PHASE II
ENVIRONMENTAL SITE ASSESSMENT

TIER 2 VAPOR ENCROACHMENT SCREENING
LOS REALES LANDFILL DEVELOPMENT PROJECT
TUCSON, ARIZONA
(PARCEL NO. 140-39-052F)

PREPARED FOR:

CITY OF TUCSON
ENVIRONMENTAL SERVICES
P.O. BOX 27210
TUCSON, AZ 85726-7210

JUNE 16, 2014

ALLWYN ENVIRONMENTAL JOB NO. 002-105

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EXECUTIVE SUMMARY

This report presents the findings of the Phase II Environmental Site Assessment: Tier 2 Vapor Encroachment Screening (VES) performed by Allwyn Environmental for the Los Reales Landfill Property at 5300 E. Los Reales Road located north of the existing landfill in Tucson, Pima County, Arizona (herein referred to as the Site). The Site consists of one parcel (Parcel No. 140-39-052F) and covers approximately 44.7 acres. The purpose of the Tier 2 VES was to further investigate vapor encroachment conditions (VECs) at the site as documented in a Phase I ESA Report (herein referred to as the Phase I ESA Report) prepared by ConformaTECH for the Site on February 6, 2014.

Allwyn Environmental conducted a Tier 2 VES field investigation on May 22, 2014 and collected the following samples:

- One soil vapor sample from each of 14 soil borings at a depth of 5 feet below ground surface.
  - Four within the proposed building footprints (two at each building)
  - Six along the southern boundary
  - Four along the western boundary

- Two duplicate samples, one each from VP-3 and VP-12.

- One ambient air sample from upgradient (southwest corner) of the sample area.

Collected samples were analyzed for Volatile Organic Compounds (VOCs) using EPA method TO-15.

Based on the soil vapor analytical results and the calculated soil concentrations, no detected compound exceeded their respective soil vapor screening levels for non-residential land use, or their respective non-residential soil remediation level.

Based on the results of the Tier 2 VES, Allwyn Environmental concludes that there is not a vapor encroachment condition and recommends no further assessment be conducted at the site.

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1.0 INTRODUCTION

1.1 PROJECT BACKGROUND

Allwyn Environmental was retained by the City of Tucson – Environmental Services Department (COT) to conduct a Tier 2 Vapor Encroachment Screening (VES) of the Los Reales Landfill Property located at 5300 E. Los Reales Road north of the existing landfill in Tucson, Pima County, Arizona (herein referred to as the Site). A vicinity map of the Site is contained in Figure 1. The purpose of this Tier 2 VES was to assess possible vapor encroachment from the Los Reales Landfill WQARF site which may have the potential to impact the Site.

1.2 SITE BACKGROUND

The Site is located at 5300 E. Los Reales Road in Tucson, Pima County, Arizona. The Site consists of one parcels (140-39-052F) and covers approximately 44.7 acres. The Site is located within the southeast quarter of Section 14, Township 15 South, Range 14 East of the Gila and Salt River Baseline and Meridian System.

The City of Tucson is expanding the Los Reales Landfill by developing an Entrance facility that includes two buildings (a scale house and an administration building) and a recyclables drop-off pavilion. The planned Tier 2 VES development includes advancing soil borings to depths of 5 feet below ground surface (bgs). The VES process proscribed by ASTM E2600-10[1], is a two-tiered screening process. This soil vapor screening represents the second screening process by collecting existing or new soil vapor data to evaluate vapor encroachment concerns.

The purpose of the Tier 2 VES was to further investigate potential vapor encroachment conditions (VECs) at the site as documented in a Phase I Environmental Site Assessment (ESA) Report (herein referred to as the Phase I ESA Report) prepared by ConformaTECH for the Site on February 6, 2014. The RECs and recommendations contained within the Phase I ESA Report were as follows:

- Phase I Environmental Site Assessment conducted by ConformaTECH dated February 6, 2014 identified the potential for soil vapor intrusion from the Los Reales Landfill Water Quality Assurance Revolving Fund (WQARF) site dissolved tetrachloroethylene (PCE) groundwater plume. Based on the Phase I ESA the PCE-impacted groundwater is located southwest of the Site. The Phase I recommended an ASTM E2600-08 (current ASTM 2600-10) soil vapor intrusion assessment be completed prior to site development.

- Allwyn Environmental recommends further assessment of the area be conducted to evaluate the soil for the presence of VOCs in soil vapor beneath the site.

[1] ASTM; Standard Guide for Vapor Encroachment Screening on Peoperty Involved in Real Estate Transactions (Designation: E-2600-10); June 2010.

1.3 SCOPE OF WORK

COT contracted Allwyn Environmental to conduct this Phase II ESA: Tier 2 VES by collecting soil vapor samples from temporary soil vapor points installed at the site to assess potential vapor encroachment issues, if any, that exists at the site for planned road development. Field work was conducted on May 22, 2014.

Allwyn Environmental collected the following soil vapor samples during the course of field investigation activities:

- 14 discrete soil vapor samples (Samples LRL-VP-1 through LRL-VP-14) were collected at a depth of 5 feet bgs from direct push borings installed along the south and west boundaries of the development area and within the footprint of the two proposed buildings. See Figure 2 for vapor sampling locations.

- Two duplicate soil vapor sample from VP-3 (Field Dup-1) and VP-12 (Field Dup-2).

- One ambient air sample collected from upgradient of the site (LRL-AA-1).

Allwyn Environmental submitted the soil vapor samples to Environmental Science Corp (ESC) for analysis on May 22, 2014 and received the analytical reports on June 6, 2014. The collected samples were analyzed for VOCs using EPA Method TO-15. The analytical report is provided in Appendix A.

1.4 DEVIATIONS FROM SCOPE OF WORK

There were no deviations from the scope of work (SOW).

2.0 SITE ASSESSMENT ACTIVITIES DESCRIPTION

2.1 HEALTH AND SAFETY PLAN (HASP)

A site-specific HASP was developed to assure that site activities are conducted in a safe manner and was prepared in accordance with 29 CFR 1910. The purpose of the plan was to assign responsibilities, to establish personnel protection standards and mandatory safety practices and procedures, and to provide for contingencies that may arise while operations are conducted at the site. A copy of the HASP was kept on site during site activities.

2.2 UNDERGROUND UTILITY LOCATION

Site utilities were located in the field prior to the commencement of any excavation activities. Allwyn Environmental submitted a Blue Stake order for the vacant property located at 5300 E. Los Reales Road in Tucson, Pima County, Arizona and received 'no conflict' responses from all of the respondents. In addition to the Blue Stake Request, Allwyn Environmental subcontracted with a private utility locator, Underground Detection Services, Inc., who performed an on-site Utility Inspection on May 22, 2014. The inspection did not reveal the presence of electrical, water, and sewer lines on the Site.

2.3 SOIL VAPOR SAMPLING PROCEDURES

On May 22, 2014, Allwyn Environmental collected soil vapor samples from the southern and western boundaries of the proposed development area and from within the footprint of the proposed buildings within the development area. These soil samples were collected in accordance with the protocol outlined in Section 2.4 of this report.

Once soil samples were collected using the appropriate protocol, the sample information was written on a label including the sample designation and other requisite information, and the label was placed on the sample container. The sample container (Summa canister) was placed into a cardboard box, until delivered to an analytical laboratory. Following placement in box, the analytical laboratory chain-of-custody (COC) form was completed, and recorded in the field log book and on the field sampling sheet. The completed field sampling sheet is provided in Appendix B.

Information regarding the samples collected (i.e., sample identification, sample type (primary or duplicate), location, depth, collection date/time, and analyses performed) is summarized in Table 1.

2.4 SOIL VAPOR SAMPLES COLLECTED FROM TEMPORARY VAPOR POINTS

The Bobcat mounted direct push drill rig was used to install the boring to the appropriate depth (5 ft bgs) or at refual depth for each sample point. Once the desired depth was achieved, the drill rod was lifted approximately 6 to 8 inches to expose the interior screen of the drill pipe to the borehole. A 6-foot long 1/8-inch OD nylaflo tubing was attached to the sampling port located within the drill rod. A hydrated bentonite seal was placed at the surface.

The temporary vapor point was allowed to equilibrate for at least 20 minutes prior to collecting a sample. After equilibration, the vapor point was purged using the sample pump for the photoionization detector (PID). The purge time was calculated using the length of nylaflo tubing and open portion of the boring. After the vapor point was purged, a 1-Liter Summa canister with a 200 milliliter per minute flow controller was attached to one of the sampling ports on the "T" attached to the nylaflo tubing. The valve on the summa canister was opened for five minutes. After completion of the sampling the valve was closed and the Summa Canister was removed.

In addition, a duplicate sample was also collected from Vapor points VP-3 and VP-12 for quality control purposes. The duplicate sample was collected as a split sample at the same time as the primary sample using the second port on the sampling "T".

2.5 INVESTIGATION-DERIVED WASTE (IDW)

No investigation-derived waste was generated during this project. Excavated soil was returned to the boring and rinse water used to clean the sampling equipment was dispersed on the ground surface.

2.6 DECONTAMINATION PROCEDURES

Decontamination procedures were conducted in accordance with ASTM D5088-90, Standard practice for Decontamination of Field Equipment Used at Nonradioactive Waste Sites. Non-disposable sampling equipment was decontaminated after each use by washing with non-phosphate detergent and deionized water, and rinsing with deionized water. Disposable gloves were changed between each sampling event.

3.0 RESULTS AND CONCLUSIONS

Soil vapor samples were submitted to ESC of Mt Juliet, Tennessee. ESC is an analytical laboratory certified by the Arizona Department of Health Services (ADHS) to perform the required analyses to support the site assessment. Soil vapor samples were analyzed for VOCs using EPA Method TO-15.

3.1 CONSTITUENTS PRESENT IN CONCENTRATIONS ABOVE MINIMUM DETECTION LIMITS

The following constituents were present in soil vapor concentrations above the applicable analytical laboratory reported detection limits (RDLs) in the soil vapor samples (Constituents not listed were not present in any of the soil vapor samples above the applicable RDLs):

- Acetone, Benzene, 1,3-Butadiene, Carbon disulfide, Chloromethane, Cyclohexane, 1,4-Dioxane, Ethanol, Ethylbenzene, 4-Ethyltoluene, Trichlorofluoromethane, Dichlorodifluoromethane, 1,1,2-Trichlorotrifluoroethane, 1,2-Dichlorotetrafluoroethane, Heptane, Hexane, Methylene chloride, Methyl ethyl ketone, Methyl Methacrylate, Methyl tert-butyl ether, Naphthalene, 2-Propanol, Propylene, Styrene, Tetrachloroethylene, Toluene, Trichloroethylene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, m,p-Xylene, o-Xylene.

- 1,1-Difluoroethane was used a leak test tracer to test the integrity of the sampling train and identify potential ambient air infiltration. 1,1-Difluoroethane was not detected in any of the soil vapor samples and was only detected in the ambient air sample.

Summaries of the detected VOCs in samples are provided in Table 2 for the boundary sample locations and Table 3 for proposed building sample locations.

3.2 SOIL VAPOR SCREENING LEVEL COMPARISON

Allwyn Environmental compared the analytical results with available regulatory guidance and industry standards to evaluate whether the observed soil vapor concentrations represented an environmental concern during the planned Los Reales Landfill expansion project. Currently the Arizona Department of Environmental Quality does not have quantitative soil vapor screening or regulatory guidance for soil vapor. ADEQ instead recommends that the soil vapor concentration be used to calculate a soil concentration. The basic soil conversion calculation uses default soil parameter values (soil density, porosity, organic partitioning coefficient, and soil moisture) that are based on typical or generalized data. Because these soil parameter values are default and do not necessarily represent the soil type present at the site, the resulting soil concentration is considered an estimated concentration instead of a concentration derived from analytical testing by a laboratory.

The calculated soil concentration are then compared to the ADEQ non-residential Soil Remediation Levels (non-RSRLs) to evaluate whether an environmental condition exists at the site. Table 4 presents the calculated soil concentrations from the soil vapor concentrations. Based on the soil vapor analytical result and the calculated soil concentrations, no detected compound is present above the respective non-RSRL.

The soil concentration only provides a way to evaluate whether there is potential soil contamination, but does not provide an assessment of potential vapor intrusion issues. In order to address the vapor encroachment onto the Site or vapor intrusion into the proposed buildings, Allwyn also compared the soil

vapor concentrations to other state and federal guidance documents listing regulatory soil vapor screening levels for vapor intrusion issues. Allwyn used the soil vapor screening levels developed by the San Francisco Bay Water Quality Control Board (SFBWQCB)[2]. The values presented in the SFBWQCB Environmental screening levels (ESLs) Summary Table E were developed to address potential vapor intrusion issues from soil vapor migrating from source areas to beneath buildings. The ESL values listed in Table 2 and 3 are for soil vapor migrating from shallow soils (approximately 5 feet below ground surface). Table 2 summarizes the soil vapor results and the non-residential land use for the vapor samples collected along the southern and western boundaries of the proposed development. Table 3 summarizes the soil vapor results and non-residential land use for vapor samples collected within the footprint of the proposed buildings. Based on the comparison with the ESLs, none of the detected compounds at the boundaries sample locations were detected at concentrations above their respective non-residential ESL. Table 2 summarizes the soil vapor results and non-residential use for the proposed building locations. Based on the comparison with the ESLs none of the detected compounds at the proposed building sample locations were detected at concentrations above their respective non-residential ESL.

3.3 CONCLUSIONS

Based on the results of the Tier 2 VES, Allwyn Environmental concludes that there is not a vapor encroachment condition and recommends no further assessment be conducted at the site.

[2] San Francisco Bay Regional Water Quality Control Board 2013 Tier 1 Environmental Screening Levels Summary Table E; May 2013

TABLES

TABLE 1

Soil Vapor Sample Information
Phase II Environmental Site Assessment: Tier 2 Vapor Encroachment Screening
Los Reales Landfill Development, Tucson, Arizona

Sample ID	Sample Location	Sample Date	Sample Time	Sample Type	Sample Depth (ft bgs)	PID (ppmv)
LRL-VP-1	VP-1	5/22/2014	9:17	primary	5	<0.1
LRL-VP-2	VP-2	5/22/2014	9:26	primary	5	0.2
LRL-VP-3	VP-3	5/22/2014	9:37	primary	5	0.1
Field Dup 1	VP-3	5/22/2014	10:07	duplicate	5	0.1
LRL-VP-4	VP-4	5/22/2014	9:51	primary	5	0.1
LRL-VP-5	VP-5	5/22/2014	10:02	primary	5	0.1
LRL-VP-6	VP-6	5/22/2014	10:17	primary	5	<0.1
LRL-VP-7	VP-7	5/22/2014	10:58	primary	5	<0.1
LRL-VP-8	VP-8	5/22/2014	11:08	primary	5	<0.1
LRL-VP-9	VP-9	5/22/2014	11:17	primary	5	<0.1
LRL-VP-10	VP-10	5/22/2014	11:26	primary	5	<0.1
LRL-VP-11	VP-11	5/22/2014	12:03	primary	5	<0.1
LRL-VP-12	VP-12	5/22/2014	12:16	primary	5	<0.1
Field Dup-2	VP-12	5/22/2014	12:45	duplicate	5	<0.1
LRL-VP-13	VP-13	5/22/2014	12:38	primary	5	<0.1
LRL-VP-14	VP-14	5/22/2014	12:26	primary	5	<0.1
LRL-AA-1	Southwest corner	5/22/2014	10:41	primary	5	<0.1

Notes:

ft bgs = feet below ground surface

PID = photo ionization detector

ppmv = parts per million by volume

TABLE 2
Analytical Results: Soil Vapor Western and Southern Development Perimeter
Phase II Environmental Site Assessment: Tier 2 Vapor Encroachment Screening
Los Reales Landfill Development, Tucson, Arizona

