.786	13.812	13.811
2/14/15 4:00	13.794	13.792	13.751	13.681	13.786	13.805	13.807
2/14/15 6:00	13.797	13.806	13.759	13.693	13.794	13.806	13.811
2/14/15 8:00	13.810	13.831	13.776	13.712	13.795	13.821	13.821
2/14/15 10:00	13.849	13.864	13.822	13.753	13.839	13.858	13.860
2/14/15 12:00	13.890	13.905	13.858	13.791	13.883	13.896	13.900
2/14/15 14:00	13.897	13.900	13.845	13.781	13.886	13.912	13.911
2/14/15 16:00	13.882	13.881	13.840	13.770	13.878	13.895	13.898
2/14/15 18:00	13.893	13.896	13.848	13.783	13.887	13.899	13.904
2/14/15 20:00	13.900	13.905	13.848	13.785	13.884	13.909	13.909
2/14/15 22:00	13.895	13.895	13.853	13.784	13.886	13.905	13.907
2/15/15 0:00	13.901	13.905	13.856	13.789	13.897	13.909	13.915
2/15/15 2:00	13.899	13.902	13.847	13.782	13.884	13.910	13.909
2/15/15 4:00	13.890	13.882	13.842	13.771	13.882	13.901	13.903
2/15/15 6:00	13.880	13.880	13.832	13.765	13.876	13.888	13.892
2/15/15 8:00	13.867	13.882	13.827	13.762	13.853	13.880	13.879
2/15/15 10:00	13.882	13.886	13.845	13.775	13.875	13.893	13.895
2/15/15 12:00	13.884	13.890	13.842	13.776	13.881	13.894	13.897
2/15/15 14:00	13.861	13.867	13.812	13.747	13.849	13.875	13.874
2/15/15 16:00	13.847	13.837	13.796	13.726	13.842	13.861	13.863
2/15/15 18:00	13.839	13.849	13.802	13.735	13.833	13.847	13.851

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
2/15/15 20:00	13.855	13.875	13.820	13.755	13.841	13.865	13.865
2/15/15 22:00	13.857	13.844	13.803	13.734	13.850	13.869	13.870
2/16/15 0:00	13.850	13.843	13.796	13.730	13.846	13.860	13.863
2/16/15 2:00	13.838	13.842	13.787	13.723	13.824	13.850	13.849
2/16/15 4:00	13.813	13.813	13.773	13.703	13.807	13.827	13.827
2/16/15 6:00	13.816	13.824	13.777	13.710	13.813	13.826	13.829
2/16/15 8:00	13.816	13.832	13.777	13.712	13.802	13.828	13.827
2/16/15 10:00	13.823	13.825	13.783	13.713	13.817	13.836	13.836
2/16/15 12:00	13.815	13.821	13.773	13.707	13.813	13.827	13.830
2/16/15 14:00	13.801	13.803	13.748	13.683	13.789	13.814	13.814
2/16/15 16:00	13.783	13.782	13.742	13.672	13.775	13.794	13.797
2/16/15 18:00	13.787	13.795	13.748	13.682	13.780	13.793	13.798
2/16/15 20:00	13.798	13.807	13.752	13.689	13.784	13.809	13.808
2/16/15 22:00	13.796	13.799	13.758	13.688	13.790	13.809	13.811
2/17/15 0:00	13.801	13.804	13.756	13.692	13.797	13.811	13.815
2/17/15 2:00	13.798	13.810	13.755	13.691	13.785	13.811	13.810
2/17/15 4:00	13.802	13.799	13.758	13.688	13.795	13.814	13.816
2/17/15 6:00	13.805	13.809	13.762	13.696	13.802	13.815	13.818
2/17/15 8:00	13.803	13.812	13.756	13.692	13.789	13.816	13.814
2/17/15 10:00	13.792	13.780	13.739	13.670	13.786	13.805	13.807
2/17/15 12:00	13.791	13.823	13.776	13.708	13.786	13.800	13.804
2/17/15 14:00	13.818	13.829	13.776	13.711	13.803	13.830	13.829
2/17/15 16:00	13.812	13.807	13.766	13.696	13.808	13.826	13.830
2/17/15 18:00	13.804	13.805	13.757	13.692	13.801	13.814	13.819
2/17/15 20:00	13.804	13.818	13.763	13.699	13.789	13.814	13.813
2/17/15 22:00	13.817	13.821	13.781	13.710	13.808	13.828	13.829
2/18/15 0:00	13.826	13.833	13.784	13.718	13.821	13.835	13.839
2/18/15 2:00	13.837	13.849	13.794	13.729	13.823	13.849	13.848
2/18/15 4:00	13.845	13.845	13.804	13.735	13.839	13.859	13.860
2/18/15 6:00	13.864	13.875	13.828	13.761	13.861	13.874	13.877
2/18/15 8:00	13.883	13.904	13.850	13.785	13.867	13.893	13.891
2/18/15 10:00	13.906	13.915	13.874	13.804	13.901	13.920	13.921
2/18/15 12:00	13.911	13.920	13.873	13.807	13.910	13.924	13.926
2/18/15 14:00	13.902	13.910	13.855	13.790	13.891	13.917	13.916
2/18/15 16:00	13.888	13.885	13.843	13.774	13.883	13.902	13.903
2/18/15 18:00	13.882	13.888	13.840	13.774	13.880	13.894	13.898
2/18/15 20:00	13.896	13.907	13.853	13.788	13.882	13.908	13.907
2/18/15 22:00	13.901	13.904	13.862	13.793	13.894	13.912	13.913
2/19/15 0:00	13.905	13.917	13.869	13.802	13.906	13.921	13.923
2/19/15 2:00	13.907	13.917	13.862	13.799	13.893	13.920	13.918
2/19/15 4:00	13.897	13.882	13.841	13.770	13.892	13.910	13.912
2/19/15 6:00	13.877	13.871	13.823	13.757	13.878	13.891	13.893
2/19/15 8:00	13.855	13.862	13.809	13.744	13.843	13.868	13.866
2/19/15 10:00	13.847	13.838	13.797	13.728	13.844	13.864	13.864
2/19/15 12:00	13.834	13.832	13.784	13.718	13.828	13.842	13.845
2/19/15 14:00	13.803	13.801	13.746	13.682	13.794	13.820	13.818
2/19/15 16:00	13.772	13.766	13.725	13.656	13.765	13.784	13.786
2/19/15 18:00	13.754	13.764	13.716	13.650	13.753	13.768	13.771
2/19/15 20:00	13.759	13.773	13.719	13.654	13.744	13.771	13.769
2/19/15 22:00	13.761	13.761	13.719	13.650	13.757	13.776	13.777

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
2/20/15 0:00	13.751	13.750	13.702	13.637	13.748	13.763	13.766
2/20/15 2:00	13.740	13.744	13.690	13.626	13.727	13.754	13.752
2/20/15 4:00	13.722	13.707	13.666	13.597	13.717	13.736	13.736
2/20/15 6:00	13.706	13.707	13.658	13.593	13.699	13.713	13.716
2/20/15 8:00	13.693	13.703	13.649	13.585	13.679	13.705	13.703
2/20/15 10:00	13.703	13.702	13.660	13.591	13.697	13.717	13.718
2/20/15 12:00	13.685	13.679	13.631	13.566	13.686	13.700	13.703
2/20/15 14:00	13.658	13.659	13.605	13.542	13.647	13.673	13.672
2/20/15 16:00	13.645	13.648	13.605	13.537	13.640	13.659	13.660
2/20/15 18:00	13.648	13.665	13.617	13.550	13.644	13.657	13.661
2/20/15 20:00	13.673	13.688	13.634	13.571	13.659	13.684	13.683
2/20/15 22:00	13.690	13.702	13.661	13.591	13.683	13.703	13.703
2/21/15 0:00	13.706	13.710	13.662	13.597	13.706	13.720	13.724
2/21/15 2:00	13.707	13.723	13.669	13.605	13.693	13.718	13.717
2/21/15 4:00	13.711	13.711	13.669	13.601	13.704	13.724	13.725
2/21/15 6:00	13.718	13.734	13.686	13.620	13.715	13.728	13.732
2/21/15 8:00	13.734	13.755	13.701	13.637	13.719	13.745	13.744
2/21/15 10:00	13.753	13.758	13.717	13.647	13.745	13.765	13.767
2/21/15 12:00	13.770	13.779	13.732	13.666	13.766	13.779	13.783
2/21/15 14:00	13.771	13.775	13.721	13.656	13.757	13.784	13.783
2/21/15 16:00	13.776	13.786	13.744	13.676	13.766	13.785	13.787
2/21/15 18:00	13.807	13.824	13.777	13.711	13.802	13.815	13.820
2/21/15 20:00	13.838	13.871	13.816	13.752	13.823	13.848	13.848
2/21/15 22:00	13.878	13.894	13.853	13.784	13.868	13.887	13.889
2/22/15 0:00	13.919	13.935	13.887	13.822	13.913	13.927	13.931
2/22/15 2:00	13.949	13.973	13.917	13.854	13.934	13.959	13.958
2/22/15 4:00	13.974	13.976	13.936	13.866	13.965	13.984	13.986
2/22/15 6:00	13.982	13.999	13.951	13.885	13.980	13.993	13.997
2/22/15 8:00	14.007	14.032	13.978	13.912	13.991	14.018	14.017
2/22/15 10:00	14.039	14.044	14.003	13.934	14.032	14.053	14.055
2/22/15 12:00	14.050	14.060	14.011	13.946	14.047	14.060	14.063
2/22/15 14:00	14.033	14.040	13.985	13.922	14.024	14.051	14.050
2/22/15 16:00	14.019	14.022	13.980	13.912	14.014	14.033	14.035
2/22/15 18:00	14.031	14.046	13.998	13.932	14.026	14.040	14.044
2/22/15 20:00	14.055	14.070	14.015	13.950	14.040	14.066	14.065
2/22/15 22:00	14.068	14.078	14.037	13.967	14.061	14.080	14.082
2/23/15 0:00	14.081	14.093	14.044	13.977	14.079	14.095	14.097
2/23/15 2:00	14.089	14.108	14.055	13.989	14.077	14.103	14.102
2/23/15 4:00	14.086	14.083	14.042	13.971	14.083	14.103	14.104
2/23/15 6:00	14.082	14.085	14.037	13.970	14.080	14.096	14.098
2/23/15 8:00	14.074	14.082	14.029	13.964	14.061	14.086	14.085
2/23/15 10:00	14.068	14.066	14.023	13.954	14.065	14.084	14.085
2/23/15 12:00	14.045	14.045	13.997	13.930	14.048	14.062	14.064
2/23/15 14:00	14.005	14.001	13.946	13.881	13.998	14.023	14.023
2/23/15 16:00	13.959	13.951	13.909	13.841	13.958	13.977	13.978
2/23/15 18:00	13.930	13.930	13.881	13.816	13.930	13.944	13.947
2/23/15 20:00	13.905	13.910	13.855	13.791	13.893	13.919	13.917
2/23/15 22:00	13.893	13.893	13.851	13.783	13.887	13.906	13.907
2/24/15 0:00	13.875	13.867	13.819	13.753	13.875	13.890	13.892
2/24/15 2:00	13.842	13.842	13.789	13.725	13.833	13.858	13.856

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
2/24/15 4:00	13.807	13.798	13.756	13.687	13.803	13.822	13.823
2/24/15 6:00	13.783	13.789	13.740	13.675	13.779	13.795	13.797
2/24/15 8:00	13.783	13.799	13.746	13.681	13.772	13.796	13.795
2/24/15 10:00	13.789	13.790	13.747	13.679	13.786	13.805	13.806
2/24/15 12:00	13.783	13.785	13.736	13.670	13.784	13.800	13.801
2/24/15 14:00	13.762	13.760	13.706	13.643	13.751	13.776	13.775
2/24/15 16:00	13.737	13.726	13.684	13.616	13.729	13.748	13.749
2/24/15 18:00	13.720	13.722	13.673	13.608	13.715	13.729	13.733
2/24/15 20:00	13.711	13.717	13.662	13.599	13.697	13.723	13.723
2/24/15 22:00	13.703	13.701	13.659	13.591	13.697	13.716	13.717
2/25/15 0:00	13.692	13.691	13.642	13.578	13.687	13.702	13.705
2/25/15 2:00	13.676	13.682	13.627	13.565	13.663	13.687	13.687
2/25/15 4:00	13.659	13.650	13.607	13.539	13.655	13.674	13.675
2/25/15 6:00	13.644	13.649	13.601	13.536	13.639	13.654	13.657
2/25/15 8:00	13.641	13.646	13.592	13.528	13.624	13.649	13.648
2/25/15 10:00	13.643	13.640	13.599	13.529	13.635	13.655	13.656
2/25/15 12:00	13.647	13.656	13.608	13.543	13.646	13.660	13.664
2/25/15 14:00	13.659	13.679	13.623	13.560	13.643	13.669	13.669
2/25/15 16:00	13.694	13.712	13.670	13.602	13.689	13.707	13.710
2/25/15 18:00	13.746	13.777	13.730	13.661	13.737	13.750	13.755
2/25/15 20:00	13.797	13.829	13.774	13.711	13.780	13.807	13.806
2/25/15 22:00	13.847	13.865	13.822	13.753	13.838	13.857	13.859
2/26/15 0:00	13.871	13.885	13.837	13.768	13.867	13.882	13.885
2/26/15 2:00	13.898	13.927	13.873	13.809	13.885	13.911	13.910
2/26/15 4:00	13.917	13.919	13.876	13.809	13.910	13.930	13.931
2/26/15 6:00	13.940	13.956	13.909	13.842	13.932	13.947	13.951
2/26/15 8:00	13.955	13.971	13.917	13.854	13.942	13.967	13.966
2/26/15 10:00	13.969	13.971	13.928	13.861	13.964	13.984	13.984
2/26/15 12:00	13.973	13.983	13.935	13.869	13.972	13.987	13.989
2/26/15 14:00	13.966	13.975	13.922	13.857	13.956	13.981	13.980
2/26/15 16:00	13.954	13.951	13.909	13.841	13.950	13.969	13.970
2/26/15 18:00	13.952	13.966	13.918	13.852	13.949	13.963	13.967
2/26/15 20:00	13.967	13.985	13.930	13.866	13.955	13.980	13.980
2/26/15 22:00	13.982	13.990	13.948	13.878	13.976	13.995	13.996
2/27/15 0:00	13.998	14.008	13.960	13.893	13.994	14.009	14.011
2/27/15 2:00	14.003	14.015	13.962	13.898	13.991	14.015	14.014
2/27/15 4:00	13.997	13.996	13.954	13.885	13.992	14.011	14.012
2/27/15 6:00	13.994	14.004	13.955	13.890	13.991	14.007	14.009
2/27/15 8:00	13.992	14.009	13.956	13.890	13.984	14.007	14.006
2/27/15 10:00	14.001	14.003	13.959	13.891	13.997	14.017	14.017
2/27/15 12:00	13.991	13.996	13.943	13.879	13.986	14.007	14.009
2/27/15 14:00	13.962	13.952	13.909	13.842	13.961	13.980	13.981
2/27/15 16:00	13.940	13.946	13.897	13.832	13.939	13.956	13.957
2/27/15 18:00	13.928	13.942	13.888	13.824	13.920	13.942	13.945
2/27/15 20:00	13.935	13.940	13.897	13.828	13.932	13.947	13.949
2/27/15 22:00	13.936	13.947	13.898	13.832	13.930	13.948	13.949
2/28/15 0:00	13.932	13.942	13.891	13.824	13.923	13.944	13.948
2/28/15 2:00	13.925	13.927	13.883	13.815	13.919	13.937	13.939
2/28/15 4:00	13.911	13.915	13.865	13.800	13.911	13.926	13.926
2/28/15 6:00	13.909	13.917	13.863	13.799	13.899	13.922	13.924

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
2/28/15 8:00	13.907	13.917	13.871	13.804	13.901	13.920	13.920
2/28/15 10:00	13.918	13.928	13.879	13.814	13.915	13.931	13.931
2/28/15 12:00	13.910	13.914	13.861	13.798	13.905	13.925	13.926
2/28/15 14:00	13.891	13.888	13.843	13.776	13.890	13.908	13.910
2/28/15 16:00	13.872	13.881	13.832	13.766	13.870	13.889	13.889
2/28/15 18:00	13.871	13.884	13.830	13.766	13.863	13.883	13.886
2/28/15 20:00	13.874	13.886	13.841	13.773	13.873	13.889	13.889
2/28/15 22:00	13.886	13.902	13.852	13.786	13.882	13.900	13.901
3/1/15 0:00	13.887	13.898	13.845	13.780	13.884	13.904	13.907
3/1/15 2:00	13.883	13.886	13.840	13.773	13.881	13.899	13.901
3/1/15 4:00	13.886	13.893	13.842	13.778	13.886	13.901	13.900
3/1/15 6:00	13.884	13.902	13.848	13.784	13.877	13.897	13.899
3/1/15 8:00	13.902	13.911	13.865	13.796	13.898	13.915	13.917
3/1/15 10:00	13.918	13.936	13.885	13.819	13.916	13.930	13.931
3/1/15 12:00	13.921	13.939	13.886	13.822	13.918	13.938	13.940
3/1/15 14:00	13.914	13.917	13.872	13.805	13.914	13.932	13.934
3/1/15 16:00	13.906	13.914	13.864	13.798	13.905	13.923	13.924
3/1/15 18:00	13.908	13.922	13.868	13.804	13.901	13.921	13.924
3/1/15 20:00	13.925	13.933	13.890	13.821	13.926	13.941	13.942
3/1/15 22:00	13.937	13.951	13.903	13.837	13.936	13.954	13.955
3/2/15 0:00	13.952	13.969	13.914	13.849	13.944	13.965	13.968
3/2/15 2:00	13.950	13.954	13.911	13.842	13.945	13.965	13.966
3/2/15 4:00	13.933	13.936	13.887	13.822	13.937	13.952	13.951
3/2/15 6:00	13.925	13.936	13.882	13.817	13.915	13.937	13.939
3/2/15 8:00	13.933	13.927	13.884	13.816	13.929	13.947	13.948
3/2/15 10:00	13.915	13.915	13.867	13.801	13.917	13.931	13.931
3/2/15 12:00	13.884	13.885	13.829	13.767	13.878	13.899	13.902
3/2/15 14:00	13.842	13.823	13.780	13.712	13.842	13.861	13.862
3/2/15 16:00	13.788	13.787	13.738	13.671	13.786	13.806	13.806
3/2/15 18:00	13.756	13.754	13.699	13.636	13.751	13.772	13.775
3/2/15 20:00	13.725	13.713	13.671	13.603	13.727	13.743	13.744
3/2/15 22:00	13.690	13.679	13.631	13.567	13.687	13.707	13.708
3/3/15 0:00	13.645	13.633	13.579	13.516	13.640	13.663	13.665
3/3/15 2:00	13.594	13.579	13.537	13.470	13.589	13.609	13.610
3/3/15 4:00	13.582	13.553	13.505	13.442	13.573	13.587	13.587
3/3/15 6:00	13.573	13.586	13.532	13.469	13.558	13.580	13.583
3/3/15 8:00	13.609	13.629	13.586	13.517	13.599	13.618	13.619
3/3/15 10:00	13.662	13.684	13.637	13.572	13.660	13.674	13.675
3/3/15 12:00	13.701	13.725	13.671	13.607	13.691	13.714	13.717
3/3/15 14:00	13.717	13.712	13.669	13.602	13.715	13.735	13.737
3/3/15 16:00	13.724	13.736	13.687	13.622	13.716	13.734	13.736
3/3/15 18:00	13.728	13.742	13.688	13.626	13.720	13.741	13.744
3/3/15 20:00	13.747	13.762	13.719	13.650	13.744	13.759	13.759
3/3/15 22:00	13.790	13.800	13.752	13.687	13.778	13.798	13.800
3/4/15 0:00	13.815	13.835	13.782	13.718	13.803	13.825	13.829
3/4/15 2:00	13.824	13.831	13.788	13.719	13.818	13.838	13.840
3/4/15 4:00	13.834	13.848	13.801	13.734	13.834	13.848	13.848
3/4/15 6:00	13.853	13.875	13.821	13.756	13.841	13.864	13.867
3/4/15 8:00	13.875	13.888	13.845	13.777	13.866	13.885	13.887
3/4/15 10:00	13.904	13.918	13.869	13.804	13.902	13.916	13.916

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
3/4/15 12:00	13.902	13.921	13.866	13.802	13.892	13.914	13.917
3/4/15 14:00	13.893	13.888	13.844	13.778	13.889	13.909	13.911
3/4/15 16:00	13.876	13.876	13.828	13.763	13.874	13.893	13.894
3/4/15 18:00	13.882	13.900	13.846	13.782	13.874	13.896	13.899
3/4/15 20:00	13.902	13.911	13.868	13.799	13.899	13.914	13.915
3/4/15 22:00	13.917	13.938	13.889	13.823	13.910	13.930	13.931
3/5/15 0:00	13.937	13.956	13.902	13.838	13.926	13.948	13.951
3/5/15 2:00	13.949	13.953	13.909	13.841	13.942	13.962	13.964
3/5/15 4:00	13.949	13.953	13.904	13.838	13.948	13.963	13.963
3/5/15 6:00	13.948	13.964	13.909	13.845	13.938	13.960	13.961
3/5/15 8:00	13.960	13.967	13.922	13.854	13.954	13.974	13.975
3/5/15 10:00	13.966	13.975	13.926	13.860	13.967	13.982	13.982
3/5/15 12:00	13.955	13.959	13.905	13.842	13.948	13.971	13.972
3/5/15 14:00	13.925	13.919	13.875	13.808	13.924	13.943	13.944
3/5/15 16:00	13.896	13.899	13.851	13.785	13.891	13.910	13.912
3/5/15 18:00	13.884	13.895	13.841	13.778	13.876	13.898	13.900
3/5/15 20:00	13.882	13.889	13.845	13.778	13.880	13.896	13.896
3/5/15 22:00	13.883	13.892	13.844	13.778	13.878	13.897	13.899
3/6/15 0:00	13.879	13.888	13.833	13.770	13.869	13.892	13.894
3/6/15 2:00	13.872	13.875	13.832	13.764	13.866	13.885	13.887
3/6/15 4:00	13.866	13.872	13.824	13.758	13.866	13.880	13.881
3/6/15 6:00	13.868	13.883	13.829	13.766	13.859	13.880	13.883
3/6/15 8:00	13.869	13.884	13.839	13.771	13.865	13.884	13.886
3/6/15 10:00	13.883	13.892	13.843	13.778	13.885	13.900	13.899
3/6/15 12:00	13.877	13.885	13.831	13.767	13.866	13.889	13.892
3/6/15 14:00	13.859	13.849	13.806	13.737	13.857	13.872	13.873
3/6/15 16:00	13.839	13.840	13.792	13.727	13.829	13.847	13.849
3/6/15 18:00	13.831	13.835	13.780	13.718	13.815	13.837	13.840
3/6/15 20:00	13.826	13.830	13.787	13.718	13.826	13.840	13.841
3/6/15 22:00	13.830	13.842	13.794	13.729	13.823	13.844	13.844
3/7/15 0:00	13.837	13.849	13.794	13.731	13.827	13.848	13.852
3/7/15 2:00	13.841	13.852	13.810	13.741	13.836	13.856	13.858
3/7/15 4:00	13.852	13.862	13.813	13.748	13.855	13.869	13.869
3/7/15 6:00	13.858	13.875	13.820	13.757	13.846	13.870	13.873
3/7/15 8:00	13.867	13.871	13.829	13.761	13.859	13.879	13.882
3/7/15 10:00	13.877	13.886	13.838	13.773	13.877	13.892	13.892
3/7/15 12:00	13.880	13.881	13.827	13.765	13.865	13.888	13.892
3/7/15 14:00	13.862	13.841	13.799	13.731	13.853	13.869	13.870
3/7/15 16:00	13.835	13.825	13.777	13.712	13.817	13.837	13.838
3/7/15 18:00	13.819	13.814	13.760	13.697	13.798	13.820	13.823
3/7/15 20:00	13.798	13.797	13.755	13.688	13.798	13.811	13.813
3/7/15 22:00	13.794	13.803	13.755	13.690	13.788	13.808	13.810
3/8/15 0:00	13.798	13.802	13.747	13.685	13.786	13.808	13.811
3/8/15 2:00	13.780	13.779	13.737	13.669	13.775	13.795	13.797
3/8/15 4:00	13.767	13.773	13.725	13.660	13.768	13.781	13.781
3/8/15 6:00	13.762	13.774	13.719	13.657	13.750	13.773	13.776
3/8/15 8:00	13.767	13.779	13.737	13.668	13.759	13.780	13.782
3/8/15 10:00	13.785	13.797	13.749	13.685	13.785	13.799	13.800
3/8/15 12:00	13.799	13.812	13.756	13.695	13.785	13.809	13.812
3/8/15 14:00	13.798	13.793	13.750	13.682	13.791	13.807	13.809

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
3/8/15 16:00	13.790	13.791	13.743	13.679	13.778	13.799	13.799
3/8/15 18:00	13.790	13.802	13.747	13.685	13.773	13.795	13.799
3/8/15 20:00	13.801	13.807	13.765	13.697	13.800	13.813	13.814
3/8/15 22:00	13.812	13.823	13.776	13.711	13.804	13.826	13.827
3/9/15 0:00	13.815	13.826	13.772	13.709	13.804	13.827	13.831
3/9/15 2:00	13.815	13.817	13.776	13.707	13.809	13.829	13.830
3/9/15 4:00	13.807	13.810	13.762	13.698	13.805	13.822	13.823
3/9/15 6:00	13.808	13.818	13.763	13.701	13.797	13.820	13.823
3/9/15 8:00	13.806	13.810	13.768	13.699	13.798	13.820	13.821
3/9/15 10:00	13.810	13.814	13.767	13.702	13.810	13.824	13.825
3/9/15 12:00	13.799	13.799	13.744	13.682	13.785	13.809	13.811
3/9/15 14:00	13.773	13.754	13.713	13.644	13.768	13.783	13.784
3/9/15 16:00	13.749	13.738	13.691	13.626	13.732	13.753	13.753
3/9/15 18:00	13.729	13.730	13.676	13.613	13.709	13.732	13.735
3/9/15 20:00	13.726	13.729	13.688	13.619	13.724	13.737	13.739
3/9/15 22:00	13.725	13.733	13.685	13.621	13.717	13.739	13.741
3/10/15 0:00	13.725	13.736	13.682	13.619	13.714	13.736	13.740
3/10/15 2:00	13.724	13.723	13.682	13.614	13.717	13.737	13.740
3/10/15 4:00	13.720	13.721	13.674	13.610	13.717	13.733	13.735
3/10/15 6:00	13.718	13.730	13.676	13.613	13.706	13.729	13.732
3/10/15 8:00	13.723	13.730	13.687	13.619	13.716	13.737	13.738
3/10/15 10:00	13.738	13.748	13.700	13.635	13.737	13.752	13.752
3/10/15 12:00	13.752	13.755	13.701	13.639	13.733	13.757	13.761
3/10/15 14:00	13.749	13.737	13.695	13.627	13.738	13.753	13.754
3/10/15 16:00	13.749	13.745	13.697	13.633	13.725	13.746	13.747
3/10/15 18:00	13.757	13.761	13.706	13.643	13.731	13.754	13.757
3/10/15 20:00	13.768	13.773	13.732	13.663	13.763	13.777	13.779
3/10/15 22:00	13.785	13.801	13.755	13.689	13.777	13.798	13.801
3/11/15 0:00	13.805	13.823	13.768	13.705	13.793	13.817	13.819
3/11/15 2:00	13.815	13.823	13.782	13.714	13.809	13.829	13.830
3/11/15 4:00	13.825	13.840	13.791	13.727	13.823	13.839	13.840
3/11/15 6:00	13.840	13.861	13.806	13.744	13.827	13.850	13.853
3/11/15 8:00	13.859	13.870	13.828	13.759	13.851	13.872	13.873
3/11/15 10:00	13.881	13.886	13.838	13.774	13.876	13.891	13.891
3/11/15 12:00	13.877	13.876	13.822	13.759	13.860	13.883	13.886
3/11/15 14:00	13.865	13.855	13.800	13.734	13.851	13.868	13.869
3/11/15 16:00	13.849	13.837	13.790	13.725	13.825	13.844	13.846
3/11/15 18:00	13.844	13.837	13.783	13.720	13.814	13.837	13.840
3/11/15 20:00	13.832	13.833	13.791	13.724	13.827	13.840	13.841
3/11/15 22:00	13.837	13.850	13.803	13.738	13.829	13.850	13.852
3/12/15 0:00	13.846	13.861	13.806	13.744	13.836	13.859	13.863
3/12/15 2:00	13.848	13.844	13.803	13.734	13.844	13.861	13.863
3/12/15 4:00	13.831	13.834	13.786	13.722	13.829	13.848	13.848
3/12/15 6:00	13.821	13.837	13.783	13.719	13.810	13.833	13.836
3/12/15 8:00	13.825	13.829	13.787	13.719	13.819	13.840	13.841
3/12/15 10:00	13.832	13.839	13.791	13.726	13.831	13.845	13.845
3/12/15 12:00	13.830	13.828	13.773	13.711	13.812	13.836	13.839
3/12/15 14:00	13.814	13.793	13.752	13.683	13.803	13.818	13.819
3/12/15 16:00	13.796	13.783	13.736	13.670	13.772	13.792	13.795
3/12/15 18:00	13.796	13.798	13.743	13.679	13.766	13.790	13.793