					TO-15 Volatile Organic Compounds (µg/m^3)															
Sample ID	**Sample Location**	**Sample Date**	**Sample Depth (ft bgs)**	**PID (ppmv)**	**Acetone**	**Benzene**	**1,3-Butadiene**	**Carbon disulfide**	**Chloromethane**	**Cyclohexane**	**1,4-Dioxane**	**Ethanol**	**Ethylbenzene**	**4-Ethyltoluene**	**Trichlorofluoromethane**	**Dichlorodifluoromethane**	**1,1,2-Trichlorotrifluoroethane**	**1,2-Dichlorotetrafluoroethane**	**Heptane**	**Hexane**	**Methylene chloride**
LRL-VP-1	VP-1	5/22/2014	5	<0.1	**110**	**3.1**	<8.9	**3.4**	**1.4**	**7.9**	<1.4	**210.0**	**9.1**	<2.0	**36**	**320**	**4.5**	**51**	**5**	**5.6**	<1.4
LRL-VP-2	VP-2	5/22/2014	5	0.2	**190**	**11.0**	**12.0**	**5.0**	<0.83	**5.9**	<1.4	**260**	**24.0**	**3.2**	**40**	**490**	**5.4**	**63**	**12**	**14.0**	<1.4
LRL-VP-3	VP-3	5/22/2014	5	0.1	**69**	**2.8**	<8.9	**12.0**	<0.83	**13**	**2.0**	**91**	**2.0**	<2.0	**33**	**280**	**6.0**	**8.1**	**4.9**	**6.3**	<1.4
Field Dup 1	VP-3	5/22/2014	5	0.1	**55**	**2.6**	<8.9	**1.5**	<0.83	**34**	<1.4	**85**	**1.8**	<2.0	**30**	**320**	**6.1**	**52**	**4.0**	**6.7**	**3.5**
LRL-VP-4	VP-4	5/22/2014	5	0.1	**100**	**1.4**	<8.9	**<1.2**	**1.1**	**5.5**	<1.4	**98**	**3.4**	<2.0	**20**	**210**	**8.4**	**38**	**1.7**	**2.4**	<1.4
LRL-VP-5	VP-5	5/22/2014	5	0.1	**78**	<1.3	<8.9	**1.4**	**0.83**	**4.8**	<1.4	**100**	**3.2**	<2.0	**19**	**180**	**5.6**	**41**	<1.6	**1.5**	<1.4
LRL-VP-6	VP-6	5/22/2014	5	<0.1	**86**	<1.2	<8.9	**1.7**	<0.83	**5.5**	<1.4	**58**	**9.1**	<2.0	**23**	**380**	**7.4**	**53**	**1.8**	**1.7**	<1.4
LRL-VP-7	VP-7	5/22/2014	5	<0.1	**69**	**2.7**	<8.9	**1.8**	<0.83	7.6	<1.4	**25**	**5.2**	<2.0	**25**	**280**	**4.7**	**45**	**5.7**	**6.3**	<1.4
LRL-VP-8	VP-8	5/22/2014	5	<0.1	**88**	**2.2**	<8.9	**2.2**	**0.99**	**4.5**	1.8	**57**	<1.7	<2.0	**34**	**260**	**5.5**	**55**	**3.5**	**4.2**	<1.4
LRL-VP-9	VP-9	5/22/2014	5	<0.1	**83**	**4.2**	<8.9	**3.4**	<0.83	**5.5**	<1.4	**120**	**5.2**	<2.0	**21**	**180**	**3.5**	**30**	**7.0**	**8.1**	<1.4
LRL-VP-10	VP-10	5/22/2014	5	<0.1	**64**	**3.8**	<8.9	**2.5**	<0.83	**4.5**	**4.0**	**75.0**	**2.7**	<2.0	**14**	**110**	<3.1	**18**	**3.1**	**4.2**	<1.4
LRL-AA-1	Southwest corner	5/22/2014	5	<0.1	**210**	<1.3	<8.9	<1.2	**1.9**	**1.7**	<1.4	**75.0**	<1.7	<2.0	<2.2	**3.2**	<3.1	<2.8	<1.6	**<1.4**	<1.4
San Francisco Bay Water Quality Control Board Soil Gas Screening Levels for Vapor Intrusion[a] Summary Table E (shallow subsurface) Commercial/Industrial Land Use					1.4E+08	420	NE	NE	3.9E+05	NE	NE	NE	4900	NE	NE	NE	NE	NE	NE	NE	2.6E+04

Notes:

a =	ADEQ has not established soil vapor screening levels for soil vapor-soil vapor concentrations are converted to soil concentrations and compared to soil remediation levels- See Table 2 for calculated soil concentratons
Bolded Value =	Listed analyte detected above the laboratory reporting limit but below residential soil remediation level
µg/m^3 =	micrograms per cubic meter
ft bgs =	feet below ground surface
PID =	photo ionization detector
ppmv =	parts per million by volume
J =	Estimated value: concentration is below the laboratory reporting limit but above the method detection level
< =	Indicates that the listed analyte was not detected above the listed reporting limit
NE =	Environmental screening level not established

TABLE 2

Analytical Results: Soil Vapor Western and Soutern Development Perimeter

Phase II Environmental Site Assessment: Tier 2 Vapor Encroachment Screening

Los Reales Landfill Tucson Arizona

					TO-15 Volatile Organic Compounds (µg/m^3)																
Sample ID	**Sample Location**	**Sample Date**	**Sample Depth (ft bgs)**	**PID (ppmv)**	**Methyl ethyl ketone**	**Methyl Methacrylate**	**Methyl tert-butyl ether**	**Naphthalene**	**2-Propanol**	**Propylene**	**Styrene**	**Tetrachloroethylene**	**Toluene**	**Trichloroethylene**	**1,2,4-Trimethylbenzene**	**1,3,5-Trimethylbenzene**	**m,p-Xylene**	**o-Xylene**	**Xylenes (total)**	**1,1-Difluoroethane**	
LRL-VP-1	VP-1	5/22/2014	5	<0.1	**22**	**1.7**	**0.93**	<6.6	**22**	**26**	**2.3**	**170**	**7.2**	<2.1	**6.4**	<2.0	**29**	**12**	**41**	ND	
LRL-VP-2	VP-2	5/22/2014	5	0.2	**32**	<1.6	**5.0**	<6.6	**21**	**76**	**8.1**	**350**	**22**	**3.5**	**10.0**	**3.5**	**82**	**36**	**118**	ND	
LRL-VP-3	VP-3	5/22/2014	5	0.1	**13**	<1.6	<1.4	<6.6	**9.6**	**16**	<1.7	**350**	**10**	**3.8**	<2.0	<2.0	**5.6**	**2.5**	**8.1**	ND	
Field Dup 1	VP-3	5/22/2014	5	0.1	**14**	**3.1**	<1.4	<6.6	**10**	**21**	**2.0**	**400**	**6.8**	**2.36**	**2.2**	<2.0	**5.6**	**2.8**	**8.4**	ND	
LRL-VP-4	VP-4	5/22/2014	5	0.1	**11**	<1.6	<1.4	<6.6	**790**	**11**	<1.7	**390**	**4.9**	**3.2**	<2.0	<2.0	**11**	**4.3**	**15.3**	ND	
LRL-VP-5	VP-5	5/22/2014	5	0.1	**18**	<1.6	<1.4	<6.6	**12**	**10**	**1.9**	**410**	**5.3**	**5.0**	**5.4**	<2.0	**12**	**5.2**	**17.2**	ND	
LRL-VP-6	VP-6	5/22/2014	5	<0.1	**18**	<1.6	<1.4	<6.6	**8.1**	**9.8**	<1.7	**1200**	**8.7**	**7.0**	**2.4**	<2.0	**30**	**13**	**43**	ND	
LRL-VP-7	VP-7	5/22/2014	5	<0.1	**23**	<1.6	<1.4	<6.6	<6.1	**12**	<1.7	**480**	**9.8**	**12**	<2.0	<2.0	**17**	**7.4**	**24.4**	ND	
LRL-VP-8	VP-8	5/22/2014	5	<0.1	**25**	<1.6	<1.4	<6.6	**6.4**	**12**	<1.7	**370**	**5.3**	**33**	<2.0	<2.0	**3.6**	**2.1**	**5.7**	ND	
LRL-VP-9	VP-9	5/22/2014	5	<0.1	**44**	<1.6	<1.4	<6.6	**12**	**28**	**2.2**	**230**	**12**	**14**	**2.8**	<2.0	**16**	**7.4**	**23.4**	ND	
LRL-VP-10	VP-10	5/22/2014	5	<0.1	**26**	<1.6	<1.4	<6.6	**6.1**	**22**	**1.8**	**110**	**12**	<2.1	<2.0	<2.0	**7.8**	**3.5**	**11.3**	ND	
LRL-AA-1	Southwest corner	5/22/2014	5	<0.1	**9.4**	<1.6	<1.4	<6.6	**270**	<1.4	<1.7	<2.7	**4.9**	<2.1	<2.0	<2.0	<3.5	<1.7	<5.2	ND	
San Francisco Bay Water Quality Control Board Soil Gas Screening Levels for Vapor Intrusion[a] Summary Table E (shallow subsurface) Commercial/Industrial Land Use					2.2E+07	NE	4.7E+04	360	NE	NE	3.9E+06	2100	1.3E+06	3000	NE	NE	4.4E+05	4.4E+05	4.4E+05	NE	

Notes:

a = ADEQ has not established soil vapor screening levels for soil vapor-soil vapor concentrations are converted to soil concentrations and compared to soil remediation levels- See Table 2 for calculated soil concentratons

Bolded Value = Listed analyte detected above the laboratory reporting limit

µg/m^3 = micrograms per cubic meter

ft bgs = feet below ground surface

PID = photo ionization detector

ppmv = parts per million by volume

J = Estimated value: concentration is below the laboratory reporting limit but above the method detection level

< = Indicates that the listed analyte was not detected above the listed reporting limit

ND = 1,1-Difluoroethane was not detected or reported as a tentatively identified compound-used as a leak test tracer compound

NE = Environmental screening level not established

TABLE 3
Analytical Results: Soil Vapor Beneath Proposed Buildings
Phase II Environmental Site Assessment: Tier 2 Vapor Encroachment Screening
Los Reales Landfill Development, Tucson, Arizona

					TO-15 Volatile Organic Compounds (µg/m^3)															
Sample ID	**Sample Location**	**Sample Date**	**Sample Depth (ft bgs)**	**PID (ppmv)**	**Acetone**	**Benzene**	**1,3-Butadiene**	**Carbon disulfide**	**Chloromethane**	**Cyclohexane**	**1,4-Dioxane**	**Ethanol**	**Ethylbenzene**	**4-Ethyltoluene**	**Trichlorofluoromethane**	**Dichlorodifluoromethane**	**1,1,2-Trichlorotrifluoroethane**	**1,2-Dichlorotetrafluoroethane**	**Heptane**	**Hexane**	**Methylene chloride**
LRL-VP-11	VP-11	5/22/2014	5	<0.1	**69**	**2.6**	<8.9	**2.1**	**1.0**	**4.8**	<1.4	**91.0**	**5.2**	**5.9**	**14**	**120**	<3.1	**21**	**3.4**	**3.9**	<1.4
LRL-VP-12	VP-12	5/22/2014	5	<0.1	**3300**	**4.2**	<8.9	<1.2	<0.83	**6.2**	**5.0**	**83.0**	<1.7	<2.0	**9.6**	**79.0**	<3.1	**13.0**	**2.8**	**3.9**	<1.4
Field Dup-2	VP-12	5/22/2014	5	<0.1	**55**	**2.6**	<8.9	**1.5**	<0.83	**34**	<1.4	**85.0**	**1.8**	<2.0	**30**	**320**	**6.1**	**52**	**4.0**	**6.7**	**3.5**
LRL-VP-13	VP-13	5/22/2014	5	<0.1	**57**	**2.6**	<8.9	**2.4**	<0.83	**7.6**	<1.4	**68.0**	**1.8**	<2.0	**9.6**	**69.0**	<3.1	**12.0**	**3.6**	**4.9**	<1.4
LRL-VP-14	VP-14	5/22/2014	5	<0.1	**76**	**5.4**	<8.9	**2.2**	**<0.83**	**4.8**	<1.4	**40.0**	**8.7**	<2.0	**10.0**	**79.0**	<3.1	**13.0**	**6.5**	**7.1**	<1.4
LRL-AA-1	Southwest corner	5/22/2014	5	<0.1	**210**	<1.3	<8.9	<1.2	**1.9**	**1.7**	<1.4	**75.0**	<1.7	<2.0	<2.2	**3.2**	<3.1	<2.8	<1.6	**<1.4**	<1.4
San Francisco Bay Water Quality Control Board Soil Gas Screening Levels for Vapor Intrusion[a] Summary Table E (shallow subsurface) Commercial/Industrial Land Use					1.4E+08	420	NE	NE	3.9E+05	NE	NE	NE	4900	NE	NE	NE	NE	NE	NE	NE	2.6E+04

Notes:

a =	ADEQ has not established soil vapor screening levels for soil vapor-soil vapor concentrations are converted to soil concentrations and compared to soil remediation levels- See Table 2 for calculated soil concentratons
Bolded Value =	Listed analyte detected above the laboratory reporting limit but below residential soil remediation level
µg/m^3 =	micrograms per cubic meter
ft bgs =	feet below ground surface
PID =	photo ionization detector
ppmv =	parts per million by volume
J =	Estimated value: concentration is below the laboratory reporting limit but above the method detection level
< =	Indicates that the listed analyte was not detected above the listed reporting limit
NE =	Environmental screening level not established

TABLE 4

Calculated Soil Concentration from Soil Vapor Concentration
Phase II Environmental Site Assessment: Tier 2 Vapor Encroachment Screening
Los Reales Landfill Development, Tucson, Arizona

Analyte	Maximum Soil Vapor Concentration ($\mu g/m^3$)	Sample Location	Sample ID	Calculated Soil Concentration[a] (mg/Kg)	ADEQ Non-Residential Soil Remediation Level (mg/Kg)
Acetone	3300	VP-12	LRL-VP-12	215.3	54,000
Benzene	11.0	VP-2	LRL-VP-2	0.024	1.4
1,3-Butadiene	12.0	VP-2	LRL-VP-2	NC	1.2
Carbon disulfide	12.0	VP-3	LRL-VP-3 & Filed Dup-2	0.0059	720
Chloromethane	1.9	Ambient Air	LRL-AA-1	0.0027	160
Cyclohexane	34.0	VP-12 Dup	Field Dup-2	NC	140
1,4-Dioxane	5.0	VP-12	LRL-VP-12	NC	160
Dichlorodifluoromethane	490	VP-2	LRL-VP-2	NC	310
1,2-Dichlorotetrafluoroethane	63.0	VP-2	LRL-VP-2	NC	NE
Ethanol	260	VP-2	LRL-VP-2	NC	NE
Ethylbenzene	24.0	VP-2	LRL-VP-2	0.174	400
4-Ethyltoluene	5.9	VP-2	LRL-VP-2	NC	NE
Trichlorofluoromethane	40.0	VP-2	LRL-VP-2	NC	1,300
1,1,2-Trichlorotrifluoroethane	8.4	VP-4	LRL-VP-4	NC	5,600
Heptane	12.0	VP-2	LRL-VP-2	NC	NE
Hexane	14.0	VP-2	LRL-VP-2	0.0064	110
Methylene chloride	3.5	VP-3 & VP-12 DUP	LRL-VP-3 & Filed Dup-2	0.0073	210
Methyl ethyl ketone	44.0	VP-9	LRL-VP-9	NC	34,000
Methyl methacrylate	3.4	VP-13	LRL-VP-13	NC	2,700
Methyl tert-butyl ether	5.0	VP-2	LRL-VP-2	0.0469	710
Naphthalene	25.0	VP-11	LRL-VP-11	0.00561	190
2-Propanol	1600	VP-12	LRL-VP-12	NC	NE
Propylene	76.0	VP-2	LRL-VP-2	NC	NE
Styrene	8.1	VP-2	LRL-VP-2	0.3424	1,500
1,2,4-Trimethylbenzene	26.0	VP-11	LRL-VP-11	2.54	170
1,3,5-Trimethylbenzene	5.4	VP-11	LRL-VP-11	0.0856	70
Tetrachloroethylene	1200	VP-6	LRL-VP-6	0.0019	13
Toluene	22.0	VP-2	LRL-VP-2	0.1005	650
Trichloroethylene	33.0	VP-8	LRL-VP-8	0.0919	65
Xylenes (total)	118	VP-2	LRL-VP-2	1.055	420

Notes:

a = Soil concentration calculated using ADEQ Soil Vapor Guidance Manual Three-phase Partitioning Equation

NC = Soil concentration not calculated- organic carbon partition coefficient or Henry's Law Constant not available

NE = No soil remediation level established by ADEQ

$\mu g/m^3$ = Micrograms per cubic meter

mg/Kg = Milligrams per kilogram

TABLE 3

Analytical Results: Soil Vapor Beneath Proposed Buildings

Phase II Environmental Site Assessment: Tier 2 Vapor Encroachment Screening

Los Reales Landfill Development, Tucson, Arizona

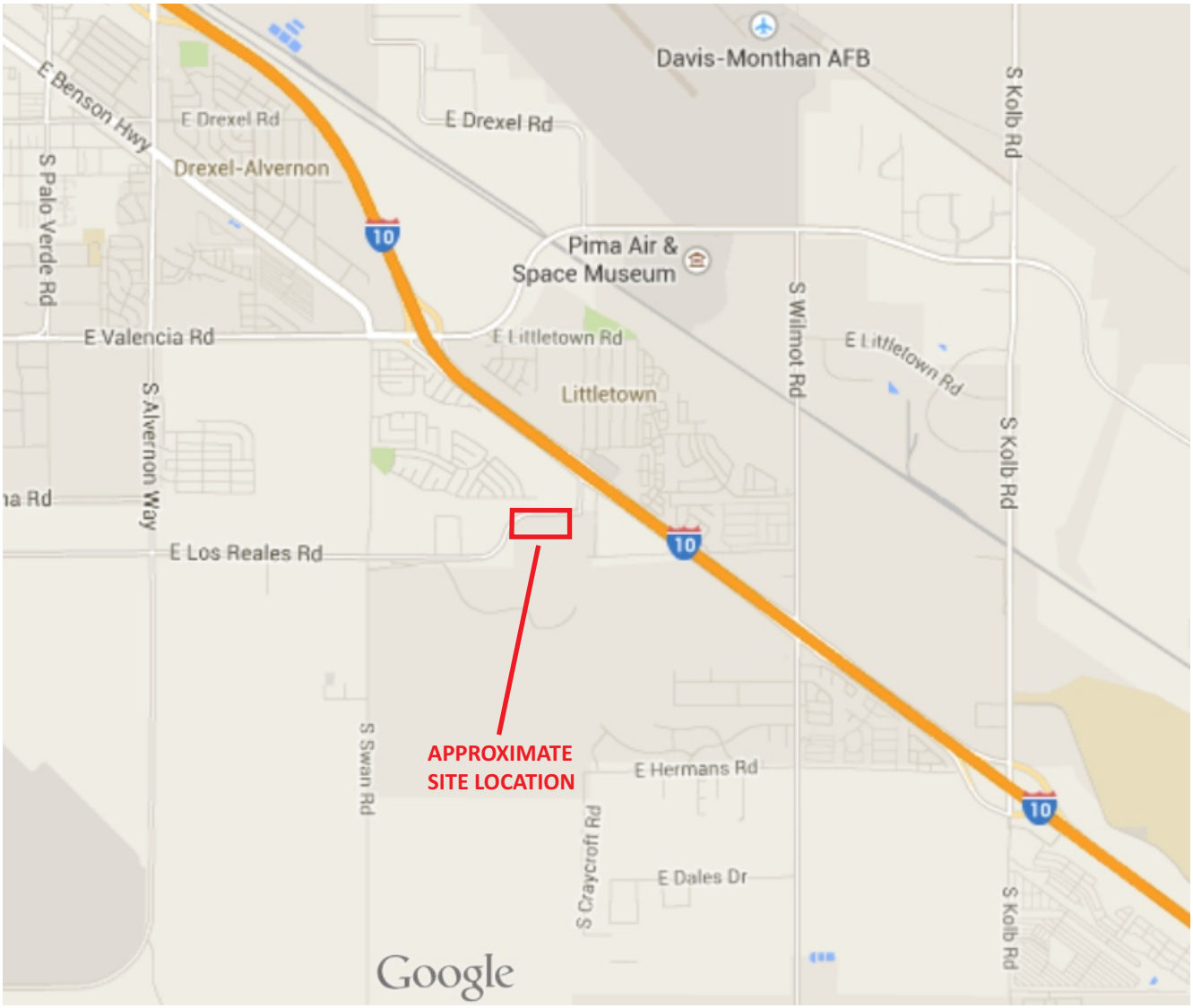
					TO-15 Volatile Organic Compounds (µg/m^3)															
Sample ID	**Sample Location**	**Sample Date**	**Sample Depth (ft bgs)**	**PID (ppmv)**	**Methyl ethyl ketone**	**Methyl Methacrylate**	**Methyl tert-butyl ether**	**Naphthalene**	**2-Propanol**	**Propylene**	**Styrene**	**Tetrachloroethylene**	**Toluene**	**Trichloroethylene**	**1,2,4-Trimethylbenzene**	**1,3,5-Trimethylbenzene**	**m,p-Xylene**	**o-Xylene**	**Xylenes (total)**	**1,1-Difluoroethane**
LRL-VP-11	VP-11	5/22/2014	5	<0.1	**25**	<1.6	<1.4	**25**	**13**	**12**	**2.0**	**140**	**11**	<2.1	**26.0**	**5.4**	**26**	**10**	**36**	ND
LRL-VP-12	VP-12	5/22/2014	5	<0.1	**18**	<1.6	<1.4	<6.6	**1600**	**14**	<1.7	**88**	**7.9**	**5.4**	<2.0	<2.0	<3.5	<1.7	<5.2	ND
Field Dup-2	VP-12	5/22/2014	5	<0.1	**14**	**3.1**	<1.4	<6.6	**10**	**21**	**2**	**400**	**6.8**	**2.6**	**2.2**	<2.0	**5.6**	**2.8**	**8.4**	ND
LRL-VP-13	VP-13	5/22/2014	5	<0.1	**32**	**3.4**	<1.4	<6.6	**9.1**	**28**	**2.1**	**31**	**8.3**	**13**	**2.8**	<2.0	**5.6**	**2.6**	**8.2**	ND
LRL-VP-14	VP-14	5/22/2014	5	<0.1	**20**	<1.6	<1.4	<6.6	<6.1	**28**	**2.5**	**29**	**17**	<2.1	**3.5**	<2.0	**26**	**12**	**38**	ND
LRL-AA-1	Southwest corner	5/22/2014	5	<0.1	**9.4**	<1.6	<1.4	<6.6	**270**	<1.4	<1.7	<2.7	**4.9**	<2.1	<2.0	<2.0	<3.5	<1.7	<5.2	3.82
San Francisco Bay Water Quality Control Board Soil Gas Screening Levels for Vapor Intrusion[a] Summary Table E (shallow subsurface) Commercial/Industrial Land Use					2.2E+07	NE	4.7E+04	360	NE	NE	3.9E+06	2100	1.3E+06	3000	NE	NE	4.4E+05	4.4E+05	4.4E+05	NE

Notes:

a =	ADEQ has not established soil vapor screening levels for soil vapor-soil vapor concentrations are converted to soil concentrations and compared to soil remediation levels- See Table 2 for calculated soil concentratons
Bolded Value =	Listed analyte detected above the laboratory reporting limit
µg/m^3 =	micrograms per cubic meter
ft bgs =	feet below ground surface
PID =	photo ionization detector
ppmv =	parts per million by volume
J =	Estimated value: concentration is below the laboratory reporting limit but above the method detection level
< =	Indicates that the listed analyte was not detected above the listed reporting limit
ND =	1,1-Difluoroethane was not detected or reported as a tentatively identified compound-used as a leak test tracer compound
NE =	Environmental screening level not established

FIGURES

FIGURE 1
VICINITY MAP



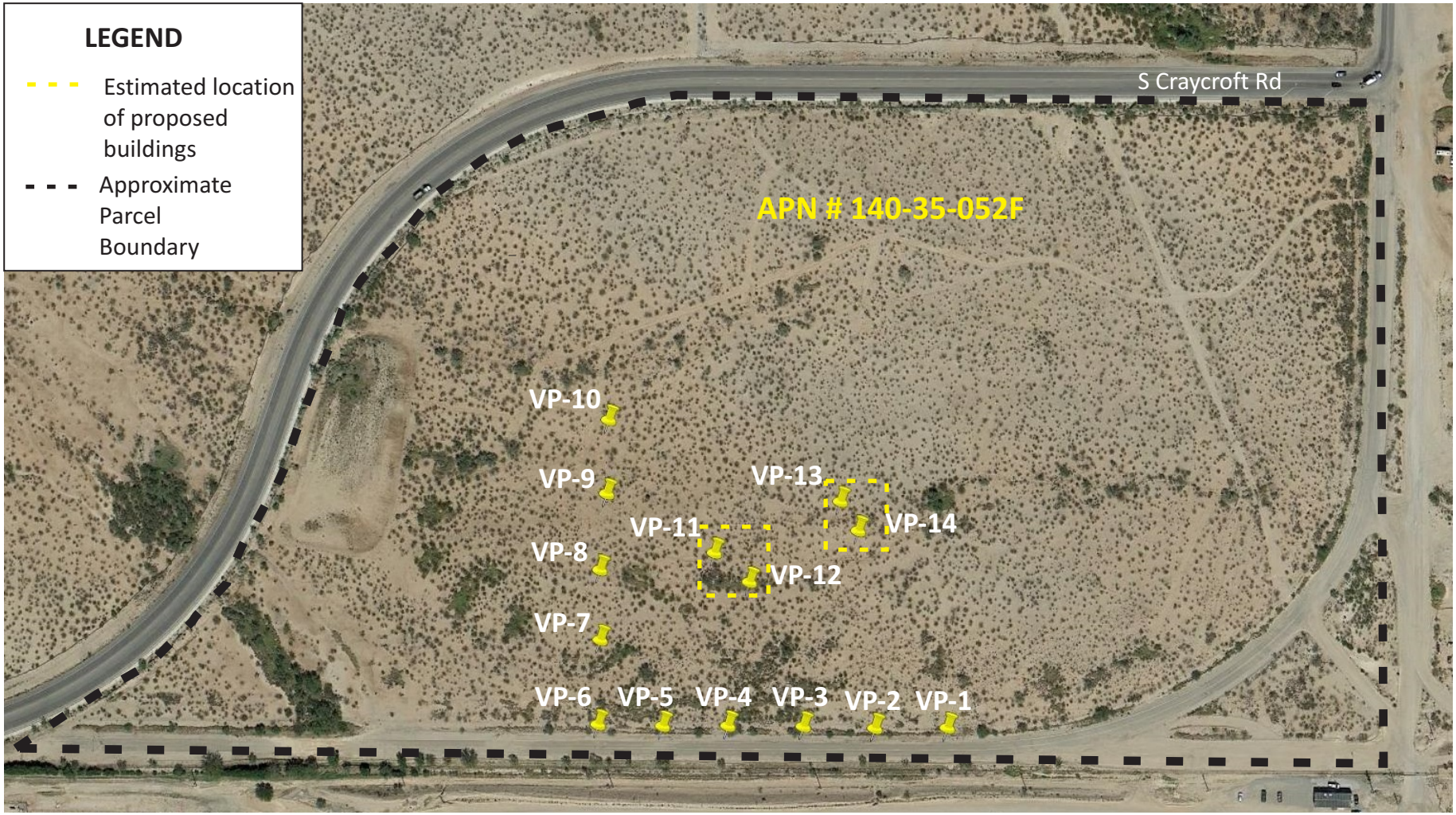
Map Source:
Google Maps
https://www.google.com/maps

N

City of Tucson - Environmental Services Department
Phase II Environmental Site Assessment
5300 E. Los Reales Road
140-39-052F
Allwyn Environmental Job No. 002-105
June 16, 2014

Allwyn ENVIRONMENTAL

FIGURE 2
Soil Vapor Sampling Location Map



Map Source:
Google Maps
https://www.google.com/maps

N

City of Tucson - Environmental Services Department
Phase II Environmental Site Assessment
5300 E. Los Reales Road
140-39-052F
Allwyn Environmental Job No. 002-105
June 14, 2014

Allwyn ENVIRONMENTAL

APPENDIX A

ANALYTICAL LABORATORY RESULTS

ESC LAB SCIENCES
YOUR LAB OF CHOICE

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(615) 758-5858
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Fax (615) 758-5859
Tax I.D 62-0814289
Est. 1970

Quality Control Summary
SDG: L700915

For: Allwyn Environmental
Los Reales Landfill VES Soil Vapor Survey

L700915

Lab SampleID.	Client ID
L700915-01	LRL-VP-1
L700915-02	LRL-VP-2
L700915-03	LRL-VP-3
L700915-04	LRL-VP-4
L700915-05	LRL-VP-5
L700915-06	LRL-VP-6
L700915-07	LRL-AA-1
L700915-08	LRL-VP-7
L700915-09	LRL-VP-8
L700915-10	LRL-VP-9
L700915-11	LRL-VP-10
L700915-12	LRL-VP-11
L700915-13	LRL-VP-12
L700915-14	LRL-VP-13
L700915-15	LRL-FIELD-DUP
L700915-16	LRL-VP-14
L700915-17	LRL-FIELD-DUP-2

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Quality Control Summary
SDG: L700915

For: Allwyn Environmental
Project: Los Reales Landfill VES Soil Vapor
June 06, 2014

Sample Receiving and Handling

All sample aliquots were received at the correct temperature, in the proper containers, and with the appropriate preservatives. All method specified holding times were met.

VOCs in Air by Method TO-15

Laboratory Control Sample

Samples L700915-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11, -12, -13, -14, -15, -16, and -17 were analyzed in analytical batch WG724088. The laboratory control sample associated with these samples was within the laboratory control limits for all target analytes reported from this batch. The relative percent difference was within laboratory limits for all target analytes reported from this batch.

Samples L700915-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -12, -13, -14, and -15 were analyzed in analytical batch WG724285. The laboratory control sample associated with these samples was within the laboratory control limits for all target analytes reported from this batch. The relative percent difference was within laboratory limits for all target analytes reported from this batch.

Samples L700915-04 and 13 were analyzed in analytical batch WG724465. The laboratory control sample associated with these samples was within the laboratory control limits for all target analytes reported from this batch. The relative percent difference was within laboratory limits for all target analytes reported from this batch.

Matrix Spike/Matrix Spike Duplicate

Precision for batch WG724088 was evaluated using the LCS/LCSD. The RPDs were within method limits.

Precision for batch WG724285 was evaluated using the LCS/LCSD. The RPDs were within method limits.

Precision for batch WG724465 was evaluated using the LCS/LCSD. The RPDs were within method limits.

Blank Analysis

The method blank, the initial, and all continuing calibration blanks contained no analytes at concentrations above the method reporting limit.

Nancy F. McLain
ESC Representative
ESC Lab Sciences

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Est. 1970

Keith Ross
Allwyn Environmental
1 West Deer Valley Rd, Bldg 2 Ste 305
Phoenix, AZ 85027

Report Summary

Friday June 06, 2014

Report Number: L700915
Samples Received: 05/23/14
Client Project: 002-105

Description: Los Reales Landfill VES Soil Vapor Survey

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Daphne R Richards

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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Quality Control Summary
SDG: L700915

For: Allwyn Environmental
Los Reales Landfill VES Soil Vapor Survey

L700915

Lab SampleID.	Client ID
L700915-01	LRL-VP-1
L700915-02	LRL-VP-2
L700915-03	LRL-VP-3
L700915-04	LRL-VP-4
L700915-05	LRL-VP-5
L700915-06	LRL-VP-6
L700915-07	LRL-AA-1
L700915-08	LRL-VP-7
L700915-09	LRL-VP-8
L700915-10	LRL-VP-9
L700915-11	LRL-VP-10
L700915-12	LRL-VP-11
L700915-13	LRL-VP-12
L700915-14	LRL-VP-13
L700915-15	LRL-FIELD-DUP
L700915-16	LRL-VP-14
L700915-17	LRL-FIELD-DUP-2

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Est. 1970

SAMPLE NUMBER
LRL-VP-1

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 9:17 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-01**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/2/2014 | Analysis Time: 4:44 PM
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
107-05-1	Allyl chloride	0.40	< 0.40	
71-43-2	Benzene	0.40	**0.96**	
100-44-7	Benzyl Chloride	0.40	< 0.40	
75-27-4	Bromodichloromethane	0.40	< 0.40	
75-25-2	Bromoform	1.2	< 1.2	
74-83-9	Bromomethane	0.40	< 0.40	
106-99-0	1,3-Butadiene	4.0	< 4.0	
75-15-0	Carbon disulfide	0.40	**1.1**	
56-23-5	Carbon tetrachloride	0.40	< 0.40	
108-90-7	Chlorobenzene	0.40	< 0.40	
75-00-3	Chloroethane	0.40	< 0.40	
67-66-3	Chloroform	0.40	< 0.40	
74-87-3	Chloromethane	0.40	**0.67**	
95-49-8	2-Chlorotoluene	0.40	< 0.40	
110-82-7	Cyclohexane	0.40	**2.3**	
124-48-1	Dibromochloromethane	0.40	< 0.40	
106-93-4	1,2-Dibromoethane	0.40	< 0.40	
95-50-1	1,2-Dichlorobenzene	0.40	< 0.40	
541-73-1	1,3-Dichlorobenzene	0.40	< 0.40	
106-46-7	1,4-Dichlorobenzene	0.40	< 0.40	
107-06-2	1,2-Dichloroethane	0.40	< 0.40	
75-34-3	1,1-Dichloroethane	0.40	< 0.40	
75-35-4	1,1-Dichloroethene	0.40	< 0.40	
156-59-2	cis-1,2-Dichloroethene	0.40	< 0.40	
156-60-5	trans-1,2-Dichloroethene	0.40	< 0.40	
78-87-5	1,2-Dichloropropane	0.40	< 0.40	
10061-01-5	cis-1,3-Dichloropropene	0.40	< 0.40	
10061-02-6	trans-1,3-Dichloropropene	0.40	< 0.40	
123-91-1	1,4-Dioxane	0.40	< 0.40	
100-41-4	Ethylbenzene	0.40	**2.1**	
622-96-8	4-Ethyltoluene	0.40	< 0.40	
75-69-4	Trichlorofluoromethane	0.40	**6.4**	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.40	**0.59**	

Comments: 1) Sample results are reported as rounded values.
2) These results are applicable only to the items tested.

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Est. 1970

SAMPLE NUMBER
LRL-VP-1

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 9:17 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-01**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/2/2014 | Analysis Time: 4:44 PM
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
76-14-2	1,2-Dichlorotetrafluoroethane	0.40	**7.3**	
142-82-5	Heptane	0.40	**1.2**	
87-68-3	Hexachloro-1,3-butadiene	1.3	< 1.3	
110-54-3	n-Hexane	0.40	**1.6**	
98-82-8	Isopropylbenzene	0.40	< 0.40	
75-09-2	Methylene Chloride	0.40	< 0.40	
591-78-6	Methyl Butyl Ketone	2.5	< 2.5	
78-93-3	2-Butanone (MEK)	2.5	**7.6**	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.5	< 2.5	
80-62-6	Methyl methacrylate	0.40	**1.7**	
1634-04-4	MTBE	0.40	**0.93**	
91-20-3	Naphthalene	1.3	< 1.3	
67-63-0	2-Propanol	2.5	**8.8**	
115-07-1	Propene	0.80	**15**	
100-42-5	Styrene	0.40	**0.55**	
79-34-5	1,1,2,2-Tetrachloroethane	0.40	< 0.40	
127-18-4	Tetrachloroethylene	0.40	**25**	
109-99-9	Tetrahydrofuran	0.40	< 0.40	
108-88-3	Toluene	0.40	**1.9**	
120-82-1	1,2,4-Trichlorobenzene	1.3	< 1.3	
71-55-6	1,1,1-Trichloroethane	0.40	< 0.40	
79-00-5	1,1,2-Trichloroethane	0.40	< 0.40	
79-01-6	Trichloroethylene	0.40	< 0.40	
95-63-6	1,2,4-Trimethylbenzene	0.40	**1.3**	
108-67-8	1,3,5-Trimethylbenzene	0.40	< 0.40	
540-84-1	2,2,4-Trimethylpentane	0.40	< 0.40	
75-01-4	Vinyl chloride	0.40	< 0.40	
593-60-2	Vinyl Bromide	0.40	< 0.40	
108-05-4	Vinyl acetate	0.40	< 0.40	
1330-20-7	m&p-Xylene	0.80	**6.7**	
95-47-6	o-Xylene	0.40	**2.7**	

Surrogates

Analyte	PERCENT RECOVERY	QUALIFIERS	FLAG
1,4-Bromofluorobenzene	**101**		

Comments:
1) Sample results are reported as rounded values.
2) These results are applicable only to the items tested.