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

Pressure (psi)							
Date/Time	Atmospheric	SG1S	SG2S	SG3S	SG1D	SG2D	SG3D
3/12/15 20:00	13.795	13.798	13.756	13.688	13.791	13.805	13.806
3/12/15 22:00	13.805	13.814	13.767	13.702	13.796	13.817	13.819
3/13/15 0:00	13.817	13.831	13.776	13.713	13.806	13.828	13.832
3/13/15 2:00	13.817	13.823	13.782	13.713	13.815	13.831	13.832
3/13/15 4:00	13.818	13.830	13.783	13.719	13.812	13.832	13.832
3/13/15 6:00	13.825	13.837	13.782	13.720	13.814	13.837	13.841
3/13/15 8:00	13.828	13.838	13.796	13.727	13.821	13.841	13.843
3/13/15 10:00	13.842	13.849	13.801	13.736	13.840	13.853	13.855
3/13/15 12:00	13.844	13.847	13.793	13.730	13.823	13.848	13.851
3/13/15 14:00	13.847	13.832	13.791	13.723	13.836	13.851	13.853
3/13/15 16:00	13.840	13.838	13.790	13.726	13.821	13.842	13.844
3/13/15 18:00	13.846	13.853	13.799	13.735	13.822	13.845	13.849
3/13/15 20:00	13.850	13.854	13.813	13.743	13.847	13.861	13.862
3/13/15 22:00	13.862	13.876	13.829	13.764	13.853	13.874	13.875
3/14/15 0:00	13.875	13.889	13.834	13.772	13.863	13.885	13.889
3/14/15 2:00	13.878	13.887	13.846	13.778	13.874	13.890	13.892
3/14/15 4:00	13.886	13.897	13.849	13.784	13.884	13.901	13.902
3/14/15 6:00	13.894	13.914	13.860	13.796	13.883	13.905	13.908
3/14/15 8:00	13.912	13.920	13.878	13.810	13.904	13.925	13.928
3/14/15 10:00	13.927	13.935	13.886	13.822	13.927	13.941	13.942
3/14/15 12:00	13.922	13.923	13.868	13.806	13.908	13.931	13.934
3/14/15 14:00	13.902	13.881	13.840	13.772	13.895	13.910	13.911
3/14/15 16:00	13.875	13.871	13.824	13.759	13.858	13.879	13.880
3/14/15 18:00	13.872	13.874	13.820	13.756	13.843	13.867	13.870
3/14/15 20:00	13.866	13.865	13.823	13.754	13.862	13.876	13.876
3/14/15 22:00	13.864	13.870	13.823	13.758	13.857	13.878	13.879
3/15/15 0:00	13.864	13.873	13.819	13.756	13.855	13.877	13.880
3/15/15 2:00	13.858	13.856	13.815	13.747	13.851	13.869	13.870
3/15/15 4:00	13.845	13.855	13.807	13.742	13.843	13.862	13.863
3/15/15 6:00	13.843	13.856	13.802	13.739	13.834	13.858	13.860
3/15/15 8:00	13.851	13.851	13.809	13.740	13.845	13.866	13.868
3/15/15 10:00	13.845	13.843	13.795	13.730	13.845	13.859	13.859
3/15/15 12:00	13.841	13.838	13.784	13.721	13.822	13.846	13.848
3/15/15 14:00	13.815	13.791	13.749	13.681	13.806	13.821	13.821
3/15/15 16:00	13.797	13.776	13.730	13.665	13.772	13.791	13.793
3/15/15 18:00	13.784	13.780	13.726	13.663	13.753	13.776	13.780
3/15/15 20:00	13.781	13.778	13.737	13.669	13.776	13.790	13.790
3/15/15 22:00	13.782	13.791	13.744	13.679	13.773	13.794	13.796
3/16/15 0:00	13.780	13.788	13.733	13.671	13.770	13.793	13.796
3/16/15 2:00	13.768	13.769	13.728	13.660	13.766	13.782	13.783
3/16/15 4:00	13.756	13.757	13.709	13.645	13.754	13.772	13.772
3/16/15 6:00	13.746	13.759	13.705	13.642	13.736	13.760	13.763
3/16/15 8:00	13.743	13.743	13.701	13.633	13.736	13.757	13.758
3/16/15 10:00	13.735	13.734	13.686	13.623	13.733	13.748	13.748
3/16/15 12:00	13.715	13.707	13.653	13.591	13.697	13.722	13.724
3/16/15 14:00	13.694	13.669	13.628	13.560	13.676	13.691	13.693
3/16/15 16:00	13.685	13.663	13.616	13.551	13.652	13.672	13.674
3/16/15 18:00	13.685	13.674	13.620	13.558	13.643	13.666	13.670
3/16/15 20:00	13.721	13.740	13.698	13.631	13.706	13.719	13.721
3/16/15 22:00	13.782	13.812	13.764	13.698	13.768	13.789	13.792



TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
3/17/15 0:00	13.833	13.861	13.806	13.744	13.820	13.842	13.847
3/17/15 2:00	13.881	13.898	13.856	13.788	13.874	13.892	13.894
3/17/15 4:00	13.917	13.937	13.889	13.823	13.908	13.928	13.930
3/17/15 6:00	13.945	13.973	13.918	13.854	13.933	13.957	13.961
3/17/15 8:00	13.971	13.983	13.940	13.872	13.966	13.986	13.988
3/17/15 10:00	13.991	14.003	13.954	13.889	13.990	14.005	14.005
3/17/15 12:00	13.988	13.988	13.934	13.871	13.977	14.000	14.004
3/17/15 14:00	13.957	13.943	13.902	13.834	13.957	13.973	13.974
3/17/15 16:00	13.923	13.913	13.866	13.804	13.915	13.936	13.937
3/17/15 18:00	13.892	13.896	13.843	13.779	13.878	13.903	13.905
3/17/15 20:00	13.886	13.893	13.851	13.783	13.887	13.901	13.902
3/17/15 22:00	13.890	13.894	13.847	13.782	13.885	13.905	13.907
3/18/15 0:00	13.878	13.884	13.830	13.768	13.869	13.893	13.896
3/18/15 2:00	13.868	13.869	13.826	13.759	13.863	13.881	13.882
3/18/15 4:00	13.849	13.850	13.803	13.738	13.844	13.865	13.866
3/18/15 6:00	13.827	13.834	13.780	13.718	13.819	13.842	13.845
3/18/15 8:00	13.827	13.829	13.787	13.720	13.821	13.842	13.844
3/18/15 10:00	13.819	13.828	13.780	13.716	13.820	13.835	13.834
3/18/15 12:00	13.808	13.809	13.754	13.693	13.798	13.822	13.824
3/18/15 14:00	13.781	13.768	13.727	13.659	13.779	13.795	13.795
3/18/15 16:00	13.758	13.757	13.710	13.644	13.748	13.768	13.770
3/18/15 18:00	13.751	13.763	13.709	13.647	13.737	13.761	13.764
3/18/15 20:00	13.755	13.758	13.716	13.649	13.754	13.769	13.770
3/18/15 22:00	13.769	13.785	13.737	13.672	13.761	13.781	13.783
3/19/15 0:00	13.777	13.793	13.740	13.676	13.768	13.790	13.793
3/19/15 2:00	13.779	13.777	13.734	13.668	13.773	13.794	13.794
3/19/15 4:00	13.770	13.776	13.729	13.665	13.765	13.784	13.786
3/19/15 6:00	13.773	13.789	13.735	13.673	13.763	13.786	13.789
3/19/15 8:00	13.790	13.800	13.758	13.689	13.784	13.803	13.805
3/19/15 10:00	13.806	13.817	13.769	13.704	13.806	13.820	13.820
3/19/15 12:00	13.807	13.816	13.762	13.699	13.797	13.821	13.823
3/19/15 14:00	13.791	13.783	13.740	13.675	13.790	13.805	13.807
3/19/15 16:00	13.774	13.773	13.727	13.661	13.762	13.782	13.784
3/19/15 18:00	13.767	13.774	13.720	13.658	13.750	13.773	13.776
3/19/15 20:00	13.769	13.776	13.733	13.666	13.767	13.781	13.782
3/19/15 22:00	13.783	13.799	13.752	13.687	13.775	13.796	13.798
3/20/15 0:00	13.800	13.813	13.759	13.697	13.789	13.811	13.815
3/20/15 2:00	13.804	13.809	13.767	13.700	13.795	13.817	13.818
3/20/15 4:00	13.811	13.818	13.770	13.706	13.805	13.825	13.826
3/20/15 6:00	13.815	13.835	13.780	13.718	13.804	13.827	13.830
3/20/15 8:00	13.836	13.846	13.803	13.735	13.829	13.848	13.849
3/20/15 10:00	13.842	13.849	13.800	13.736	13.840	13.855	13.856
3/20/15 12:00	13.831	13.827	13.774	13.712	13.817	13.841	13.843
3/20/15 14:00	13.815	13.798	13.755	13.689	13.806	13.820	13.821
3/20/15 16:00	13.793	13.782	13.735	13.671	13.775	13.795	13.797
3/20/15 18:00	13.786	13.787	13.732	13.670	13.760	13.783	13.787
3/20/15 20:00	13.781	13.782	13.741	13.674	13.776	13.792	13.792
3/20/15 22:00	13.787	13.797	13.748	13.684	13.781	13.802	13.804
3/21/15 0:00	13.795	13.809	13.755	13.692	13.785	13.808	13.811
3/21/15 2:00	13.799	13.807	13.764	13.697	13.795	13.814	13.815

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

Date/Time	Pressure (psi)						
	Atmospheric	SG1S	SG2S	SG3S	SG1D	SG2D	SG3D
3/21/15 4:00	13.799	13.812	13.763	13.699	13.794	13.814	13.815
3/21/15 6:00	13.803	13.825	13.772	13.707	13.792	13.814	13.818
3/21/15 8:00	13.818	13.825	13.782	13.715	13.812	13.831	13.833
3/21/15 10:00	13.820	13.832	13.783	13.719	13.818	13.833	13.833
3/21/15 12:00	13.820	13.820	13.765	13.703	13.804	13.827	13.830
3/21/15 14:00	13.802	13.781	13.738	13.671	13.791	13.806	13.807
3/21/15 16:00	13.781	13.762	13.714	13.650	13.756	13.776	13.778
3/21/15 18:00	13.764	13.758	13.703	13.641	13.733	13.757	13.760
3/21/15 20:00	13.753	13.751	13.709	13.641	13.747	13.762	13.763
3/21/15 22:00	13.754	13.763	13.715	13.650	13.747	13.768	13.769
3/22/15 0:00	13.757	13.768	13.713	13.651	13.748	13.771	13.775
3/22/15 2:00	13.751	13.753	13.711	13.645	13.747	13.768	13.769
3/22/15 4:00	13.741	13.745	13.697	13.634	13.737	13.758	13.759
3/22/15 6:00	13.735	13.751	13.697	13.635	13.726	13.748	13.752
3/22/15 8:00	13.729	13.734	13.691	13.625	13.728	13.746	13.748
3/22/15 10:00	13.736	13.745	13.697	13.633	13.732	13.747	13.748
3/22/15 12:00	13.738	13.732	13.678	13.616	13.721	13.743	13.747
3/22/15 14:00	13.722	13.710	13.667	13.600	13.705	13.721	13.722
3/22/15 16:00	13.714	13.700	13.652	13.589	13.688	13.708	13.710
3/22/15 18:00	13.726	13.735	13.681	13.619	13.694	13.716	13.721
3/22/15 20:00	13.748	13.762	13.718	13.652	13.743	13.758	13.759
3/22/15 22:00	13.782	13.802	13.754	13.689	13.773	13.794	13.796
3/23/15 0:00	13.805	13.822	13.768	13.706	13.793	13.817	13.821
3/23/15 2:00	13.823	13.820	13.777	13.711	13.815	13.836	13.838
3/23/15 4:00	13.813	13.822	13.774	13.709	13.808	13.827	13.829
3/23/15 6:00	13.823	13.834	13.779	13.718	13.813	13.836	13.839
3/23/15 8:00	13.819	13.822	13.779	13.713	13.820	13.838	13.840
3/23/15 10:00	13.824	13.824	13.776	13.712	13.828	13.843	13.844
3/23/15 12:00	13.819	13.820	13.765	13.704	13.811	13.833	13.836
3/23/15 14:00	13.789	13.769	13.726	13.660	13.786	13.803	13.803
3/23/15 16:00	13.756	13.748	13.700	13.636	13.745	13.765	13.767
3/23/15 18:00	13.735	13.745	13.691	13.628	13.716	13.740	13.744
3/23/15 20:00	13.730	13.730	13.687	13.621	13.729	13.744	13.745
3/23/15 22:00	13.727	13.736	13.687	13.623	13.719	13.739	13.741
3/24/15 0:00	13.713	13.720	13.666	13.603	13.704	13.727	13.731
3/24/15 2:00	13.714	13.710	13.667	13.602	13.704	13.726	13.726
3/24/15 4:00	13.696	13.687	13.638	13.576	13.688	13.707	13.712
3/24/15 6:00	13.667	13.678	13.621	13.561	13.658	13.680	13.685
3/24/15 8:00	13.694	13.716	13.673	13.608	13.686	13.702	13.706
3/24/15 10:00	13.715	13.722	13.673	13.609	13.712	13.722	13.726
3/24/15 12:00	13.702	13.694	13.638	13.579	13.696	13.719	13.724
3/24/15 14:00	13.676	13.668	13.624	13.560	13.671	13.685	13.688
3/24/15 16:00	13.666	13.660	13.612	13.550	13.649	13.668	13.672
3/24/15 18:00	13.663	13.670	13.615	13.555	13.643	13.666	13.671
3/24/15 20:00	13.679	13.690	13.648	13.581	13.672	13.685	13.687
3/24/15 22:00	13.696	13.704	13.656	13.593	13.687	13.709	13.712
3/25/15 0:00	13.705	13.717	13.663	13.602	13.694	13.717	13.722
3/25/15 2:00	13.709	13.712	13.669	13.603	13.702	13.725	13.727
3/25/15 4:00	13.714	13.720	13.672	13.609	13.706	13.726	13.729
3/25/15 6:00	13.719	13.741	13.686	13.625	13.708	13.730	13.734

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
3/25/15 8:00	13.740	13.748	13.706	13.641	13.736	13.753	13.755
3/25/15 10:00	13.771	13.793	13.746	13.682	13.764	13.777	13.781
3/25/15 12:00	13.802	13.820	13.766	13.705	13.786	13.810	13.815
3/25/15 14:00	13.813	13.812	13.770	13.705	13.811	13.825	13.829
3/25/15 16:00	13.817	13.830	13.782	13.719	13.808	13.828	13.831
3/25/15 18:00	13.826	13.843	13.787	13.726	13.815	13.838	13.843
3/25/15 20:00	13.838	13.845	13.803	13.737	13.837	13.850	13.852
3/25/15 22:00	13.864	13.876	13.828	13.765	13.855	13.876	13.879
3/26/15 0:00	13.875	13.884	13.829	13.768	13.865	13.886	13.890
3/26/15 2:00	13.864	13.870	13.827	13.761	13.853	13.877	13.878
3/26/15 4:00	13.867	13.873	13.825	13.762	13.859	13.879	13.883
3/26/15 6:00	13.869	13.883	13.829	13.768	13.855	13.878	13.882
3/26/15 8:00	13.875	13.873	13.830	13.765	13.871	13.889	13.891
3/26/15 10:00	13.860	13.865	13.817	13.753	13.861	13.875	13.876
3/26/15 12:00	13.840	13.836	13.781	13.721	13.830	13.853	13.856
3/26/15 14:00	13.794	13.775	13.732	13.667	13.794	13.810	13.811
3/26/15 16:00	13.745	13.744	13.695	13.632	13.735	13.757	13.758
3/26/15 18:00	13.751	13.770	13.715	13.655	13.733	13.758	13.762
3/26/15 20:00	13.779	13.801	13.759	13.691	13.775	13.788	13.791
3/26/15 22:00	13.834	13.850	13.803	13.740	13.823	13.844	13.847
3/27/15 0:00	13.849	13.862	13.807	13.747	13.841	13.863	13.868
3/27/15 2:00	13.863	13.869	13.826	13.760	13.855	13.879	13.881
3/27/15 4:00	13.869	13.881	13.833	13.768	13.863	13.883	13.885
3/27/15 6:00	13.879	13.889	13.834	13.772	13.867	13.890	13.894
3/27/15 8:00	13.880	13.883	13.839	13.774	13.877	13.894	13.896
3/27/15 10:00	13.878	13.883	13.835	13.772	13.878	13.892	13.894
3/27/15 12:00	13.863	13.868	13.813	13.753	13.852	13.874	13.879
3/27/15 14:00	13.831	13.817	13.775	13.714	13.829		13.847
3/27/15 16:00	13.791	13.787	13.738	13.676	13.778	13.800	13.802
3/27/15 18:00	13.763	13.761	13.704	13.644	13.744	13.768	13.774
3/27/15 20:00	13.741	13.741	13.700	13.633	13.738	13.750	13.753
3/27/15 22:00	13.751	13.756	13.707	13.645	13.742	13.763	13.766
3/28/15 0:00	13.748	13.757	13.700	13.641	13.735	13.761	13.765
3/28/15 2:00	13.737	13.734	13.692	13.627	13.724	13.748	13.751
3/28/15 4:00	13.731	13.739	13.690	13.627	13.721	13.741	13.745
3/28/15 6:00	13.741	13.762	13.706	13.645	13.727	13.750	13.755
3/28/15 8:00	13.767	13.767	13.726	13.660	13.760	13.777	13.779
3/28/15 10:00	13.777	13.781	13.734	13.671	13.774	13.786	13.788
3/28/15 12:00	13.774	13.778	13.722	13.662	13.756	13.780	13.785
3/28/15 14:00	13.759	13.741	13.700	13.634	13.750	13.764	13.767
3/28/15 16:00	13.741	13.730	13.682	13.619	13.724	13.744	13.747
3/28/15 18:00	13.729	13.722	13.665	13.606	13.701	13.726	13.730
3/28/15 20:00	13.703	13.695	13.654	13.588	13.698	13.711	13.714
3/28/15 22:00	13.692	13.692	13.643	13.581	13.681	13.702	13.705
3/29/15 0:00	13.678	13.684	13.629	13.568	13.665	13.689	13.694
3/29/15 2:00	13.670	13.689	13.648	13.582	13.655	13.679	13.681
3/29/15 4:00	13.671	13.690	13.641	13.578	13.668	13.685	13.691
3/29/15 6:00	13.714	13.737	13.682	13.621	13.693	13.717	13.722
3/29/15 8:00	13.753	13.766	13.724	13.657	13.748	13.764	13.766
3/29/15 10:00	13.795	13.812	13.764	13.702	13.785	13.798	13.801

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
3/29/15 12:00	13.820	13.827	13.771	13.712	13.799	13.823	13.828
3/29/15 14:00	13.823	13.806	13.765	13.699	13.814	13.829	13.832
3/29/15 16:00	13.816	13.813	13.765	13.702	13.798	13.818	13.822
3/29/15 18:00	13.820	13.823	13.766	13.707	13.794	13.819	13.824
3/29/15 20:00	13.825	13.828	13.786	13.720	13.821	13.834	13.836
3/29/15 22:00	13.836	13.845	13.796	13.733	13.825	13.847	13.850
3/30/15 0:00	13.834	13.849	13.794	13.733	13.819	13.843	13.848
3/30/15 2:00	13.838	13.827	13.785	13.719	13.825	13.851	13.852
3/30/15 4:00	13.820	13.822	13.773	13.709	13.812	13.833	13.835
3/30/15 6:00	13.811	13.827	13.771	13.710	13.796	13.821	13.825
3/30/15 8:00	13.814	13.810	13.770	13.703	13.810	13.825	13.828
3/30/15 10:00	13.801	13.800	13.751	13.689	13.799	13.811	13.814
3/30/15 12:00	13.783	13.779	13.723	13.663	13.763	13.786	13.792
3/30/15 14:00	13.753	13.724	13.683	13.618	13.741	13.754	13.757
3/30/15 16:00	13.731	13.712	13.664	13.601	13.703	13.724	13.727
3/30/15 18:00	13.727	13.725	13.669	13.609	13.690	13.715	13.721
3/30/15 20:00	13.730	13.727	13.686	13.621	13.719	13.733	13.736
3/30/15 22:00	13.739	13.749	13.701	13.639	13.728	13.749	13.752
3/31/15 0:00	13.747	13.756	13.700	13.639	13.731	13.755	13.760
3/31/15 2:00	13.746	13.747	13.705	13.640	13.730	13.756	13.758
3/31/15 4:00	13.746	13.754	13.705	13.643	13.737	13.758	13.760
3/31/15 6:00	13.748	13.765	13.711	13.649	13.732	13.756	13.762
3/31/15 8:00	13.764	13.763	13.722	13.656	13.759	13.775	13.778
3/31/15 10:00	13.774	13.776	13.728	13.666	13.767	13.781	13.784
3/31/15 12:00	13.770	13.763	13.707	13.647	13.746	13.771	13.776
3/31/15 14:00	13.749	13.719	13.678	13.613	13.733	13.746	13.749
3/31/15 16:00	13.723	13.699	13.651	13.588	13.693	13.713	13.717
3/31/15 18:00	13.706	13.689	13.633	13.573	13.670	13.693	13.698
3/31/15 20:00	13.681	13.673	13.632	13.566	13.671	13.685	13.687
3/31/15 22:00	13.677	13.679	13.631	13.569	13.665	13.688	13.691
4/1/15 0:00	13.668	13.673	13.617	13.558	13.655	13.678	13.683
4/1/15 2:00	13.658	13.655	13.614	13.550	13.645	13.671	13.673
4/1/15 4:00	13.648	13.650	13.602	13.539	13.642	13.661	13.665
4/1/15 6:00	13.635	13.643	13.588	13.528	13.622	13.646	13.651
4/1/15 8:00	13.633	13.629	13.588	13.522	13.629	13.643	13.646
4/1/15 10:00	13.621	13.611	13.570	13.505	13.613	13.627	13.629
4/1/15 12:00	13.606	13.591	13.543	13.481	13.590	13.605	13.610
4/1/15 14:00	13.582	13.566	13.510	13.452	13.549	13.578	13.578
4/1/15 16:00	13.562	13.529	13.488	13.424	13.532	13.551	13.555
4/1/15 18:00	13.533	13.510	13.461	13.399	13.510	13.525	13.531
4/1/15 20:00	13.515	13.532	13.477	13.417	13.493	13.522	13.524
4/1/15 22:00	13.584	13.595	13.554	13.488	13.563	13.583	13.588
4/2/15 0:00	13.630	13.642	13.595	13.532	13.618	13.633	13.639
4/2/15 2:00	13.650	13.669	13.614	13.553	13.631	13.660	13.662
4/2/15 4:00	13.662	13.669	13.628	13.562	13.649	13.671	13.674
4/2/15 6:00	13.678	13.693	13.646	13.582	13.673	13.688	13.694
4/2/15 8:00	13.702	13.723	13.668	13.607	13.685	13.712	13.715
4/2/15 10:00	13.718	13.714	13.674	13.608	13.708	13.729	13.733
4/2/15 12:00	13.716	13.717	13.668	13.606	13.707	13.721	13.727
4/2/15 14:00	13.696	13.698	13.643	13.583	13.675	13.703	13.704

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
4/2/15 16:00	13.690	13.677	13.636	13.572	13.674	13.695	13.699
4/2/15 18:00	13.690	13.700	13.652	13.591	13.678	13.693	13.700
4/2/15 20:00	13.703	13.705	13.649	13.591	13.680	13.707	13.710
4/2/15 22:00	13.731	13.792	13.751	13.683	13.713	13.733	13.738
4/3/15 0:00	13.801	13.785	13.737	13.675	13.786	13.799	13.808
4/3/15 2:00	13.826	13.821	13.765	13.709	13.809	13.834	13.838
4/3/15 4:00	13.839	13.838	13.797	13.732	13.825	13.846	13.851
4/3/15 6:00	13.851	13.869	13.820	13.758	13.845	13.858	13.866
4/3/15 8:00	13.882	13.902	13.846	13.787	13.863	13.891	13.893
4/3/15 10:00	13.908	13.917	13.875	13.810	13.898	13.917	13.923
4/3/15 12:00	13.923	13.927	13.878	13.816	13.917	13.931	13.939
4/3/15 14:00	13.917	13.923	13.867	13.808	13.899	13.928	13.930
4/3/15 16:00	13.904	13.898	13.857	13.791	13.893	13.914	13.918
4/3/15 18:00	13.901	13.905	13.858	13.795	13.891	13.905	13.913
4/3/15 20:00	13.898	13.913	13.857	13.797	13.881	13.909	13.912
4/3/15 22:00	13.908	13.906	13.865	13.800	13.900	13.920	13.924
4/4/15 0:00	13.908	13.917	13.868	13.806	13.904	13.917	13.924
4/4/15 2:00	13.909	13.923	13.867	13.807	13.895	13.922	13.924
4/4/15 4:00	13.904	13.900	13.859	13.793	13.895	13.916	13.920
4/4/15 6:00	13.891	13.896	13.847	13.785	13.889	13.903	13.909
4/4/15 8:00	13.893	13.905	13.850	13.790	13.876	13.904	13.906
4/4/15 10:00	13.890	13.887	13.845	13.780	13.881	13.901	13.905
4/4/15 12:00	13.873	13.866	13.817	13.755	13.867	13.882	13.888
4/4/15 14:00	13.838	13.824	13.769	13.711	13.817	13.846	13.847
4/4/15 16:00	13.796	13.774	13.734	13.669	13.782	13.802	13.805
4/4/15 18:00	13.767	13.760	13.711	13.650	13.756	13.771	13.776
4/4/15 20:00	13.751	13.759	13.704	13.645	13.731	13.758	13.760
4/4/15 22:00	13.749	13.749	13.708	13.644	13.739	13.760	13.764
4/5/15 0:00	13.745	13.746	13.697	13.636	13.741	13.757	13.763
4/5/15 2:00	13.728	13.728	13.673	13.613	13.713	13.742	13.744
4/5/15 4:00	13.697	13.688	13.645	13.581	13.689	13.710	13.713
4/5/15 6:00	13.678	13.688	13.639	13.577	13.673	13.688	13.694
4/5/15 8:00	13.683	13.691	13.637	13.577	13.666	13.694	13.696
4/5/15 10:00	13.673	13.669	13.627	13.563	13.662	13.682	13.685
4/5/15 12:00	13.666	13.655	13.606	13.546	13.655	13.670	13.675
4/5/15 14:00	13.646	13.632	13.577	13.518	13.619	13.647	13.649
4/5/15 16:00	13.619	13.594	13.552	13.489	13.594	13.615	13.619
4/5/15 18:00	13.609	13.600	13.551	13.489	13.584	13.599	13.607
4/5/15 20:00	13.601	13.610	13.554	13.495	13.576	13.604	13.607
4/5/15 22:00	13.621	13.620	13.579	13.514	13.609	13.630	13.635
4/6/15 0:00	13.629	13.633	13.585	13.523	13.620	13.636	13.642
4/6/15 2:00	13.620	13.627	13.572	13.513	13.601	13.630	13.631
4/6/15 4:00	13.608	13.598	13.557	13.494	13.597	13.618	13.622
4/6/15 6:00	13.596	13.602	13.554	13.492	13.589	13.603	13.610
4/6/15 8:00	13.602	13.613	13.558	13.499	13.580	13.610	13.612
4/6/15 10:00	13.607	13.602	13.561	13.498	13.597	13.618	13.622
4/6/15 12:00	13.613	13.612	13.564	13.502	13.599	13.616	13.621
4/6/15 14:00	13.618	13.619	13.564	13.505	13.586	13.615	13.617
4/6/15 16:00	13.622	13.611	13.569	13.505	13.600	13.621	13.625
4/6/15 18:00	13.623	13.620	13.572	13.511	13.607	13.622	13.629

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
4/6/15 20:00	13.626	13.641	13.585	13.525	13.602	13.629	13.632
4/6/15 22:00	13.641	13.638	13.597	13.534	13.632	13.652	13.656
4/7/15 0:00	13.631	13.634	13.586	13.525	13.626	13.642	13.648
4/7/15 2:00	13.617	13.622	13.566	13.508	13.601	13.630	13.632
4/7/15 4:00	13.617	13.619	13.578	13.515	13.608	13.629	13.634
4/7/15 6:00	13.637	13.654	13.606	13.545	13.628	13.643	13.649
4/7/15 8:00	13.671	13.697	13.642	13.583	13.649	13.676	13.680
4/7/15 10:00	13.698	13.699	13.658	13.596	13.686	13.707	13.712
4/7/15 12:00	13.711	13.715	13.666	13.607	13.701	13.715	13.721
4/7/15 14:00	13.712	13.719	13.664	13.606	13.692	13.721	13.723
4/7/15 16:00	13.712	13.702	13.660	13.598	13.697	13.717	13.721
4/7/15 18:00	13.711	13.722	13.673	13.613	13.700	13.715	13.722
4/7/15 20:00	13.720	13.739	13.684	13.623	13.702	13.731	13.733
4/7/15 22:00	13.731	13.714	13.673	13.610	13.725	13.746	13.749
4/8/15 0:00	13.706	13.719	13.671	13.609	13.705	13.720	13.727
4/8/15 2:00	13.703	13.723	13.667	13.608	13.685	13.713	13.715
4/8/15 4:00	13.706	13.701	13.659	13.597	13.700	13.721	13.725
4/8/15 6:00	13.703	13.708	13.661	13.599	13.698	13.713	13.719
4/8/15 8:00	13.699	13.709	13.654	13.595	13.682	13.711	13.713
4/8/15 10:00	13.683	13.693	13.652	13.587	13.681	13.702	13.706
4/8/15 12:00	13.678	13.669	13.621	13.561	13.675	13.690	13.696
4/8/15 14:00	13.651	13.654	13.599	13.541	13.635	13.664	13.666
4/8/15 16:00	13.616	13.611	13.570	13.508	13.608	13.630	13.633
4/8/15 18:00	13.599	13.592	13.544	13.484	13.595	13.610	13.617
4/8/15 20:00	13.604	13.595	13.540	13.482	13.582	13.610	13.614
4/8/15 22:00	13.574	13.570	13.529	13.466	13.565	13.587	13.590
4/9/15 0:00	13.587	13.589	13.540	13.481	13.578	13.594	13.601
4/9/15 2:00	13.587	13.591	13.536	13.477	13.567	13.596	13.598
4/9/15 4:00	13.588	13.589	13.547	13.485	13.580	13.602	13.607
4/9/15 6:00	13.615	13.627	13.579	13.519	13.608	13.623	13.630
4/9/15 8:00	13.645	13.659	13.604	13.545	13.626	13.654	13.657
4/9/15 10:00	13.661	13.677	13.633	13.572	13.649	13.669	13.676
4/9/15 12:00	13.708	13.725	13.674	13.617	13.698	13.709	13.720
4/9/15 14:00	13.732	13.761	13.703	13.649	13.713	13.738	13.744
4/9/15 16:00	13.765	13.766	13.722	13.663	13.755	13.773	13.781
4/9/15 18:00	13.788	13.799	13.748	13.689	13.777	13.790	13.799
4/9/15 20:00	13.809	13.830	13.771	13.715	13.790	13.815	13.821
4/9/15 22:00	13.829	13.827	13.783	13.722	13.818	13.837	13.843
4/10/15 0:00	13.826	13.830	13.779	13.720	13.820	13.833	13.842
4/10/15 2:00	13.824	13.836	13.779	13.722	13.807	13.833	13.838
4/10/15 4:00	13.824	13.819	13.774	13.715	13.814	13.834	13.840
4/10/15 6:00	13.814	13.828	13.777	13.718	13.808	13.821	13.830
4/10/15 8:00	13.832	13.851	13.793	13.738	13.815	13.840	13.846
4/10/15 10:00	13.849	13.850	13.803	13.745	13.837	13.855	13.862
4/10/15 12:00	13.845	13.840	13.788	13.731	13.835	13.848	13.858
4/10/15 14:00	13.831	13.823	13.765	13.710	13.803	13.829	13.836
4/10/15 16:00	13.810	13.786	13.741	13.682	13.788	13.806	13.813
4/10/15 18:00	13.793	13.782	13.732	13.674	13.773	13.785	13.796
4/10/15 20:00	13.784	13.796	13.736	13.681	13.759	13.784	13.791
4/10/15 22:00	13.798	13.797	13.752	13.693	13.788	13.806	13.813