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Est. 1970

SAMPLE NUMBER
LRL-VP-1

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 9:17 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-01**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724285 | Analysis Date: 6/3/2014 | Analysis Time: 11:06
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/3/2014 10:26
Method: TO-15 | Dilution: 16

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
67-64-1	Acetone	20	**48**	
64-17-5	Ethanol	10	**110**	
75-71-8	Dichlorodifluoromethane	3.2	**65**	

LEGEND

RL - Reporting Limit

Comments: 1) Sample results are reported as rounded values.
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SAMPLE NUMBER
LRL-VP-2

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 9:26 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-02**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/2/2014 | Analysis Time: 5:32 PM
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
107-05-1	Allyl chloride	0.40	< 0.40	
71-43-2	Benzene	0.40	**3.4**	
100-44-7	Benzyl Chloride	0.40	< 0.40	
75-27-4	Bromodichloromethane	0.40	< 0.40	
75-25-2	Bromoform	1.2	< 1.2	
74-83-9	Bromomethane	0.40	< 0.40	
106-99-0	1,3-Butadiene	4.0	**5.2**	
75-15-0	Carbon disulfide	0.40	**1.6**	
56-23-5	Carbon tetrachloride	0.40	< 0.40	
108-90-7	Chlorobenzene	0.40	< 0.40	
75-00-3	Chloroethane	0.40	< 0.40	
67-66-3	Chloroform	0.40	< 0.40	
74-87-3	Chloromethane	0.40	< 0.40	
95-49-8	2-Chlorotoluene	0.40	< 0.40	
110-82-7	Cyclohexane	0.40	**1.7**	
124-48-1	Dibromochloromethane	0.40	< 0.40	
106-93-4	1,2-Dibromoethane	0.40	< 0.40	
95-50-1	1,2-Dichlorobenzene	0.40	< 0.40	
541-73-1	1,3-Dichlorobenzene	0.40	< 0.40	
106-46-7	1,4-Dichlorobenzene	0.40	< 0.40	
107-06-2	1,2-Dichloroethane	0.40	< 0.40	
75-34-3	1,1-Dichloroethane	0.40	< 0.40	
75-35-4	1,1-Dichloroethene	0.40	< 0.40	
156-59-2	cis-1,2-Dichloroethene	0.40	< 0.40	
156-60-5	trans-1,2-Dichloroethene	0.40	< 0.40	
78-87-5	1,2-Dichloropropane	0.40	< 0.40	
10061-01-5	cis-1,3-Dichloropropene	0.40	< 0.40	
10061-02-6	trans-1,3-Dichloropropene	0.40	< 0.40	
123-91-1	1,4-Dioxane	0.40	< 0.40	
100-41-4	Ethylbenzene	0.40	**5.6**	
622-96-8	4-Ethyltoluene	0.40	**0.65**	
75-69-4	Trichlorofluoromethane	0.40	**7.2**	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.40	**0.70**	

Comments: 1) Sample results are reported as rounded values.
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SAMPLE NUMBER
LRL-VP-2

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 9:26 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-02**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/2/2014 | Analysis Time: 5:32 PM
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
76-14-2	1,2-Dichlorotetrafluoroethane	0.40	**9.0**	
142-82-5	Heptane	0.40	**2.9**	
87-68-3	Hexachloro-1,3-butadiene	1.3	< 1.3	
110-54-3	n-Hexane	0.40	**4.1**	
98-82-8	Isopropylbenzene	0.40	< 0.40	
75-09-2	Methylene Chloride	0.40	< 0.40	
591-78-6	Methyl Butyl Ketone	2.5	< 2.5	
78-93-3	2-Butanone (MEK)	2.5	**11**	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.5	< 2.5	
80-62-6	Methyl methacrylate	0.40	< 0.40	
1634-04-4	MTBE	0.40	**1.4**	
91-20-3	Naphthalene	1.3	< 1.3	
67-63-0	2-Propanol	2.5	**8.4**	
100-42-5	Styrene	0.40	**1.9**	
79-34-5	1,1,2,2-Tetrachloroethane	0.40	< 0.40	
109-99-9	Tetrahydrofuran	0.40	< 0.40	
108-88-3	Toluene	0.40	**5.9**	
120-82-1	1,2,4-Trichlorobenzene	1.3	< 1.3	
71-55-6	1,1,1-Trichloroethane	0.40	< 0.40	
79-00-5	1,1,2-Trichloroethane	0.40	< 0.40	
79-01-6	Trichloroethylene	0.40	**0.65**	
95-63-6	1,2,4-Trimethylbenzene	0.40	**2.1**	
108-67-8	1,3,5-Trimethylbenzene	0.40	**0.72**	
540-84-1	2,2,4-Trimethylpentane	0.40	< 0.40	
75-01-4	Vinyl chloride	0.40	< 0.40	
593-60-2	Vinyl Bromide	0.40	< 0.40	
108-05-4	Vinyl acetate	0.40	< 0.40	
1330-20-7	m&p-Xylene	0.80	**19**	
95-47-6	o-Xylene	0.40	**8.2**	

Surrogates

Analyte	PERCENT RECOVERY	QUALIFIERS	FLAG
1,4-Bromofluorobenzene	**99.6**		

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SAMPLE NUMBER
LRL-VP-2

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 9:26 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-02**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724285 | Analysis Date: 6/3/2014 | Analysis Time: 11:52
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/3/2014 10:26
Method: TO-15 | Dilution: 16

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
67-64-1	Acetone	20	**78**	
64-17-5	Ethanol	10	**140**	
75-71-8	Dichlorodifluoromethane	3.2	**99**	
115-07-1	Propene	6.4	**44**	
127-18-4	Tetrachloroethylene	3.2	**52**	

LEGEND

RL - Reporting Limit

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SAMPLE NUMBER
LRL-VP-3

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 9:37 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-03**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/2/2014 | Analysis Time: 6:20 PM
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
67-64-1	Acetone	2.5	**29**	
107-05-1	Allyl chloride	0.40	< 0.40	
71-43-2	Benzene	0.40	**0.88**	
100-44-7	Benzyl Chloride	0.40	< 0.40	
75-27-4	Bromodichloromethane	0.40	< 0.40	
75-25-2	Bromoform	1.2	< 1.2	
74-83-9	Bromomethane	0.40	< 0.40	
106-99-0	1,3-Butadiene	4.0	< 4.0	
75-15-0	Carbon disulfide	0.40	**3.7**	
56-23-5	Carbon tetrachloride	0.40	< 0.40	
108-90-7	Chlorobenzene	0.40	< 0.40	
75-00-3	Chloroethane	0.40	< 0.40	
67-66-3	Chloroform	0.40	< 0.40	
74-87-3	Chloromethane	0.40	< 0.40	
95-49-8	2-Chlorotoluene	0.40	< 0.40	
110-82-7	Cyclohexane	0.40	**3.7**	
124-48-1	Dibromochloromethane	0.40	< 0.40	
106-93-4	1,2-Dibromoethane	0.40	< 0.40	
95-50-1	1,2-Dichlorobenzene	0.40	< 0.40	
541-73-1	1,3-Dichlorobenzene	0.40	< 0.40	
106-46-7	1,4-Dichlorobenzene	0.40	< 0.40	
107-06-2	1,2-Dichloroethane	0.40	< 0.40	
75-34-3	1,1-Dichloroethane	0.40	< 0.40	
75-35-4	1,1-Dichloroethene	0.40	< 0.40	
156-59-2	cis-1,2-Dichloroethene	0.40	< 0.40	
156-60-5	trans-1,2-Dichloroethene	0.40	< 0.40	
78-87-5	1,2-Dichloropropane	0.40	< 0.40	
10061-01-5	cis-1,3-Dichloropropene	0.40	< 0.40	
10061-02-6	trans-1,3-Dichloropropene	0.40	< 0.40	
123-91-1	1,4-Dioxane	0.40	**0.55**	
100-41-4	Ethylbenzene	0.40	**0.46**	
622-96-8	4-Ethyltoluene	0.40	< 0.40	
75-69-4	Trichlorofluoromethane	0.40	**5.8**	

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SAMPLE NUMBER
LRL-VP-3

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 9:37 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-03**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/2/2014 | Analysis Time: 6:20 PM
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
76-13-1	1,1,2-Trichlorotrifluoroethane	0.40	**0.78**	
76-14-2	1,2-Dichlorotetrafluoroethane	0.40	**8.1**	
142-82-5	Heptane	0.40	**1.2**	
87-68-3	Hexachloro-1,3-butadiene	1.3	< 1.3	
110-54-3	n-Hexane	0.40	**1.8**	
98-82-8	Isopropylbenzene	0.40	< 0.40	
75-09-2	Methylene Chloride	0.40	< 0.40	
591-78-6	Methyl Butyl Ketone	2.5	< 2.5	
78-93-3	2-Butanone (MEK)	2.5	**4.5**	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.5	< 2.5	
80-62-6	Methyl methacrylate	0.40	< 0.40	
1634-04-4	MTBE	0.40	< 0.40	
91-20-3	Naphthalene	1.3	< 1.3	
67-63-0	2-Propanol	2.5	**3.9**	
115-07-1	Propene	0.80	**9.2**	
100-42-5	Styrene	0.40	< 0.40	
79-34-5	1,1,2,2-Tetrachloroethane	0.40	< 0.40	
109-99-9	Tetrahydrofuran	0.40	< 0.40	
108-88-3	Toluene	0.40	**2.7**	
120-82-1	1,2,4-Trichlorobenzene	1.3	< 1.3	
71-55-6	1,1,1-Trichloroethane	0.40	< 0.40	
79-00-5	1,1,2-Trichloroethane	0.40	< 0.40	
79-01-6	Trichloroethylene	0.40	**0.71**	
95-63-6	1,2,4-Trimethylbenzene	0.40	< 0.40	
108-67-8	1,3,5-Trimethylbenzene	0.40	< 0.40	
540-84-1	2,2,4-Trimethylpentane	0.40	< 0.40	
75-01-4	Vinyl chloride	0.40	< 0.40	
593-60-2	Vinyl Bromide	0.40	< 0.40	
108-05-4	Vinyl acetate	0.40	< 0.40	
1330-20-7	m&p-Xylene	0.80	**1.3**	
95-47-6	o-Xylene	0.40	**0.58**	

Surrogates

Analyte	PERCENT RECOVERY	QUALIFIERS	FLAG
1,4-Bromofluorobenzene	**99.3**		

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SAMPLE NUMBER
LRL-VP-3

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 9:37 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-03**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724285 | Analysis Date: 6/3/2014 | Analysis Time: 12:39
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/3/2014 10:26
Method: TO-15 | Dilution: 10

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
64-17-5	Ethanol	6.3	**48**	
75-71-8	Dichlorodifluoromethane	2.0	**57**	
127-18-4	Tetrachloroethylene	2.0	**51**	

LEGEND

RL - Reporting Limit

Comments: 1) Sample results are reported as rounded values.
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SAMPLE NUMBER
LRL-VP-4

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 9:51 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-04**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/2/2014 | Analysis Time: 7:09 PM
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
107-05-1	Allyl chloride	0.40	< 0.40	
71-43-2	Benzene	0.40	**0.44**	
100-44-7	Benzyl Chloride	0.40	< 0.40	
75-27-4	Bromodichloromethane	0.40	< 0.40	
75-25-2	Bromoform	1.2	< 1.2	
74-83-9	Bromomethane	0.40	< 0.40	
106-99-0	1,3-Butadiene	4.0	< 4.0	
75-15-0	Carbon disulfide	0.40	< 0.40	
56-23-5	Carbon tetrachloride	0.40	< 0.40	
108-90-7	Chlorobenzene	0.40	< 0.40	
75-00-3	Chloroethane	0.40	< 0.40	
67-66-3	Chloroform	0.40	< 0.40	
74-87-3	Chloromethane	0.40	**0.53**	
95-49-8	2-Chlorotoluene	0.40	< 0.40	
110-82-7	Cyclohexane	0.40	**1.6**	
124-48-1	Dibromochloromethane	0.40	< 0.40	
106-93-4	1,2-Dibromoethane	0.40	< 0.40	
95-50-1	1,2-Dichlorobenzene	0.40	< 0.40	
541-73-1	1,3-Dichlorobenzene	0.40	< 0.40	
106-46-7	1,4-Dichlorobenzene	0.40	< 0.40	
107-06-2	1,2-Dichloroethane	0.40	< 0.40	
75-34-3	1,1-Dichloroethane	0.40	< 0.40	
75-35-4	1,1-Dichloroethene	0.40	< 0.40	
156-59-2	cis-1,2-Dichloroethene	0.40	< 0.40	
156-60-5	trans-1,2-Dichloroethene	0.40	< 0.40	
78-87-5	1,2-Dichloropropane	0.40	< 0.40	
10061-01-5	cis-1,3-Dichloropropene	0.40	< 0.40	
10061-02-6	trans-1,3-Dichloropropene	0.40	< 0.40	
123-91-1	1,4-Dioxane	0.40	< 0.40	
100-41-4	Ethylbenzene	0.40	**0.78**	
622-96-8	4-Ethyltoluene	0.40	< 0.40	
75-69-4	Trichlorofluoromethane	0.40	**3.6**	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.40	**1.1**	

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SAMPLE NUMBER
LRL-VP-4

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 9:51 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-04**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/2/2014 | Analysis Time: 7:09 PM
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
76-14-2	1,2-Dichlorotetrafluoroethane	0.40	**5.5**	
142-82-5	Heptane	0.40	**0.42**	
87-68-3	Hexachloro-1,3-butadiene	1.3	< 1.3	
110-54-3	n-Hexane	0.40	**0.67**	
98-82-8	Isopropylbenzene	0.40	< 0.40	
75-09-2	Methylene Chloride	0.40	< 0.40	
591-78-6	Methyl Butyl Ketone	2.5	< 2.5	
78-93-3	2-Butanone (MEK)	2.5	**3.8**	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.5	< 2.5	
80-62-6	Methyl methacrylate	0.40	< 0.40	
1634-04-4	MTBE	0.40	< 0.40	
91-20-3	Naphthalene	1.3	< 1.3	
115-07-1	Propene	0.80	**6.4**	
100-42-5	Styrene	0.40	< 0.40	
79-34-5	1,1,2,2-Tetrachloroethane	0.40	< 0.40	
109-99-9	Tetrahydrofuran	0.40	< 0.40	
108-88-3	Toluene	0.40	**1.3**	
120-82-1	1,2,4-Trichlorobenzene	1.3	< 1.3	
71-55-6	1,1,1-Trichloroethane	0.40	< 0.40	
79-00-5	1,1,2-Trichloroethane	0.40	< 0.40	
79-01-6	Trichloroethylene	0.40	**0.59**	
95-63-6	1,2,4-Trimethylbenzene	0.40	< 0.40	
108-67-8	1,3,5-Trimethylbenzene	0.40	< 0.40	
540-84-1	2,2,4-Trimethylpentane	0.40	< 0.40	
75-01-4	Vinyl chloride	0.40	< 0.40	
593-60-2	Vinyl Bromide	0.40	< 0.40	
108-05-4	Vinyl acetate	0.40	< 0.40	
1330-20-7	m&p-Xylene	0.80	**2.5**	
95-47-6	o-Xylene	0.40	**1.0**	

Surrogates

Analyte	PERCENT RECOVERY	QUALIFIERS	FLAG
1,4-Bromofluorobenzene	**98.0**		

Comments: 1) Sample results are reported as rounded values.
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SAMPLE NUMBER
LRL-VP-4

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 9:51 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-04**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724285 | Analysis Date: 6/3/2014 | Analysis Time: 1:26 PM
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/3/2014 10:26
Method: TO-15 | Dilution: 10

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
67-64-1	Acetone	13	**42**	
64-17-5	Ethanol	6.3	**52**	
75-71-8	Dichlorodifluoromethane	2.0	**43**	
127-18-4	Tetrachloroethylene	2.0	**57**	

TO-15

Analytic Batch: WG724465 | Analysis Date: 6/5/2014 | Analysis Time: 7:51
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/4/2014 8:37 AM
Method: TO-15 | Dilution: 50

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
67-63-0	2-Propanol	63	**320**	

LEGEND

RL - Reporting Limit

Comments: 1) Sample results are reported as rounded values.
2) These results are applicable only to the items tested.

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SAMPLE NUMBER
LRL-VP-5

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 10:02 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-05**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/2/2014 | Analysis Time: 7:57 PM
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
67-64-1	Acetone	2.5	**33**	
107-05-1	Allyl chloride	0.40	< 0.40	
71-43-2	Benzene	0.40	< 0.40	
100-44-7	Benzyl Chloride	0.40	< 0.40	
75-27-4	Bromodichloromethane	0.40	< 0.40	
75-25-2	Bromoform	1.2	< 1.2	
74-83-9	Bromomethane	0.40	< 0.40	
106-99-0	1,3-Butadiene	4.0	< 4.0	
75-15-0	Carbon disulfide	0.40	**0.44**	
56-23-5	Carbon tetrachloride	0.40	< 0.40	
108-90-7	Chlorobenzene	0.40	< 0.40	
75-00-3	Chloroethane	0.40	< 0.40	
67-66-3	Chloroform	0.40	< 0.40	
74-87-3	Chloromethane	0.40	**0.40**	
95-49-8	2-Chlorotoluene	0.40	< 0.40	
110-82-7	Cyclohexane	0.40	**1.4**	
124-48-1	Dibromochloromethane	0.40	< 0.40	
106-93-4	1,2-Dibromoethane	0.40	< 0.40	
95-50-1	1,2-Dichlorobenzene	0.40	< 0.40	
541-73-1	1,3-Dichlorobenzene	0.40	< 0.40	
106-46-7	1,4-Dichlorobenzene	0.40	< 0.40	
107-06-2	1,2-Dichloroethane	0.40	< 0.40	
75-34-3	1,1-Dichloroethane	0.40	< 0.40	
75-35-4	1,1-Dichloroethene	0.40	< 0.40	
156-59-2	cis-1,2-Dichloroethene	0.40	< 0.40	
156-60-5	trans-1,2-Dichloroethene	0.40	< 0.40	
78-87-5	1,2-Dichloropropane	0.40	< 0.40	
10061-01-5	cis-1,3-Dichloropropene	0.40	< 0.40	
10061-02-6	trans-1,3-Dichloropropene	0.40	< 0.40	
123-91-1	1,4-Dioxane	0.40	< 0.40	
100-41-4	Ethylbenzene	0.40	**0.74**	
622-96-8	4-Ethyltoluene	0.40	< 0.40	
75-69-4	Trichlorofluoromethane	0.40	**3.3**	

Comments: 1) Sample results are reported as rounded values.
2) These results are applicable only to the items tested.

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SAMPLE NUMBER
LRL-VP-5

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 10:02 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-05**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/2/2014 | Analysis Time: 7:57 PM
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
76-13-1	1,1,2-Trichlorotrifluoroethane	0.40	**0.73**	
76-14-2	1,2-Dichlorotetrafluoroethane	0.40	**5.8**	
142-82-5	Heptane	0.40	< 0.40	
87-68-3	Hexachloro-1,3-butadiene	1.3	< 1.3	
110-54-3	n-Hexane	0.40	**0.42**	
98-82-8	Isopropylbenzene	0.40	< 0.40	
75-09-2	Methylene Chloride	0.40	< 0.40	
591-78-6	Methyl Butyl Ketone	2.5	< 2.5	
78-93-3	2-Butanone (MEK)	2.5	**6.2**	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.5	< 2.5	
80-62-6	Methyl methacrylate	0.40	< 0.40	
1634-04-4	MTBE	0.40	< 0.40	
91-20-3	Naphthalene	1.3	< 1.3	
67-63-0	2-Propanol	2.5	**4.7**	
115-07-1	Propene	0.80	**5.8**	
100-42-5	Styrene	0.40	**0.45**	
79-34-5	1,1,2,2-Tetrachloroethane	0.40	< 0.40	
109-99-9	Tetrahydrofuran	0.40	< 0.40	
108-88-3	Toluene	0.40	**1.4**	
120-82-1	1,2,4-Trichlorobenzene	1.3	< 1.3	
71-55-6	1,1,1-Trichloroethane	0.40	< 0.40	
79-00-5	1,1,2-Trichloroethane	0.40	< 0.40	
79-01-6	Trichloroethylene	0.40	**0.94**	
95-63-6	1,2,4-Trimethylbenzene	0.40	**1.1**	
108-67-8	1,3,5-Trimethylbenzene	0.40	< 0.40	
540-84-1	2,2,4-Trimethylpentane	0.40	< 0.40	
75-01-4	Vinyl chloride	0.40	< 0.40	
593-60-2	Vinyl Bromide	0.40	< 0.40	
108-05-4	Vinyl acetate	0.40	< 0.40	
1330-20-7	m&p-Xylene	0.80	**2.8**	
95-47-6	o-Xylene	0.40	**1.2**	

Surrogates

Analyte	PERCENT RECOVERY	QUALIFIERS	FLAG
1,4-Bromofluorobenzene	**100**		

Comments:
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SAMPLE NUMBER
LRL-VP-5

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 10:02 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-05**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724285 | Analysis Date: 6/3/2014 | Analysis Time: 2:12 PM
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/3/2014 10:26
Method: TO-15 | Dilution: 10

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
64-17-5	Ethanol	6.3	**53**	
75-71-8	Dichlorodifluoromethane	2.0	**37**	
127-18-4	Tetrachloroethylene	2.0	**61**	

LEGEND

RL - Reporting Limit

Comments: 1) Sample results are reported as rounded values.
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SAMPLE NUMBER
LRL-VP-6

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 10:17 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-06**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/2/2014 | Analysis Time: 8:46 PM
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
67-64-1	Acetone	2.5	**36**	
107-05-1	Allyl chloride	0.40	< 0.40	
71-43-2	Benzene	0.40	< 0.40	
100-44-7	Benzyl Chloride	0.40	< 0.40	
75-27-4	Bromodichloromethane	0.40	< 0.40	
75-25-2	Bromoform	1.2	< 1.2	
74-83-9	Bromomethane	0.40	< 0.40	
106-99-0	1,3-Butadiene	4.0	< 4.0	
75-15-0	Carbon disulfide	0.40	**0.54**	
56-23-5	Carbon tetrachloride	0.40	< 0.40	
108-90-7	Chlorobenzene	0.40	< 0.40	
75-00-3	Chloroethane	0.40	< 0.40	
67-66-3	Chloroform	0.40	< 0.40	
74-87-3	Chloromethane	0.40	< 0.40	
95-49-8	2-Chlorotoluene	0.40	< 0.40	
110-82-7	Cyclohexane	0.40	**1.6**	
124-48-1	Dibromochloromethane	0.40	< 0.40	
106-93-4	1,2-Dibromoethane	0.40	< 0.40	
95-50-1	1,2-Dichlorobenzene	0.40	< 0.40	
541-73-1	1,3-Dichlorobenzene	0.40	< 0.40	
106-46-7	1,4-Dichlorobenzene	0.40	< 0.40	
107-06-2	1,2-Dichloroethane	0.40	< 0.40	
75-34-3	1,1-Dichloroethane	0.40	< 0.40	
75-35-4	1,1-Dichloroethene	0.40	< 0.40	
156-59-2	cis-1,2-Dichloroethene	0.40	< 0.40	
156-60-5	trans-1,2-Dichloroethene	0.40	< 0.40	
78-87-5	1,2-Dichloropropane	0.40	< 0.40	
10061-01-5	cis-1,3-Dichloropropene	0.40	< 0.40	
10061-02-6	trans-1,3-Dichloropropene	0.40	< 0.40	
123-91-1	1,4-Dioxane	0.40	< 0.40	
64-17-5	Ethanol	1.3	**31**	
100-41-4	Ethylbenzene	0.40	**2.1**	
622-96-8	4-Ethyltoluene	0.40	< 0.40	

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SAMPLE NUMBER
LRL-VP-6

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 10:17 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-06**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/2/2014 | Analysis Time: 8:46 PM
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
75-69-4	Trichlorofluoromethane	0.40	**4.1**	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.40	**0.97**	
76-14-2	1,2-Dichlorotetrafluoroethane	0.40	**7.6**	
142-82-5	Heptane	0.40	**0.45**	
87-68-3	Hexachloro-1,3-butadiene	1.3	< 1.3	
110-54-3	n-Hexane	0.40	**0.48**	
98-82-8	Isopropylbenzene	0.40	< 0.40	
75-09-2	Methylene Chloride	0.40	< 0.40	
591-78-6	Methyl Butyl Ketone	2.5	< 2.5	
78-93-3	2-Butanone (MEK)	2.5	**6.0**	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.5	< 2.5	
80-62-6	Methyl methacrylate	0.40	< 0.40	
1634-04-4	MTBE	0.40	< 0.40	
91-20-3	Naphthalene	1.3	< 1.3	
67-63-0	2-Propanol	2.5	**3.3**	
115-07-1	Propene	0.80	**5.7**	
100-42-5	Styrene	0.40	< 0.40	
79-34-5	1,1,2,2-Tetrachloroethane	0.40	< 0.40	
109-99-9	Tetrahydrofuran	0.40	< 0.40	
108-88-3	Toluene	0.40	**2.3**	
120-82-1	1,2,4-Trichlorobenzene	1.3	< 1.3	
71-55-6	1,1,1-Trichloroethane	0.40	< 0.40	
79-00-5	1,1,2-Trichloroethane	0.40	< 0.40	
79-01-6	Trichloroethylene	0.40	**1.3**	
95-63-6	1,2,4-Trimethylbenzene	0.40	**0.49**	
108-67-8	1,3,5-Trimethylbenzene	0.40	< 0.40	
540-84-1	2,2,4-Trimethylpentane	0.40	< 0.40	
75-01-4	Vinyl chloride	0.40	< 0.40	
593-60-2	Vinyl Bromide	0.40	< 0.40	
108-05-4	Vinyl acetate	0.40	< 0.40	
1330-20-7	m&p-Xylene	0.80	**6.9**	
95-47-6	o-Xylene	0.40	**2.9**	

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SAMPLE NUMBER
LRL-VP-6

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 10:17 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-06**	Date Received :	5/23/2014

Surrogates

Analyte	PERCENT RECOVERY	QUALIFIERS	FLAG
1,4-Bromofluorobenzene	**99.1**		

TO-15

Analytic Batch: WG724285	Analysis Date: 6/3/2014	Analysis Time: 2:58 PM
Instrument: AIRMS4	Analyst: 564	Preparation Date: 6/3/2014 10:26
Method: TO-15	Dilution: 16	

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
75-71-8	Dichlorodifluoromethane	3.2	**76**	
127-18-4	Tetrachloroethylene	3.2	**170**	

LEGEND

RL -	Reporting Limit

Comments: 1) Sample results are reported as rounded values.
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SAMPLE NUMBER
LRL-AA-1

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 10:41 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-07**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/2/2014 | Analysis Time: 9:31 PM
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
107-05-1	Allyl chloride	0.40	< 0.40	
71-43-2	Benzene	0.40	< 0.40	
100-44-7	Benzyl Chloride	0.40	< 0.40	
75-27-4	Bromodichloromethane	0.40	< 0.40	
75-25-2	Bromoform	1.2	< 1.2	
74-83-9	Bromomethane	0.40	< 0.40	
106-99-0	1,3-Butadiene	4.0	< 4.0	
75-15-0	Carbon disulfide	0.40	< 0.40	
56-23-5	Carbon tetrachloride	0.40	< 0.40	
108-90-7	Chlorobenzene	0.40	< 0.40	
75-00-3	Chloroethane	0.40	< 0.40	
67-66-3	Chloroform	0.40	< 0.40	
74-87-3	Chloromethane	0.40	**0.91**	
95-49-8	2-Chlorotoluene	0.40	< 0.40	
110-82-7	Cyclohexane	0.40	**0.48**	
124-48-1	Dibromochloromethane	0.40	< 0.40	
106-93-4	1,2-Dibromoethane	0.40	< 0.40	
95-50-1	1,2-Dichlorobenzene	0.40	< 0.40	
541-73-1	1,3-Dichlorobenzene	0.40	< 0.40	
106-46-7	1,4-Dichlorobenzene	0.40	< 0.40	
107-06-2	1,2-Dichloroethane	0.40	< 0.40	
75-34-3	1,1-Dichloroethane	0.40	< 0.40	
75-35-4	1,1-Dichloroethene	0.40	< 0.40	
156-59-2	cis-1,2-Dichloroethene	0.40	< 0.40	
156-60-5	trans-1,2-Dichloroethene	0.40	< 0.40	
78-87-5	1,2-Dichloropropane	0.40	< 0.40	
10061-01-5	cis-1,3-Dichloropropene	0.40	< 0.40	
10061-02-6	trans-1,3-Dichloropropene	0.40	< 0.40	
123-91-1	1,4-Dioxane	0.40	< 0.40	
100-41-4	Ethylbenzene	0.40	< 0.40	
622-96-8	4-Ethyltoluene	0.40	< 0.40	
75-69-4	Trichlorofluoromethane	0.40	< 0.40	
75-71-8	Dichlorodifluoromethane	0.40	**0.65**	

Comments: 1) Sample results are reported as rounded values.
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SAMPLE NUMBER
LRL-AA-1

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 10:41 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-07**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/2/2014 | Analysis Time: 9:31 PM
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
76-13-1	1,1,2-Trichlorotrifluoroethane	0.40	< 0.40	
76-14-2	1,2-Dichlorotetrafluoroethane	0.40	< 0.40	
142-82-5	Heptane	0.40	< 0.40	
87-68-3	Hexachloro-1,3-butadiene	1.3	< 1.3	
110-54-3	n-Hexane	0.40	< 0.40	
98-82-8	Isopropylbenzene	0.40	< 0.40	
75-09-2	Methylene Chloride	0.40	< 0.40	
591-78-6	Methyl Butyl Ketone	2.5	< 2.5	
78-93-3	2-Butanone (MEK)	2.5	**3.2**	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.5	< 2.5	
80-62-6	Methyl methacrylate	0.40	< 0.40	
1634-04-4	MTBE	0.40	< 0.40	
91-20-3	Naphthalene	1.3	< 1.3	
115-07-1	Propene	0.80	< 0.80	
100-42-5	Styrene	0.40	< 0.40	
79-34-5	1,1,2,2-Tetrachloroethane	0.40	< 0.40	
127-18-4	Tetrachloroethylene	0.40	< 0.40	
109-99-9	Tetrahydrofuran	0.40	< 0.40	
108-88-3	Toluene	0.40	**1.3**	
120-82-1	1,2,4-Trichlorobenzene	1.3	< 1.3	
71-55-6	1,1,1-Trichloroethane	0.40	< 0.40	
79-00-5	1,1,2-Trichloroethane	0.40	< 0.40	
79-01-6	Trichloroethylene	0.40	< 0.40	
95-63-6	1,2,4-Trimethylbenzene	0.40	< 0.40	
108-67-8	1,3,5-Trimethylbenzene	0.40	< 0.40	
540-84-1	2,2,4-Trimethylpentane	0.40	< 0.40	
75-01-4	Vinyl chloride	0.40	< 0.40	
593-60-2	Vinyl Bromide	0.40	< 0.40	
108-05-4	Vinyl acetate	0.40	< 0.40	
1330-20-7	m&p-Xylene	0.80	< 0.80	
95-47-6	o-Xylene	0.40	< 0.40	

Surrogates

Analyte	PERCENT RECOVERY	QUALIFIERS	FLAG
1,4-Bromofluorobenzene	**99.6**		

Comments:
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SAMPLE NUMBER
LRL-AA-1

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 10:41 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-07**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724285 | Analysis Date: 6/3/2014 | Analysis Time: 3:43 PM
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/3/2014 10:26
Method: TO-15 | Dilution: 20

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
67-64-1	Acetone	25	**87**	
64-17-5	Ethanol	13	**40**	
67-63-0	2-Propanol	25	**110**	

LEGEND

RL - Reporting Limit

Comments: 1) Sample results are reported as rounded values.
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SAMPLE NUMBER
LRL-VP-7

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 10:58 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-08**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/2/2014 | Analysis Time: 10:18
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
67-64-1	Acetone	2.5	**29**	
107-05-1	Allyl chloride	0.40	< 0.40	
71-43-2	Benzene	0.40	**0.86**	
100-44-7	Benzyl Chloride	0.40	< 0.40	
75-27-4	Bromodichloromethane	0.40	< 0.40	
75-25-2	Bromoform	1.2	< 1.2	
74-83-9	Bromomethane	0.40	< 0.40	
106-99-0	1,3-Butadiene	4.0	< 4.0	
75-15-0	Carbon disulfide	0.40	**0.59**	
56-23-5	Carbon tetrachloride	0.40	< 0.40	
108-90-7	Chlorobenzene	0.40	< 0.40	
75-00-3	Chloroethane	0.40	< 0.40	
67-66-3	Chloroform	0.40	< 0.40	
74-87-3	Chloromethane	0.40	< 0.40	
95-49-8	2-Chlorotoluene	0.40	< 0.40	
110-82-7	Cyclohexane	0.40	**2.2**	
124-48-1	Dibromochloromethane	0.40	< 0.40	
106-93-4	1,2-Dibromoethane	0.40	< 0.40	
95-50-1	1,2-Dichlorobenzene	0.40	< 0.40	
541-73-1	1,3-Dichlorobenzene	0.40	< 0.40	
106-46-7	1,4-Dichlorobenzene	0.40	< 0.40	
107-06-2	1,2-Dichloroethane	0.40	< 0.40	
75-34-3	1,1-Dichloroethane	0.40	< 0.40	
75-35-4	1,1-Dichloroethene	0.40	< 0.40	
156-59-2	cis-1,2-Dichloroethene	0.40	< 0.40	
156-60-5	trans-1,2-Dichloroethene	0.40	< 0.40	
78-87-5	1,2-Dichloropropane	0.40	< 0.40	
10061-01-5	cis-1,3-Dichloropropene	0.40	< 0.40	
10061-02-6	trans-1,3-Dichloropropene	0.40	< 0.40	
123-91-1	1,4-Dioxane	0.40	< 0.40	
64-17-5	Ethanol	1.3	**13**	
100-41-4	Ethylbenzene	0.40	**1.2**	
622-96-8	4-Ethyltoluene	0.40	< 0.40	

Comments: 1) Sample results are reported as rounded values.
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SAMPLE NUMBER
LRL-VP-7