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
4/11/15 0:00	13.800	13.805	13.753	13.695	13.791	13.804	13.814
4/11/15 2:00	13.793	13.801	13.741	13.687	13.775	13.801	13.807
4/11/15 4:00	13.785	13.780	13.734	13.675	13.775	13.794	13.801
4/11/15 6:00	13.778	13.791	13.738	13.681	13.774	13.786	13.796
4/11/15 8:00	13.788	13.799	13.739	13.685	13.769	13.793	13.801
4/11/15 10:00	13.776	13.763	13.717	13.659	13.764	13.781	13.790
4/11/15 12:00	13.763	13.755	13.702	13.645	13.750	13.761	13.772
4/11/15 14:00	13.739	13.731	13.670	13.616	13.713	13.739	13.746
4/11/15 16:00	13.709	13.686	13.640	13.582	13.688	13.707	13.714
4/11/15 18:00	13.698	13.694	13.641	13.584	13.682	13.693	13.705
4/11/15 20:00	13.686	13.695	13.635	13.581	13.663	13.687	13.694
4/11/15 22:00	13.692	13.684	13.638	13.580	13.681	13.699	13.707
4/12/15 0:00	13.681	13.684	13.631	13.575	13.673	13.684	13.695
4/12/15 2:00	13.670	13.672	13.612	13.559	13.653	13.678	13.684
4/12/15 4:00	13.649	13.645	13.598	13.541	13.639	13.658	13.665
4/12/15 6:00	13.635	13.646	13.593	13.536	13.630	13.642	13.652
4/12/15 8:00	13.647	13.657	13.597	13.544	13.627	13.651	13.658
4/12/15 10:00	13.639	13.631	13.585	13.528	13.626	13.644	13.653
4/12/15 12:00	13.633	13.627	13.573	13.518	13.620	13.631	13.642
4/12/15 14:00	13.627	13.622	13.561	13.509	13.599	13.623	13.631
4/12/15 16:00	13.622	13.600	13.553	13.497	13.594	13.611	13.619
4/12/15 18:00	13.620	13.626	13.573	13.515	13.596	13.607	13.619
4/12/15 20:00	13.673	13.696	13.636	13.581	13.644	13.669	13.677
4/12/15 22:00	13.712	13.732	13.686	13.626	13.696	13.713	13.722
4/13/15 0:00	13.754	13.779	13.727	13.670	13.744	13.755	13.767
4/13/15 2:00	13.782	13.803	13.744	13.691	13.765	13.790	13.796
4/13/15 4:00	13.806	13.801	13.755	13.699	13.794	13.813	13.821
4/13/15 6:00	13.821	13.841	13.789	13.731	13.813	13.824	13.835
4/13/15 8:00	13.861	13.879	13.821	13.765	13.840	13.863	13.872
4/13/15 10:00	13.877	13.878	13.832	13.774	13.863	13.882	13.890
4/13/15 12:00	13.887	13.883	13.830	13.773	13.876	13.888	13.899
4/13/15 14:00	13.872	13.873	13.813	13.759	13.847	13.872	13.880
4/13/15 16:00	13.866	13.850	13.803	13.746	13.846	13.863	13.871
4/13/15 18:00	13.857	13.853	13.801	13.745	13.842	13.854	13.864
4/13/15 20:00	13.855	13.865	13.806	13.752	13.833	13.858	13.866
4/13/15 22:00	13.867	13.866	13.821	13.763	13.856	13.873	13.882
4/14/15 0:00	13.870	13.877	13.824	13.767	13.862	13.876	13.886
4/14/15 2:00	13.868	13.875	13.816	13.763	13.852	13.877	13.884
4/14/15 4:00	13.857	13.859	13.812	13.754	13.848	13.866	13.874
4/14/15 6:00	13.854	13.864	13.811	13.754	13.849	13.861	13.871
4/14/15 8:00	13.864	13.878	13.818	13.764	13.847	13.872	13.878
4/14/15 10:00	13.863	13.857	13.810	13.753	13.851	13.869	13.877
4/14/15 12:00	13.853	13.842	13.789	13.733	13.838	13.851	13.861
4/14/15 14:00	13.825	13.815	13.756	13.702	13.799	13.824	13.831
4/14/15 16:00	13.793	13.775	13.730	13.672	13.776	13.793	13.801
4/14/15 18:00	13.775	13.770	13.718	13.661	13.761	13.774	13.783
4/14/15 20:00	13.761	13.769	13.711	13.656	13.740	13.765	13.772
4/14/15 22:00	13.763	13.763	13.717	13.659	13.753	13.772	13.778
4/15/15 0:00	13.759	13.765	13.712	13.656	13.752	13.766	13.775
4/15/15 2:00	13.752	13.758	13.699	13.644	13.736	13.760	13.767

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
4/15/15 4:00	13.737	13.733	13.686	13.629	13.729	13.747	13.754
4/15/15 6:00	13.727	13.730	13.678	13.621	13.722	13.734	13.744
4/15/15 8:00	13.725	13.736	13.679	13.623	13.710	13.735	13.742
4/15/15 10:00	13.722	13.717	13.671	13.614	13.709	13.729	13.736
4/15/15 12:00	13.717	13.710	13.657	13.601	13.706	13.718	13.728
4/15/15 14:00	13.694	13.696	13.638	13.584	13.674	13.699	13.706
4/15/15 16:00	13.684	13.673	13.626	13.569	13.669	13.687	13.693
4/15/15 18:00	13.681	13.683	13.630	13.573	13.669	13.682	13.691
4/15/15 20:00	13.681	13.698	13.640	13.586	13.661	13.684	13.692
4/15/15 22:00	13.704	13.707	13.661	13.604	13.694	13.712	13.719
4/16/15 0:00	13.708	13.725	13.672	13.615	13.699	13.711	13.722
4/16/15 2:00	13.718	13.733	13.674	13.620	13.701	13.727	13.733
4/16/15 4:00	13.728	13.726	13.680	13.622	13.719	13.738	13.745
4/16/15 6:00	13.730	13.742	13.690	13.632	13.723	13.737	13.745
4/16/15 8:00	13.743	13.748	13.690	13.636	13.722	13.746	13.753
4/16/15 10:00	13.751	13.757	13.711	13.654	13.739	13.757	13.766
4/16/15 12:00	13.765	13.761	13.708	13.652	13.753	13.768	13.776
4/16/15 14:00	13.748	13.747	13.688	13.636	13.721	13.746	13.752
4/16/15 16:00	13.734	13.722	13.675	13.618	13.718	13.737	13.744
4/16/15 18:00	13.760	13.769	13.716	13.660	13.746	13.758	13.769
4/16/15 20:00	13.763	13.767	13.709	13.654	13.744	13.768	13.775
4/16/15 22:00	13.776	13.767	13.721	13.664	13.765	13.784	13.791
4/17/15 0:00	13.770	13.778	13.726	13.670	13.765	13.778	13.788
4/17/15 2:00	13.768	13.784	13.726	13.670	13.751	13.777	13.783
4/17/15 4:00	13.783	13.778	13.731	13.673	13.773	13.792	13.799
4/17/15 6:00	13.767	13.775	13.722	13.665	13.761	13.774	13.783
4/17/15 8:00	13.750	13.773	13.714	13.659	13.737	13.762	13.769
4/17/15 10:00	13.775	13.777	13.730	13.672	13.770	13.788	13.794
4/17/15 12:00	13.782	13.779	13.727	13.670	13.773	13.786	13.796
4/17/15 14:00	13.761	13.761	13.702	13.648	13.738	13.763	13.770
4/17/15 16:00	13.743	13.727	13.681	13.624	13.727	13.744	13.751
4/17/15 18:00	13.731	13.727	13.674	13.618	13.717	13.730	13.739
4/17/15 20:00	13.729	13.736	13.678	13.623	13.707	13.732	13.738
4/17/15 22:00	13.735	13.728	13.682	13.625	13.723	13.742	13.748
4/18/15 0:00	13.724	13.731	13.677	13.622	13.716	13.731	13.739
4/18/15 2:00	13.721	13.717	13.656	13.605	13.701	13.722	13.733
4/18/15 4:00	13.710	13.692	13.638	13.590	13.694	13.706	13.726
4/18/15 6:00	13.708	13.714	13.656	13.608	13.692	13.694	13.717
4/18/15 8:00	13.713	13.708	13.639	13.597	13.685	13.706	13.720
4/18/15 10:00	13.707	13.689	13.640	13.587	13.682	13.698	13.712
4/18/15 12:00	13.704	13.685	13.632	13.580	13.685	13.692	13.709
4/18/15 14:00	13.680	13.667	13.603	13.555	13.646	13.672	13.682
4/18/15 16:00	13.652	13.619	13.573	13.517	13.623	13.640	13.651
4/18/15 18:00	13.656	13.659	13.606	13.554	13.634	13.642	13.658
4/18/15 20:00	13.649	13.669	13.605	13.555	13.618	13.644	13.655
4/18/15 22:00	13.663	13.649	13.603	13.548	13.648	13.666	13.677
4/19/15 0:00	13.662	13.656	13.602	13.549	13.650	13.658	13.675
4/19/15 2:00	13.647	13.653	13.589	13.541	13.619	13.644	13.655
4/19/15 4:00	13.650	13.642	13.595	13.541	13.632	13.650	13.661
4/19/15 6:00	13.658	13.664	13.610	13.557		13.652	13.669



TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
4/19/15 8:00	13.673	13.684	13.618	13.572		13.669	13.680
4/19/15 10:00	13.691	13.689	13.637	13.586		13.677	13.695
4/19/15 12:00	13.731	13.722	13.666	13.618		13.710	13.736
4/19/15 14:00	13.721	13.717	13.648	13.603		13.705	13.718
4/19/15 16:00	13.700	13.679	13.632	13.578		13.694	13.709
4/19/15 18:00	13.692	13.687	13.633	13.581		13.681	13.700
4/19/15 20:00	13.700	13.709	13.642	13.595		13.692	13.702
4/19/15 22:00	13.713	13.702	13.655	13.600		13.709	13.721
4/20/15 0:00	13.722	13.722	13.669	13.615		13.713	13.731
4/20/15 2:00	13.725	13.730	13.664	13.616		13.721	13.730
4/20/15 4:00	13.728	13.720	13.674	13.617		13.725	13.737
4/20/15 6:00	13.735	13.734	13.681	13.628		13.727	13.744
4/20/15 8:00	13.741	13.748	13.682	13.634		13.735	13.745
4/20/15 10:00	13.741	13.729	13.683	13.626		13.739	13.750
4/20/15 12:00	13.734	13.723	13.670	13.617		13.727	13.744
4/20/15 14:00	13.715	13.710	13.644	13.597		13.708	13.719
4/20/15 16:00	13.698	13.678	13.631	13.575		13.696	13.707
4/20/15 18:00	13.691	13.680	13.628	13.575		13.681	13.697
4/20/15 20:00	13.684	13.693	13.629	13.580		13.678	13.687
4/20/15 22:00	13.700	13.687	13.642	13.586		13.700	13.711
4/21/15 0:00	13.699	13.700	13.648	13.594		13.695	13.710
4/21/15 2:00	13.700	13.704	13.640	13.590		13.700	13.708
4/21/15 4:00	13.697	13.687	13.642	13.585		13.699	13.709
4/21/15 6:00	13.694	13.695	13.644	13.589		13.690	13.705
4/21/15 8:00	13.709	13.712	13.649	13.599		13.706	13.715
4/21/15 10:00	13.707	13.694	13.648	13.591		13.704	13.715
4/21/15 12:00	13.700	13.684	13.632	13.579		13.690	13.706
4/21/15 14:00	13.680	13.672	13.608	13.559		13.671	13.680
4/21/15 16:00	13.663	13.638	13.593	13.537		13.654	13.665
4/21/15 18:00	13.652	13.640	13.588	13.535		13.639	13.654
4/21/15 20:00	13.666	13.692	13.629	13.580		13.652	13.663
4/21/15 22:00	13.720	13.720	13.676	13.619		13.718	13.729
4/22/15 0:00	13.745	13.753	13.702	13.647		13.742	13.757
4/22/15 2:00	13.758	13.763	13.700	13.651		13.759	13.767
4/22/15 4:00	13.765	13.758	13.714	13.656		13.766	13.777
4/22/15 6:00	13.766	13.768	13.716	13.662		13.764	13.780
4/22/15 8:00	13.785	13.796	13.733	13.683		13.785	13.794
4/22/15 10:00	13.801	13.793	13.749	13.693		13.800	13.811
4/22/15 12:00	13.796	13.787	13.735	13.681		13.793	13.809
4/22/15 14:00	13.776	13.773	13.710	13.661		13.773	13.782
4/22/15 16:00	13.761	13.736	13.691	13.635		13.757	13.768
4/22/15 18:00	13.744	13.737	13.684	13.630		13.734	13.749
4/22/15 20:00	13.740	13.747	13.685	13.635		13.738	13.746
4/22/15 22:00	13.755	13.749	13.704	13.649		13.758	13.767
4/23/15 0:00	13.754	13.757	13.705	13.651		13.753	13.767
4/23/15 2:00	13.747	13.752	13.691	13.641		13.750	13.757
4/23/15 4:00	13.747	13.739	13.695	13.638		13.751	13.760
4/23/15 6:00	13.753	13.758	13.706	13.651		13.751	13.764
4/23/15 8:00	13.757	13.763	13.701	13.651		13.761	13.769
4/23/15 10:00	13.756	13.743	13.699	13.643		13.757	13.766

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
4/23/15 12:00	13.747	13.731	13.679	13.626		13.741	13.755
4/23/15 14:00	13.720	13.713	13.652	13.602		13.716	13.723
4/23/15 16:00	13.702	13.672	13.627	13.572		13.696	13.705
4/23/15 18:00	13.680	13.667	13.615	13.562		13.670	13.683
4/23/15 20:00	13.666	13.674	13.612	13.563		13.665	13.673
4/23/15 22:00	13.678	13.673	13.629	13.574		13.680	13.690
4/24/15 0:00	13.675	13.661	13.610	13.556		13.677	13.689
4/24/15 2:00	13.656	13.671	13.610	13.561		13.661	13.671
4/24/15 4:00	13.620	13.613	13.569	13.513		13.624	13.633
4/24/15 6:00	13.616	13.613	13.561	13.507		13.616	13.631
4/24/15 8:00	13.616	13.622	13.561	13.512		13.616	13.625
4/24/15 10:00	13.604	13.588	13.545	13.489		13.608	13.618
4/24/15 12:00	13.587	13.569	13.518	13.466		13.583	13.597
4/24/15 14:00	13.564	13.557	13.495	13.446		13.561	13.569
4/24/15 16:00	13.538	13.508	13.464	13.409		13.535	13.544
4/24/15 18:00	13.524	13.512	13.460	13.406		13.520	13.533
4/24/15 20:00	13.503	13.507	13.445	13.395		13.501	13.510
4/24/15 22:00	13.522	13.508	13.464	13.408		13.523	13.533
4/25/15 0:00	13.513	13.509	13.456	13.405		13.510	13.528
4/25/15 2:00	13.528	13.524	13.455	13.414		13.521	13.534
4/25/15 4:00	13.513	13.495	13.445	13.395		13.505	13.521
4/25/15 6:00	13.527	13.524	13.469	13.420		13.513	13.535
4/25/15 8:00	13.550	13.560	13.492	13.449		13.538	13.553
4/25/15 10:00	13.581	13.572	13.524	13.471		13.571	13.586
4/25/15 12:00	13.600	13.595	13.542	13.493		13.583	13.603
4/25/15 14:00	13.607	13.619	13.552	13.507		13.600	13.612
4/25/15 16:00	13.619	13.604	13.558	13.505		13.613	13.626
4/25/15 18:00	13.635	13.632	13.579	13.527		13.624	13.641
4/25/15 20:00	13.643	13.654	13.590	13.544		13.637	13.648
4/25/15 22:00	13.666	13.664	13.619	13.565		13.664	13.677
4/26/15 0:00	13.684	13.684	13.631	13.579		13.677	13.694
4/26/15 2:00	13.688	13.693	13.628	13.581		13.685	13.695
4/26/15 4:00	13.690	13.679	13.633	13.579		13.688	13.700
4/26/15 6:00	13.708	13.712	13.660	13.607		13.702	13.719
4/26/15 8:00	13.722	13.730	13.666	13.619		13.721	13.731
4/26/15 10:00	13.722	13.719	13.673	13.619		13.721	13.733
4/26/15 12:00	13.739	13.737	13.684	13.632		13.735	13.751
4/26/15 14:00	13.735	13.741	13.678	13.631		13.731	13.743
4/26/15 16:00	13.731	13.719	13.674	13.619		13.730	13.742
4/26/15 18:00	13.728	13.726	13.674	13.621		13.723	13.739
4/26/15 20:00	13.748	13.770	13.706	13.656		13.740	13.751
4/26/15 22:00	13.770	13.766	13.721	13.666		13.771	13.781
4/27/15 0:00	13.788	13.793	13.741	13.688		13.782	13.798
4/27/15 2:00	13.791	13.795	13.732	13.684		13.790	13.800
4/27/15 4:00	13.796	13.796	13.752	13.696		13.799	13.810
4/27/15 6:00	13.813	13.815	13.763	13.710		13.810	13.825
4/27/15 8:00	13.824	13.838	13.775	13.725		13.824	13.833
4/27/15 10:00	13.847	13.839	13.793	13.738		13.848	13.858
4/27/15 12:00	13.847	13.838	13.785	13.734		13.841	13.858
4/27/15 14:00	13.830	13.828	13.765	13.717		13.829	13.839

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
4/27/15 16:00	13.823	13.801	13.757	13.702		13.819	13.829
4/27/15 18:00	13.817	13.812	13.760	13.708		13.808	13.823
4/27/15 20:00	13.824	13.831	13.768	13.720		13.821	13.830
4/27/15 22:00	13.836	13.831	13.785	13.731		13.836	13.847
4/28/15 0:00	13.845	13.847	13.796	13.741		13.843	13.858
4/28/15 2:00	13.850	13.854	13.792	13.743		13.850	13.859
4/28/15 4:00	13.850	13.846	13.802	13.747		13.852	13.864
4/28/15 6:00	13.859	13.866	13.814	13.761		13.857	13.872
4/28/15 8:00	13.872	13.883	13.821	13.771		13.872	13.881
4/28/15 10:00	13.878	13.866	13.821	13.767		13.879	13.889
4/28/15 12:00	13.871	13.857	13.805	13.753		13.863	13.879
4/28/15 14:00	13.848	13.840	13.777	13.730		13.844	13.853
4/28/15 16:00	13.830	13.807	13.763	13.709		13.822	13.834
4/28/15 18:00	13.818	13.805	13.752	13.699		13.807	13.823
4/28/15 20:00	13.810	13.812	13.750	13.702		13.805	13.815
4/28/15 22:00	13.815	13.808	13.764	13.710		13.817	13.827
4/29/15 0:00	13.812	13.813	13.761	13.708		13.811	13.826
4/29/15 2:00	13.807	13.811	13.750	13.701		13.811	13.819
4/29/15 4:00	13.802	13.794	13.750	13.696		13.807	13.817
4/29/15 6:00	13.799	13.805	13.753	13.700		13.799	13.813
4/29/15 8:00	13.803	13.810	13.748	13.699		13.805	13.815
4/29/15 10:00	13.809	13.788	13.743	13.690		13.807	13.817
4/29/15 12:00	13.793	13.776	13.724	13.672		13.786	13.800
4/29/15 14:00	13.772	13.766	13.704	13.655		13.763	13.773
4/29/15 16:00	13.758	13.735	13.690	13.636		13.751	13.761
4/29/15 18:00	13.751	13.734	13.682	13.630		13.735	13.750
4/29/15 20:00	13.737	13.736	13.675	13.625		13.731	13.740
4/29/15 22:00	13.736	13.732	13.688	13.634		13.740	13.749
4/30/15 0:00	13.740	13.746	13.694	13.640		13.742	13.755
4/30/15 2:00	13.744	13.747	13.685	13.636		13.747	13.756
4/30/15 4:00	13.739	13.735	13.690	13.636		13.744	13.754
4/30/15 6:00	13.742	13.751	13.700	13.646		13.743	13.756
4/30/15 8:00	13.753	13.762	13.701	13.651		13.757	13.766
4/30/15 10:00	13.757	13.745	13.702	13.646		13.758	13.768
4/30/15 12:00	13.758	13.742	13.690	13.638		13.750	13.763
4/30/15 14:00	13.747	13.733	13.671	13.624		13.735	13.744
4/30/15 16:00	13.737	13.706	13.661	13.608		13.720	13.730
4/30/15 18:00	13.734	13.717	13.663	13.611		13.712	13.726
4/30/15 20:00	13.728	13.730	13.669	13.620		13.719	13.728
4/30/15 22:00	13.742	13.741	13.696	13.643		13.742	13.752
5/1/15 0:00	13.757	13.760	13.708	13.654		13.756	13.770
5/1/15 2:00	13.765	13.775	13.714	13.665		13.767	13.777
5/1/15 4:00	13.761	13.763	13.719	13.663		13.767	13.776
5/1/15 6:00	13.770	13.777	13.725	13.671		13.774	13.786
5/1/15 8:00	13.787	13.796	13.735	13.686		13.789	13.798
5/1/15 10:00	13.788	13.780	13.735	13.681		13.792	13.801
5/1/15 12:00	13.798	13.794	13.741	13.688		13.795	13.807
5/1/15 14:00	13.786	13.777	13.716	13.667		13.780	13.789
5/1/15 16:00	13.768	13.740	13.695	13.641		13.760	13.768
5/1/15 18:00	13.754	13.739	13.687	13.634		13.742	13.754

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
5/1/15 20:00	13.747	13.744	13.683	13.634		13.741	13.750
5/1/15 22:00	13.751	13.743	13.697	13.643		13.754	13.763
5/2/15 0:00	13.748	13.751	13.699	13.645		13.748	13.761
5/2/15 2:00	13.732	13.739	13.678	13.628		13.737	13.745
5/2/15 4:00	13.727	13.719	13.674	13.620		13.733	13.741
5/2/15 6:00	13.719	13.722	13.669	13.615		13.720	13.731
5/2/15 8:00	13.721	13.724	13.664	13.614		13.725	13.733
5/2/15 10:00	13.712	13.697	13.651	13.597		13.713	13.721
5/2/15 12:00	13.706	13.691	13.638	13.585		13.696	13.708
5/2/15 14:00	13.687	13.669	13.609	13.559		13.677	13.684
5/2/15 16:00	13.668	13.633	13.586	13.532		13.652	13.660
5/2/15 18:00	13.652	13.630	13.578	13.524		13.632	13.643
5/2/15 20:00	13.634	13.634	13.575	13.523		13.628	13.636
5/2/15 22:00	13.637	13.634	13.589	13.533		13.639	13.646
5/3/15 0:00	13.641	13.639	13.586	13.533		13.641	13.652
5/3/15 2:00	13.632	13.637	13.579	13.527		13.637	13.644
5/3/15 4:00	13.630	13.626	13.580	13.525		13.636	13.644
5/3/15 6:00	13.636	13.652	13.599	13.545		13.634	13.645
5/3/15 8:00	13.652	13.664	13.605	13.554		13.658	13.665
5/3/15 10:00	13.663	13.652	13.605	13.551		13.661	13.669
5/3/15 12:00	13.669	13.655	13.602	13.548		13.656	13.667
5/3/15 14:00	13.664	13.650	13.591	13.539		13.650	13.658
5/3/15 16:00	13.661	13.630	13.584	13.528		13.644	13.650
5/3/15 18:00	13.656	13.635	13.582	13.527		13.636	13.645
5/3/15 20:00	13.645	13.654	13.595	13.541		13.639	13.646
5/3/15 22:00	13.678	13.673	13.626	13.569		13.679	13.687
5/4/15 0:00	13.702	13.709	13.657	13.599		13.706	13.715
5/4/15 2:00	13.702	13.755	13.697	13.647		13.710	13.718
5/4/15 4:00	13.731	13.730	13.683	13.628		13.737	13.744
5/4/15 6:00	13.735	13.753	13.701	13.644		13.740	13.749
5/4/15 8:00	13.757	13.777	13.720	13.666		13.763	13.770
5/4/15 10:00	13.762	13.785	13.739	13.682		13.768	13.775
5/4/15 12:00	13.781	13.788	13.736	13.679		13.786	13.795
5/4/15 14:00	13.791	13.785	13.728	13.674		13.792	13.799
5/4/15 16:00	13.775	13.760	13.712	13.657		13.777	13.783
5/4/15 18:00	13.758	13.766	13.714	13.657		13.764	13.774
5/4/15 20:00	13.762	13.794	13.737	13.682		13.771	13.777
5/4/15 22:00	13.794	13.791	13.744	13.688		13.803	13.810
5/5/15 0:00	13.774	13.783	13.730	13.674		13.780	13.789
5/5/15 2:00	13.777	13.779	13.722	13.668		13.785	13.792
5/5/15 4:00	13.765	13.758	13.711	13.656		13.775	13.781
5/5/15 6:00	13.754	13.765	13.712	13.656		13.761	13.770
5/5/15 8:00	13.758	13.769	13.712	13.657		13.766	13.772
5/5/15 10:00	13.759	13.753	13.706	13.650		13.764	13.770
5/5/15 12:00	13.754	13.745	13.692	13.638		13.754	13.762
5/5/15 14:00	13.738	13.733	13.676	13.622		13.738	13.744
5/5/15 16:00	13.720	13.707	13.660	13.603		13.721	13.728
5/5/15 18:00	13.705	13.711	13.659	13.602		13.711	13.719
5/5/15 20:00	13.701	13.706	13.649	13.596		13.710	13.717
5/5/15 22:00	13.700	13.698	13.651	13.595		13.707	13.713

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

Date/Time	Pressure (psi)						
	Atmospheric	SG1S	SG2S	SG3S	SG1D	SG2D	SG3D
5/6/15 0:00	13.692	13.686	13.633	13.579		13.697	13.707
5/6/15 2:00	13.666	13.664	13.605	13.554		13.674	13.680
5/6/15 4:00	13.645	13.635	13.585	13.531		13.653	13.661
5/6/15 6:00	13.635	13.638	13.584	13.531		13.638	13.648
5/6/15 8:00	13.630	13.638	13.577	13.527		13.635	13.643
5/6/15 10:00	13.632	13.630	13.581	13.527		13.637	13.645
5/6/15 12:00	13.627	13.619	13.565	13.512		13.629	13.641
5/6/15 14:00	13.591	13.586	13.522	13.478		13.594	13.601
5/6/15 16:00	13.573	13.556	13.505	13.455		13.570	13.581
5/6/15 18:00	13.569	13.563	13.508	13.457		13.560	13.575
5/6/15 20:00	13.559	13.568	13.505	13.457		13.557	13.568
5/6/15 22:00	13.574	13.572	13.522	13.471		13.574	13.586
5/7/15 0:00	13.588	13.603	13.546	13.498		13.586	13.602
5/7/15 2:00	13.595	13.601	13.535	13.492		13.587	13.602
5/7/15 4:00	13.617	13.617	13.566	13.518		13.613	13.628
5/7/15 6:00	13.637	13.638	13.581	13.533		13.630	13.648
5/7/15 8:00	13.654	13.667	13.602	13.558		13.651	13.664
5/7/15 10:00	13.676	13.674	13.625	13.574		13.670	13.683
5/7/15 12:00	13.694	13.682	13.627	13.577		13.681	13.698
5/7/15 14:00	13.692	13.692	13.629	13.583		13.678	13.689
5/7/15 16:00	13.691	13.671	13.622	13.570		13.678	13.689
5/7/15 18:00	13.700	13.692	13.637	13.586		13.682	13.697
5/7/15 20:00	13.707	13.715	13.653	13.605		13.699	13.710
5/7/15 22:00	13.733	13.727	13.679	13.628		13.733	13.744
5/8/15 0:00	13.743	13.754	13.700	13.649		13.744	13.759
5/8/15 2:00	13.753	13.765	13.703	13.654		13.756	13.766
5/8/15 4:00	13.760	13.762	13.713	13.660		13.766	13.777
5/8/15 6:00	13.768	13.787	13.734	13.681		13.769	13.783
5/8/15 8:00	13.797	13.805	13.742	13.695		13.799	13.810
5/8/15 10:00	13.791	13.772	13.723	13.673		13.793	13.805
5/8/15 12:00	13.786	13.779	13.725	13.673		13.783	13.797
5/8/15 14:00	13.771	13.770	13.708	13.660		13.764	13.775
5/8/15 16:00	13.758	13.742	13.693	13.642		13.757	13.767
5/8/15 18:00	13.745	13.757	13.703	13.651		13.734	13.749
5/8/15 20:00	13.759	13.762	13.699	13.652		13.760	13.770
5/8/15 22:00	13.754	13.750	13.702	13.649		13.759	13.769
5/9/15 0:00	13.760	13.768	13.713	13.660		13.762	13.775
5/9/15 2:00	13.766	13.773	13.711	13.662		13.769	13.779
5/9/15 4:00	13.761	13.758	13.709	13.657		13.765	13.775
5/9/15 6:00	13.749	13.743	13.688	13.636		13.753	13.764
5/9/15 8:00	13.735	13.740	13.680	13.629		13.738	13.747
5/9/15 10:00	13.752	13.748	13.699	13.647		13.757	13.766
5/9/15 12:00	13.739	13.729	13.674	13.623		13.745	13.757
5/9/15 14:00	13.707	13.679	13.618	13.575		13.711	13.721
5/9/15 16:00	13.665	13.659	13.611	13.558		13.669	13.680
5/9/15 18:00	13.658	13.662	13.608	13.555		13.652	13.666
5/9/15 20:00	13.652	13.659	13.597	13.548		13.655	13.663
5/9/15 22:00	13.642	13.630	13.581	13.528		13.646	13.655
5/10/15 0:00	13.642	13.651	13.596	13.545		13.640	13.653
5/10/15 2:00	13.635	13.635	13.575	13.525		13.638	13.648