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 10:58 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-08**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/2/2014 | Analysis Time: 10:18
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
75-69-4	Trichlorofluoromethane	0.40	**4.4**	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.40	**0.61**	
76-14-2	1,2-Dichlorotetrafluoroethane	0.40	**6.5**	
142-82-5	Heptane	0.40	**1.4**	
87-68-3	Hexachloro-1,3-butadiene	1.3	< 1.3	
110-54-3	n-Hexane	0.40	**1.8**	
98-82-8	Isopropylbenzene	0.40	< 0.40	
75-09-2	Methylene Chloride	0.40	< 0.40	
591-78-6	Methyl Butyl Ketone	2.5	< 2.5	
78-93-3	2-Butanone (MEK)	2.5	**7.7**	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.5	< 2.5	
80-62-6	Methyl methacrylate	0.40	< 0.40	
1634-04-4	MTBE	0.40	< 0.40	
91-20-3	Naphthalene	1.3	< 1.3	
67-63-0	2-Propanol	2.5	< 2.5	
115-07-1	Propene	0.80	**7.2**	
100-42-5	Styrene	0.40	< 0.40	
79-34-5	1,1,2,2-Tetrachloroethane	0.40	< 0.40	
109-99-9	Tetrahydrofuran	0.40	< 0.40	
108-88-3	Toluene	0.40	**2.6**	
120-82-1	1,2,4-Trichlorobenzene	1.3	< 1.3	
71-55-6	1,1,1-Trichloroethane	0.40	< 0.40	
79-00-5	1,1,2-Trichloroethane	0.40	< 0.40	
79-01-6	Trichloroethylene	0.40	**2.2**	
95-63-6	1,2,4-Trimethylbenzene	0.40	< 0.40	
108-67-8	1,3,5-Trimethylbenzene	0.40	< 0.40	
540-84-1	2,2,4-Trimethylpentane	0.40	< 0.40	
75-01-4	Vinyl chloride	0.40	< 0.40	
593-60-2	Vinyl Bromide	0.40	< 0.40	
108-05-4	Vinyl acetate	0.40	< 0.40	
1330-20-7	m&p-Xylene	0.80	**3.9**	
95-47-6	o-Xylene	0.40	**1.7**	

Comments: 1) Sample results are reported as rounded values.
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SAMPLE NUMBER
LRL-VP-7

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 10:58 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-08**	Date Received :	5/23/2014

Surrogates

Analyte	PERCENT RECOVERY	QUALIFIERS	FLAG
1,4-Bromofluorobenzene	**100**		

TO-15

Analytic Batch: WG724285 | Analysis Date: 6/3/2014 | Analysis Time: 4:27 PM
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/3/2014 10:26
Method: TO-15 | Dilution: 10

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
75-71-8	Dichlorodifluoromethane	2.0	**57**	
127-18-4	Tetrachloroethylene	2.0	**70**	

LEGEND

RL - Reporting Limit

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SAMPLE NUMBER
LRL-VP-8

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 11:08 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-09**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/2/2014 | Analysis Time: 11:05
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
107-05-1	Allyl chloride	0.40	< 0.40	
71-43-2	Benzene	0.40	**0.68**	
100-44-7	Benzyl Chloride	0.40	< 0.40	
75-27-4	Bromodichloromethane	0.40	< 0.40	
75-25-2	Bromoform	1.2	< 1.2	
74-83-9	Bromomethane	0.40	< 0.40	
106-99-0	1,3-Butadiene	4.0	< 4.0	
75-15-0	Carbon disulfide	0.40	**0.71**	
56-23-5	Carbon tetrachloride	0.40	< 0.40	
108-90-7	Chlorobenzene	0.40	< 0.40	
75-00-3	Chloroethane	0.40	< 0.40	
67-66-3	Chloroform	0.40	< 0.40	
74-87-3	Chloromethane	0.40	**0.48**	
95-49-8	2-Chlorotoluene	0.40	< 0.40	
110-82-7	Cyclohexane	0.40	**1.3**	
124-48-1	Dibromochloromethane	0.40	< 0.40	
106-93-4	1,2-Dibromoethane	0.40	< 0.40	
95-50-1	1,2-Dichlorobenzene	0.40	< 0.40	
541-73-1	1,3-Dichlorobenzene	0.40	< 0.40	
106-46-7	1,4-Dichlorobenzene	0.40	< 0.40	
107-06-2	1,2-Dichloroethane	0.40	< 0.40	
75-34-3	1,1-Dichloroethane	0.40	< 0.40	
75-35-4	1,1-Dichloroethene	0.40	< 0.40	
156-59-2	cis-1,2-Dichloroethene	0.40	< 0.40	
156-60-5	trans-1,2-Dichloroethene	0.40	< 0.40	
78-87-5	1,2-Dichloropropane	0.40	< 0.40	
10061-01-5	cis-1,3-Dichloropropene	0.40	< 0.40	
10061-02-6	trans-1,3-Dichloropropene	0.40	< 0.40	
123-91-1	1,4-Dioxane	0.40	**0.49**	
64-17-5	Ethanol	1.3	**30**	
100-41-4	Ethylbenzene	0.40	< 0.40	
622-96-8	4-Ethyltoluene	0.40	< 0.40	
75-69-4	Trichlorofluoromethane	0.40	**6.0**	

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SAMPLE NUMBER
LRL-VP-8

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 11:08 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-09**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/2/2014 | Analysis Time: 11:05
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
76-13-1	1,1,2-Trichlorotrifluoroethane	0.40	**0.72**	
76-14-2	1,2-Dichlorotetrafluoroethane	0.40	**7.9**	
142-82-5	Heptane	0.40	**0.85**	
87-68-3	Hexachloro-1,3-butadiene	1.3	< 1.3	
110-54-3	n-Hexane	0.40	**1.2**	
98-82-8	Isopropylbenzene	0.40	< 0.40	
75-09-2	Methylene Chloride	0.40	< 0.40	
591-78-6	Methyl Butyl Ketone	2.5	< 2.5	
78-93-3	2-Butanone (MEK)	2.5	**8.5**	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.5	< 2.5	
80-62-6	Methyl methacrylate	0.40	< 0.40	
1634-04-4	MTBE	0.40	< 0.40	
91-20-3	Naphthalene	1.3	< 1.3	
67-63-0	2-Propanol	2.5	**2.6**	
115-07-1	Propene	0.80	**6.9**	
100-42-5	Styrene	0.40	< 0.40	
79-34-5	1,1,2,2-Tetrachloroethane	0.40	< 0.40	
109-99-9	Tetrahydrofuran	0.40	< 0.40	
108-88-3	Toluene	0.40	**1.4**	
120-82-1	1,2,4-Trichlorobenzene	1.3	< 1.3	
71-55-6	1,1,1-Trichloroethane	0.40	< 0.40	
79-00-5	1,1,2-Trichloroethane	0.40	< 0.40	
79-01-6	Trichloroethylene	0.40	**6.2**	
95-63-6	1,2,4-Trimethylbenzene	0.40	< 0.40	
108-67-8	1,3,5-Trimethylbenzene	0.40	< 0.40	
540-84-1	2,2,4-Trimethylpentane	0.40	< 0.40	
75-01-4	Vinyl chloride	0.40	< 0.40	
593-60-2	Vinyl Bromide	0.40	< 0.40	
108-05-4	Vinyl acetate	0.40	< 0.40	
1330-20-7	m&p-Xylene	0.80	**0.84**	
95-47-6	o-Xylene	0.40	**0.48**	

Surrogates

Analyte	PERCENT RECOVERY	QUALIFIERS	FLAG
1,4-Bromofluorobenzene	**99.9**		

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SAMPLE NUMBER
LRL-VP-8

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 11:08 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-09**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724285 | Analysis Date: 6/3/2014 | Analysis Time: 5:13 PM
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/3/2014 10:26
Method: TO-15 | Dilution: 10

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
67-64-1	Acetone	13	**37**	
75-71-8	Dichlorodifluoromethane	2.0	**52**	
127-18-4	Tetrachloroethylene	2.0	**54**	

LEGEND

RL - Reporting Limit

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SAMPLE NUMBER
LRL-VP-9

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 11:17 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-10**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/2/2014 | Analysis Time: 11:52
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
67-64-1	Acetone	2.5	**35**	
107-05-1	Allyl chloride	0.40	< 0.40	
71-43-2	Benzene	0.40	**1.3**	
100-44-7	Benzyl Chloride	0.40	< 0.40	
75-27-4	Bromodichloromethane	0.40	< 0.40	
75-25-2	Bromoform	1.2	< 1.2	
74-83-9	Bromomethane	0.40	< 0.40	
106-99-0	1,3-Butadiene	4.0	< 4.0	
75-15-0	Carbon disulfide	0.40	**1.1**	
56-23-5	Carbon tetrachloride	0.40	< 0.40	
108-90-7	Chlorobenzene	0.40	< 0.40	
75-00-3	Chloroethane	0.40	< 0.40	
67-66-3	Chloroform	0.40	< 0.40	
74-87-3	Chloromethane	0.40	< 0.40	
95-49-8	2-Chlorotoluene	0.40	< 0.40	
110-82-7	Cyclohexane	0.40	**1.6**	
124-48-1	Dibromochloromethane	0.40	< 0.40	
106-93-4	1,2-Dibromoethane	0.40	< 0.40	
95-50-1	1,2-Dichlorobenzene	0.40	< 0.40	
541-73-1	1,3-Dichlorobenzene	0.40	< 0.40	
106-46-7	1,4-Dichlorobenzene	0.40	< 0.40	
107-06-2	1,2-Dichloroethane	0.40	< 0.40	
75-34-3	1,1-Dichloroethane	0.40	< 0.40	
75-35-4	1,1-Dichloroethene	0.40	< 0.40	
156-59-2	cis-1,2-Dichloroethene	0.40	< 0.40	
156-60-5	trans-1,2-Dichloroethene	0.40	< 0.40	
78-87-5	1,2-Dichloropropane	0.40	< 0.40	
10061-01-5	cis-1,3-Dichloropropene	0.40	< 0.40	
10061-02-6	trans-1,3-Dichloropropene	0.40	< 0.40	
123-91-1	1,4-Dioxane	0.40	< 0.40	
100-41-4	Ethylbenzene	0.40	**1.2**	
622-96-8	4-Ethyltoluene	0.40	< 0.40	
75-69-4	Trichlorofluoromethane	0.40	**3.7**	

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SAMPLE NUMBER
LRL-VP-9

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 11:17 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-10**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/2/2014 | Analysis Time: 11:52
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
75-71-8	Dichlorodifluoromethane	0.40	**36**	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.40	**0.46**	
76-14-2	1,2-Dichlorotetrafluoroethane	0.40	**4.3**	
142-82-5	Heptane	0.40	**1.7**	
87-68-3	Hexachloro-1,3-butadiene	1.3	< 1.3	
110-54-3	n-Hexane	0.40	**2.3**	
98-82-8	Isopropylbenzene	0.40	< 0.40	
75-09-2	Methylene Chloride	0.40	< 0.40	
591-78-6	Methyl Butyl Ketone	2.5	< 2.5	
78-93-3	2-Butanone (MEK)	2.5	**15**	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.5	< 2.5	
80-62-6	Methyl methacrylate	0.40	< 0.40	
1634-04-4	MTBE	0.40	< 0.40	
91-20-3	Naphthalene	1.3	< 1.3	
67-63-0	2-Propanol	2.5	**5.0**	
115-07-1	Propene	0.80	**16**	
100-42-5	Styrene	0.40	**0.52**	
79-34-5	1,1,2,2-Tetrachloroethane	0.40	< 0.40	
127-18-4	Tetrachloroethylene	0.40	**34**	
109-99-9	Tetrahydrofuran	0.40	< 0.40	
108-88-3	Toluene	0.40	**3.1**	
120-82-1	1,2,4-Trichlorobenzene	1.3	< 1.3	
71-55-6	1,1,1-Trichloroethane	0.40	< 0.40	
79-00-5	1,1,2-Trichloroethane	0.40	< 0.40	
79-01-6	Trichloroethylene	0.40	**2.7**	
95-63-6	1,2,4-Trimethylbenzene	0.40	**0.58**	
108-67-8	1,3,5-Trimethylbenzene	0.40	< 0.40	
540-84-1	2,2,4-Trimethylpentane	0.40	< 0.40	
75-01-4	Vinyl chloride	0.40	< 0.40	
593-60-2	Vinyl Bromide	0.40	< 0.40	
108-05-4	Vinyl acetate	0.40	< 0.40	
1330-20-7	m&p-Xylene	0.80	**3.8**	
95-47-6	o-Xylene	0.40	**1.7**	

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SAMPLE NUMBER
LRL-VP-9

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 11:17 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-10**	Date Received :	5/23/2014

Surrogates

Analyte	PERCENT RECOVERY	QUALIFIERS	FLAG
1,4-Bromofluorobenzene	**100**		

TO-15

Analytic Batch: WG724285	Analysis Date: 6/3/2014	Analysis Time: 5:57 PM
Instrument: AIRMS4	Analyst: 564	Preparation Date: 6/3/2014 10:26
Method: TO-15	Dilution: 10	

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
64-17-5	Ethanol	6.3	**63**	

LEGEND

RL - Reporting Limit

Comments: 1) Sample results are reported as rounded values.
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SAMPLE NUMBER
LRL-VP-10

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 11:26 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-11**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/3/2014 | Analysis Time: 12:39
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
67-64-1	Acetone	2.5	**27**	
107-05-1	Allyl chloride	0.40	< 0.40	
71-43-2	Benzene	0.40	**1.2**	
100-44-7	Benzyl Chloride	0.40	< 0.40	
75-27-4	Bromodichloromethane	0.40	< 0.40	
75-25-2	Bromoform	1.2	< 1.2	
74-83-9	Bromomethane	0.40	< 0.40	
106-99-0	1,3-Butadiene	4.0	< 4.0	
75-15-0	Carbon disulfide	0.40	**0.80**	
56-23-5	Carbon tetrachloride	0.40	< 0.40	
108-90-7	Chlorobenzene	0.40	< 0.40	
75-00-3	Chloroethane	0.40	< 0.40	
67-66-3	Chloroform	0.40	< 0.40	
74-87-3	Chloromethane	0.40	< 0.40	
95-49-8	2-Chlorotoluene	0.40	< 0.40	
110-82-7	Cyclohexane	0.40	**1.3**	
124-48-1	Dibromochloromethane	0.40	< 0.40	
106-93-4	1,2-Dibromoethane	0.40	< 0.40	
95-50-1	1,2-Dichlorobenzene	0.40	< 0.40	
541-73-1	1,3-Dichlorobenzene	0.40	< 0.40	
106-46-7	1,4-Dichlorobenzene	0.40	< 0.40	
107-06-2	1,2-Dichloroethane	0.40	< 0.40	
75-34-3	1,1-Dichloroethane	0.40	< 0.40	
75-35-4	1,1-Dichloroethene	0.40	< 0.40	
156-59-2	cis-1,2-Dichloroethene	0.40	< 0.40	
156-60-5	trans-1,2-Dichloroethene	0.40	< 0.40	
78-87-5	1,2-Dichloropropane	0.40	< 0.40	
10061-01-5	cis-1,3-Dichloropropene	0.40	< 0.40	
10061-02-6	trans-1,3-Dichloropropene	0.40	< 0.40	
123-91-1	1,4-Dioxane	0.40	**1.1**	
64-17-5	Ethanol	1.3	**40**	
100-41-4	Ethylbenzene	0.40	**0.63**	
622-96-8	4-Ethyltoluene	0.40	< 0.40	

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SAMPLE NUMBER
LRL-VP-10

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 11:26 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-11**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/3/2014 | Analysis Time: 12:39
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
75-69-4	Trichlorofluoromethane	0.40	**2.5**	
75-71-8	Dichlorodifluoromethane	0.40	**22**	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.40	< 0.40	
76-14-2	1,2-Dichlorotetrafluoroethane	0.40	**2.6**	
142-82-5	Heptane	0.40	**0.75**	
87-68-3	Hexachloro-1,3-butadiene	1.3	< 1.3	
110-54-3	n-Hexane	0.40	**1.2**	
98-82-8	Isopropylbenzene	0.40	< 0.40	
75-09-2	Methylene Chloride	0.40	< 0.40	
591-78-6	Methyl Butyl Ketone	2.5	< 2.5	
78-93-3	2-Butanone (MEK)	2.5	**8.9**	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.5	< 2.5	
80-62-6	Methyl methacrylate	0.40	< 0.40	
1634-04-4	MTBE	0.40	< 0.40	
91-20-3	Naphthalene	1.3	< 1.3	
67-63-0	2-Propanol	2.5	**2.5**	
115-07-1	Propene	0.80	**13**	
100-42-5	Styrene	0.40	**0.42**	
79-34-5	1,1,2,2-Tetrachloroethane	0.40	< 0.40	
127-18-4	Tetrachloroethylene	0.40	**16**	
109-99-9	Tetrahydrofuran	0.40	< 0.40	
108-88-3	Toluene	0.40	**3.3**	
120-82-1	1,2,4-Trichlorobenzene	1.3	< 1.3	
71-55-6	1,1,1-Trichloroethane	0.40	< 0.40	
79-00-5	1,1,2-Trichloroethane	0.40	< 0.40	
79-01-6	Trichloroethylene	0.40	< 0.40	
95-63-6	1,2,4-Trimethylbenzene	0.40	< 0.40	
108-67-8	1,3,5-Trimethylbenzene	0.40	< 0.40	
540-84-1	2,2,4-Trimethylpentane	0.40	< 0.40	
75-01-4	Vinyl chloride	0.40	< 0.40	
593-60-2	Vinyl Bromide	0.40	< 0.40	
108-05-4	Vinyl acetate	0.40	< 0.40	
1330-20-7	m&p-Xylene	0.80	**1.8**	

Comments: 1) Sample results are reported as rounded values.
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SAMPLE NUMBER
LRL-VP-10

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 11:26 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-11**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/3/2014 | Analysis Time: 12:39
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
95-47-6	o-Xylene	0.40	**0.80**	

Surrogates

Analyte	PERCENT RECOVERY	QUALIFIERS	FLAG
1,4-Bromofluorobenzene	**99.5**		

LEGEND

RL - Reporting Limit

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SAMPLE NUMBER
LRL-VP-11

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 12:03 PM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-12**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/3/2014 | Analysis Time: 1:25
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
67-64-1	Acetone	2.5	**29**	
107-05-1	Allyl chloride	0.40	< 0.40	
71-43-2	Benzene	0.40	**0.80**	
100-44-7	Benzyl Chloride	0.40	< 0.40	
75-27-4	Bromodichloromethane	0.40	< 0.40	
75-25-2	Bromoform	1.2	< 1.2	
74-83-9	Bromomethane	0.40	< 0.40	
106-99-0	1,3-Butadiene	4.0	< 4.0	
75-15-0	Carbon disulfide	0.40	**0.68**	
56-23-5	Carbon tetrachloride	0.40	< 0.40	
108-90-7	Chlorobenzene	0.40	< 0.40	
75-00-3	Chloroethane	0.40	< 0.40	
67-66-3	Chloroform	0.40	< 0.40	
74-87-3	Chloromethane	0.40	**0.50**	
95-49-8	2-Chlorotoluene	0.40	< 0.40	
110-82-7	Cyclohexane	0.40	**1.4**	
124-48-1	Dibromochloromethane	0.40	< 0.40	
106-93-4	1,2-Dibromoethane	0.40	< 0.40	
95-50-1	1,2-Dichlorobenzene	0.40	< 0.40	
541-73-1	1,3-Dichlorobenzene	0.40	< 0.40	
106-46-7	1,4-Dichlorobenzene	0.40	< 0.40	
107-06-2	1,2-Dichloroethane	0.40	< 0.40	
75-34-3	1,1-Dichloroethane	0.40	< 0.40	
75-35-4	1,1-Dichloroethene	0.40	< 0.40	
156-59-2	cis-1,2-Dichloroethene	0.40	< 0.40	
156-60-5	trans-1,2-Dichloroethene	0.40	< 0.40	
78-87-5	1,2-Dichloropropane	0.40	< 0.40	
10061-01-5	cis-1,3-Dichloropropene	0.40	< 0.40	
10061-02-6	trans-1,3-Dichloropropene	0.40	< 0.40	
123-91-1	1,4-Dioxane	0.40	< 0.40	
100-41-4	Ethylbenzene	0.40	**1.2**	
622-96-8	4-Ethyltoluene	0.40	**1.2**	
75-69-4	Trichlorofluoromethane	0.40	**2.5**	

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SAMPLE NUMBER
LRL-VP-11

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 12:03 PM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-12**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/3/2014 | Analysis Time: 1:25
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
75-71-8	Dichlorodifluoromethane	0.40	**24**	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.40	< 0.40	
76-14-2	1,2-Dichlorotetrafluoroethane	0.40	**3.0**	
142-82-5	Heptane	0.40	**0.82**	
87-68-3	Hexachloro-1,3-butadiene	1.3	< 1.3	
110-54-3	n-Hexane	0.40	**1.1**	
98-82-8	Isopropylbenzene	0.40	< 0.40	
75-09-2	Methylene Chloride	0.40	< 0.40	
591-78-6	Methyl Butyl Ketone	2.5	< 2.5	
78-93-3	2-Butanone (MEK)	2.5	**8.6**	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.5	< 2.5	
80-62-6	Methyl methacrylate	0.40	< 0.40	
1634-04-4	MTBE	0.40	< 0.40	
91-20-3	Naphthalene	1.3	**4.7**	
67-63-0	2-Propanol	2.5	**5.1**	
115-07-1	Propene	0.80	**7.2**	
100-42-5	Styrene	0.40	**0.46**	
79-34-5	1,1,2,2-Tetrachloroethane	0.40	< 0.40	
127-18-4	Tetrachloroethylene	0.40	**21**	
109-99-9	Tetrahydrofuran	0.40	< 0.40	
108-88-3	Toluene	0.40	**2.8**	
120-82-1	1,2,4-Trichlorobenzene	1.3	< 1.3	
71-55-6	1,1,1-Trichloroethane	0.40	< 0.40	
79-00-5	1,1,2-Trichloroethane	0.40	< 0.40	
79-01-6	Trichloroethylene	0.40	< 0.40	
95-63-6	1,2,4-Trimethylbenzene	0.40	**5.2**	
108-67-8	1,3,5-Trimethylbenzene	0.40	**1.1**	
540-84-1	2,2,4-Trimethylpentane	0.40	< 0.40	
75-01-4	Vinyl chloride	0.40	< 0.40	
593-60-2	Vinyl Bromide	0.40	< 0.40	
108-05-4	Vinyl acetate	0.40	< 0.40	
1330-20-7	m&p-Xylene	0.80	**6.1**	
95-47-6	o-Xylene	0.40	**2.4**	

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SAMPLE NUMBER
LRL-VP-11

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 12:03 PM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-12**	Date Received :	5/23/2014

Surrogates

Analyte	PERCENT RECOVERY	QUALIFIERS	FLAG
1,4-Bromofluorobenzene	**97.8**		

TO-15

Analytic Batch: WG724285	Analysis Date: 6/3/2014	Analysis Time: 6:42 PM
Instrument: AIRMS4	Analyst: 564	Preparation Date: 6/3/2014 10:26
Method: TO-15	Dilution: 8	

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
64-17-5	Ethanol	5.0	**48**	

LEGEND

RL - Reporting Limit

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SAMPLE NUMBER
LRL-VP-12

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 12:16 PM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-13**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/3/2014 | Analysis Time: 2:11
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
107-05-1	Allyl chloride	0.40	< 0.40	
71-43-2	Benzene	0.40	**1.3**	
100-44-7	Benzyl Chloride	0.40	< 0.40	
75-27-4	Bromodichloromethane	0.40	< 0.40	
75-25-2	Bromoform	1.2	< 1.2	
74-83-9	Bromomethane	0.40	< 0.40	
106-99-0	1,3-Butadiene	4.0	< 4.0	
75-15-0	Carbon disulfide	0.40	< 0.40	
56-23-5	Carbon tetrachloride	0.40	< 0.40	
108-90-7	Chlorobenzene	0.40	< 0.40	
75-00-3	Chloroethane	0.40	< 0.40	
67-66-3	Chloroform	0.40	< 0.40	
74-87-3	Chloromethane	0.40	< 0.40	
95-49-8	2-Chlorotoluene	0.40	< 0.40	
110-82-7	Cyclohexane	0.40	**1.8**	
124-48-1	Dibromochloromethane	0.40	< 0.40	
106-93-4	1,2-Dibromoethane	0.40	< 0.40	
95-50-1	1,2-Dichlorobenzene	0.40	< 0.40	
541-73-1	1,3-Dichlorobenzene	0.40	< 0.40	
106-46-7	1,4-Dichlorobenzene	0.40	< 0.40	
107-06-2	1,2-Dichloroethane	0.40	< 0.40	
75-34-3	1,1-Dichloroethane	0.40	< 0.40	
75-35-4	1,1-Dichloroethene	0.40	< 0.40	
156-59-2	cis-1,2-Dichloroethene	0.40	< 0.40	
156-60-5	trans-1,2-Dichloroethene	0.40	< 0.40	
78-87-5	1,2-Dichloropropane	0.40	< 0.40	
10061-01-5	cis-1,3-Dichloropropene	0.40	< 0.40	
10061-02-6	trans-1,3-Dichloropropene	0.40	< 0.40	
123-91-1	1,4-Dioxane	0.40	**1.4**	
100-41-4	Ethylbenzene	0.40	< 0.40	
622-96-8	4-Ethyltoluene	0.40	< 0.40	
75-69-4	Trichlorofluoromethane	0.40	**1.7**	
75-71-8	Dichlorodifluoromethane	0.40	**16**	

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SAMPLE NUMBER
LRL-VP-12

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 12:16 PM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-13**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/3/2014 | Analysis Time: 2:11
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
76-13-1	1,1,2-Trichlorotrifluoroethane	0.40	< 0.40	
76-14-2	1,2-Dichlorotetrafluoroethane	0.40	**1.8**	
142-82-5	Heptane	0.40	**0.68**	
87-68-3	Hexachloro-1,3-butadiene	1.3	< 1.3	
110-54-3	n-Hexane	0.40	**1.1**	
98-82-8	Isopropylbenzene	0.40	< 0.40	
75-09-2	Methylene Chloride	0.40	< 0.40	
591-78-6	Methyl Butyl Ketone	2.5	< 2.5	
78-93-3	2-Butanone (MEK)	2.5	**6.1**	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.5	< 2.5	
80-62-6	Methyl methacrylate	0.40	< 0.40	
1634-04-4	MTBE	0.40	< 0.40	
91-20-3	Naphthalene	1.3	< 1.3	
115-07-1	Propene	0.80	**8.2**	
100-42-5	Styrene	0.40	< 0.40	
79-34-5	1,1,2,2-Tetrachloroethane	0.40	< 0.40	
127-18-4	Tetrachloroethylene	0.40	**13**	
109-99-9	Tetrahydrofuran	0.40	< 0.40	
108-88-3	Toluene	0.40	**2.1**	
120-82-1	1,2,4-Trichlorobenzene	1.3	< 1.3	
71-55-6	1,1,1-Trichloroethane	0.40	< 0.40	
79-00-5	1,1,2-Trichloroethane	0.40	< 0.40	
79-01-6	Trichloroethylene	0.40	**1.0**	
95-63-6	1,2,4-Trimethylbenzene	0.40	< 0.40	
108-67-8	1,3,5-Trimethylbenzene	0.40	< 0.40	
540-84-1	2,2,4-Trimethylpentane	0.40	< 0.40	
75-01-4	Vinyl chloride	0.40	< 0.40	
593-60-2	Vinyl Bromide	0.40	< 0.40	
108-05-4	Vinyl acetate	0.40	< 0.40	
1330-20-7	m&p-Xylene	0.80	< 0.80	
95-47-6	o-Xylene	0.40	< 0.40	

Surrogates

Analyte	PERCENT RECOVERY	QUALIFIERS	FLAG
1,4-Bromofluorobenzene	**97.5**		

Comments:
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SAMPLE NUMBER
LRL-VP-12

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 12:16 PM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-13**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724285 | Analysis Date: 6/3/2014 | Analysis Time: 7:28 PM
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/3/2014 10:26
Method: TO-15 | Dilution: 16

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
64-17-5	Ethanol	10	**44**	

TO-15

Analytic Batch: WG724465 | Analysis Date: 6/5/2014 | Analysis Time: 11:43
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/4/2014 8:37 AM
Method: TO-15 | Dilution: 200

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
67-64-1	Acetone	250	**1400**	
67-63-0	2-Propanol	250	**640**	

LEGEND

RL - Reporting Limit

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SAMPLE NUMBER
LRL-VP-13

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 12:38 PM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-14**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/3/2014 | Analysis Time: 3:00
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
107-05-1	Allyl chloride	0.40	< 0.40	
71-43-2	Benzene	0.40	**0.82**	
100-44-7	Benzyl Chloride	0.40	< 0.40	
75-27-4	Bromodichloromethane	0.40	< 0.40	
75-25-2	Bromoform	1.2	< 1.2	
74-83-9	Bromomethane	0.40	< 0.40	
106-99-0	1,3-Butadiene	4.0	< 4.0	
75-15-0	Carbon disulfide	0.40	**0.76**	
56-23-5	Carbon tetrachloride	0.40	< 0.40	
108-90-7	Chlorobenzene	0.40	< 0.40	
75-00-3	Chloroethane	0.40	< 0.40	
67-66-3	Chloroform	0.40	< 0.40	
74-87-3	Chloromethane	0.40	< 0.40	
95-49-8	2-Chlorotoluene	0.40	< 0.40	
110-82-7	Cyclohexane	0.40	**2.2**	
124-48-1	Dibromochloromethane	0.40	< 0.40	
106-93-4	1,2-Dibromoethane	0.40	< 0.40	
95-50-1	1,2-Dichlorobenzene	0.40	< 0.40	
541-73-1	1,3-Dichlorobenzene	0.40	< 0.40	
106-46-7	1,4-Dichlorobenzene	0.40	< 0.40	
107-06-2	1,2-Dichloroethane	0.40	< 0.40	
75-34-3	1,1-Dichloroethane	0.40	< 0.40	
75-35-4	1,1-Dichloroethene	0.40	< 0.40	
156-59-2	cis-1,2-Dichloroethene	0.40	< 0.40	
156-60-5	trans-1,2-Dichloroethene	0.40	< 0.40	
78-87-5	1,2-Dichloropropane	0.40	< 0.40	
10061-01-5	cis-1,3-Dichloropropene	0.40	< 0.40	
10061-02-6	trans-1,3-Dichloropropene	0.40	< 0.40	
123-91-1	1,4-Dioxane	0.40	< 0.40	
64-17-5	Ethanol	1.3	**36**	
100-41-4	Ethylbenzene	0.40	**0.41**	
622-96-8	4-Ethyltoluene	0.40	< 0.40	
75-69-4	Trichlorofluoromethane	0.40	**1.7**	

Comments: 1) Sample results are reported as rounded values.
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SAMPLE NUMBER
LRL-VP-13

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 12:38 PM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-14**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/3/2014 | Analysis Time: 3:00
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
75-71-8	Dichlorodifluoromethane	0.40	**14**	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.40	< 0.40	
76-14-2	1,2-Dichlorotetrafluoroethane	0.40	**1.7**	
142-82-5	Heptane	0.40	**0.88**	
87-68-3	Hexachloro-1,3-butadiene	1.3	< 1.3	
110-54-3	n-Hexane	0.40	**1.4**	
98-82-8	Isopropylbenzene	0.40	< 0.40	
75-09-2	Methylene Chloride	0.40	< 0.40	
591-78-6	Methyl Butyl Ketone	2.5	< 2.5	
78-93-3	2-Butanone (MEK)	2.5	**11**	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.5	< 2.5	
80-62-6	Methyl methacrylate	0.40	**0.82**	
1634-04-4	MTBE	0.40	< 0.40	
91-20-3	Naphthalene	1.3	< 1.3	
67-63-0	2-Propanol	2.5	**3.7**	
115-07-1	Propene	0.80	**16**	
100-42-5	Styrene	0.40	**0.50**	
79-34-5	1,1,2,2-Tetrachloroethane	0.40	< 0.40	
127-18-4	Tetrachloroethylene	0.40	**4.6**	
109-99-9	Tetrahydrofuran	0.40	< 0.40	
108-88-3	Toluene	0.40	**2.2**	
120-82-1	1,2,4-Trichlorobenzene	1.3	< 1.3	
71-55-6	1,1,1-Trichloroethane	0.40	< 0.40	
79-00-5	1,1,2-Trichloroethane	0.40	< 0.40	
79-01-6	Trichloroethylene	0.40	**2.5**	
95-63-6	1,2,4-Trimethylbenzene	0.40	**0.58**	
108-67-8	1,3,5-Trimethylbenzene	0.40	< 0.40	
540-84-1	2,2,4-Trimethylpentane	0.40	< 0.40	
75-01-4	Vinyl chloride	0.40	< 0.40	
593-60-2	Vinyl Bromide	0.40	< 0.40	
108-05-4	Vinyl acetate	0.40	< 0.40	
1330-20-7	m&p-Xylene	0.80	**1.3**	
95-47-6	o-Xylene	0.40	**0.61**	

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SAMPLE NUMBER
LRL-VP-13

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 12:38 PM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-14**	Date Received :	5/23/2014

Surrogates

Analyte	PERCENT RECOVERY	QUALIFIERS	FLAG
1,4-Bromofluorobenzene	**102**		

TO-15

Analytic Batch: WG724285 | Analysis Date: 6/3/2014 | Analysis Time: 8:12 PM
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/3/2014 10:26
Method: TO-15 | Dilution: 8

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
67-64-1	Acetone	10	**24**	

LEGEND

RL - Reporting Limit

Comments: 1) Sample results are reported as rounded values.
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SAMPLE NUMBER
LRL-FIELD-DUP