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

Date/Time	Pressure (psi)						
	Atmospheric	SG1S	SG2S	SG3S	SG1D	SG2D	SG3D
5/10/15 4:00	13.611	13.616	13.567	13.513		13.619	13.628
5/10/15 6:00	13.622	13.643	13.589	13.535		13.622	13.635
5/10/15 8:00	13.665	13.672	13.611	13.562		13.674	13.681
5/10/15 10:00	13.652	13.658	13.610	13.557		13.659	13.667
5/10/15 12:00	13.677	13.681	13.627	13.573		13.678	13.691
5/10/15 14:00	13.677	13.688	13.628	13.578		13.680	13.688
5/10/15 16:00	13.693	13.693	13.644	13.590		13.695	13.704
5/10/15 18:00	13.707	13.717	13.663	13.610		13.708	13.720
5/10/15 20:00	13.723	13.738	13.678	13.626		13.726	13.735
5/10/15 22:00	13.752	13.758	13.708	13.655		13.758	13.767
5/11/15 0:00	13.763	13.773	13.718	13.663		13.767	13.779
5/11/15 2:00	13.758	13.772	13.712	13.662		13.768	13.776
5/11/15 4:00	13.761	13.769	13.722	13.668		13.769	13.777
5/11/15 6:00	13.761	13.777	13.723	13.669		13.766	13.776
5/11/15 8:00	13.785	13.800	13.740	13.689		13.793	13.800
5/11/15 10:00	13.796	13.798	13.749	13.694		13.804	13.813
5/11/15 12:00	13.796	13.797	13.744	13.690		13.800	13.811
5/11/15 14:00	13.795	13.803	13.745	13.692		13.797	13.806
5/11/15 16:00	13.793	13.796	13.747	13.692		13.800	13.808
5/11/15 18:00	13.815	13.826	13.771	13.717		13.812	13.822
5/11/15 20:00	13.831	13.846	13.787	13.735		13.833	13.841
5/11/15 22:00	13.848	13.859	13.810	13.755		13.856	13.864
5/12/15 0:00	13.861	13.874	13.821	13.766		13.866	13.877
5/12/15 2:00	13.865	13.884	13.825	13.774		13.874	13.881
5/12/15 4:00	13.874	13.874	13.826	13.772		13.883	13.891
5/12/15 6:00	13.868	13.893	13.840	13.785		13.876	13.884
5/12/15 8:00	13.886	13.899	13.841	13.788		13.897	13.904
5/12/15 10:00	13.896	13.898	13.849	13.794		13.902	13.909
5/12/15 12:00	13.890	13.884	13.831	13.774		13.892	13.901
5/12/15 14:00	13.870	13.856		13.716	13.875	13.877	13.876
5/12/15 16:00	13.840	13.837		13.694	13.817	13.838	13.844
5/12/15 18:00	13.819	13.816		13.682	13.791	13.813	13.821
5/12/15 20:00	13.802	13.795		13.703	13.770	13.801	13.808
5/12/15 22:00	13.813	13.821		13.717	13.794	13.822	13.828
5/13/15 0:00	13.825	13.837		13.712	13.809	13.833	13.842
5/13/15 2:00	13.819	13.824		13.711	13.795	13.830	13.835
5/13/15 4:00	13.819	13.828		13.697	13.799	13.830	13.835
5/13/15 6:00	13.804	13.817		13.709	13.787	13.814	13.822
5/13/15 8:00	13.817	13.821		13.708	13.790	13.827	13.832
5/13/15 10:00	13.820	13.825		13.703	13.795	13.826	13.832
5/13/15 12:00	13.815	13.822		13.692	13.790	13.819	13.827
5/13/15 14:00	13.805	13.805		13.675	13.773	13.810	13.815
5/13/15 16:00	13.787	13.791		13.658	13.760	13.793	13.798
5/13/15 18:00	13.769	13.776		13.650	13.744	13.773	13.782
5/13/15 20:00	13.757	13.760		13.647	13.728	13.764	13.773
5/13/15 22:00	13.756	13.761		13.633	13.728	13.758	13.770
5/14/15 0:00	13.743	13.749		13.611	13.715	13.735	13.756
5/14/15 2:00	13.726	13.717		13.601	13.683	13.718	13.735
5/14/15 4:00	13.713	13.711		13.596	13.677	13.707	13.724
5/14/15 6:00	13.708	13.712		13.602	13.677	13.698	13.720

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
5/14/15 8:00	13.719	13.709		13.610	13.675	13.712	13.727
5/14/15 10:00	13.725	13.720		13.614	13.688	13.719	13.734
5/14/15 12:00	13.731	13.731		13.601	13.695	13.717	13.738
5/14/15 14:00	13.725	13.709		13.594	13.674	13.713	13.727
5/14/15 16:00	13.719	13.706		13.586	13.671	13.705	13.717
5/14/15 18:00	13.709	13.704		13.577	13.667	13.691	13.709
5/14/15 20:00	13.703	13.683		13.591	13.648	13.689	13.701
5/14/15 22:00	13.706	13.702		13.599	13.668	13.703	13.715
5/15/15 0:00	13.712	13.716		13.590	13.679	13.705	13.722
5/15/15 2:00	13.705	13.696		13.525	13.662	13.702	13.713
5/15/15 4:00	13.689	13.615		13.553	13.582	13.625	13.651
5/15/15 6:00	13.703	13.674		13.547	13.635	13.644	13.677
5/15/15 8:00	13.709	13.661		13.558	13.626	13.665	13.673
5/15/15 10:00	13.703	13.666		13.552	13.632	13.666	13.682
5/15/15 12:00	13.700	13.676		13.520	13.638	13.654	13.675
5/15/15 14:00	13.674	13.631		13.516	13.596	13.639	13.643
5/15/15 16:00	13.653	13.623		13.504	13.589	13.627	13.638
5/15/15 18:00	13.641	13.625		13.487	13.587	13.610	13.627
5/15/15 20:00	13.628	13.597		13.504	13.563	13.607	13.612
5/15/15 22:00	13.631	13.612		13.500	13.578	13.617	13.627
5/16/15 0:00	13.625	13.620		13.485	13.582	13.606	13.622
5/16/15 2:00	13.620	13.595		13.498	13.560	13.605	13.609
5/16/15 4:00	13.624	13.606		13.499	13.571	13.609	13.621
5/16/15 6:00	13.622	13.618		13.496	13.580	13.602	13.621
5/16/15 8:00	13.631	13.605		13.497	13.567	13.609	13.618
5/16/15 10:00	13.628	13.606		13.491	13.570	13.606	13.620
5/16/15 12:00	13.622	13.614		13.478	13.574	13.593	13.614
5/16/15 14:00	13.623	13.591		13.484	13.556	13.599	13.604
5/16/15 16:00	13.613	13.591		13.462	13.555	13.594	13.606
5/16/15 18:00	13.599	13.583		13.478	13.544	13.567	13.585
5/16/15 20:00	13.615	13.589		13.484	13.552	13.596	13.603
5/16/15 22:00	13.605	13.588		13.441	13.552	13.590	13.604
5/17/15 0:00	13.567	13.561		13.431	13.524	13.544	13.563
5/17/15 2:00	13.569	13.543		13.446	13.507	13.550	13.556
5/17/15 4:00	13.570	13.553		13.447	13.517	13.555	13.568
5/17/15 6:00	13.573	13.568		13.458	13.529	13.549	13.569
5/17/15 8:00	13.596	13.569		13.490	13.533	13.577	13.584
5/17/15 10:00	13.619	13.597		13.514	13.561	13.600	13.612
5/17/15 12:00	13.645	13.634		13.526	13.595	13.618	13.636
5/17/15 14:00	13.667	13.635		13.555	13.598	13.644	13.649
5/17/15 16:00	13.689	13.662		13.572	13.624	13.666	13.677
5/17/15 18:00	13.700	13.690		13.582	13.651	13.676	13.694
5/17/15 20:00	13.722	13.690		13.627	13.652	13.699	13.706
5/17/15 22:00	13.748	13.734		13.649	13.698	13.739	13.750
5/18/15 0:00	13.769	13.768		13.677	13.729	13.755	13.771
5/18/15 2:00	13.803	13.783		13.716	13.747	13.795	13.800
5/18/15 4:00	13.834	13.823		13.745	13.787	13.829	13.838
5/18/15 6:00	13.863	13.865		13.765	13.825	13.852	13.868
5/18/15 8:00	13.891	13.872		13.790	13.836	13.883	13.888
5/18/15 10:00	13.909	13.897		13.796	13.861	13.902	13.912

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

Date/Time	Pressure (psi)						
	Atmospheric	SG1S	SG2S	SG3S	SG1D	SG2D	SG3D
5/18/15 12:00	13.917	13.914		13.781	13.875	13.901	13.918
5/18/15 14:00	13.911	13.888		13.776	13.851	13.899	13.905
5/18/15 16:00	13.902	13.883		13.770	13.846	13.888	13.898
5/18/15 18:00	13.896	13.887		13.765	13.847	13.874	13.891
5/18/15 20:00	13.892	13.871		13.783	13.833	13.881	13.887
5/18/15 22:00	13.897	13.888		13.790	13.851	13.894	13.904
5/19/15 0:00	13.903	13.907		13.780	13.867	13.895	13.911
5/19/15 2:00	13.899	13.885		13.780	13.847	13.895	13.901
5/19/15 4:00	13.894	13.887		13.780	13.848	13.892	13.901
5/19/15 6:00	13.893	13.897		13.788	13.858	13.885	13.901
5/19/15 8:00	13.907	13.892		13.783	13.855	13.903	13.910
5/19/15 10:00	13.896	13.888		13.778	13.851	13.894	13.903
5/19/15 12:00	13.893	13.896		13.772	13.856	13.885	13.901
5/19/15 14:00	13.888	13.874		13.717	13.837	13.884	13.892
5/19/15 16:00	13.828	13.820		13.695	13.783	13.824	13.836
5/19/15 18:00	13.809	13.812		13.701	13.772	13.798	13.817
5/19/15 20:00	13.832	13.808		13.715	13.769	13.810	13.824
5/19/15 22:00	13.848	13.822		13.716	13.783	13.819	13.837
5/20/15 0:00	13.850	13.838		13.692	13.796	13.811	13.837
5/20/15 2:00	13.839	13.805		13.698	13.766	13.809	13.817
5/20/15 4:00	13.828	13.806		13.703	13.767	13.806	13.820
5/20/15 6:00	13.833	13.826		13.709	13.785	13.802	13.825
5/20/15 8:00	13.851	13.822		13.739	13.783	13.826	13.832
5/20/15 10:00	13.866	13.846		13.747	13.808	13.847	13.860
5/20/15 12:00	13.876	13.869		13.734	13.828	13.847	13.869
5/20/15 14:00	13.874	13.847		13.746	13.807	13.852	13.859
5/20/15 16:00	13.873	13.853		13.746	13.814	13.855	13.867
5/20/15 18:00	13.873	13.867		13.734	13.826	13.847	13.867
5/20/15 20:00	13.872	13.845		13.763	13.806	13.853	13.858
5/20/15 22:00	13.889	13.872		13.776	13.834	13.874	13.886
5/21/15 0:00	13.898	13.897		13.765	13.856	13.879	13.897
5/21/15 2:00	13.898	13.875		13.778	13.836	13.882	13.888
5/21/15 4:00	13.901	13.886		13.772	13.847	13.889	13.900
5/21/15 6:00	13.894	13.893		13.769	13.851	13.875	13.894
5/21/15 8:00	13.901	13.879		13.777	13.840	13.887	13.892
5/21/15 10:00	13.902	13.884		13.773	13.846	13.887	13.898
5/21/15 12:00	13.899	13.893		13.753	13.852	13.876	13.894
5/21/15 14:00	13.888	13.862		13.746	13.823	13.871	13.876
5/21/15 16:00	13.874	13.853		13.726	13.814	13.857	13.868
5/21/15 18:00	13.857	13.845		13.706	13.804	13.830	13.846
5/21/15 20:00	13.840	13.815		13.730	13.775	13.825	13.830
5/21/15 22:00	13.850	13.837		13.735	13.798	13.842	13.852
5/22/15 0:00	13.853	13.854		13.720	13.813	13.840	13.857
5/22/15 2:00	13.848	13.828		13.725	13.789	13.839	13.843
5/22/15 4:00	13.843	13.832		13.712	13.793	13.837	13.847
5/22/15 6:00	13.830	13.831		13.719	13.791	13.817	13.834
5/22/15 8:00	13.847	13.828		13.722	13.788	13.837	13.843
5/22/15 10:00	13.844	13.829		13.720	13.790	13.831	13.844
5/22/15 12:00	13.844	13.840		13.697	13.799	13.821	13.842
5/22/15 14:00	13.828	13.805		13.696	13.765	13.813	13.820



TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

Pressure (psi)							
Date/Time	Atmospheric	SG1S	SG2S	SG3S	SG1D	SG2D	SG3D
5/22/15 16:00	13.818	13.803		13.687	13.764	13.805	13.818
5/22/15 18:00	13.809	13.806		13.668	13.764	13.787	13.808
5/22/15 20:00	13.802	13.778		13.681	13.739	13.784	13.793
5/22/15 22:00	13.806	13.788		13.686	13.750	13.791	13.804
5/23/15 0:00	13.810	13.806		13.676	13.763	13.787	13.808
5/23/15 2:00	13.811	13.786		13.678	13.747	13.792	13.800
5/23/15 4:00	13.802	13.784		13.686	13.745	13.787	13.799
5/23/15 6:00	13.811	13.808		13.675	13.765	13.788	13.809
5/23/15 8:00	13.807	13.783		13.674	13.742	13.790	13.797
5/23/15 10:00	13.797	13.779		13.687	13.741	13.782	13.795
5/23/15 12:00	13.815	13.808		13.607	13.765	13.782	13.807
5/23/15 14:00	13.772	13.723		13.603	13.681	13.725	13.732
5/23/15 16:00	13.749	13.712		13.593	13.672	13.712	13.725
5/23/15 18:00	13.734	13.718		13.570	13.675	13.692	13.714
5/23/15 20:00	13.723	13.684		13.594	13.645	13.691	13.694
5/23/15 22:00	13.729	13.701		13.602	13.662	13.704	13.716
5/24/15 0:00	13.736	13.726		13.568	13.683	13.702	13.723
5/24/15 2:00	13.714	13.680		13.572	13.640	13.686	13.690
5/24/15 4:00	13.707	13.681		13.574	13.642	13.683	13.695
5/24/15 6:00	13.705	13.696		13.552	13.654	13.674	13.695
5/24/15 8:00	13.699	13.665		13.561	13.625	13.672	13.677
5/24/15 10:00	13.696	13.669		13.557	13.630	13.672	13.683
5/24/15 12:00	13.694	13.680		13.539	13.638	13.658	13.679
5/24/15 14:00	13.687	13.652		13.540	13.612	13.659	13.664
5/24/15 16:00	13.677	13.647		13.528	13.608	13.650	13.662
5/24/15 18:00	13.661	13.649		13.507	13.608	13.629	13.649
5/24/15 20:00	13.652	13.619		13.534	13.578	13.627	13.631
5/24/15 22:00	13.663	13.641		13.544	13.602	13.646	13.657
5/25/15 0:00	13.671	13.664		13.493	13.622	13.646	13.664
5/25/15 2:00	13.647	13.608		13.509	13.567	13.611	13.617
5/25/15 4:00	13.644	13.616		13.511	13.576	13.617	13.630
5/25/15 6:00	13.649	13.637		13.512	13.593	13.610	13.633
5/25/15 8:00	13.666	13.628		13.531	13.587	13.632	13.636
5/25/15 10:00	13.670	13.639		13.535	13.599	13.641	13.653
5/25/15 12:00	13.677	13.660		13.513	13.618	13.636	13.656
5/25/15 14:00	13.668	13.626		13.520	13.586	13.634	13.637
5/25/15 16:00	13.663	13.625		13.511	13.587	13.631	13.640
5/25/15 18:00	13.653	13.634		13.506	13.592	13.616	13.635
5/25/15 20:00	13.653	13.616		13.525	13.576	13.626	13.629
5/25/15 22:00	13.655	13.631		13.538	13.592	13.638	13.648
5/26/15 0:00	13.666	13.659		13.526	13.617	13.643	13.660
5/26/15 2:00	13.662	13.634		13.537	13.594	13.646	13.650
5/26/15 4:00	13.662	13.643		13.546	13.603	13.648	13.659
5/26/15 6:00	13.672	13.667		13.553	13.625	13.651	13.668
5/26/15 8:00	13.691	13.662		13.591	13.621	13.673	13.677
5/26/15 10:00	13.720	13.697		13.599	13.658	13.703	13.713
5/26/15 12:00	13.731	13.719		13.590	13.678	13.703	13.721
5/26/15 14:00	13.733	13.699		13.606	13.659	13.710	13.714
5/26/15 16:00	13.741	13.713		13.606	13.673	13.718	13.728
5/26/15 18:00	13.741	13.726		13.604	13.683	13.710	13.728

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
5/26/15 20:00	13.745	13.710		13.627	13.670	13.721	13.726
5/26/15 22:00	13.751	13.733		13.637	13.693	13.739	13.749
5/27/15 0:00	13.759	13.757		13.635	13.715	13.742	13.759
5/27/15 2:00	13.765	13.741		13.648	13.701	13.753	13.757
5/27/15 4:00	13.768	13.754		13.661	13.714	13.760	13.769
5/27/15 6:00	13.781	13.781		13.656	13.738	13.766	13.782
5/27/15 8:00	13.787	13.764		13.675	13.723	13.774	13.779
5/27/15 10:00	13.804	13.781		13.674	13.742	13.787	13.797
5/27/15 12:00	13.807	13.794		13.663	13.752	13.778	13.795
5/27/15 14:00	13.805	13.769		13.656	13.729	13.780	13.785
5/27/15 16:00	13.789	13.761		13.645	13.721	13.767	13.777
5/27/15 18:00	13.775	13.764		13.632	13.721	13.749	13.766
5/27/15 20:00	13.766	13.739		13.657	13.699	13.750	13.755
5/27/15 22:00	13.780	13.764		13.653	13.724	13.769	13.780
5/28/15 0:00	13.771	13.771		13.621	13.728	13.757	13.773
5/28/15 2:00	13.749	13.726		13.637	13.686	13.738	13.743
5/28/15 4:00	13.755	13.741		13.642	13.701	13.748	13.757
5/28/15 6:00	13.759	13.760		13.636	13.717	13.747	13.763
5/28/15 8:00	13.764	13.742		13.645	13.701	13.754	13.759
5/28/15 10:00	13.765	13.749		13.644	13.709	13.754	13.766
5/28/15 12:00	13.767	13.763		13.622	13.720	13.745	13.765
5/28/15 14:00	13.760	13.728		13.596	13.687	13.738	13.744
5/28/15 16:00	13.731	13.699		13.576	13.660	13.706	13.716
5/28/15 18:00	13.704	13.693		13.578	13.651	13.679	13.696
5/28/15 20:00	13.709	13.684		13.614	13.643	13.694	13.701
5/28/15 22:00	13.735	13.719		13.599	13.678	13.724	13.736
5/29/15 0:00	13.718	13.717		13.588	13.675	13.700	13.720
5/29/15 2:00	13.714	13.691		13.606	13.650	13.701	13.710
5/29/15 4:00	13.724	13.709		13.610	13.669	13.715	13.727
5/29/15 6:00	13.728	13.728		13.619	13.685	13.712	13.731
5/29/15 8:00	13.745	13.724		13.628	13.682	13.733	13.741
5/29/15 10:00	13.751	13.732		13.626	13.691	13.737	13.749
5/29/15 12:00	13.755	13.744		13.622	13.702	13.729	13.748
5/29/15 14:00	13.760	13.725		13.616	13.685	13.735	13.743
5/29/15 16:00	13.751	13.719		13.608	13.680	13.725	13.737
5/29/15 18:00	13.741	13.724		13.478	13.681	13.710	13.728
5/29/15 20:00	13.768	13.608		13.608	13.567	13.625	13.604
5/29/15 22:00	13.811	13.718		13.663	13.677	13.723	13.732
5/30/15 0:00	13.839	13.804		13.657	13.760	13.760	13.786
5/30/15 2:00	13.846	13.778		13.691	13.736	13.784	13.781
5/30/15 4:00	13.850	13.797		13.698	13.756	13.800	13.813
5/30/15 6:00	13.851	13.833		13.701	13.789	13.795	13.821
5/30/15 8:00	13.870	13.816		13.729	13.774	13.822	13.824
5/30/15 10:00	13.877	13.832		13.733	13.791	13.835	13.851
5/30/15 12:00	13.878	13.862		13.711	13.818	13.831	13.855
5/30/15 14:00	13.865	13.820		13.718	13.778	13.829	13.833
5/30/15 16:00	13.859	13.819		13.707	13.778	13.826	13.839
5/30/15 18:00	13.848	13.830		13.688	13.786	13.806	13.828
5/30/15 20:00	13.839	13.794		13.709	13.753	13.806	13.810
5/30/15 22:00	13.839	13.809		13.710	13.768	13.818	13.830

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
5/31/15 0:00	13.837	13.833		13.704	13.789	13.810	13.830
5/31/15 2:00	13.842	13.809		13.715	13.767	13.822	13.825
5/31/15 4:00	13.841	13.815		13.702	13.774	13.824	13.836
5/31/15 6:00	13.828	13.825		13.688	13.781	13.803	13.823
5/31/15 8:00	13.826	13.794		13.697	13.752	13.805	13.809
5/31/15 10:00	13.828	13.796		13.687	13.756	13.805	13.817
5/31/15 12:00	13.821	13.809		13.667	13.765	13.785	13.807
5/31/15 14:00	13.813	13.771		13.653	13.730	13.782	13.789
5/31/15 16:00	13.789	13.753		13.641	13.712	13.760	13.774
5/31/15 18:00	13.773	13.761		13.642	13.717	13.739	13.761
5/31/15 20:00	13.782	13.745		13.662	13.704	13.757	13.765
5/31/15 22:00	13.790	13.763		13.667	13.723	13.771	13.784
6/1/15 0:00	13.790	13.787		13.657	13.744	13.767	13.787
6/1/15 2:00	13.790	13.760		13.665	13.718	13.772	13.778
6/1/15 4:00	13.788	13.765		13.669	13.723	13.773	13.785
6/1/15 6:00	13.792	13.790		13.664	13.746	13.769	13.790
6/1/15 8:00	13.797	13.767		13.668	13.725	13.778	13.786
6/1/15 10:00	13.796	13.766		13.662	13.726	13.775	13.788
6/1/15 12:00	13.791	13.781		13.648	13.738	13.761	13.783
6/1/15 14:00	13.788	13.750		13.649	13.707	13.761	13.769
6/1/15 16:00	13.778	13.746		13.638	13.706	13.755	13.768
6/1/15 18:00	13.769	13.756		13.627	13.713	13.737	13.758
6/1/15 20:00	13.763	13.727		13.640	13.685	13.739	13.748
6/1/15 22:00	13.763	13.738		13.644	13.697	13.747	13.761
6/2/15 0:00	13.764	13.762		13.626	13.718	13.743	13.765
6/2/15 2:00	13.753	13.725		13.631	13.683	13.737	13.745
6/2/15 4:00	13.753	13.730		13.616	13.690	13.738	13.752
6/2/15 6:00	13.735	13.734		13.592	13.691	13.713	13.735
6/2/15 8:00	13.721	13.692		13.591	13.651	13.703	13.713
6/2/15 10:00	13.717	13.689		13.589	13.648	13.697	13.712
6/2/15 12:00	13.720	13.708		13.565	13.665	13.688	13.710
6/2/15 14:00	13.705	13.664		13.552	13.622	13.676	13.686
6/2/15 16:00	13.692	13.648		13.543	13.608	13.656	13.672
6/2/15 18:00	13.683	13.659		13.528	13.615	13.641	13.662
6/2/15 20:00	13.668	13.624		13.537	13.582	13.636	13.648
6/2/15 22:00	13.659	13.633		13.545	13.593	13.643	13.657
6/3/15 0:00	13.664	13.660		13.533	13.617	13.644	13.664
6/3/15 2:00	13.655	13.629		13.547	13.587	13.641	13.651
6/3/15 4:00	13.663	13.642		13.587	13.601	13.652	13.666
6/3/15 6:00	13.705	13.702		13.584	13.660	13.687	13.708
6/3/15 8:00	13.705	13.680		13.579	13.638	13.692	13.703
6/3/15 10:00	13.696	13.674		13.576	13.632	13.683	13.696
6/3/15 12:00	13.703	13.690		13.586	13.648	13.675	13.696
6/3/15 14:00	13.718	13.680		13.584	13.638	13.692	13.705
6/3/15 16:00	13.714	13.678		13.579	13.637	13.688	13.701
6/3/15 18:00	13.700	13.691		13.568	13.648	13.677	13.697
6/3/15 20:00	13.691	13.662		13.584	13.620	13.675	13.687
6/3/15 22:00	13.702	13.679		13.581	13.639	13.690	13.705
6/4/15 0:00	13.694	13.694		13.566	13.650	13.680	13.700
6/4/15 2:00	13.682	13.660		13.573	13.618	13.672	13.684

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
6/4/15 4:00	13.688	13.669		13.591	13.628	13.679	13.693
6/4/15 6:00	13.706	13.705		13.591	13.662	13.692	13.711
6/4/15 8:00	13.712	13.687		13.599	13.647	13.701	13.712
6/4/15 10:00	13.715	13.694		13.605	13.652	13.704	13.718
6/4/15 12:00	13.724	13.719		13.607	13.676	13.706	13.724
6/4/15 14:00	13.727	13.701		13.602	13.659	13.714	13.725
6/4/15 16:00	13.722	13.697		13.582	13.657	13.707	13.721
6/4/15 18:00	13.709	13.695		13.582	13.652	13.683	13.702
6/4/15 20:00	13.704	13.676		13.602	13.634	13.689	13.700
6/4/15 22:00	13.715	13.698		13.636	13.657	13.709	13.722
6/5/15 0:00	13.754	13.751		13.639	13.710	13.742	13.760
6/5/15 2:00	13.746	13.730		13.696	13.688	13.742	13.754
6/5/15 4:00	13.809	13.793		13.679	13.753	13.804	13.818
6/5/15 6:00	13.788	13.790		13.635	13.746	13.776	13.796
6/5/15 8:00	13.751	13.730		13.696	13.689	13.742	13.756
6/5/15 10:00	13.808	13.790		13.684	13.748	13.799	13.815
6/5/15 12:00	13.805	13.798		13.680	13.756	13.784	13.805
6/5/15 14:00	13.803	13.774		13.670	13.731	13.785	13.798
6/5/15 16:00	13.797	13.767		13.659	13.727	13.776	13.791
6/5/15 18:00	13.779	13.771		13.649	13.728	13.759	13.778
6/5/15 20:00	13.767	13.744		13.663	13.701	13.756	13.767
6/5/15 22:00	13.777	13.759		13.660	13.718	13.769	13.783
6/6/15 0:00	13.772	13.773		13.641	13.728	13.761	13.778
6/6/15 2:00	13.753	13.735		13.632	13.692	13.747	13.758
6/6/15 4:00	13.743	13.726		13.627	13.686	13.738	13.751
6/6/15 6:00	13.738	13.740		13.630	13.696	13.729	13.746
6/6/15 8:00	13.745	13.725		13.624	13.683	13.738	13.748
6/6/15 10:00	13.744	13.720		13.609	13.678	13.730	13.743
6/6/15 12:00	13.735	13.722		13.585	13.679	13.711	13.728
6/6/15 14:00	13.713	13.681		13.563	13.638	13.692	13.704
6/6/15 16:00	13.691	13.660		13.547	13.620	13.671	13.683
6/6/15 18:00	13.683	13.661		13.545	13.618	13.651	13.667
6/6/15 20:00	13.673	13.642		13.546	13.600	13.655	13.665
6/6/15 22:00	13.662	13.645		13.575	13.603	13.654	13.666
6/7/15 0:00	13.687	13.686		13.553	13.644	13.678	13.693
6/7/15 2:00	13.664	13.646		13.559	13.604	13.659	13.669
6/7/15 4:00	13.669	13.656		13.557	13.615	13.667	13.679
6/7/15 6:00	13.666	13.671		13.560	13.627	13.662	13.676
6/7/15 8:00	13.676	13.658		13.570	13.618	13.671	13.680
6/7/15 10:00	13.691	13.669		13.577	13.627	13.679	13.690
6/7/15 12:00	13.704	13.690		13.578	13.648	13.683	13.697
6/7/15 14:00	13.705	13.676		13.594	13.635	13.689	13.698
6/7/15 16:00	13.719	13.693		13.590	13.652	13.703	13.713
6/7/15 18:00	13.718	13.704		13.594	13.660	13.696	13.710
6/7/15 20:00	13.717	13.693		13.613	13.651	13.705	13.713
6/7/15 22:00	13.723	13.715		13.632	13.674	13.724	13.734
6/8/15 0:00	13.740	13.746		13.628	13.703	13.740	13.752
6/8/15 2:00	13.736	13.728		13.636	13.685	13.740	13.748
6/8/15 4:00	13.743	13.737		13.646	13.696	13.748	13.757
6/8/15 6:00	13.752	13.760		13.650	13.716	13.754	13.766

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
6/8/15 8:00	13.762	13.751		13.654	13.710	13.764	13.770
6/8/15 10:00	13.771	13.755		13.655	13.714	13.766	13.774
6/8/15 12:00	13.777	13.770		13.645	13.727	13.763	13.775
6/8/15 14:00	13.770	13.747		13.635	13.704	13.757	13.765
6/8/15 16:00	13.765	13.739		13.623	13.697	13.747	13.755
6/8/15 18:00	13.755	13.738		13.619	13.695	13.733	13.744
6/8/15 20:00	13.749	13.722		13.623	13.680	13.733	13.739
6/8/15 22:00	13.735	13.728		13.627	13.686	13.736	13.744
6/9/15 0:00	13.735	13.742		13.620	13.699	13.737	13.747
6/9/15 2:00	13.728	13.723		13.617	13.681	13.734	13.740
6/9/15 4:00	13.723	13.720		13.616	13.679	13.730	13.737
6/9/15 6:00	13.723	13.732		13.613	13.688	13.728	13.738
6/9/15 8:00	13.726	13.717		13.607	13.675	13.729	13.734
6/9/15 10:00	13.727	13.712		13.593	13.670	13.721	13.727
6/9/15 12:00	13.720	13.708		13.578	13.665	13.703	13.713
6/9/15 14:00	13.708	13.683		13.561	13.640	13.692	13.697
6/9/15 16:00	13.698	13.668		13.545	13.625	13.675	13.682
6/9/15 18:00	13.686	13.660		13.537	13.617	13.656	13.665
6/9/15 20:00	13.674	13.644		13.547	13.601	13.652	13.657
6/9/15 22:00	13.661	13.655		13.554	13.614	13.662	13.668
6/10/15 0:00	13.666	13.670		13.549	13.627	13.666	13.675
6/10/15 2:00	13.657	13.655		13.548	13.612	13.664	13.669
6/10/15 4:00	13.656	13.655		13.552	13.614	13.663	13.669
6/10/15 6:00	13.660	13.669		13.556	13.625	13.665	13.673
6/10/15 8:00	13.670	13.663		13.554	13.622	13.672	13.677
6/10/15 10:00	13.677	13.660		13.535	13.619	13.668	13.674
6/10/15 12:00	13.672	13.651		13.522	13.609	13.649	13.656
6/10/15 14:00	13.660	13.630		13.495	13.589	13.638	13.643
6/10/15 16:00	13.634	13.604		13.472	13.562	13.610	13.616
6/10/15 18:00	13.604	13.589		13.468	13.545	13.585	13.593
6/10/15 20:00	13.592	13.576		13.498	13.534	13.584	13.588
6/10/15 22:00	13.613	13.594		13.513	13.552	13.587	13.621
6/11/15 0:00	13.627	13.628		13.488	13.585	13.608	13.636
6/11/15 2:00	13.603	13.591		13.477	13.547	13.586	13.610
6/11/15 4:00	13.591	13.579		13.481	13.536	13.575	13.598
6/11/15 6:00	13.594	13.596		13.475	13.551	13.575	13.602
6/11/15 8:00	13.593	13.578		13.495	13.536	13.576	13.596
6/11/15 10:00	13.613	13.597		13.509	13.554	13.596	13.617
6/11/15 12:00	13.627	13.623		13.514	13.578	13.608	13.629
6/11/15 14:00	13.641	13.617		13.518	13.574	13.622	13.634
6/11/15 16:00	13.645	13.621		13.540	13.580	13.627	13.640
6/11/15 18:00	13.661	13.656		13.551	13.613	13.647	13.662
6/11/15 20:00	13.669	13.655		13.582	13.614	13.664	13.674
6/11/15 22:00	13.690	13.685		13.598	13.643	13.691	13.701
6/12/15 0:00	13.706	13.713		13.591	13.669	13.704	13.718
6/12/15 2:00	13.702	13.695		13.606	13.653	13.704	13.713
6/12/15 4:00	13.714	13.710		13.601	13.668	13.718	13.727
6/12/15 6:00	13.710	13.717		13.602	13.674	13.711	13.723
6/12/15 8:00	13.713	13.707		13.622	13.664	13.716	13.724
6/12/15 10:00	13.731	13.726		13.617	13.685	13.733	13.743

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
6/12/15 12:00	13.728	13.734		13.621	13.690	13.725	13.740
6/12/15 14:00	13.732	13.725		13.621	13.683	13.732	13.742
6/12/15 16:00	13.731	13.724		13.609	13.681	13.727	13.741
6/12/15 18:00	13.719	13.725		13.605	13.680	13.712	13.729
6/12/15 20:00	13.717	13.708		13.608	13.665	13.713	13.725
6/12/15 22:00	13.719	13.712		13.614	13.670	13.716	13.730
6/13/15 0:00	13.724	13.730		13.597	13.687	13.718	13.735
6/13/15 2:00	13.707	13.700		13.591	13.658	13.705	13.718
6/13/15 4:00	13.699	13.695		13.595	13.652	13.698	13.712
6/13/15 6:00	13.704	13.711		13.599	13.667	13.700	13.717
6/13/15 8:00	13.712	13.704		13.596	13.662	13.710	13.722
6/13/15 10:00	13.713	13.699		13.592	13.658	13.704	13.717
6/13/15 12:00	13.714	13.709		13.584	13.665	13.698	13.715
6/13/15 14:00	13.708	13.688		13.570	13.646	13.694	13.705
6/13/15 16:00	13.699	13.673		13.556	13.631	13.679	13.690
6/13/15 18:00	13.688	13.672		13.555	13.629	13.663	13.678
6/13/15 20:00	13.680	13.659		13.575	13.618	13.667	13.677
6/13/15 22:00	13.689	13.680		13.587	13.639	13.687	13.697
6/14/15 0:00	13.696	13.702		13.583	13.659	13.695	13.708
6/14/15 2:00	13.693	13.688		13.579	13.645	13.696	13.704
6/14/15 4:00	13.689	13.685		13.577	13.643	13.691	13.700
6/14/15 6:00	13.689	13.694		13.579	13.652	13.687	13.701
6/14/15 8:00	13.690	13.684		13.592	13.641	13.691	13.699
6/14/15 10:00	13.711	13.697		13.599	13.655	13.704	13.713
6/14/15 12:00	13.723	13.715		13.591	13.671	13.707	13.720
6/14/15 14:00	13.716	13.696		13.579	13.653	13.703	13.712
6/14/15 16:00	13.701	13.684		13.591	13.643	13.691	13.700
6/14/15 18:00	13.720	13.711		13.574	13.673	13.709	13.722
6/14/15 20:00	13.702	13.675		13.593	13.632	13.667	13.698
6/14/15 22:00	13.724	13.689		13.595	13.645	13.677	13.717
6/15/15 0:00	13.720	13.715		13.601	13.668	13.677	13.717
6/15/15 2:00	13.733	13.707		13.608	13.664	13.698	13.725
6/15/15 4:00	13.730	13.709		13.624	13.665	13.701	13.730
6/15/15 6:00	13.744	13.743		13.635	13.698	13.711	13.745
6/15/15 8:00	13.767	13.740		13.658	13.698	13.734	13.758
6/15/15 10:00	13.785	13.759		13.662	13.717	13.754	13.780
6/15/15 12:00	13.791	13.781		13.660	13.737	13.755	13.785
6/15/15 14:00	13.796	13.766		13.676	13.722	13.767	13.784
6/15/15 16:00	13.807	13.778		13.669	13.736	13.779	13.798
6/15/15 18:00	13.803	13.787		13.679	13.743	13.769	13.791
6/15/15 20:00	13.812	13.783		13.706	13.741	13.789	13.802
6/15/15 22:00	13.825	13.809		13.725	13.768	13.813	13.829
6/16/15 0:00	13.841	13.843		13.723	13.798	13.828	13.847
6/16/15 2:00	13.841	13.827		13.726	13.784	13.832	13.845
6/16/15 4:00	13.839	13.828		13.723	13.785	13.832	13.848
6/16/15 6:00	13.835	13.840		13.715	13.796	13.825	13.844
6/16/15 8:00	13.836	13.819		13.713	13.776	13.825	13.837
6/16/15 10:00	13.833	13.816		13.711	13.773	13.820	13.835
6/16/15 12:00	13.837	13.829		13.687	13.785	13.813	13.833
6/16/15 14:00	13.817	13.790		13.662	13.747	13.795	13.809

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
6/16/15 16:00	13.792	13.761		13.639	13.718	13.765	13.781
6/16/15 18:00	13.772	13.754		13.629	13.709	13.741	13.759
6/16/15 20:00	13.762	13.730		13.641	13.688	13.738	13.750
6/16/15 22:00	13.756	13.743		13.647	13.700	13.748	13.762
6/17/15 0:00	13.763	13.764		13.641	13.721	13.753	13.771
6/17/15 2:00	13.756	13.744		13.665	13.701	13.751	13.762
6/17/15 4:00	13.775	13.764		13.634	13.721	13.762	13.785
6/17/15 6:00	13.749	13.751		13.642	13.707	13.732	13.757
6/17/15 8:00	13.761	13.744		13.651	13.701	13.745	13.763
6/17/15 10:00	13.772	13.751		13.652	13.709	13.754	13.772
6/17/15 12:00	13.778	13.769		13.651	13.725	13.754	13.774
6/17/15 14:00	13.780	13.754		13.638	13.710	13.759	13.772
6/17/15 16:00	13.768	13.739		13.623	13.696	13.743	13.759
6/17/15 18:00	13.753	13.739		13.624	13.694	13.726	13.744
6/17/15 20:00	13.744	13.726		13.633	13.683	13.732	13.745
6/17/15 22:00	13.748	13.735		13.638	13.693	13.740	13.755
6/18/15 0:00	13.751	13.754		13.629	13.710	13.743	13.760
6/18/15 2:00	13.743	13.732		13.628	13.689	13.739	13.751
6/18/15 4:00	13.738	13.729		13.630	13.688	13.736	13.749
6/18/15 6:00	13.741	13.748		13.681	13.702	13.736	13.752
6/18/15 8:00	13.801	13.787		13.644	13.745	13.795	13.807
6/18/15 10:00	13.779	13.741		13.638	13.700	13.731	13.770
6/18/15 12:00	13.770	13.760		13.644	13.714	13.722	13.760
6/18/15 14:00	13.785	13.749		13.649	13.705	13.745	13.766
6/18/15 16:00	13.783	13.750		13.647	13.707	13.749	13.771
6/18/15 18:00	13.782	13.766		13.647	13.721	13.745	13.770
6/18/15 20:00	13.781	13.752		13.673	13.710	13.756	13.771
6/18/15 22:00	13.792	13.774		13.686	13.733	13.777	13.795
6/19/15 0:00	13.802	13.804		13.676	13.759	13.786	13.808
6/19/15 2:00	13.799	13.781		13.664	13.738	13.785	13.799
6/19/15 4:00	13.780	13.765		13.660	13.723	13.768	13.786
6/19/15 6:00	13.775	13.779		13.661	13.734	13.760	13.782
6/19/15 8:00	13.786	13.766		13.658	13.723	13.770	13.784
6/19/15 10:00	13.781	13.760		13.649	13.718	13.763	13.780
6/19/15 12:00	13.776	13.766		13.619	13.721	13.748	13.770
6/19/15 14:00	13.755	13.723		13.596	13.679	13.727	13.741
6/19/15 16:00	13.733	13.698		13.573	13.654	13.700	13.717
6/19/15 18:00	13.711	13.689		13.552	13.645	13.674	13.693
6/19/15 20:00	13.689	13.654		13.555	13.612	13.661	13.673
6/19/15 22:00	13.675	13.656		13.556	13.614	13.661	13.677
6/20/15 0:00	13.674	13.673		13.536	13.628	13.659	13.678
6/20/15 2:00	13.656	13.638		13.534	13.596	13.646	13.658
6/20/15 4:00	13.650	13.635		13.520	13.594	13.642	13.656
6/20/15 6:00	13.633	13.636		13.518	13.591	13.623	13.640
6/20/15 8:00	13.647	13.624		13.526	13.584	13.634	13.646
6/20/15 10:00	13.649	13.627		13.533	13.584	13.632	13.647
6/20/15 12:00	13.665	13.648		13.541	13.604	13.637	13.655
6/20/15 14:00	13.677	13.643		13.549	13.600	13.650	13.663
6/20/15 16:00	13.686	13.651		13.554	13.608	13.657	13.671
6/20/15 18:00	13.690	13.669		13.565	13.625	13.660	13.676

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
6/20/15 20:00	13.694	13.668		13.580	13.625	13.676	13.687
6/20/15 22:00	13.696	13.683		13.600	13.642	13.691	13.702
6/21/15 0:00	13.713	13.715		13.608	13.671	13.707	13.722
6/21/15 2:00	13.722	13.711		13.590	13.668	13.720	13.729
6/21/15 4:00	13.702	13.693		13.578	13.651	13.700	13.712
6/21/15 6:00	13.689	13.693		13.614	13.649	13.686	13.699
6/21/15 8:00	13.729	13.718		13.628	13.676	13.728	13.737
6/21/15 10:00	13.746	13.732		13.586	13.690	13.739	13.751
6/21/15 12:00	13.704	13.703		13.590	13.659	13.696	13.709
6/21/15 14:00	13.718	13.693		13.567	13.651	13.701	13.710
6/21/15 16:00	13.706	13.671		13.546	13.629	13.679	13.688
6/21/15 18:00	13.685	13.662		13.530	13.618	13.655	13.667
6/21/15 20:00	13.668	13.635		13.535	13.593	13.643	13.651
6/21/15 22:00	13.658	13.642		13.547	13.600	13.649	13.657
6/22/15 0:00	13.665	13.663		13.540	13.619	13.657	13.668
6/22/15 2:00	13.657	13.645		13.527	13.603	13.654	13.661
6/22/15 4:00	13.641	13.634		13.515	13.591	13.640	13.648
6/22/15 6:00	13.632	13.633		13.528	13.590	13.628	13.638
6/22/15 8:00	13.644	13.635		13.531	13.591	13.642	13.649
6/22/15 10:00	13.656	13.640		13.561	13.596	13.645	13.653
6/22/15 12:00	13.692	13.678		13.586	13.634	13.673	13.684
6/22/15 14:00	13.717	13.693		13.607	13.650	13.700	13.707
6/22/15 16:00	13.740	13.717		13.623	13.674	13.722	13.729
6/22/15 18:00	13.754	13.740		13.634	13.696	13.736	13.746
6/22/15 20:00	13.761	13.745		13.660	13.703	13.752	13.758
6/22/15 22:00	13.774	13.771		13.689	13.729	13.776	13.783
6/23/15 0:00	13.799	13.807		13.701	13.764	13.803	13.812
6/23/15 2:00	13.811	13.812		13.709	13.769	13.819	13.824
6/23/15 4:00	13.819	13.820		13.711	13.778	13.826	13.833
6/23/15 6:00	13.820	13.829		13.717	13.786	13.825	13.833
6/23/15 8:00	13.828	13.828		13.717	13.784	13.834	13.839
6/23/15 10:00	13.831	13.828		13.708	13.785	13.833	13.838
6/23/15 12:00	13.829	13.826		13.690	13.782	13.822	13.830
6/23/15 14:00	13.812	13.802		13.674	13.758	13.806	13.811
6/23/15 16:00	13.801	13.786		13.660	13.743	13.790	13.795
6/23/15 18:00	13.786	13.779		13.657	13.734	13.775	13.782
6/23/15 20:00	13.777	13.769		13.651	13.727	13.775	13.780
6/23/15 22:00	13.763	13.764		13.647	13.721	13.767	13.774
6/24/15 0:00	13.756	13.765		13.647	13.721	13.762	13.769
6/24/15 2:00	13.757	13.760		13.614	13.716	13.765	13.769
6/24/15 4:00	13.723	13.727		13.605	13.683	13.730	13.735
6/24/15 6:00	13.717	13.723		13.628	13.680	13.721	13.727
6/24/15 8:00	13.743	13.741		13.629	13.697	13.746	13.750
6/24/15 10:00	13.750	13.742		13.627	13.700	13.746	13.750
6/24/15 12:00	13.756	13.744		13.601	13.702	13.742	13.749
6/24/15 14:00	13.735	13.715		13.590	13.672	13.718	13.722
6/24/15 16:00	13.730	13.704		13.576	13.662	13.707	13.712
6/24/15 18:00	13.716	13.694		13.579	13.651	13.692	13.699
6/24/15 20:00	13.710	13.693		13.602	13.650	13.696	13.700
6/24/15 22:00	13.723	13.718		13.612	13.676	13.721	13.725



TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
6/25/15 0:00	13.726	13.730		13.611	13.687	13.728	13.734
6/25/15 2:00	13.722	13.726		13.617	13.682	13.729	13.733
6/25/15 4:00	13.729	13.734		13.623	13.690	13.736	13.740
6/25/15 6:00	13.734	13.741		13.642	13.698	13.739	13.746
6/25/15 8:00	13.756	13.757		13.652	13.713	13.761	13.764
6/25/15 10:00	13.770	13.767		13.659	13.724		13.774
6/25/15 12:00	13.781	13.779		13.603	13.736		13.784
6/25/15 14:00	13.711	13.712		13.639	13.667		13.718
6/25/15 16:00	13.757	13.755		13.624	13.711		13.760
6/25/15 18:00	13.748	13.743		13.610	13.700		13.747
6/25/15 20:00	13.734	13.727		13.633	13.684		13.734
6/25/15 22:00	13.749	13.751		13.663	13.709		13.758
6/26/15 0:00	13.775	13.782		13.637	13.739		13.786
6/26/15 2:00	13.749	13.754		13.652	13.711		13.761
6/26/15 4:00	13.762	13.769		13.667	13.727		13.776
6/26/15 6:00	13.774	13.786		13.682	13.742		13.790
6/26/15 8:00	13.795	13.798		13.693	13.755		13.805
6/26/15 10:00	13.811	13.809		13.697	13.766		13.815
6/26/15 12:00	13.816	13.814		13.690	13.771		13.819
6/26/15 14:00	13.816	13.807		13.693	13.764		13.814
6/26/15 16:00	13.820	13.811		13.689	13.767		13.816
6/26/15 18:00	13.817	13.807		13.691	13.765		13.812
6/26/15 20:00	13.815	13.808		13.703	13.764		13.814
6/26/15 22:00	13.814	13.821		13.713	13.777		13.825
6/27/15 0:00	13.822	13.832		13.714	13.789		13.836
6/27/15 2:00	13.822	13.832		13.711	13.787		13.837
6/27/15 4:00	13.819	13.829		13.718	13.786		13.835
6/27/15 6:00	13.826	13.838		13.721	13.795		13.842
6/27/15 8:00	13.833	13.838		13.722	13.794		13.844
6/27/15 10:00	13.841	13.841		13.715	13.797		13.845
6/27/15 12:00	13.840	13.835		13.701	13.791		13.838
6/27/15 14:00	13.829	13.818		13.686	13.774		13.823
6/27/15 16:00	13.820	13.804		13.668	13.761		13.809
6/27/15 18:00	13.804	13.787		13.656	13.743		13.791
6/27/15 20:00	13.786	13.774		13.655	13.730		13.779
6/27/15 22:00	13.768	13.773		13.664	13.730		13.779
6/28/15 0:00	13.772	13.783		13.652	13.740		13.787
6/28/15 2:00	13.761	13.770		13.636	13.727		13.775
6/28/15 4:00	13.744	13.754		13.634	13.710		13.758
6/28/15 6:00	13.743	13.754		13.639	13.711		13.757
6/28/15 8:00	13.756	13.756		13.640	13.717		13.765
6/28/15 10:00	13.762	13.758		13.637	13.715		13.763
6/28/15 12:00	13.768	13.756		13.629	13.713		13.760
6/28/15 14:00	13.761	13.746		13.623	13.702		13.751
6/28/15 16:00	13.764	13.743		13.620	13.700		13.748
6/28/15 18:00	13.760	13.740		13.620	13.696		13.744
6/28/15 20:00	13.750	13.739		13.633	13.696		13.744
6/28/15 22:00	13.748	13.752		13.641	13.709		13.757
6/29/15 0:00	13.753	13.761		13.650	13.718		13.767
6/29/15 2:00	13.759	13.769		13.652	13.725		13.774

TABLE S11.1 Automatically measured air pressures at SG1S,D through SG3S,D, and local barometric pressure.

<b>Pressure (psi)</b>							
<b>Date/Time</b>	<b>Atmospheric</b>	<b>SG1S</b>	<b>SG2S</b>	<b>SG3S</b>	<b>SG1D</b>	<b>SG2D</b>	<b>SG3D</b>
6/29/15 4:00	13.759	13.771		13.654	13.729		13.776
6/29/15 6:00	13.760	13.774		13.666	13.731		13.778
6/29/15 8:00	13.781	13.787		13.667	13.743		13.792
6/29/15 10:00	13.787	13.786		13.664	13.741		13.791
6/29/15 12:00	13.791	13.782		13.650	13.739		13.786
6/29/15 14:00	13.780	13.769		13.638	13.725		13.773
6/29/15 16:00	13.776	13.757		13.624	13.713		13.761
6/29/15 18:00	13.765	13.743		13.625	13.700		13.748
6/29/15 20:00	13.758	13.745		13.632	13.702		13.749
6/29/15 22:00	13.748	13.751		13.643	13.708		13.757
6/30/15 0:00	13.754	13.761		13.649	13.719		13.767
6/30/15 2:00	13.757	13.769		13.636	13.725		13.772
6/30/15 4:00	13.746	13.755		13.636	13.711		13.760
6/30/15 6:00	13.744	13.755		13.642	13.713		13.760
6/30/15 8:00	13.754	13.761		13.636	13.718		13.765
6/30/15 10:00	13.758	13.756		13.615	13.711		13.759
6/30/15 12:00	13.745	13.734		13.593	13.691		13.738
6/30/15 14:00	13.730	13.713		13.573	13.671		13.718
6/30/15 16:00	13.715	13.691		13.555	13.648		13.696
6/30/15 18:00	13.701	13.675		13.551	13.631		13.680
6/30/15 20:00	13.684	13.671		13.552	13.627		13.674
6/30/15 22:00	13.671	13.671		13.548	13.627		13.676

**Supplement 12:**

**Automatically Recorded Water Level Data**

TABLE S12.1 Automatically measured groundwater levels at GW2 and GW5.

<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>	<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>
1/1/15 0:00	41.895	41.810	1/4/15 22:00	42.126	42.069
1/1/15 2:00	41.851	41.771	1/5/15 0:00	42.134	42.082
1/1/15 4:00	41.859	41.771	1/5/15 2:00	42.114	42.079
1/1/15 6:00	41.857	41.764	1/5/15 4:00	42.116	42.065
1/1/15 8:00	41.837	41.761	1/5/15 6:00	42.078	42.025
1/1/15 10:00	41.869	41.783	1/5/15 8:00	42.015	41.976
1/1/15 12:00	41.879	41.791	1/5/15 10:00	41.983	41.918
1/1/15 14:00	41.827	41.746	1/5/15 12:00	41.945	41.871
1/1/15 16:00	41.845	41.754	1/5/15 14:00	41.831	41.761
1/1/15 18:00	41.859	41.773	1/5/15 16:00	41.849	41.759
1/1/15 20:00	41.859	41.795	1/5/15 18:00	41.863	41.778
1/1/15 22:00	41.887	41.805	1/5/15 20:00	41.879	41.815
1/2/15 0:00	41.895	41.817	1/5/15 22:00	41.927	41.844
1/2/15 2:00	41.885	41.822	1/6/15 0:00	41.971	41.901
1/2/15 4:00	41.901	41.825	1/6/15 2:00	42.017	41.962
1/2/15 6:00	41.903	41.827	1/6/15 4:00	42.074	42.011
1/2/15 8:00	41.899	41.835	1/6/15 6:00	42.088	42.038
1/2/15 10:00	41.927	41.849	1/6/15 8:00	42.078	42.025
1/2/15 12:00	41.921	41.842	1/6/15 10:00	42.102	42.038
1/2/15 14:00	41.869	41.800	1/6/15 12:00	42.078	42.016
1/2/15 16:00	41.871	41.788	1/6/15 14:00	41.997	41.957
1/2/15 18:00	41.871	41.786	1/6/15 16:00	41.991	41.923
1/2/15 20:00	41.847	41.776	1/6/15 18:00	41.977	41.910
1/2/15 22:00	41.853	41.771	1/6/15 20:00	41.987	41.932
1/3/15 0:00	41.859	41.773	1/6/15 22:00	42.071	41.991
1/3/15 2:00	41.813	41.744	1/7/15 0:00	42.133	42.067
1/3/15 4:00	41.829	41.742	1/7/15 2:00	42.150	42.111
1/3/15 6:00	41.813	41.737	1/7/15 4:00	42.202	42.148
1/3/15 8:00	41.795	41.742	1/7/15 6:00	42.208	42.165
1/3/15 10:00	41.823	41.744	1/7/15 8:00	42.212	42.177
1/3/15 12:00	41.841	41.761	1/7/15 10:00	42.258	42.204
1/3/15 14:00	41.795	41.727	1/7/15 12:00	42.240	42.206
1/3/15 16:00	41.839	41.759	1/7/15 14:00	42.172	42.140
1/3/15 18:00	41.959	41.903	1/7/15 16:00	42.156	42.101
1/3/15 20:00	41.995	41.947	1/7/15 18:00	42.111	42.060
1/3/15 22:00	42.054	41.996	1/7/15 20:00	42.032	41.998
1/4/15 0:00	42.080	42.028	1/7/15 22:00	42.005	41.945
1/4/15 2:00	42.064	42.035	1/8/15 0:00	41.939	41.869
1/4/15 4:00	42.112	42.060	1/8/15 2:00	41.835	41.756
1/4/15 6:00	42.122	42.067	1/8/15 4:00	41.803	41.702
1/4/15 8:00	42.114	42.079	1/8/15 6:00	41.755	41.658
1/4/15 10:00	42.166	42.113	1/8/15 8:00	41.690	41.592
1/4/15 12:00	42.166	42.121	1/8/15 10:00	41.731	41.636
1/4/15 14:00	42.102	42.072	1/8/15 12:00	41.755	41.658
1/4/15 16:00	42.116	42.064	1/8/15 14:00	41.741	41.661
1/4/15 18:00	42.116	42.069	1/8/15 16:00	41.801	41.710
1/4/15 20:00	42.104	42.072	1/8/15 18:00	41.857	41.817

TABLE S12.1 Automatically measured groundwater levels at GW2 and GW5.

<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>	<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>
1/8/15 20:00	41.913	41.881	1/12/15 18:00	42.081	42.028
1/8/15 22:00	41.999	41.940	1/12/15 20:00	42.065	42.028
1/9/15 0:00	41.997	41.962	1/12/15 22:00	42.091	42.035
1/9/15 2:00	42.013	41.981	1/13/15 0:00	42.083	42.025
1/9/15 4:00	42.046	41.994	1/13/15 2:00	42.045	42.006
1/9/15 6:00	42.027	41.989	1/13/15 4:00	42.053	41.996
1/9/15 8:00	42.009	41.967	1/13/15 6:00	42.037	41.969
1/9/15 10:00	42.045	41.998	1/13/15 8:00	41.999	41.949
1/9/15 12:00	42.067	42.001	1/13/15 10:00	42.019	41.949
1/9/15 14:00	41.995	41.937	1/13/15 12:00	42.025	41.949
1/9/15 16:00	41.981	41.905	1/13/15 14:00	41.963	41.915
1/9/15 18:00	41.945	41.901	1/13/15 16:00	41.961	41.888
1/9/15 20:00	41.929	41.881	1/13/15 18:00	41.955	41.883
1/9/15 22:00	41.945	41.866	1/13/15 20:00	41.943	41.886
1/10/15 0:00	41.903	41.835	1/13/15 22:00	41.969	41.891
1/10/15 2:00	41.859	41.795	1/14/15 0:00	41.961	41.888
1/10/15 4:00	41.859	41.771	1/14/15 2:00	41.935	41.871
1/10/15 6:00	41.817	41.722	1/14/15 4:00	41.943	41.864
1/10/15 8:00	41.791	41.715	1/14/15 6:00	41.933	41.852
1/10/15 10:00	41.829	41.734	1/14/15 8:00	41.925	41.859
1/10/15 12:00	41.835	41.734	1/14/15 10:00	41.943	41.859
1/10/15 14:00	41.789	41.700	1/14/15 12:00	41.961	41.869
1/10/15 16:00	41.793	41.698	1/14/15 14:00	41.897	41.844
1/10/15 18:00	41.819	41.729	1/14/15 16:00	41.895	41.810
1/10/15 20:00	41.819	41.754	1/14/15 18:00	41.907	41.822
1/10/15 22:00	41.847	41.766	1/14/15 20:00	41.891	41.820
1/11/15 0:00	41.857	41.773	1/14/15 22:00	41.905	41.820
1/11/15 2:00	41.825	41.754	1/15/15 0:00	41.905	41.822
1/11/15 4:00	41.853	41.773	1/15/15 2:00	41.889	41.817
1/11/15 6:00	41.859	41.786	1/15/15 4:00	41.899	41.817
1/11/15 8:00	41.839	41.771	1/15/15 6:00	41.907	41.820
1/11/15 10:00	41.877	41.793	1/15/15 8:00	41.913	41.844
1/11/15 12:00	41.903	41.815	1/15/15 10:00	41.957	41.879
1/11/15 14:00	41.857	41.788	1/15/15 12:00	41.985	41.908
1/11/15 16:00	41.891	41.810	1/15/15 14:00	41.943	41.888
1/11/15 18:00	41.933	41.859	1/15/15 16:00	41.955	41.874
1/11/15 20:00	41.975	41.918	1/15/15 18:00	41.957	41.879
1/11/15 22:00	42.027	41.962	1/15/15 20:00	41.937	41.871
1/12/15 0:00	42.059	41.996	1/15/15 22:00	41.959	41.876
1/12/15 2:00	42.059	42.020	1/16/15 0:00	41.941	41.871
1/12/15 4:00	42.111	42.055	1/16/15 2:00	41.919	41.854
1/12/15 6:00	42.115	42.062	1/16/15 4:00	41.923	41.842
1/12/15 8:00	42.109	42.069	1/16/15 6:00	41.913	41.832
1/12/15 10:00	42.144	42.091	1/16/15 8:00	41.879	41.810
1/12/15 12:00	42.154	42.101	1/16/15 10:00	41.881	41.793
1/12/15 14:00	42.091	42.064	1/16/15 12:00	41.893	41.805
1/12/15 16:00	42.083	42.033	1/16/15 14:00	41.837	41.768

TABLE S12.1 Automatically measured groundwater levels at GW2 and GW5.

<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>	<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>
1/16/15 16:00	41.833	41.744	1/20/15 14:00	42.015	41.967
1/16/15 18:00	41.829	41.729	1/20/15 16:00	42.021	41.949
1/16/15 20:00	41.817	41.739	1/20/15 18:00	42.019	41.947
1/16/15 22:00	41.827	41.737	1/20/15 20:00	42.011	41.972
1/17/15 0:00	41.815	41.717	1/20/15 22:00	42.049	41.976
1/17/15 2:00	41.813	41.737	1/21/15 0:00	42.051	41.989
1/17/15 4:00	41.829	41.744	1/21/15 2:00	42.043	41.991
1/17/15 6:00	41.867	41.795	1/21/15 4:00	42.075	42.006
1/17/15 8:00	41.891	41.825	1/21/15 6:00	42.063	42.003
1/17/15 10:00	41.957	41.881	1/21/15 8:00	42.069	42.018
1/17/15 12:00	42.023	41.952	1/21/15 10:00	42.097	42.028
1/17/15 14:00	41.989	41.945	1/21/15 12:00	42.105	42.040
1/17/15 16:00	41.999	41.932	1/21/15 14:00	42.053	42.013
1/17/15 18:00	42.011	41.947	1/21/15 16:00	42.063	41.991
1/17/15 20:00	42.003	41.949	1/21/15 18:00	42.067	41.996
1/17/15 22:00	42.023	41.952	1/21/15 20:00	42.081	42.025
1/18/15 0:00	42.007	41.942	1/21/15 22:00	42.125	42.052
1/18/15 2:00	41.973	41.923	1/22/15 0:00	42.123	42.064
1/18/15 4:00	41.981	41.913	1/22/15 2:00	42.099	42.067
1/18/15 6:00	41.935	41.869	1/22/15 4:00	42.133	42.067
1/18/15 8:00	41.919	41.871	1/22/15 6:00	42.135	42.074
1/18/15 10:00	41.939	41.861	1/22/15 8:00	42.117	42.069
1/18/15 12:00	41.933	41.857	1/22/15 10:00	42.138	42.074
1/18/15 14:00	41.903	41.842	1/22/15 12:00	42.135	42.074
1/18/15 16:00	41.935	41.852	1/22/15 14:00	42.065	42.028
1/18/15 18:00	41.953	41.876	1/22/15 16:00	42.051	41.981
1/18/15 20:00	41.953	41.891	1/22/15 18:00	42.029	41.959
1/18/15 22:00	41.971	41.896	1/22/15 20:00	42.011	41.954
1/19/15 0:00	41.971	41.913	1/22/15 22:00	42.029	41.959
1/19/15 2:00	41.953	41.893	1/23/15 0:00	42.019	41.947
1/19/15 4:00	41.961	41.886	1/23/15 2:00	41.981	41.923
1/19/15 6:00	41.937	41.861	1/23/15 4:00	41.989	41.908
1/19/15 8:00	41.933	41.874	1/23/15 6:00	41.951	41.881
1/19/15 10:00	41.973	41.893	1/23/15 8:00	41.931	41.861
1/19/15 12:00	41.999	41.927	1/23/15 10:00	41.951	41.859
1/19/15 14:00	41.963	41.923	1/23/15 12:00	41.947	41.866
1/19/15 16:00	41.985	41.905	1/23/15 14:00	41.901	41.835
1/19/15 18:00	41.985	41.913	1/23/15 16:00	41.949	41.825
1/19/15 20:00	41.985	41.923	1/23/15 18:00	41.911	41.849
1/19/15 22:00	42.013	41.935	1/23/15 20:00	41.945	41.879
1/20/15 0:00	41.999	41.932	1/23/15 22:00	41.971	41.905
1/20/15 2:00	41.995	41.940	1/24/15 0:00	41.975	41.918
1/20/15 4:00	42.023	41.952	1/24/15 2:00	41.967	41.905
1/20/15 6:00	42.019	41.952	1/24/15 4:00	41.955	41.896
1/20/15 8:00	42.017	41.964	1/24/15 6:00	41.955	41.893
1/20/15 10:00	42.047	41.974	1/24/15 8:00	41.941	41.874
1/20/15 12:00	42.059	41.989	1/24/15 10:00	41.925	41.859

TABLE S12.1 Automatically measured groundwater levels at GW2 and GW5.

<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>	<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>
1/24/15 12:00	41.925	41.859	1/28/15 10:00	41.951	41.881
1/24/15 14:00	41.869	41.798	1/28/15 12:00	41.939	41.883
1/24/15 16:00	41.841	41.759	1/28/15 14:00	41.919	41.857
1/24/15 18:00	41.851	41.778	1/28/15 16:00	41.925	41.852
1/24/15 20:00	41.863	41.791	1/28/15 18:00	41.947	41.888
1/24/15 22:00	41.873	41.795	1/28/15 20:00	42.005	41.947
1/25/15 0:00	41.901	41.842	1/28/15 22:00	42.057	42.001
1/25/15 2:00	41.913	41.854	1/29/15 0:00	42.085	42.040
1/25/15 4:00	41.939	41.879	1/29/15 2:00	42.149	42.099
1/25/15 6:00	41.963	41.908	1/29/15 4:00	42.183	42.145
1/25/15 8:00	41.979	41.925	1/29/15 6:00	42.188	42.155
1/25/15 10:00	42.007	41.952	1/29/15 8:00	42.208	42.175
1/25/15 12:00	42.033	41.984	1/29/15 10:00	42.237	42.206
1/25/15 14:00	42.031	41.986	1/29/15 12:00	42.222	42.206
1/25/15 16:00	42.027	41.984	1/29/15 14:00	42.201	42.179
1/25/15 18:00	42.041	41.994	1/29/15 16:00	42.183	42.150
1/25/15 20:00	42.029	41.984	1/29/15 18:00	42.167	42.140
1/25/15 22:00	42.037	41.984	1/29/15 20:00	42.173	42.135
1/26/15 0:00	42.027	41.974	1/29/15 22:00	42.173	42.138
1/26/15 2:00	42.003	41.957	1/30/15 0:00	42.155	42.126
1/26/15 4:00	41.981	41.927	1/30/15 2:00	42.143	42.111
1/26/15 6:00	41.969	41.915	1/30/15 4:00	42.131	42.094
1/26/15 8:00	41.971	41.908	1/30/15 6:00	42.115	42.082
1/26/15 10:00	42.003	41.942	1/30/15 8:00	42.105	42.062
1/26/15 12:00	42.003	41.957	1/30/15 10:00	42.095	42.050
1/26/15 14:00	41.995	41.947	1/30/15 12:00	42.079	42.040
1/26/15 16:00	41.991	41.937	1/30/15 14:00	42.031	41.986
1/26/15 18:00	41.995	41.964	1/30/15 16:00	42.007	41.957
1/26/15 20:00	42.015	41.954	1/30/15 18:00	42.003	41.952
1/26/15 22:00	42.031	41.972	1/30/15 20:00	41.999	41.940
1/27/15 0:00	42.021	41.972	1/30/15 22:00	42.009	41.952
1/27/15 2:00	42.029	41.972	1/31/15 0:00	41.981	41.945
1/27/15 4:00	42.023	41.972	1/31/15 2:00	41.979	41.918
1/27/15 6:00	42.009	41.964	1/31/15 4:00	41.957	41.898
1/27/15 8:00	42.015	41.959	1/31/15 6:00	41.935	41.876
1/27/15 10:00	42.023	41.967	1/31/15 8:00	41.941	41.854
1/27/15 12:00	42.015	41.964	1/31/15 10:00	41.957	41.857
1/27/15 14:00	41.977	41.923	1/31/15 12:00	41.979	41.849
1/27/15 16:00	41.959	41.893	1/31/15 14:00	42.041	41.810
1/27/15 18:00	41.947	41.886	1/31/15 16:00	42.093	41.783
1/27/15 20:00	41.951	41.888	1/31/15 18:00	42.115	41.786
1/27/15 22:00	41.955	41.888	1/31/15 20:00	42.129	41.778
1/28/15 0:00	41.943	41.883	1/31/15 22:00	42.153	41.793
1/28/15 2:00	41.939	41.876	2/1/15 0:00	42.103	41.813
1/28/15 4:00	41.931	41.866	2/1/15 2:00	42.079	41.849
1/28/15 6:00	41.919	41.859	2/1/15 4:00	42.065	41.886
1/28/15 8:00	41.927	41.861	2/1/15 6:00	42.075	41.930

TABLE S12.1 Automatically measured groundwater levels at GW2 and GW5.

<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>	<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>
2/1/15 8:00	42.023	41.981	2/5/15 6:00	41.875	42.040
2/1/15 10:00	41.931	42.018	2/5/15 8:00	41.869	42.013
2/1/15 12:00	41.943	42.057	2/5/15 10:00	41.893	41.996
2/1/15 14:00	41.905	42.062	2/5/15 12:00	42.045	41.976
2/1/15 16:00	41.899	42.062	2/5/15 14:00	41.987	41.947
2/1/15 18:00	41.905	42.089	2/5/15 16:00	41.959	41.915
2/1/15 20:00	41.851	42.104	2/5/15 18:00	42.009	41.898
2/1/15 22:00	41.837	42.106	2/5/15 20:00	42.007	41.913
2/2/15 0:00	41.857	42.094	2/5/15 22:00	42.003	41.905
2/2/15 2:00	41.824	42.077	2/6/15 0:00	42.011	41.903
2/2/15 4:00	41.829	42.064	2/6/15 2:00	41.997	41.886
2/2/15 6:00	41.899	42.018	2/6/15 4:00	42.007	41.871
2/2/15 8:00	42.015	41.972	2/6/15 6:00	42.029	41.869
2/2/15 10:00	42.023	41.967	2/6/15 8:00	42.007	41.864
2/2/15 12:00	42.029	41.952	2/6/15 10:00	42.013	41.866
2/2/15 14:00	41.965	41.913	2/6/15 12:00	42.119	41.893
2/2/15 16:00	41.937	41.881	2/6/15 14:00	41.963	41.888
2/2/15 18:00	41.957	41.886	2/6/15 16:00	41.925	41.859
2/2/15 20:00	41.919	41.920	2/6/15 18:00	41.947	41.869
2/2/15 22:00	41.923	41.935	2/6/15 20:00	41.923	41.808
2/3/15 0:00	41.951	41.940	2/6/15 22:00	41.919	41.817
2/3/15 2:00	41.923	41.937	2/7/15 0:00	41.937	41.839
2/3/15 4:00	41.953	41.903	2/7/15 2:00	41.899	41.827
2/3/15 6:00	41.977	41.898	2/7/15 4:00	41.889	41.825
2/3/15 8:00	41.933	41.879	2/7/15 6:00	41.901	41.822
2/3/15 10:00	41.941	41.857	2/7/15 8:00	41.879	41.832
2/3/15 12:00	41.959	41.879	2/7/15 10:00	41.899	41.839
2/3/15 14:00	41.947	41.866	2/7/15 12:00	41.925	41.832
2/3/15 16:00	41.973	41.859	2/7/15 14:00	41.879	41.842
2/3/15 18:00	41.991	41.893	2/7/15 16:00	41.879	41.837
2/3/15 20:00	41.961	41.910	2/7/15 18:00	41.927	41.827
2/3/15 22:00	41.943	41.945	2/7/15 20:00	41.927	41.764
2/4/15 0:00	41.957	41.962	2/7/15 22:00	41.953	41.896
2/4/15 2:00	41.935	41.957	2/8/15 0:00	41.979	41.910
2/4/15 4:00	41.947	41.957	2/8/15 2:00	41.959	41.915
2/4/15 6:00	41.921	41.994	2/8/15 4:00	41.983	41.940
2/4/15 8:00	41.829	42.047	2/8/15 6:00	42.019	41.967
2/4/15 10:00	41.734	42.128	2/8/15 8:00	42.023	41.996
2/4/15 12:00	41.686	42.187	2/8/15 10:00	42.047	42.016
2/4/15 14:00	41.628	42.189	2/8/15 12:00	42.087	42.016
2/4/15 16:00	41.624	42.162	2/8/15 14:00	42.047	41.998
2/4/15 18:00	41.606	42.165	2/8/15 16:00	42.037	41.998
2/4/15 20:00	41.494	42.165	2/8/15 18:00	42.079	42.020
2/4/15 22:00	41.702	42.153	2/8/15 20:00	42.083	42.052
2/5/15 0:00	41.776	42.135	2/8/15 22:00	42.099	42.082
2/5/15 2:00	41.724	42.108	2/9/15 0:00	42.141	42.091
2/5/15 4:00	41.843	42.077	2/9/15 2:00	42.133	42.099



TABLE S12.1 Automatically measured groundwater levels at GW2 and GW5.

<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>	<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>
2/9/15 4:00	42.139	42.096	2/13/15 2:00	41.985	41.925
2/9/15 6:00	42.143	42.086	2/13/15 4:00	41.985	41.920
2/9/15 8:00	42.127	42.096	2/13/15 6:00	42.005	41.925
2/9/15 10:00	42.123	42.089	2/13/15 8:00	41.999	41.954
2/9/15 12:00	42.147	42.074	2/13/15 10:00	42.023	41.981
2/9/15 14:00	42.083	42.025	2/13/15 12:00	42.071	41.986
2/9/15 16:00	42.041	41.986	2/13/15 14:00	42.025	41.969
2/9/15 18:00	42.047	41.974	2/13/15 16:00	42.001	41.945
2/9/15 20:00	42.031	41.994	2/13/15 18:00	42.023	41.952
2/9/15 22:00	42.035	42.001	2/13/15 20:00	42.003	41.976
2/10/15 0:00	42.059	41.986	2/13/15 22:00	42.011	41.954
2/10/15 2:00	42.019	41.979	2/14/15 0:00	42.031	41.947
2/10/15 4:00	42.025	41.974	2/14/15 2:00	41.999	41.942
2/10/15 6:00	42.045	41.972	2/14/15 4:00	41.997	41.937
2/10/15 8:00	42.025	41.979	2/14/15 6:00	42.019	41.950
2/10/15 10:00	42.033	41.981	2/14/15 8:00	42.021	41.979
2/10/15 12:00	42.051	41.969	2/14/15 10:00	42.063	42.033
2/10/15 14:00	42.005	41.945	2/14/15 12:00	42.135	42.077
2/10/15 16:00	41.987	41.932	2/14/15 14:00	42.129	42.069
2/10/15 18:00	42.015	41.952	2/14/15 16:00	42.091	42.050
2/10/15 20:00	42.023	41.989	2/14/15 18:00	42.117	42.047
2/10/15 22:00	42.065	42.035	2/14/15 20:00	42.103	42.060
2/11/15 0:00	42.113	42.067	2/14/15 22:00	42.095	42.052
2/11/15 2:00	42.129	42.111	2/15/15 0:00	42.125	42.052
2/11/15 4:00	42.185	42.150	2/15/15 2:00	42.093	42.060
2/11/15 6:00	42.213	42.177	2/15/15 4:00	42.085	42.035
2/11/15 8:00	42.217	42.199	2/15/15 6:00	42.087	42.018
2/11/15 10:00	42.223	42.197	2/15/15 8:00	42.053	42.013
2/11/15 12:00	42.243	42.189	2/15/15 10:00	42.069	42.035
2/11/15 14:00	42.195	42.150	2/15/15 12:00	42.105	42.033
2/11/15 16:00	42.153	42.116	2/15/15 14:00	42.055	41.998
2/11/15 18:00	42.163	42.089	2/15/15 16:00	42.037	41.976
2/11/15 20:00	42.131	42.091	2/15/15 18:00	42.051	41.979
2/11/15 22:00	42.133	42.116	2/15/15 20:00	42.053	42.016
2/12/15 0:00	42.199	42.135	2/15/15 22:00	42.055	41.991
2/12/15 2:00	42.185	42.167	2/16/15 0:00	42.071	41.984
2/12/15 4:00	42.211	42.175	2/16/15 2:00	42.035	41.994
2/12/15 6:00	42.221	42.172	2/16/15 4:00	42.017	41.959
2/12/15 8:00	42.201	42.170	2/16/15 6:00	42.035	41.962
2/12/15 10:00	42.195	42.150	2/16/15 8:00	42.017	41.976
2/12/15 12:00	42.199	42.106	2/16/15 10:00	42.029	41.984
2/12/15 14:00	42.123	42.045	2/16/15 12:00	42.055	41.969
2/12/15 16:00	42.055	41.991	2/16/15 14:00	42.017	41.952
2/12/15 18:00	42.047	41.974	2/16/15 16:00	41.995	41.935
2/12/15 20:00	42.019	41.957	2/16/15 18:00	42.021	41.945
2/12/15 22:00	42.013	41.957	2/16/15 20:00	42.023	41.969
2/13/15 0:00	42.017	41.928	2/16/15 22:00	42.025	41.976

TABLE S12.1 Automatically measured groundwater levels at GW2 and GW5.

<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>	<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>
2/17/15 0:00	42.057	41.974	2/20/15 22:00	42.001	41.964
2/17/15 2:00	42.037	41.979	2/21/15 0:00	42.053	41.967
2/17/15 4:00	42.045	41.984	2/21/15 2:00	42.023	41.981
2/17/15 6:00	42.061	41.984	2/21/15 4:00	42.037	41.981
2/17/15 8:00	42.041	41.991	2/21/15 6:00	42.057	41.996
2/17/15 10:00	42.031	41.964	2/21/15 8:00	42.055	42.020
2/17/15 12:00	42.049	42.003	2/21/15 10:00	42.079	42.038
2/17/15 14:00	42.071	42.020	2/21/15 12:00	42.115	42.055
2/17/15 16:00	42.061	42.013	2/21/15 14:00	42.097	42.040
2/17/15 18:00	42.071	41.994	2/21/15 16:00	42.085	42.067
2/17/15 20:00	42.049	42.003	2/21/15 18:00	42.147	42.094
2/17/15 22:00	42.061	42.023	2/21/15 20:00	42.165	42.150
2/18/15 0:00	42.101	42.028	2/21/15 22:00	42.189	42.179
2/18/15 2:00	42.091	42.040	2/22/15 0:00	42.252	42.209
2/18/15 4:00	42.107	42.047	2/22/15 2:00	42.248	42.233
2/18/15 6:00	42.133	42.074	2/22/15 4:00	42.262	42.233
2/18/15 8:00	42.131	42.104	2/22/15 6:00	42.268	42.228
2/18/15 10:00	42.157	42.131	2/22/15 8:00	42.258	42.246
2/18/15 12:00	42.189	42.118	2/22/15 10:00	42.280	42.255
2/18/15 14:00	42.145	42.094	2/22/15 12:00	42.296	42.248
2/18/15 16:00	42.113	42.069	2/22/15 14:00	42.239	42.201
2/18/15 18:00	42.127	42.055	2/22/15 16:00	42.205	42.167
2/18/15 20:00	42.119	42.074	2/22/15 18:00	42.229	42.177
2/18/15 22:00	42.125	42.082	2/22/15 20:00	42.219	42.199
2/19/15 0:00	42.151	42.082	2/22/15 22:00	42.231	42.209
2/19/15 2:00	42.125	42.084	2/23/15 0:00	42.268	42.206
2/19/15 4:00	42.123	42.050	2/23/15 2:00	42.235	42.214
2/19/15 6:00	42.105	42.013	2/23/15 4:00	42.235	42.179
2/19/15 8:00	42.051	42.016	2/23/15 6:00	42.231	42.162
2/19/15 10:00	42.055	41.994	2/23/15 8:00	42.185	42.148
2/19/15 12:00	42.057	41.979	2/23/15 10:00	42.173	42.131
2/19/15 14:00	42.015	41.945	2/23/15 12:00	42.171	42.096
2/19/15 16:00	41.979	41.908	2/23/15 14:00	42.099	42.038
2/19/15 18:00	41.989	41.906	2/23/15 16:00	42.043	41.984
2/19/15 20:00	41.977	41.930	2/23/15 18:00	42.041	41.952
2/19/15 22:00	41.995	41.932	2/23/15 20:00	41.993	41.930
2/20/15 0:00	42.011	41.915	2/23/15 22:00	41.989	41.930
2/20/15 2:00	41.981	41.915	2/24/15 0:00	42.003	41.896
2/20/15 4:00	41.973	41.888	2/24/15 2:00	41.955	41.876
2/20/15 6:00	41.969	41.879	2/24/15 4:00	41.929	41.844
2/20/15 8:00	41.945	41.888	2/24/15 6:00	41.923	41.835
2/20/15 10:00	41.963	41.910	2/24/15 8:00	41.921	41.866
2/20/15 12:00	41.977	41.884	2/24/15 10:00	41.943	41.886
2/20/15 14:00	41.933	41.861	2/24/15 12:00	41.973	41.884
2/20/15 16:00	41.929	41.869	2/24/15 14:00	41.931	41.857
2/20/15 18:00	41.967	41.891	2/24/15 16:00	41.907	41.830
2/20/15 20:00	41.983	41.928	2/24/15 18:00	41.921	41.830

TABLE S12.1 Automatically measured groundwater levels at GW2 and GW5.

<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>	<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>
2/24/15 20:00	41.903	41.835	2/28/15 18:00	42.021	41.986
2/24/15 22:00	41.905	41.837	2/28/15 20:00	41.997	42.003
2/25/15 0:00	41.925	41.827	2/28/15 22:00	41.965	42.018
2/25/15 2:00	41.895	41.825	3/1/15 0:00	41.921	42.018
2/25/15 4:00	41.893	41.808	3/1/15 2:00	41.917	42.011
2/25/15 6:00	41.897	41.820	3/1/15 4:00	41.919	42.008
2/25/15 8:00	41.883	41.820	3/1/15 6:00	41.861	42.030
2/25/15 10:00	41.895	41.837	3/1/15 8:00	42.055	42.040
2/25/15 12:00	41.941	41.861	3/1/15 10:00	42.121	42.067
2/25/15 14:00	41.937	41.901	3/1/15 12:00	42.113	42.074
2/25/15 16:00	41.985	41.957	3/1/15 14:00	42.199	42.057
2/25/15 18:00	42.065	42.025	3/1/15 16:00	42.111	42.040
2/25/15 20:00	42.107	42.099	3/1/15 18:00	42.093	42.047
2/25/15 22:00	42.151	42.131	3/1/15 20:00	42.119	42.074
2/26/15 0:00	42.193	42.140	3/1/15 22:00	42.135	42.082
2/26/15 2:00	42.191	42.175	3/2/15 0:00	42.145	42.101
2/26/15 4:00	42.203	42.155	3/2/15 2:00	42.135	42.091
2/26/15 6:00	42.227	42.170	3/2/15 4:00	42.129	42.060
2/26/15 8:00	42.207	42.177	3/2/15 6:00	42.099	42.047
2/26/15 10:00	42.219	42.175	3/2/15 8:00	42.111	42.050
2/26/15 12:00	42.237	42.170	3/2/15 10:00	42.101	42.045
2/26/15 14:00	42.185	42.155	3/2/15 12:00	42.199	41.989
2/26/15 16:00	42.167	42.121	3/2/15 14:00	42.021	41.928
2/26/15 18:00	42.177	42.121	3/2/15 16:00	41.967	41.874
2/26/15 20:00	42.169	42.133	3/2/15 18:00	41.931	41.847
2/26/15 22:00	42.183	42.140	3/2/15 20:00	41.911	41.825
2/27/15 0:00	42.219	42.148	3/2/15 22:00	41.899	41.786
2/27/15 2:00	42.187	42.153	3/3/15 0:00	41.859	41.742
2/27/15 4:00	42.187	42.133	3/3/15 2:00	41.808	41.717
2/27/15 6:00	42.191	42.121	3/3/15 4:00	41.816	41.695
2/27/15 8:00	42.159	42.123	3/3/15 6:00	41.827	41.776
2/27/15 10:00	42.173	42.126	3/3/15 8:00	41.893	41.861
2/27/15 12:00	42.159	42.104	3/3/15 10:00	41.979	41.935
2/27/15 14:00	42.111	42.057	3/3/15 12:00	42.021	41.981
2/27/15 16:00	42.095	42.038	3/3/15 14:00	42.053	41.984
2/27/15 18:00	42.079	42.033	3/3/15 16:00	42.041	41.989
2/27/15 20:00	42.083	42.040	3/3/15 18:00	42.045	41.998
2/27/15 22:00	42.101	42.038	3/3/15 20:00	42.063	42.028
2/28/15 0:00	42.093	42.038	3/3/15 22:00	42.115	42.067
2/28/15 2:00	42.079	42.025	3/4/15 0:00	42.137	42.096
2/28/15 4:00	42.071	42.016	3/4/15 2:00	42.139	42.096
2/28/15 6:00	42.061	42.008	3/4/15 4:00	42.147	42.099
2/28/15 8:00	42.063	42.016	3/4/15 6:00	42.153	42.118
2/28/15 10:00	42.083	42.030	3/4/15 8:00	42.167	42.140
2/28/15 12:00	42.075	42.018	3/4/15 10:00	42.201	42.157
2/28/15 14:00	42.053	42.008	3/4/15 12:00	42.191	42.148
2/28/15 16:00	42.041	41.979	3/4/15 14:00	42.223	42.111

TABLE S12.1 Automatically measured groundwater levels at GW2 and GW5.

<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>	<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>
3/4/15 16:00	42.165	42.084	3/8/15 14:00	42.075	42.018
3/4/15 18:00	42.137	42.101	3/8/15 16:00	42.071	42.011
3/4/15 20:00	42.153	42.123	3/8/15 18:00	42.063	42.016
3/4/15 22:00	42.181	42.143	3/8/15 20:00	42.083	42.038
3/5/15 0:00	42.193	42.155	3/8/15 22:00	42.109	42.047
3/5/15 2:00	42.197	42.155	3/9/15 0:00	42.103	42.069
3/5/15 4:00	42.197	42.140	3/9/15 2:00	42.101	42.052
3/5/15 6:00	42.178	42.138	3/9/15 4:00	42.101	42.033
3/5/15 8:00	42.185	42.150	3/9/15 6:00	42.091	42.038
3/5/15 10:00	42.201	42.145	3/9/15 8:00	42.087	42.047
3/5/15 12:00	42.187	42.121	3/9/15 10:00	42.107	42.045
3/5/15 14:00	42.160	42.077	3/9/15 12:00	42.083	42.020
3/5/15 16:00	42.103	42.035	3/9/15 14:00	42.051	41.981
3/5/15 18:00	42.085	42.033	3/9/15 16:00	42.029	41.954
3/5/15 20:00	42.077	42.035	3/9/15 18:00	42.007	41.947
3/5/15 22:00	42.095	42.033	3/9/15 20:00	42.013	41.969
3/6/15 0:00	42.087	42.030	3/9/15 22:00	42.037	41.967
3/6/15 2:00	42.075	42.025	3/10/15 0:00	42.035	41.976
3/6/15 4:00	42.081	42.016	3/10/15 2:00	42.035	41.976
3/6/15 6:00	42.075	42.025	3/10/15 4:00	42.041	41.972
3/6/15 8:00	42.081	42.042	3/10/15 6:00	42.041	41.981
3/6/15 10:00	42.109	42.052	3/10/15 8:00	42.043	41.998
3/6/15 12:00	42.095	42.045	3/10/15 10:00	42.079	42.018
3/6/15 14:00	42.075	42.025	3/10/15 12:00	42.081	42.030
3/6/15 16:00	42.053	42.025	3/10/15 14:00	42.075	42.038
3/6/15 18:00	42.041	41.984	3/10/15 16:00	42.077	42.023
3/6/15 20:00	42.045	41.996	3/10/15 18:00	42.081	42.035
3/6/15 22:00	42.063	42.003	3/10/15 20:00	42.107	42.069
3/7/15 0:00	42.067	42.016	3/10/15 22:00	42.140	42.094
3/7/15 2:00	42.077	42.030	3/11/15 0:00	42.156	42.116
3/7/15 4:00	42.101	42.035	3/11/15 2:00	42.158	42.126
3/7/15 6:00	42.095	42.047	3/11/15 4:00	42.174	42.128
3/7/15 8:00	42.103	42.060	3/11/15 6:00	42.176	42.143
3/7/15 10:00	42.129	42.069	3/11/15 8:00	42.194	42.167
3/7/15 12:00	42.117	42.062	3/11/15 10:00	42.222	42.167
3/7/15 14:00	42.091	42.020	3/11/15 12:00	42.192	42.145
3/7/15 16:00	42.061	41.989	3/11/15 14:00	42.166	42.104
3/7/15 18:00	42.039	41.979	3/11/15 16:00	42.146	42.087
3/7/15 20:00	42.029	41.989	3/11/15 18:00	42.125	42.079
3/7/15 22:00	42.043	41.976	3/11/15 20:00	42.125	42.084
3/8/15 0:00	42.045	41.994	3/11/15 22:00	42.147	42.094
3/8/15 2:00	42.031	41.972	3/12/15 0:00	42.154	42.111
3/8/15 4:00	42.025	41.959	3/12/15 2:00	42.151	42.101
3/8/15 6:00	42.015	41.959	3/12/15 4:00	42.138	42.074
3/8/15 8:00	42.025	41.986	3/12/15 6:00	42.117	42.072
3/8/15 10:00	42.067	42.011	3/12/15 8:00	42.121	42.089
3/8/15 12:00	42.075	42.025	3/12/15 10:00	42.140	42.079

TABLE S12.1 Automatically measured groundwater levels at GW2 and GW5.

<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>	<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>
3/12/15 12:00	42.123	42.067	3/16/15 10:00	42.057	41.989
3/12/15 14:00	42.101	42.035	3/16/15 12:00	42.029	41.954
3/12/15 16:00	42.081	42.011	3/16/15 14:00	41.995	41.932
3/12/15 18:00	42.077	42.030	3/16/15 16:00	41.999	41.928
3/12/15 20:00	42.095	42.052	3/16/15 18:00	41.997	41.947
3/12/15 22:00	42.121	42.069	3/16/15 20:00	42.061	42.057
3/13/15 0:00	42.129	42.087	3/16/15 22:00	42.168	42.150
3/13/15 2:00	42.127	42.091	3/17/15 0:00	42.216	42.204
3/13/15 4:00	42.140	42.087	3/17/15 2:00	42.262	42.255
3/13/15 6:00	42.137	42.094	3/17/15 4:00	42.296	42.270
3/13/15 8:00	42.140	42.104	3/17/15 6:00	42.300	42.290
3/13/15 10:00	42.166	42.113	3/17/15 8:00	42.314	42.292
3/13/15 12:00	42.152	42.106	3/17/15 10:00	42.326	42.287
3/13/15 14:00	42.148	42.101	3/17/15 12:00	42.290	42.241
3/13/15 16:00	42.146	42.091	3/17/15 14:00	42.238	42.177
3/13/15 18:00	42.144	42.113	3/17/15 16:00	42.190	42.121
3/13/15 20:00	42.160	42.126	3/17/15 18:00	42.138	42.096
3/13/15 22:00	42.184	42.140	3/17/15 20:00	42.135	42.099
3/14/15 0:00	42.188	42.150	3/17/15 22:00	42.154	42.096
3/14/15 2:00	42.184	42.155	3/18/15 0:00	42.137	42.079
3/14/15 4:00	42.204	42.155	3/18/15 2:00	42.117	42.074
3/14/15 6:00	42.194	42.165	3/18/15 4:00	42.107	42.042
3/14/15 8:00	42.210	42.184	3/18/15 6:00	42.083	42.025
3/14/15 10:00	42.238	42.187	3/18/15 8:00	42.081	42.038
3/14/15 12:00	42.204	42.155	3/18/15 10:00	42.091	42.033
3/14/15 14:00	42.172	42.109	3/18/15 12:00	42.081	42.016
3/14/15 16:00	42.135	42.082	3/18/15 14:00	42.041	41.979
3/14/15 18:00	42.121	42.079	3/18/15 16:00	42.033	41.964
3/14/15 20:00	42.125	42.087	3/18/15 18:00	42.029	41.979
3/14/15 22:00	42.138	42.087	3/18/15 20:00	42.043	41.998
3/15/15 0:00	42.140	42.087	3/18/15 22:00	42.071	42.025
3/15/15 2:00	42.123	42.077	3/19/15 0:00	42.085	42.038
3/15/15 4:00	42.123	42.065	3/19/15 2:00	42.087	42.040
3/15/15 6:00	42.121	42.069	3/19/15 4:00	42.087	42.025
3/15/15 8:00	42.125	42.079	3/19/15 6:00	42.085	42.042
3/15/15 10:00	42.133	42.079	3/19/15 8:00	42.105	42.072
3/15/15 12:00	42.111	42.067	3/19/15 10:00	42.142	42.089
3/15/15 14:00	42.079	42.006	3/19/15 12:00	42.133	42.084
3/15/15 16:00	42.055	41.981	3/19/15 14:00	42.109	42.055
3/15/15 18:00	42.041	41.991	3/19/15 16:00	42.091	42.047
3/15/15 20:00	42.063	42.011	3/19/15 18:00	42.077	42.045
3/15/15 22:00	42.083	42.025	3/19/15 20:00	42.085	42.045
3/16/15 0:00	42.085	42.028	3/19/15 22:00	42.119	42.072
3/16/15 2:00	42.067	42.018	3/20/15 0:00	42.133	42.089
3/16/15 4:00	42.065	41.998	3/20/15 2:00	42.137	42.099
3/16/15 6:00	42.055	41.998	3/20/15 4:00	42.152	42.101
3/16/15 8:00	42.051	42.003	3/20/15 6:00	42.150	42.113

TABLE S12.1 Automatically measured groundwater levels at GW2 and GW5.

<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>	<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>
3/20/15 8:00	42.166	42.140	3/24/15 6:00	42.025	42.003
3/20/15 10:00	42.190	42.131	3/24/15 8:00	42.007	42.067
3/20/15 12:00	42.160	42.099	3/24/15 10:00	42.047	42.082
3/20/15 14:00	42.129	42.072	3/24/15 12:00	42.105	42.065
3/20/15 16:00	42.111	42.042	3/24/15 14:00	42.067	42.025
3/20/15 18:00	42.093	42.047	3/24/15 16:00	42.069	42.008
3/20/15 20:00	42.101	42.065	3/24/15 18:00	42.067	42.028
3/20/15 22:00	42.133	42.074	3/24/15 20:00	42.089	42.067
3/21/15 0:00	42.131	42.089	3/24/15 22:00	42.140	42.087
3/21/15 2:00	42.137	42.104	3/25/15 0:00	42.138	42.101
3/21/15 4:00	42.152	42.099	3/25/15 2:00	42.140	42.109
3/21/15 6:00	42.144	42.113	3/25/15 4:00	42.152	42.106
3/21/15 8:00	42.160	42.128	3/25/15 6:00	42.154	42.123
3/21/15 10:00	42.174	42.121	3/25/15 8:00	42.178	42.150
3/21/15 12:00	42.156	42.104	3/25/15 10:00	42.218	42.194
3/21/15 14:00	42.127	42.069	3/25/15 12:00	42.290	42.226
3/21/15 16:00	42.105	42.038	3/25/15 14:00	42.238	42.224
3/21/15 18:00	42.077	42.030	3/25/15 16:00	42.238	42.216
3/21/15 20:00	42.085	42.040	3/25/15 18:00	42.222	42.224
3/21/15 22:00	42.109	42.052	3/25/15 20:00	42.252	42.226
3/22/15 0:00	42.113	42.074	3/25/15 22:00	42.284	42.253
3/22/15 2:00	42.107	42.062	3/26/15 0:00	42.274	42.248
3/22/15 4:00	42.105	42.042	3/26/15 2:00	42.252	42.224
3/22/15 6:00	42.097	42.050	3/26/15 4:00	42.258	42.214
3/22/15 8:00	42.097	42.045	3/26/15 6:00	42.236	42.209
3/22/15 10:00	42.109	42.055	3/26/15 8:00	42.242	42.204
3/22/15 12:00	42.105	42.040	3/26/15 10:00	42.238	42.180
3/22/15 14:00	42.075	42.025	3/26/15 12:00	42.200	42.135
3/22/15 16:00	42.079	42.013	3/26/15 14:00	42.138	42.074
3/22/15 18:00	42.075	42.055	3/26/15 16:00	42.089	42.030
3/22/15 20:00	42.137	42.111	3/26/15 18:00	42.094	42.062
3/22/15 22:00	42.194	42.160	3/26/15 20:00	42.128	42.123
3/23/15 0:00	42.206	42.177	3/26/15 22:00	42.224	42.184
3/23/15 2:00	42.214	42.182	3/27/15 0:00	42.222	42.194
3/23/15 4:00	42.216	42.165	3/27/15 2:00	42.238	42.209
3/23/15 6:00	42.208	42.170	3/27/15 4:00	42.248	42.204
3/23/15 8:00	42.202	42.162	3/27/15 6:00	42.242	42.206
3/23/15 10:00	42.218	42.153	3/27/15 8:00	42.236	42.221
3/23/15 12:00	42.200	42.143	3/27/15 10:00	42.246	42.192
3/23/15 14:00	42.154	42.089	3/27/15 12:00	42.210	42.162
3/23/15 16:00	42.115	42.052	3/27/15 14:00	42.166	42.145
3/23/15 18:00	42.091	42.042	3/27/15 16:00	42.279	42.067
3/23/15 20:00	42.093	42.045	3/27/15 18:00	42.109	42.028
3/23/15 22:00	42.109	42.052	3/27/15 20:00	42.070	42.025
3/24/15 0:00	42.093	42.038	3/27/15 22:00	42.104	42.040
3/24/15 2:00	42.081	42.040	3/28/15 0:00	42.100	42.043
3/24/15 4:00	42.041	42.018	3/28/15 2:00	42.086	42.035

TABLE S12.1 Automatically measured groundwater levels at GW2 and GW5.

<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>	<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>
3/28/15 4:00	42.092	42.050	4/1/15 2:00	42.080	42.033
3/28/15 6:00	42.104	42.067	4/1/15 4:00	42.086	42.025
3/28/15 8:00	42.132	42.094	4/1/15 6:00	42.076	42.018
3/28/15 10:00	42.160	42.101	4/1/15 8:00	42.066	42.023
3/28/15 12:00	42.146	42.096	4/1/15 10:00	42.072	42.006
3/28/15 14:00	42.120	42.067	4/1/15 12:00	42.052	41.979
3/28/15 16:00	42.114	42.040	4/1/15 14:00	42.021	41.957
3/28/15 18:00	42.086	42.028	4/1/15 16:00	41.995	41.937
3/28/15 20:00	42.066	42.023	4/1/15 18:00	41.997	41.913
3/28/15 22:00	42.078	42.011	4/1/15 20:00	41.981	41.954
3/29/15 0:00	42.064	42.008	4/1/15 22:00	42.074	42.072
3/29/15 2:00	42.050	42.028	4/2/15 0:00	42.152	42.126
3/29/15 4:00	42.068	42.030	4/2/15 2:00	42.190	42.150
3/29/15 6:00	42.122	42.091	4/2/15 4:00	42.184	42.155
3/29/15 8:00	42.170	42.167	4/2/15 6:00	42.214	42.170
3/29/15 10:00	42.220	42.197	4/2/15 8:00	42.220	42.204
3/29/15 12:00	42.242	42.214	4/2/15 10:00	42.232	42.194
3/29/15 14:00	42.226	42.194	4/2/15 12:00	42.232	42.180
3/29/15 16:00	42.228	42.175	4/2/15 14:00	42.188	42.145
3/29/15 18:00	42.214	42.175	4/2/15 16:00	42.170	42.128
3/29/15 20:00	42.220	42.187	4/2/15 18:00	42.186	42.143
3/29/15 22:00	42.246	42.202	4/2/15 20:00	42.192	42.150
3/30/15 0:00	42.226	42.197	4/2/15 22:00	42.210	42.258
3/30/15 2:00	42.226	42.180	4/3/15 0:00	42.268	42.258
3/30/15 4:00	42.212	42.150	4/3/15 2:00	42.246	42.287
3/30/15 6:00	42.184	42.153	4/3/15 4:00	42.264	42.292
3/30/15 8:00	42.186	42.160	4/3/15 6:00	42.306	42.297
3/30/15 10:00	42.184	42.118	4/3/15 8:00	42.286	42.324
3/30/15 12:00	42.146	42.096	4/3/15 10:00	42.350	42.341
3/30/15 14:00	42.102	42.038	4/3/15 12:00	42.370	42.319
3/30/15 16:00	42.084	42.023	4/3/15 14:00	42.314	42.292
3/30/15 18:00	42.078	42.043	4/3/15 16:00	42.284	42.250
3/30/15 20:00	42.104	42.074	4/3/15 18:00	42.286	42.238
3/30/15 22:00	42.142	42.091	4/3/15 20:00	42.258	42.238
3/31/15 0:00	42.144	42.099	4/3/15 22:00	42.270	42.238
3/31/15 2:00	42.144	42.104	4/4/15 0:00	42.284	42.248
3/31/15 4:00	42.156	42.101	4/4/15 2:00	42.254	42.250
3/31/15 6:00	42.148	42.118	4/4/15 4:00	42.244	42.211
3/31/15 8:00	42.166	42.133	4/4/15 6:00	42.250	42.194
3/31/15 10:00	42.192	42.138	4/4/15 8:00	42.224	42.194
3/31/15 12:00	42.170	42.116	4/4/15 10:00	42.220	42.184
3/31/15 14:00	42.134	42.077	4/4/15 12:00	42.224	42.140
3/31/15 16:00	42.110	42.047	4/4/15 14:00	42.154	42.091
3/31/15 18:00	42.084	42.030	4/4/15 16:00	42.102	42.047
3/31/15 20:00	42.072	42.035	4/4/15 18:00	42.100	42.025
3/31/15 22:00	42.102	42.038	4/4/15 20:00	42.074	42.033
4/1/15 0:00	42.090	42.035	4/4/15 22:00	42.086	42.047

TABLE S12.1 Automatically measured groundwater levels at GW2 and GW5.

<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>	<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>
4/5/15 0:00	42.114	42.043	4/8/15 22:00	42.072	42.030
4/5/15 2:00	42.084	42.028	4/9/15 0:00	42.112	42.052
4/5/15 4:00	42.048	41.994	4/9/15 2:00	42.078	42.065
4/5/15 6:00	42.052	41.994	4/9/15 4:00	42.052	42.082
4/5/15 8:00	42.056	42.006	4/9/15 6:00	42.032	42.121
4/5/15 10:00	42.050	42.003	4/9/15 8:00	41.974	42.128
4/5/15 12:00	42.070	41.986	4/9/15 10:00	42.014	42.199
4/5/15 14:00	42.028	41.969	4/9/15 12:00	42.270	42.250
4/5/15 16:00	42.003	41.947	4/9/15 14:00	42.282	42.290
4/5/15 18:00	42.013	41.950	4/9/15 16:00	42.312	42.299
4/5/15 20:00	42.015	41.972	4/9/15 18:00	42.336	42.307
4/5/15 22:00	42.056	42.018	4/9/15 20:00	42.332	42.326
4/6/15 0:00	42.094	42.028	4/9/15 22:00	42.342	42.321
4/6/15 2:00	42.070	42.025	4/10/15 0:00	42.340	42.290
4/6/15 4:00	42.056	42.011	4/10/15 2:00	42.306	42.280
4/6/15 6:00	42.062	42.006	4/10/15 4:00	42.294	42.265
4/6/15 8:00	42.068	42.023	4/10/15 6:00	42.290	42.248
4/6/15 10:00	42.070	42.030	4/10/15 8:00	42.288	42.280
4/6/15 12:00	42.096	42.043	4/10/15 10:00	42.302	42.285
4/6/15 14:00	42.088	42.055	4/10/15 12:00	42.312	42.250
4/6/15 16:00	42.098	42.072	4/10/15 14:00	42.256	42.216
4/6/15 18:00	42.120	42.062	4/10/15 16:00	42.220	42.180
4/6/15 20:00	42.112	42.087	4/10/15 18:00	42.194	42.165
4/6/15 22:00	42.144	42.106	4/10/15 20:00	42.202	42.175
4/7/15 0:00	42.150	42.091	4/10/15 22:00	42.224	42.197
4/7/15 2:00	42.118	42.069	4/11/15 0:00	42.244	42.194
4/7/15 4:00	42.114	42.082	4/11/15 2:00	42.218	42.187
4/7/15 6:00	42.152	42.121	4/11/15 4:00	42.206	42.170
4/7/15 8:00	42.180	42.175	4/11/15 6:00	42.224	42.172
4/7/15 10:00	42.212	42.194	4/11/15 8:00	42.210	42.182
4/7/15 12:00	42.230	42.192	4/11/15 10:00	42.198	42.153
4/7/15 14:00	42.216	42.189	4/11/15 12:00	42.194	42.128
4/7/15 16:00	42.206	42.172	4/11/15 14:00	42.150	42.099
4/7/15 18:00	42.216	42.182	4/11/15 16:00	42.118	42.067
4/7/15 20:00	42.216	42.199	4/11/15 18:00	42.126	42.067
4/7/15 22:00	42.234	42.182	4/11/15 20:00	42.116	42.074
4/8/15 0:00	42.216	42.162	4/11/15 22:00	42.132	42.091
4/8/15 2:00	42.182	42.162	4/12/15 0:00	42.130	42.087
4/8/15 4:00	42.194	42.150	4/12/15 2:00	42.124	42.074
4/8/15 6:00	42.194	42.153	4/12/15 4:00	42.102	42.060
4/8/15 8:00	42.186	42.158	4/12/15 6:00	42.110	42.055
4/8/15 10:00	42.176	42.150	4/12/15 8:00	42.120	42.077
4/8/15 12:00	42.180	42.111	4/12/15 10:00	42.112	42.067
4/8/15 14:00	42.130	42.087	4/12/15 12:00	42.122	42.052
4/8/15 16:00	42.096	42.057	4/12/15 14:00	42.100	42.052
4/8/15 18:00	42.100	42.033	4/12/15 16:00	42.092	42.052
4/8/15 20:00	42.088	42.040	4/12/15 18:00	42.110	42.079



TABLE S12.1 Automatically measured groundwater levels at GW2 and GW5.

<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>	<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>
4/12/15 20:00	42.184	42.172	4/16/15 18:00	42.230	42.209
4/12/15 22:00	42.228	42.236	4/16/15 20:00	42.170	42.209
4/13/15 0:00	42.300	42.277	4/16/15 22:00	42.208	42.221
4/13/15 2:00	42.312	42.297	4/17/15 0:00	42.240	42.216
4/13/15 4:00	42.318	42.297	4/17/15 2:00	42.241	42.219
4/13/15 6:00	42.340	42.314	4/17/15 4:00	42.253	42.226
4/13/15 8:00	42.353	42.358	4/17/15 6:00	42.253	42.204
4/13/15 10:00	42.359	42.346	4/17/15 8:00	42.222	42.189
4/13/15 12:00	42.371	42.316	4/17/15 10:00	42.247	42.216
4/13/15 14:00	42.318	42.285	4/17/15 12:00	42.271	42.216
4/13/15 16:00	42.292	42.255	4/17/15 14:00	42.218	42.187
4/13/15 18:00	42.294	42.241	4/17/15 16:00	42.196	42.155
4/13/15 20:00	42.276	42.253	4/17/15 18:00	42.206	42.148
4/13/15 22:00	42.286	42.268	4/17/15 20:00	42.194	42.160
4/14/15 0:00	42.306	42.260	4/17/15 22:00	42.206	42.170
4/14/15 2:00	42.286	42.253	4/18/15 0:00	42.216	42.167
4/14/15 4:00	42.262	42.236	4/18/15 2:00	42.162	42.148
4/14/15 6:00	42.274	42.226	4/18/15 4:00	42.076	42.150
4/14/15 8:00	42.270	42.246	4/18/15 6:00	42.038	42.158
4/14/15 10:00	42.260	42.224	4/18/15 8:00	41.990	42.160
4/14/15 12:00	42.258	42.192	4/18/15 10:00	42.204	42.150
4/14/15 14:00	42.204	42.155	4/18/15 12:00	42.204	42.133
4/14/15 16:00	42.166	42.118	4/18/15 14:00	42.164	42.113
4/14/15 18:00	42.168	42.109	4/18/15 16:00	42.118	42.072
4/14/15 20:00	42.154	42.113	4/18/15 18:00	42.144	42.116
4/14/15 22:00	42.162	42.126	4/18/15 20:00	41.970	42.133
4/15/15 0:00	42.182	42.123	4/18/15 22:00	41.840	42.138
4/15/15 2:00	42.170	42.118	4/19/15 0:00	41.765	42.135
4/15/15 4:00	42.148	42.104	4/19/15 2:00	41.711	42.133
4/15/15 6:00	42.156	42.099	4/19/15 4:00	41.663	42.136
4/15/15 8:00	42.156	42.114	4/19/15 6:00	41.791	42.153
4/15/15 10:00	42.142	42.104	4/19/15 8:00	41.749	42.184
4/15/15 12:00	42.156	42.089	4/19/15 10:00	41.719	42.221
4/15/15 14:00	42.128	42.079	4/19/15 12:00	41.805	42.253
4/15/15 16:00	42.112	42.074	4/19/15 14:00	41.928	42.231
4/15/15 18:00	42.130	42.077	4/19/15 16:00	42.190	42.194
4/15/15 20:00	42.132	42.104	4/19/15 18:00	42.226	42.187
4/15/15 22:00	42.168	42.133	4/19/15 20:00	42.233	42.206
4/16/15 0:00	42.190	42.150	4/19/15 22:00	42.239	42.221
4/16/15 2:00	42.190	42.160	4/20/15 0:00	42.267	42.231
4/16/15 4:00	42.200	42.165	4/20/15 2:00	42.261	42.233
4/16/15 6:00	42.218	42.172	4/20/15 4:00	42.249	42.236
4/16/15 8:00	42.218	42.187	4/20/15 6:00	42.275	42.233
4/16/15 10:00	42.230	42.209	4/20/15 8:00	42.267	42.253
4/16/15 12:00	42.257	42.202	4/20/15 10:00	42.269	42.255
4/16/15 14:00	42.210	42.180	4/20/15 12:00	42.273	42.226
4/16/15 16:00	42.194	42.155	4/20/15 14:00	42.235	42.199

TABLE S12.1 Automatically measured groundwater levels at GW2 and GW5.

<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>	<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>
4/20/15 16:00	42.204	42.177	4/24/15 14:00	42.112	42.055
4/20/15 18:00	42.218	42.170	4/24/15 16:00	42.084	42.023
4/20/15 20:00	42.204	42.175	4/24/15 18:00	42.112	42.035
4/20/15 22:00	42.224	42.197	4/24/15 20:00	42.084	42.035
4/21/15 0:00	42.241	42.202	4/24/15 22:00	42.112	42.065
4/21/15 2:00	42.235	42.202	4/25/15 0:00	42.125	42.067
4/21/15 4:00	42.222	42.199	4/25/15 2:00	42.070	42.094
4/21/15 6:00	42.237	42.192	4/25/15 4:00	42.030	42.082
4/21/15 8:00	42.245	42.214	4/25/15 6:00	41.982	42.111
4/21/15 10:00	42.231	42.209	4/25/15 8:00	41.908	42.153
4/21/15 12:00	42.243	42.184	4/25/15 10:00	42.048	42.194
4/21/15 14:00	42.206	42.162	4/25/15 12:00	42.235	42.209
4/21/15 16:00	42.178	42.148	4/25/15 14:00	42.241	42.226
4/21/15 18:00	42.188	42.138	4/25/15 16:00	42.247	42.221
4/21/15 20:00	42.190	42.204	4/25/15 18:00	42.277	42.241
4/21/15 22:00	42.271	42.273	4/25/15 20:00	42.277	42.260
4/22/15 0:00	42.323	42.290	4/25/15 22:00	42.291	42.292
4/22/15 2:00	42.317	42.292	4/26/15 0:00	42.329	42.292
4/22/15 4:00	42.301	42.290	4/26/15 2:00	42.307	42.285
4/22/15 6:00	42.325	42.282	4/26/15 4:00	42.295	42.282
4/22/15 8:00	42.325	42.309	4/26/15 6:00	42.333	42.302
4/22/15 10:00	42.329	42.326	4/26/15 8:00	42.331	42.317
4/22/15 12:00	42.339	42.287	4/26/15 10:00	42.317	42.314
4/22/15 14:00	42.289	42.248	4/26/15 12:00	42.353	42.309
4/22/15 16:00	42.253	42.214	4/26/15 14:00	42.321	42.297
4/22/15 18:00	42.247	42.194	4/26/15 16:00	42.303	42.285
4/22/15 20:00	42.239	42.206	4/26/15 18:00	42.313	42.270
4/22/15 22:00	42.253	42.233	4/26/15 20:00	42.315	42.317
4/23/15 0:00	42.273	42.231	4/26/15 22:00	42.337	42.331
4/23/15 2:00	42.255	42.219	4/27/15 0:00	42.361	42.336
4/23/15 4:00	42.239	42.216	4/27/15 2:00	42.345	42.324
4/23/15 6:00	42.267	42.231	4/27/15 4:00	42.337	42.331
4/23/15 8:00	42.265	42.228	4/27/15 6:00	42.367	42.331
4/23/15 10:00	42.253	42.216	4/27/15 8:00	42.361	42.370
4/23/15 12:00	42.257	42.189	4/27/15 10:00	42.371	42.363
4/23/15 14:00	42.212	42.158	4/27/15 12:00	42.379	42.331
4/23/15 16:00	42.180	42.121	4/27/15 14:00	42.333	42.299
4/23/15 18:00	42.178	42.118	4/27/15 16:00	42.309	42.290
4/23/15 20:00	42.172	42.131	4/27/15 18:00	42.313	42.280
4/23/15 22:00	42.177	42.160	4/27/15 20:00	42.311	42.299
4/24/15 0:00	42.208	42.138	4/27/15 22:00	42.317	42.312
4/24/15 2:00	42.172	42.143	4/28/15 0:00	42.349	42.314
4/24/15 4:00	42.096	42.099	4/28/15 2:00	42.337	42.314
4/24/15 6:00	42.102	42.096	4/28/15 4:00	42.321	42.314
4/24/15 8:00	42.152	42.109	4/28/15 6:00	42.349	42.317
4/24/15 10:00	42.214	42.099	4/28/15 8:00	42.349	42.351
4/24/15 12:00	42.152	42.072	4/28/15 10:00	42.345	42.348

TABLE S12.1 Automatically measured groundwater levels at GW2 and GW5.

<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>	<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>
4/28/15 12:00	42.345	42.304	5/2/15 10:00	42.229	42.192
4/28/15 14:00	42.297	42.265	5/2/15 12:00	42.239	42.172
4/28/15 16:00	42.265	42.253	5/2/15 14:00	42.201	42.153
4/28/15 18:00	42.273	42.231	5/2/15 16:00	42.173	42.128
4/28/15 20:00	42.255	42.233	5/2/15 18:00	42.183	42.123
4/28/15 22:00	42.263	42.248	5/2/15 20:00	42.169	42.136
4/29/15 0:00	42.287	42.241	5/2/15 22:00	42.185	42.160
4/29/15 2:00	42.267	42.233	5/3/15 0:00	42.219	42.160
4/29/15 4:00	42.251	42.226	5/3/15 2:00	42.207	42.165
4/29/15 6:00	42.269	42.231	5/3/15 4:00	42.195	42.170
4/29/15 8:00	42.265	42.248	5/3/15 6:00	42.227	42.194
4/29/15 10:00	42.263	42.241	5/3/15 8:00	42.243	42.219
4/29/15 12:00	42.265	42.204	5/3/15 10:00	42.245	42.216
4/29/15 14:00	42.221	42.187	5/3/15 12:00	42.265	42.211
4/29/15 16:00	42.203	42.180	5/3/15 14:00	42.235	42.177
4/29/15 18:00	42.213	42.167	5/3/15 16:00	42.231	42.189
4/29/15 20:00	42.203	42.167	5/3/15 18:00	42.249	42.192
4/29/15 22:00	42.205	42.187	5/3/15 20:00	42.231	42.211
4/30/15 0:00	42.239	42.206	5/3/15 22:00	42.285	42.260
4/30/15 2:00	42.237	42.194	5/4/15 0:00	42.347	42.295
4/30/15 4:00	42.223	42.199	5/4/15 2:00	42.327	42.341
4/30/15 6:00	42.249	42.209	5/4/15 4:00	42.331	42.324
4/30/15 8:00	42.255	42.238	5/4/15 6:00	42.357	42.329
4/30/15 10:00	42.251	42.226	5/4/15 8:00	42.361	42.361
4/30/15 12:00	42.267	42.214	5/4/15 10:00	42.359	42.363
4/30/15 14:00	42.247	42.199	5/4/15 12:00	42.395	42.348
4/30/15 16:00	42.215	42.187	5/4/15 14:00	42.355	42.346
4/30/15 18:00	42.217	42.192	5/4/15 16:00	42.337	42.309
4/30/15 20:00	42.227	42.209	5/4/15 18:00	42.341	42.295
4/30/15 22:00	42.253	42.243	5/4/15 20:00	42.325	42.331
5/1/15 0:00	42.297	42.255	5/4/15 22:00	42.357	42.336
5/1/15 2:00	42.293	42.270	5/5/15 0:00	42.329	42.307
5/1/15 4:00	42.279	42.265	5/5/15 2:00	42.309	42.297
5/1/15 6:00	42.319	42.270	5/5/15 4:00	42.291	42.277
5/1/15 8:00	42.305	42.292	5/5/15 6:00	42.305	42.270
5/1/15 10:00	42.309	42.282	5/5/15 8:00	42.289	42.285
5/1/15 12:00	42.337	42.285	5/5/15 10:00	42.305	42.270
5/1/15 14:00	42.289	42.258	5/5/15 12:00	42.293	42.255
5/1/15 16:00	42.261	42.226	5/5/15 14:00	42.263	42.228
5/1/15 18:00	42.265	42.209	5/5/15 16:00	42.249	42.214
5/1/15 20:00	42.249	42.219	5/5/15 18:00	42.265	42.209
5/1/15 22:00	42.261	42.236	5/5/15 20:00	42.219	42.216
5/2/15 0:00	42.279	42.238	5/5/15 22:00	42.227	42.216
5/2/15 2:00	42.251	42.226	5/6/15 0:00	42.257	42.204
5/2/15 4:00	42.239	42.209	5/6/15 2:00	42.205	42.177
5/2/15 6:00	42.255	42.197	5/6/15 4:00	42.185	42.153
5/2/15 8:00	42.249	42.211	5/6/15 6:00	42.203	42.158

TABLE S12.1 Automatically measured groundwater levels at GW2 and GW5.

<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>	<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>
5/6/15 8:00	42.181	42.172	5/10/15 6:00	42.241	42.197
5/6/15 10:00	42.193	42.177	5/10/15 8:00	42.287	42.253
5/6/15 12:00	42.239	42.165	5/10/15 10:00	42.257	42.238
5/6/15 14:00	42.201	42.128	5/10/15 12:00	42.307	42.263
5/6/15 16:00	42.071	42.121	5/10/15 14:00	42.289	42.270
5/6/15 18:00	42.205	42.126	5/10/15 16:00	42.303	42.292
5/6/15 20:00	42.153	42.138	5/10/15 18:00	42.344	42.304
5/6/15 22:00	42.187	42.165	5/10/15 20:00	42.338	42.331
5/7/15 0:00	42.231	42.199	5/10/15 22:00	42.368	42.368
5/7/15 2:00	42.189	42.216	5/11/15 0:00	42.406	42.361
5/7/15 4:00	42.189	42.241	5/11/15 2:00	42.366	42.358
5/7/15 6:00	42.263	42.255	5/11/15 4:00	42.358	42.348
5/7/15 8:00	42.259	42.321	5/11/15 6:00	42.384	42.341
5/7/15 10:00	42.317	42.331	5/11/15 8:00	42.374	42.380
5/7/15 12:00	42.359	42.312	5/11/15 10:00	42.388	42.375
5/7/15 14:00	42.315	42.312	5/11/15 12:00	42.408	42.356
5/7/15 16:00	42.313	42.290	5/11/15 14:00	42.368	42.361
5/7/15 18:00	42.341	42.307	5/11/15 16:00	42.364	42.353
5/7/15 20:00	42.333	42.326	5/11/15 18:00	42.402	42.380
5/7/15 22:00	42.373	42.358	5/11/15 20:00	42.396	42.397
5/8/15 0:00	42.401	42.370	5/11/15 22:00	42.414	42.412
5/8/15 2:00	42.379	42.363	5/12/15 0:00	42.440	42.412
5/8/15 4:00	42.377	42.365	5/12/15 2:00	42.408	42.405
5/8/15 6:00	42.401	42.378	5/12/15 4:00	42.412	42.392
5/8/15 8:00	42.399	42.395	5/12/15 6:00	42.420	42.395
5/8/15 10:00	42.379	42.343	5/12/15 8:00	42.406	42.395
5/8/15 12:00	42.389	42.326	5/12/15 10:00	42.404	42.390
5/8/15 14:00	42.329	42.302	5/12/15 12:00	42.412	42.348
5/8/15 16:00	42.315	42.292	5/12/15 14:00	42.348	42.309
5/8/15 18:00	42.309	42.285	5/12/15 16:00	42.309	42.268
5/8/15 20:00	42.321	42.297	5/12/15 18:00	42.309	42.246
5/8/15 22:00	42.319	42.287	5/12/15 20:00	42.275	42.253
5/9/15 0:00	42.349	42.299	5/12/15 22:00	42.307	42.287
5/9/15 2:00	42.333	42.321	5/13/15 0:00	42.348	42.295
5/9/15 4:00	42.317	42.297	5/13/15 2:00	42.315	42.290
5/9/15 6:00	42.332	42.265	5/13/15 4:00	42.315	42.282
5/9/15 8:00	42.289	42.270	5/13/15 6:00	42.321	42.285
5/9/15 10:00	42.313	42.285	5/13/15 8:00	42.317	42.287
5/9/15 12:00	42.313	42.253	5/13/15 10:00	42.313	42.280
5/9/15 14:00	42.233	42.214	5/13/15 12:00	42.330	42.265
5/9/15 16:00	42.221	42.177	5/13/15 14:00	42.297	42.251
5/9/15 18:00	42.229	42.180	5/13/15 16:00	42.277	42.251
5/9/15 20:00	42.215	42.182	5/13/15 18:00	42.285	42.228
5/9/15 22:00	42.217	42.170	5/13/15 20:00	42.239	42.221
5/10/15 0:00	42.243	42.199	5/13/15 22:00	42.241	42.226
5/10/15 2:00	42.217	42.182	5/14/15 0:00	42.253	42.214
5/10/15 4:00	42.195	42.165	5/14/15 2:00	42.205	42.197

TABLE S12.1 Automatically measured groundwater levels at GW2 and GW5.

<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>	<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>
5/14/15 4:00	42.191	42.189	5/18/15 2:00	42.470	42.471
5/14/15 6:00	42.215	42.197	5/18/15 4:00	42.484	42.485
5/14/15 8:00	42.213	42.221	5/18/15 6:00	42.520	42.505
5/14/15 10:00	42.241	42.236	5/18/15 8:00	42.504	42.510
5/14/15 12:00	42.289	42.246	5/18/15 10:00	42.502	42.498
5/14/15 14:00	42.267	42.228	5/18/15 12:00	42.516	42.463
5/14/15 16:00	42.253	42.214	5/18/15 14:00	42.462	42.439
5/14/15 18:00	42.271	42.214	5/18/15 16:00	42.430	42.407
5/14/15 20:00	42.255	42.224	5/18/15 18:00	42.436	42.387
5/14/15 22:00	42.267	42.246	5/18/15 20:00	42.408	42.397
5/15/15 0:00	42.303	42.255	5/18/15 22:00	42.416	42.409
5/15/15 2:00	42.281	42.221	5/19/15 0:00	42.450	42.400
5/15/15 4:00	42.149	42.238	5/19/15 2:00	42.408	42.385
5/15/15 6:00	42.113	42.258	5/19/15 4:00	42.392	42.373
5/15/15 8:00	42.109	42.270	5/19/15 6:00	42.418	42.387
5/15/15 10:00	42.221	42.236	5/19/15 8:00	42.412	42.370
5/15/15 12:00	42.275	42.226	5/19/15 10:00	42.384	42.361
5/15/15 14:00	42.239	42.194	5/19/15 12:00	42.404	42.351
5/15/15 16:00	42.211	42.172	5/19/15 14:00	42.308	42.326
5/15/15 18:00	42.231	42.167	5/19/15 16:00	42.268	42.241
5/15/15 20:00	42.215	42.177	5/19/15 18:00	42.254	42.236
5/15/15 22:00	42.227	42.219	5/19/15 20:00	42.228	42.292
5/16/15 0:00	42.253	42.197	5/19/15 22:00	42.242	42.324
5/16/15 2:00	42.235	42.192	5/20/15 0:00	42.266	42.304
5/16/15 4:00	42.153	42.180	5/20/15 2:00	42.215	42.287
5/16/15 6:00	42.103	42.211	5/20/15 4:00	42.222	42.285
5/16/15 8:00	42.027	42.216	5/20/15 6:00	42.262	42.297
5/16/15 10:00	42.151	42.206	5/20/15 8:00	42.250	42.331
5/16/15 12:00	42.235	42.224	5/20/15 10:00	42.292	42.339
5/16/15 14:00	42.201	42.228	5/20/15 12:00	42.340	42.339
5/16/15 16:00	42.203	42.204	5/20/15 14:00	42.326	42.339
5/16/15 18:00	42.237	42.192	5/20/15 16:00	42.352	42.326
5/16/15 20:00	42.260	42.246	5/20/15 18:00	42.380	42.321
5/16/15 22:00	42.203	42.170	5/20/15 20:00	42.358	42.336
5/17/15 0:00	42.099	42.199	5/20/15 22:00	42.374	42.361
5/17/15 2:00	42.005	42.209	5/21/15 0:00	42.410	42.368
5/17/15 4:00	42.009	42.199	5/21/15 2:00	42.382	42.351
5/17/15 6:00	42.035	42.226	5/21/15 4:00	42.374	42.348
5/17/15 8:00	41.979	42.265	5/21/15 6:00	42.392	42.343
5/17/15 10:00	42.259	42.290	5/21/15 8:00	42.378	42.346
5/17/15 12:00	42.350	42.314	5/21/15 10:00	42.370	42.341
5/17/15 14:00	42.350	42.341	5/21/15 12:00	42.388	42.324
5/17/15 16:00	42.364	42.348	5/21/15 14:00	42.348	42.309
5/17/15 18:00	42.404	42.375	5/21/15 16:00	42.328	42.282
5/17/15 20:00	42.398	42.409	5/21/15 18:00	42.330	42.258
5/17/15 22:00	42.430	42.432	5/21/15 20:00	42.304	42.277
5/18/15 0:00	42.468	42.454	5/21/15 22:00	42.322	42.297

TABLE S12.1 Automatically measured groundwater levels at GW2 and GW5.

<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>	<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>
5/22/15 0:00	42.356	42.295	5/25/15 22:00	42.288	42.260
5/22/15 2:00	42.330	42.285	5/26/15 0:00	42.334	42.260
5/22/15 4:00	42.316	42.275	5/26/15 2:00	42.312	42.263
5/22/15 6:00	42.330	42.282	5/26/15 4:00	42.302	42.263
5/22/15 8:00	42.336	42.295	5/26/15 6:00	42.346	42.287
5/22/15 10:00	42.266	42.297	5/26/15 8:00	42.350	42.324
5/22/15 12:00	42.308	42.285	5/26/15 10:00	42.372	42.334
5/22/15 14:00	42.234	42.275	5/26/15 12:00	42.404	42.336
5/22/15 16:00	42.240	42.258	5/26/15 14:00	42.374	42.334
5/22/15 18:00	42.260	42.253	5/26/15 16:00	42.372	42.334
5/22/15 20:00	42.215	42.258	5/26/15 18:00	42.396	42.326
5/22/15 22:00	42.228	42.273	5/26/15 20:00	42.384	42.339
5/23/15 0:00	42.274	42.275	5/26/15 22:00	42.390	42.363
5/23/15 2:00	42.232	42.280	5/27/15 0:00	42.424	42.368
5/23/15 4:00	42.238	42.255	5/27/15 2:00	42.402	42.383
5/23/15 6:00	42.272	42.280	5/27/15 4:00	42.396	42.380
5/23/15 8:00	42.244	42.270	5/27/15 6:00	42.438	42.378
5/23/15 10:00	42.248	42.277	5/27/15 8:00	42.410	42.380
5/23/15 12:00	42.290	42.282	5/27/15 10:00	42.418	42.375
5/23/15 14:00	42.165	42.241	5/27/15 12:00	42.438	42.375
5/23/15 16:00	42.148	42.206	5/27/15 14:00	42.402	42.353
5/23/15 18:00	42.207	42.202	5/27/15 16:00	42.370	42.312
5/23/15 20:00	42.194	42.207	5/27/15 18:00	42.390	42.304
5/23/15 22:00	42.222	42.219	5/27/15 20:00	42.356	42.314
5/24/15 0:00	42.278	42.219	5/27/15 22:00	42.378	42.341
5/24/15 2:00	42.240	42.202	5/28/15 0:00	42.398	42.307
5/24/15 4:00	42.222	42.194	5/28/15 2:00	42.346	42.292
5/24/15 6:00	42.268	42.209	5/28/15 4:00	42.350	42.317
5/24/15 8:00	42.248	42.204	5/28/15 6:00	42.386	42.314
5/24/15 10:00	42.238	42.204	5/28/15 8:00	42.368	42.326
5/24/15 12:00	42.272	42.209	5/28/15 10:00	42.354	42.312
5/24/15 14:00	42.254	42.199	5/28/15 12:00	42.358	42.304
5/24/15 16:00	42.236	42.182	5/28/15 14:00	42.316	42.285
5/24/15 18:00	42.256	42.177	5/28/15 16:00	42.296	42.246
5/24/15 20:00	42.234	42.184	5/28/15 18:00	42.308	42.233
5/24/15 22:00	42.252	42.216	5/28/15 20:00	42.314	42.268
5/25/15 0:00	42.298	42.231	5/28/15 22:00	42.266	42.304
5/25/15 2:00	42.128	42.197	5/29/15 0:00	42.292	42.280
5/25/15 4:00	42.081	42.189	5/29/15 2:00	42.244	42.277
5/25/15 6:00	42.065	42.224	5/29/15 4:00	42.278	42.304
5/25/15 8:00	42.061	42.248	5/29/15 6:00	42.308	42.317
5/25/15 10:00	42.202	42.228	5/29/15 8:00	42.310	42.324
5/25/15 12:00	42.262	42.246	5/29/15 10:00	42.336	42.319
5/25/15 14:00	42.272	42.236	5/29/15 12:00	42.398	42.319
5/25/15 16:00	42.264	42.204	5/29/15 14:00	42.368	42.319
5/25/15 18:00	42.290	42.209	5/29/15 16:00	42.348	42.292
5/25/15 20:00	42.282	42.231	5/29/15 18:00	42.370	42.373

TABLE S12.1 Automatically measured groundwater levels at GW2 and GW5.

<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>	<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>
5/29/15 20:00	42.011	42.407	6/2/15 18:00	42.290	42.158
5/29/15 22:00	41.781	42.434	6/2/15 20:00	42.266	42.165
5/30/15 0:00	42.008	42.427	6/2/15 22:00	42.270	42.175
5/30/15 2:00	42.264	42.412	6/3/15 0:00	42.320	42.214
5/30/15 4:00	42.302	42.397	6/3/15 2:00	42.292	42.189
5/30/15 6:00	42.348	42.414	6/3/15 4:00	42.300	42.214
5/30/15 8:00	42.362	42.405	6/3/15 6:00	42.388	42.297
5/30/15 10:00	42.378	42.380	6/3/15 8:00	42.364	42.265
5/30/15 12:00	42.440	42.361	6/3/15 10:00	42.334	42.253
5/30/15 14:00	42.418	42.329	6/3/15 12:00	42.364	42.260
5/30/15 16:00	42.388	42.307	6/3/15 14:00	42.368	42.282
5/30/15 18:00	42.396	42.277	6/3/15 16:00	42.340	42.270
5/30/15 20:00	42.378	42.280	6/3/15 18:00	42.370	42.243
5/30/15 22:00	42.374	42.297	6/3/15 20:00	42.340	42.255
5/31/15 0:00	42.400	42.295	6/3/15 22:00	42.350	42.280
5/31/15 2:00	42.392	42.302	6/4/15 0:00	42.378	42.270
5/31/15 4:00	42.372	42.277	6/4/15 2:00	42.340	42.253
5/31/15 6:00	42.388	42.270	6/4/15 4:00	42.334	42.270
5/31/15 8:00	42.374	42.275	6/4/15 6:00	42.396	42.270
5/31/15 10:00	42.356	42.265	6/4/15 8:00	42.386	42.285
5/31/15 12:00	42.370	42.246	6/4/15 10:00	42.376	42.295
5/31/15 14:00	42.346	42.231	6/4/15 12:00	42.414	42.314
5/31/15 16:00	42.302	42.202	6/4/15 14:00	42.392	42.314
5/31/15 18:00	42.326	42.202	6/4/15 16:00	42.370	42.304
5/31/15 20:00	42.334	42.231	6/4/15 18:00	42.380	42.265
5/31/15 22:00	42.336	42.253	6/4/15 20:00	42.360	42.280
6/1/15 0:00	42.374	42.255	6/4/15 22:00	42.374	42.317
6/1/15 2:00	42.358	42.255	6/5/15 0:00	42.451	42.383
6/1/15 4:00	42.338	42.255	6/5/15 2:00	42.358	42.378
6/1/15 6:00	42.376	42.263	6/5/15 4:00	42.412	42.405
6/1/15 8:00	42.370	42.265	6/5/15 6:00	42.443	42.358
6/1/15 10:00	42.348	42.258	6/5/15 8:00	42.334	42.402
6/1/15 12:00	42.370	42.248	6/5/15 10:00	42.414	42.368
6/1/15 14:00	42.348	42.246	6/5/15 12:00	42.457	42.348
6/1/15 16:00	42.326	42.224	6/5/15 14:00	42.425	42.341
6/1/15 18:00	42.346	42.219	6/5/15 16:00	42.398	42.314
6/1/15 20:00	42.330	42.229	6/5/15 18:00	42.420	42.290
6/1/15 22:00	42.328	42.248	6/5/15 20:00	42.388	42.307
6/2/15 0:00	42.368	42.236	6/5/15 22:00	42.388	42.326
6/2/15 2:00	42.340	42.233	6/6/15 0:00	42.416	42.307
6/2/15 4:00	42.324	42.243	6/6/15 2:00	42.372	42.285
6/2/15 6:00	42.292	42.214	6/6/15 4:00	42.346	42.270
6/2/15 8:00	42.230	42.202	6/6/15 6:00	42.378	42.282
6/2/15 10:00	42.288	42.192	6/6/15 8:00	42.370	42.287
6/2/15 12:00	42.322	42.194	6/6/15 10:00	42.346	42.260
6/2/15 14:00	42.286	42.177	6/6/15 12:00	42.364	42.246
6/2/15 16:00	42.258	42.160	6/6/15 14:00	42.320	42.221

TABLE S12.1 Automatically measured groundwater levels at GW2 and GW5.

<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>	<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>
6/6/15 16:00	42.282	42.199	6/10/15 14:00	42.333	42.248
6/6/15 18:00	42.312	42.184	6/10/15 16:00	42.300	42.204
6/6/15 20:00	42.302	42.204	6/10/15 18:00	42.319	42.189
6/6/15 22:00	42.294	42.224	6/10/15 20:00	42.306	42.236
6/7/15 0:00	42.375	42.251	6/10/15 22:00	42.278	42.270
6/7/15 2:00	42.326	42.248	6/11/15 0:00	42.343	42.277
6/7/15 4:00	42.319	42.248	6/11/15 2:00	42.288	42.263
6/7/15 6:00	42.358	42.248	6/11/15 4:00	42.272	42.258
6/7/15 8:00	42.346	42.285	6/11/15 6:00	42.329	42.255
6/7/15 10:00	42.347	42.270	6/11/15 8:00	42.298	42.268
6/7/15 12:00	42.391	42.287	6/11/15 10:00	42.345	42.297
6/7/15 14:00	42.377	42.309	6/11/15 12:00	42.409	42.312
6/7/15 16:00	42.379	42.307	6/11/15 14:00	42.389	42.329
6/7/15 18:00	42.407	42.307	6/11/15 16:00	42.381	42.334
6/7/15 20:00	42.389	42.312	6/11/15 18:00	42.447	42.353
6/7/15 22:00	42.403	42.348	6/11/15 20:00	42.435	42.383
6/8/15 0:00	42.455	42.361	6/11/15 22:00	42.455	42.414
6/8/15 2:00	42.427	42.358	6/12/15 0:00	42.501	42.410
6/8/15 4:00	42.417	42.356	6/12/15 2:00	42.449	42.412
6/8/15 6:00	42.459	42.363	6/12/15 4:00	42.447	42.390
6/8/15 8:00	42.437	42.375	6/12/15 6:00	42.471	42.385
6/8/15 10:00	42.425	42.361	6/12/15 8:00	42.445	42.392
6/8/15 12:00	42.457	42.351	6/12/15 10:00	42.453	42.395
6/8/15 14:00	42.411	42.339	6/12/15 12:00	42.469	42.385
6/8/15 16:00	42.389	42.317	6/12/15 14:00	42.421	42.390
6/8/15 18:00	42.409	42.302	6/12/15 16:00	42.411	42.368
6/8/15 20:00	42.383	42.309	6/12/15 18:00	42.433	42.346
6/8/15 22:00	42.381	42.321	6/12/15 20:00	42.369	42.351
6/9/15 0:00	42.423	42.314	6/12/15 22:00	42.371	42.363
6/9/15 2:00	42.387	42.312	6/13/15 0:00	42.443	42.348
6/9/15 4:00	42.373	42.304	6/13/15 2:00	42.405	42.329
6/9/15 6:00	42.409	42.309	6/13/15 4:00	42.377	42.324
6/9/15 8:00	42.387	42.309	6/13/15 6:00	42.425	42.336
6/9/15 10:00	42.367	42.280	6/13/15 8:00	42.411	42.346
6/9/15 12:00	42.391	42.273	6/13/15 10:00	42.393	42.331
6/9/15 14:00	42.349	42.265	6/13/15 12:00	42.431	42.321
6/9/15 16:00	42.325	42.243	6/13/15 14:00	42.391	42.312
6/9/15 18:00	42.349	42.231	6/13/15 16:00	42.363	42.285
6/9/15 20:00	42.321	42.241	6/13/15 18:00	42.389	42.277
6/9/15 22:00	42.333	42.275	6/13/15 20:00	42.367	42.307
6/10/15 0:00	42.387	42.277	6/13/15 22:00	42.385	42.329
6/10/15 2:00	42.353	42.273	6/14/15 0:00	42.439	42.343
6/10/15 4:00	42.341	42.275	6/14/15 2:00	42.407	42.329
6/10/15 6:00	42.387	42.292	6/14/15 4:00	42.387	42.319
6/10/15 8:00	42.371	42.299	6/14/15 6:00	42.423	42.331
6/10/15 10:00	42.361	42.277	6/14/15 8:00	42.403	42.341
6/10/15 12:00	42.381	42.268	6/14/15 10:00	42.405	42.351



TABLE S12.1 Automatically measured groundwater levels at GW2 and GW5.

<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>	<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>
6/14/15 12:00	42.455	42.351	6/18/15 10:00	42.333	42.297
6/14/15 14:00	42.411	42.329	6/18/15 12:00	42.395	42.334
6/14/15 16:00	42.367	42.319	6/18/15 14:00	42.391	42.334
6/14/15 18:00	42.445	42.343	6/18/15 16:00	42.397	42.314
6/14/15 20:00	42.321	42.356	6/18/15 18:00	42.435	42.307
6/14/15 22:00	42.329	42.385	6/18/15 20:00	42.419	42.334
6/15/15 0:00	42.391	42.370	6/18/15 22:00	42.421	42.356
6/15/15 2:00	42.355	42.388	6/19/15 0:00	42.483	42.343
6/15/15 4:00	42.353	42.358	6/19/15 2:00	42.451	42.341
6/15/15 6:00	42.415	42.380	6/19/15 4:00	42.405	42.314
6/15/15 8:00	42.395	42.405	6/19/15 6:00	42.443	42.307
6/15/15 10:00	42.435	42.422	6/19/15 8:00	42.431	42.319
6/15/15 12:00	42.499	42.405	6/19/15 10:00	42.399	42.307
6/15/15 14:00	42.463	42.395	6/19/15 12:00	42.429	42.273
6/15/15 16:00	42.459	42.380	6/19/15 14:00	42.369	42.241
6/15/15 18:00	42.481	42.370	6/19/15 16:00	42.325	42.211
6/15/15 20:00	42.467	42.402	6/19/15 18:00	42.345	42.187
6/15/15 22:00	42.477	42.422	6/19/15 20:00	42.313	42.192
6/16/15 0:00	42.531	42.419	6/19/15 22:00	42.301	42.199
6/16/15 2:00	42.489	42.402	6/20/15 0:00	42.355	42.194
6/16/15 4:00	42.465	42.392	6/20/15 2:00	42.307	42.189
6/16/15 6:00	42.493	42.373	6/20/15 4:00	42.305	42.185
6/16/15 8:00	42.461	42.373	6/20/15 6:00	42.339	42.180
6/16/15 10:00	42.435	42.361	6/20/15 8:00	42.323	42.204
6/16/15 12:00	42.469	42.346	6/20/15 10:00	42.319	42.209
6/16/15 14:00	42.411	42.302	6/20/15 12:00	42.373	42.229
6/16/15 16:00	42.361	42.263	6/20/15 14:00	42.359	42.253
6/16/15 18:00	42.377	42.241	6/20/15 16:00	42.353	42.253
6/16/15 20:00	42.357	42.255	6/20/15 18:00	42.403	42.265
6/16/15 22:00	42.355	42.275	6/20/15 20:00	42.391	42.304
6/17/15 0:00	42.407	42.270	6/20/15 22:00	42.395	42.326
6/17/15 2:00	42.383	42.353	6/21/15 0:00	42.463	42.324
6/17/15 4:00	42.353	42.285	6/21/15 2:00	42.437	42.341
6/17/15 6:00	42.355	42.277	6/21/15 4:00	42.395	42.314
6/17/15 8:00	42.345	42.297	6/21/15 6:00	42.423	42.287
6/17/15 10:00	42.381	42.295	6/21/15 8:00	42.449	42.351
6/17/15 12:00	42.425	42.304	6/21/15 10:00	42.447	42.353
6/17/15 14:00	42.397	42.299	6/21/15 12:00	42.425	42.295
6/17/15 16:00	42.369	42.268	6/21/15 14:00	42.403	42.287
6/17/15 18:00	42.397	42.263	6/21/15 16:00	42.365	42.255
6/17/15 20:00	42.377	42.277	6/21/15 18:00	42.385	42.231
6/17/15 22:00	42.377	42.290	6/21/15 20:00	42.345	42.233
6/18/15 0:00	42.425	42.299	6/21/15 22:00	42.349	42.253
6/18/15 2:00	42.391	42.287	6/22/15 0:00	42.409	42.265
6/18/15 4:00	42.371	42.280	6/22/15 2:00	42.375	42.260
6/18/15 6:00	42.417	42.290	6/22/15 4:00	42.347	42.224
6/18/15 8:00	42.467	42.383	6/22/15 6:00	42.385	42.248

TABLE S12.1 Automatically measured groundwater levels at GW2 and GW5.

<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>	<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>
6/22/15 8:00	42.375	42.265	6/26/15 6:00	42.515	42.392
6/22/15 10:00	42.373	42.285	6/26/15 8:00	42.491	42.419
6/22/15 12:00	42.457	42.341	6/26/15 10:00	42.495	42.410
6/22/15 14:00	42.445	42.370	6/26/15 12:00	42.536	42.405
6/22/15 16:00	42.465	42.385	6/26/15 14:00	42.477	42.400
6/22/15 18:00	42.518	42.395	6/26/15 16:00	42.479	42.388
6/22/15 20:00	42.485	42.412	6/26/15 18:00	42.515	42.378
6/22/15 22:00	42.503	42.444	6/26/15 20:00	42.473	42.397
6/23/15 0:00	42.568	42.456	6/26/15 22:00	42.485	42.412
6/23/15 2:00	42.526	42.454	6/27/15 0:00	42.538	42.410
6/23/15 4:00	42.513	42.427	6/27/15 2:00	42.491	42.410
6/23/15 6:00	42.548	42.427	6/27/15 4:00	42.478	42.392
6/23/15 8:00	42.509	42.432	6/27/15 6:00	42.530	42.405
6/23/15 10:00	42.499	42.410	6/27/15 8:00	42.489	42.410
6/23/15 12:00	42.520	42.388	6/27/15 10:00	42.485	42.390
6/23/15 14:00	42.453	42.353	6/27/15 12:00	42.514	42.373
6/23/15 16:00	42.429	42.331	6/27/15 14:00	42.452	42.358
6/23/15 18:00	42.453	42.314	6/27/15 16:00	42.433	42.334
6/23/15 20:00	42.421	42.319	6/27/15 18:00	42.459	42.312
6/23/15 22:00	42.407	42.329	6/27/15 20:00	42.409	42.314
6/24/15 0:00	42.449	42.317	6/27/15 22:00	42.408	42.319
6/24/15 2:00	42.415	42.321	6/28/15 0:00	42.469	42.343
6/24/15 4:00	42.365	42.253	6/28/15 2:00	42.421	42.314
6/24/15 6:00	42.407	42.275	6/28/15 4:00	42.393	42.299
6/24/15 8:00	42.409	42.324	6/28/15 6:00	42.440	42.304
6/24/15 10:00	42.405	42.295	6/28/15 8:00	42.421	42.334
6/24/15 12:00	42.447	42.287	6/28/15 10:00	42.416	42.324
6/24/15 14:00	42.379	42.265	6/28/15 12:00	42.458	42.319
6/24/15 16:00	42.365	42.253	6/28/15 14:00	42.408	42.314
6/24/15 18:00	42.397	42.251	6/28/15 16:00	42.403	42.312
6/24/15 20:00	42.375	42.282	6/28/15 18:00	42.450	42.312
6/24/15 22:00	42.407	42.314	6/28/15 20:00	42.415	42.334
6/25/15 0:00	42.465	42.321	6/28/15 22:00	42.432	42.368
6/25/15 2:00	42.425	42.331	6/29/15 0:00	42.490	42.366
6/25/15 4:00	42.425	42.334	6/29/15 2:00	42.458	42.373
6/25/15 6:00	42.479	42.353	6/29/15 4:00	42.457	42.366
6/25/15 8:00	42.463	42.380	6/29/15 6:00	42.508	42.375
6/25/15 10:00	42.467	42.368	6/29/15 8:00	42.478	42.405
6/25/15 12:00	42.515	42.400	6/29/15 10:00	42.473	42.390
6/25/15 14:00	42.403	42.351	6/29/15 12:00	42.460	42.366
6/25/15 16:00	42.441	42.341	6/29/15 14:00	42.518	42.356
6/25/15 18:00	42.467	42.324	6/29/15 16:00	42.424	42.339
6/25/15 20:00	42.407	42.348	6/29/15 18:00	42.414	42.326
6/25/15 22:00	42.435	42.395	6/29/15 20:00	42.498	42.339
6/26/15 0:00	42.518	42.375	6/29/15 22:00	42.432	42.366
6/26/15 2:00	42.435	42.353	6/30/15 0:00	42.470	42.370
6/26/15 4:00	42.455	42.385	6/30/15 2:00	42.532	42.363

TABLE S12.1 Automatically measured groundwater levels at GW2 and GW5.

<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>	<b>Date/Time</b>	<b>GW2 ft TOC</b>	<b>GW5 ft TOC</b>
6/30/15 4:00	42.438	42.358			
6/30/15 6:00	42.446	42.363			
6/30/15 8:00	42.536	42.368			
6/30/15 10:00	42.442	42.361			
6/30/15 12:00	42.420	42.321			
6/30/15 14:00	42.795	42.302			
6/30/15 16:00	42.414	42.329			
6/30/15 18:00	42.387	42.258			
6/30/15 20:00	42.461	42.277			
6/30/15 22:00	42.389	42.292			



## **Environmental Science Division**

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