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 10:07 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-15**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/3/2014 | Analysis Time: 3:48
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
67-64-1	Acetone	2.5	**23**	
107-05-1	Allyl chloride	0.40	< 0.40	
71-43-2	Benzene	0.40	**0.82**	
100-44-7	Benzyl Chloride	0.40	< 0.40	
75-27-4	Bromodichloromethane	0.40	< 0.40	
75-25-2	Bromoform	1.2	< 1.2	
74-83-9	Bromomethane	0.40	< 0.40	
106-99-0	1,3-Butadiene	4.0	< 4.0	
75-15-0	Carbon disulfide	0.40	**0.49**	
56-23-5	Carbon tetrachloride	0.40	< 0.40	
108-90-7	Chlorobenzene	0.40	< 0.40	
75-00-3	Chloroethane	0.40	< 0.40	
67-66-3	Chloroform	0.40	< 0.40	
74-87-3	Chloromethane	0.40	< 0.40	
95-49-8	2-Chlorotoluene	0.40	< 0.40	
110-82-7	Cyclohexane	0.40	**10**	
124-48-1	Dibromochloromethane	0.40	< 0.40	
106-93-4	1,2-Dibromoethane	0.40	< 0.40	
95-50-1	1,2-Dichlorobenzene	0.40	< 0.40	
541-73-1	1,3-Dichlorobenzene	0.40	< 0.40	
106-46-7	1,4-Dichlorobenzene	0.40	< 0.40	
107-06-2	1,2-Dichloroethane	0.40	< 0.40	
75-34-3	1,1-Dichloroethane	0.40	< 0.40	
75-35-4	1,1-Dichloroethene	0.40	< 0.40	
156-59-2	cis-1,2-Dichloroethene	0.40	< 0.40	
156-60-5	trans-1,2-Dichloroethene	0.40	< 0.40	
78-87-5	1,2-Dichloropropane	0.40	< 0.40	
10061-01-5	cis-1,3-Dichloropropene	0.40	< 0.40	
10061-02-6	trans-1,3-Dichloropropene	0.40	< 0.40	
123-91-1	1,4-Dioxane	0.40	< 0.40	
100-41-4	Ethylbenzene	0.40	**0.42**	
622-96-8	4-Ethyltoluene	0.40	< 0.40	
75-69-4	Trichlorofluoromethane	0.40	**5.4**	

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SAMPLE NUMBER
LRL-FIELD-DUP

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 10:07 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-15**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/3/2014 | Analysis Time: 3:48
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
76-13-1	1,1,2-Trichlorotrifluoroethane	0.40	**0.80**	
76-14-2	1,2-Dichlorotetrafluoroethane	0.40	**7.5**	
142-82-5	Heptane	0.40	**0.97**	
87-68-3	Hexachloro-1,3-butadiene	1.3	< 1.3	
110-54-3	n-Hexane	0.40	**1.9**	
98-82-8	Isopropylbenzene	0.40	< 0.40	
75-09-2	Methylene Chloride	0.40	**1.0**	
591-78-6	Methyl Butyl Ketone	2.5	< 2.5	
78-93-3	2-Butanone (MEK)	2.5	**4.6**	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.5	< 2.5	
80-62-6	Methyl methacrylate	0.40	**0.75**	
1634-04-4	MTBE	0.40	< 0.40	
91-20-3	Naphthalene	1.3	< 1.3	
67-63-0	2-Propanol	2.5	**4.1**	
115-07-1	Propene	0.80	**12**	
100-42-5	Styrene	0.40	**0.47**	
79-34-5	1,1,2,2-Tetrachloroethane	0.40	< 0.40	
109-99-9	Tetrahydrofuran	0.40	< 0.40	
108-88-3	Toluene	0.40	**1.8**	
120-82-1	1,2,4-Trichlorobenzene	1.3	< 1.3	
71-55-6	1,1,1-Trichloroethane	0.40	< 0.40	
79-00-5	1,1,2-Trichloroethane	0.40	< 0.40	
79-01-6	Trichloroethylene	0.40	**0.49**	
95-63-6	1,2,4-Trimethylbenzene	0.40	**0.45**	
108-67-8	1,3,5-Trimethylbenzene	0.40	< 0.40	
540-84-1	2,2,4-Trimethylpentane	0.40	< 0.40	
75-01-4	Vinyl chloride	0.40	< 0.40	
593-60-2	Vinyl Bromide	0.40	< 0.40	
108-05-4	Vinyl acetate	0.40	< 0.40	
1330-20-7	m&p-Xylene	0.80	**1.3**	
95-47-6	o-Xylene	0.40	**0.65**	

Surrogates

Analyte	PERCENT RECOVERY	QUALIFIERS	FLAG
1,4-Bromofluorobenzene	**98.8**		

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SAMPLE NUMBER
LRL-FIELD-DUP

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 10:07 AM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-15**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724285 | Analysis Date: 6/3/2014 | Analysis Time: 8:56 PM
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/3/2014 10:26
Method: TO-15 | Dilution: 8

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
64-17-5	Ethanol	5.0	**45**	
75-71-8	Dichlorodifluoromethane	1.6	**64**	
127-18-4	Tetrachloroethylene	1.6	**59**	

LEGEND

RL - Reporting Limit

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SAMPLE NUMBER
LRL-VP-14

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 12:26 PM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-16**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/3/2014 | Analysis Time: 4:35
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
67-64-1	Acetone	2.5	**32**	
107-05-1	Allyl chloride	0.40	< 0.40	
71-43-2	Benzene	0.40	**1.7**	
100-44-7	Benzyl Chloride	0.40	< 0.40	
75-27-4	Bromodichloromethane	0.40	< 0.40	
75-25-2	Bromoform	1.2	< 1.2	
74-83-9	Bromomethane	0.40	< 0.40	
106-99-0	1,3-Butadiene	4.0	< 4.0	
75-15-0	Carbon disulfide	0.40	**0.70**	
56-23-5	Carbon tetrachloride	0.40	< 0.40	
108-90-7	Chlorobenzene	0.40	< 0.40	
75-00-3	Chloroethane	0.40	< 0.40	
67-66-3	Chloroform	0.40	< 0.40	
74-87-3	Chloromethane	0.40	< 0.40	
95-49-8	2-Chlorotoluene	0.40	< 0.40	
110-82-7	Cyclohexane	0.40	**1.4**	
124-48-1	Dibromochloromethane	0.40	< 0.40	
106-93-4	1,2-Dibromoethane	0.40	< 0.40	
95-50-1	1,2-Dichlorobenzene	0.40	< 0.40	
541-73-1	1,3-Dichlorobenzene	0.40	< 0.40	
106-46-7	1,4-Dichlorobenzene	0.40	< 0.40	
107-06-2	1,2-Dichloroethane	0.40	< 0.40	
75-34-3	1,1-Dichloroethane	0.40	< 0.40	
75-35-4	1,1-Dichloroethene	0.40	< 0.40	
156-59-2	cis-1,2-Dichloroethene	0.40	< 0.40	
156-60-5	trans-1,2-Dichloroethene	0.40	< 0.40	
78-87-5	1,2-Dichloropropane	0.40	< 0.40	
10061-01-5	cis-1,3-Dichloropropene	0.40	< 0.40	
10061-02-6	trans-1,3-Dichloropropene	0.40	< 0.40	
123-91-1	1,4-Dioxane	0.40	< 0.40	
64-17-5	Ethanol	1.3	**21**	
100-41-4	Ethylbenzene	0.40	**2.0**	
622-96-8	4-Ethyltoluene	0.40	< 0.40	

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SAMPLE NUMBER
LRL-VP-14

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 12:26 PM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-16**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/3/2014 | Analysis Time: 4:35
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
75-69-4	Trichlorofluoromethane	0.40	**1.8**	
75-71-8	Dichlorodifluoromethane	0.40	**16**	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.40	< 0.40	
76-14-2	1,2-Dichlorotetrafluoroethane	0.40	**1.8**	
142-82-5	Heptane	0.40	**1.6**	
87-68-3	Hexachloro-1,3-butadiene	1.3	< 1.3	
110-54-3	n-Hexane	0.40	**2.0**	
98-82-8	Isopropylbenzene	0.40	< 0.40	
75-09-2	Methylene Chloride	0.40	< 0.40	
591-78-6	Methyl Butyl Ketone	2.5	< 2.5	
78-93-3	2-Butanone (MEK)	2.5	**6.8**	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.5	< 2.5	
80-62-6	Methyl methacrylate	0.40	< 0.40	
1634-04-4	MTBE	0.40	< 0.40	
91-20-3	Naphthalene	1.3	< 1.3	
67-63-0	2-Propanol	2.5	< 2.5	
115-07-1	Propene	0.80	**16**	
100-42-5	Styrene	0.40	**0.58**	
79-34-5	1,1,2,2-Tetrachloroethane	0.40	< 0.40	
127-18-4	Tetrachloroethylene	0.40	**4.3**	
109-99-9	Tetrahydrofuran	0.40	< 0.40	
108-88-3	Toluene	0.40	**4.5**	
120-82-1	1,2,4-Trichlorobenzene	1.3	< 1.3	
71-55-6	1,1,1-Trichloroethane	0.40	< 0.40	
79-00-5	1,1,2-Trichloroethane	0.40	< 0.40	
79-01-6	Trichloroethylene	0.40	< 0.40	
95-63-6	1,2,4-Trimethylbenzene	0.40	**0.71**	
108-67-8	1,3,5-Trimethylbenzene	0.40	< 0.40	
540-84-1	2,2,4-Trimethylpentane	0.40	< 0.40	
75-01-4	Vinyl chloride	0.40	< 0.40	
593-60-2	Vinyl Bromide	0.40	< 0.40	
108-05-4	Vinyl acetate	0.40	< 0.40	
1330-20-7	m&p-Xylene	0.80	**6.1**	

Comments: 1) Sample results are reported as rounded values.
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SAMPLE NUMBER
LRL-VP-14

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 12:26 PM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-16**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/3/2014 | Analysis Time: 4:35
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
95-47-6	o-Xylene	0.40	**2.8**	

Surrogates

Analyte	PERCENT RECOVERY	QUALIFIERS	FLAG
1,4-Bromofluorobenzene	**101**		

LEGEND

RL - Reporting Limit

Comments: 1) Sample results are reported as rounded values.
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SAMPLE NUMBER
LRL-FIELD-DUP-2

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 12:45 PM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-17**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/3/2014 | Analysis Time: 5:22
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
67-64-1	Acetone	2.5	**26**	
107-05-1	Allyl chloride	0.40	< 0.40	
71-43-2	Benzene	0.40	**2.0**	
100-44-7	Benzyl Chloride	0.40	< 0.40	
75-27-4	Bromodichloromethane	0.40	< 0.40	
75-25-2	Bromoform	1.2	< 1.2	
74-83-9	Bromomethane	0.40	< 0.40	
106-99-0	1,3-Butadiene	4.0	< 4.0	
75-15-0	Carbon disulfide	0.40	**0.49**	
56-23-5	Carbon tetrachloride	0.40	< 0.40	
108-90-7	Chlorobenzene	0.40	< 0.40	
75-00-3	Chloroethane	0.40	< 0.40	
67-66-3	Chloroform	0.40	< 0.40	
74-87-3	Chloromethane	0.40	< 0.40	
95-49-8	2-Chlorotoluene	0.40	< 0.40	
110-82-7	Cyclohexane	0.40	**1.9**	
124-48-1	Dibromochloromethane	0.40	< 0.40	
106-93-4	1,2-Dibromoethane	0.40	< 0.40	
95-50-1	1,2-Dichlorobenzene	0.40	< 0.40	
541-73-1	1,3-Dichlorobenzene	0.40	< 0.40	
106-46-7	1,4-Dichlorobenzene	0.40	< 0.40	
107-06-2	1,2-Dichloroethane	0.40	< 0.40	
75-34-3	1,1-Dichloroethane	0.40	< 0.40	
75-35-4	1,1-Dichloroethene	0.40	< 0.40	
156-59-2	cis-1,2-Dichloroethene	0.40	< 0.40	
156-60-5	trans-1,2-Dichloroethene	0.40	< 0.40	
78-87-5	1,2-Dichloropropane	0.40	< 0.40	
10061-01-5	cis-1,3-Dichloropropene	0.40	< 0.40	
10061-02-6	trans-1,3-Dichloropropene	0.40	< 0.40	
123-91-1	1,4-Dioxane	0.40	< 0.40	
64-17-5	Ethanol	1.3	**21**	
100-41-4	Ethylbenzene	0.40	< 0.40	
622-96-8	4-Ethyltoluene	0.40	< 0.40	

Comments: 1) Sample results are reported as rounded values.
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Mt. Juliet, TN 37122
(615) 758-5858
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Fax (615) 758-5859
Tax I.D 62-0814289
Est. 1970

SAMPLE NUMBER
LRL-FIELD-DUP-2

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 12:45 PM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-17**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/3/2014 | Analysis Time: 5:22
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
75-69-4	Trichlorofluoromethane	0.40	**2.5**	
75-71-8	Dichlorodifluoromethane	0.40	**26**	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.40	< 0.40	
76-14-2	1,2-Dichlorotetrafluoroethane	0.40	**2.9**	
142-82-5	Heptane	0.40	**0.90**	
87-68-3	Hexachloro-1,3-butadiene	1.3	< 1.3	
110-54-3	n-Hexane	0.40	**1.3**	
98-82-8	Isopropylbenzene	0.40	< 0.40	
75-09-2	Methylene Chloride	0.40	< 0.40	
591-78-6	Methyl Butyl Ketone	2.5	< 2.5	
78-93-3	2-Butanone (MEK)	2.5	**3.5**	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.5	< 2.5	
80-62-6	Methyl methacrylate	0.40	< 0.40	
1634-04-4	MTBE	0.40	< 0.40	
91-20-3	Naphthalene	1.3	< 1.3	
67-63-0	2-Propanol	2.5	**3.6**	
115-07-1	Propene	0.80	**12**	
100-42-5	Styrene	0.40	< 0.40	
79-34-5	1,1,2,2-Tetrachloroethane	0.40	< 0.40	
127-18-4	Tetrachloroethylene	0.40	**21**	
109-99-9	Tetrahydrofuran	0.40	< 0.40	
108-88-3	Toluene	0.40	**2.0**	
120-82-1	1,2,4-Trichlorobenzene	1.3	< 1.3	
71-55-6	1,1,1-Trichloroethane	0.40	< 0.40	
79-00-5	1,1,2-Trichloroethane	0.40	< 0.40	
79-01-6	Trichloroethylene	0.40	< 0.40	
95-63-6	1,2,4-Trimethylbenzene	0.40	< 0.40	
108-67-8	1,3,5-Trimethylbenzene	0.40	< 0.40	
540-84-1	2,2,4-Trimethylpentane	0.40	< 0.40	
75-01-4	Vinyl chloride	0.40	< 0.40	
593-60-2	Vinyl Bromide	0.40	< 0.40	
108-05-4	Vinyl acetate	0.40	< 0.40	
1330-20-7	m&p-Xylene	0.80	< 0.80	

Comments: 1) Sample results are reported as rounded values.
2) These results are applicable only to the items tested.

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SAMPLE NUMBER
LRL-FIELD-DUP-2

Customer :	Allwyn Environmental	Project :	002-105
Source :	LOS REALES VES	Date Sampled :	5/22/2014 12:45 PM
Location :	Los Reales Landfill VES Soil Vapor	Sampled By :	Keith Ross
Lab Sample ID :	**L700915-17**	Date Received :	5/23/2014

TO-15

Analytic Batch: WG724088 | Analysis Date: 6/3/2014 | Analysis Time: 5:22
Instrument: AIRMS4 | Analyst: 564 | Preparation Date: 6/2/2014 10:58
Method: TO-15 | Dilution: 2

CAS NO	Analyte	RL ppb	RESULTS ppb	FLAG
95-47-6	o-Xylene	0.40	< 0.40	

Surrogates

Analyte	PERCENT RECOVERY	QUALIFIERS	FLAG
1,4-Bromofluorobenzene	**99.3**		

LEGEND

RL - Reporting Limit

Comments: 1) Sample results are reported as rounded values.
2) These results are applicable only to the items tested.

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724088**
Analysis Date:	6/2/2014 4:44:00 PM	Analyst:	564
Instrument ID:	AIRMS4		

Sample Numbers: L700915-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11, -12, -13, -14, -15, -16, -17

Method Blank

Analyte	CAS	RDL	Qualifier
1,1,1-Trichloroethane	71-55-6	< 0.200	
1,1,2,2-Tetrachloroethane	79-34-5	< 0.200	
1,1,2-Trichloroethane	79-00-5	< 0.200	
1,1,2-Trichlorotrifluoroethane	76-13-1	< 0.200	
1,1-Dichloroethane	75-34-3	< 0.200	
1,1-Dichloroethene	75-35-4	< 0.200	
1,2,4-Trichlorobenzene	120-82-1	< 0.630	
1,2,4-Trimethylbenzene	95-63-6	< 0.200	
1,2-Dibromoethane	106-93-4	< 0.200	
1,2-Dichlorobenzene	95-50-1	< 0.200	
1,2-Dichloroethane	107-06-2	< 0.200	
1,2-Dichloropropane	78-87-5	< 0.200	
1,2-Dichlorotetrafluoroethane	76-14-2	< 0.200	
1,3,5-Trimethylbenzene	108-67-8	< 0.200	
1,3-Butadiene	106-99-0	< 2.00	
1,3-Dichlorobenzene	541-73-1	< 0.200	
1,4-Dichlorobenzene	106-46-7	< 0.200	
1,4-Dioxane	123-91-1	< 0.200	
2,2,4-Trimethylpentane	540-84-1	< 0.200	
2-Butanone (MEK)	78-93-3	< 1.25	
2-Chlorotoluene	95-49-8	< 0.200	
2-Propanol	67-63-0	< 1.25	
4-Ethyltoluene	622-96-8	< 0.200	
4-Methyl-2-pentanone (MIBK)	108-10-1	< 1.25	
Acetone	67-64-1	< 1.25	
Allyl Chloride	107-05-1	< 0.200	
Benzene	71-43-2	< 0.200	
Benzyl Chloride	100-44-7	< 0.200	
Bromodichloromethane	75-27-4	< 0.200	
Bromoform	75-25-2	< 0.600	
Bromomethane	74-83-9	< 0.200	
Carbon disulfide	75-15-0	< 0.200	
Carbon tetrachloride	56-23-5	< 0.200	
Chlorobenzene	108-90-7	< 0.200	
Dibromochloromethane	124-48-1	< 0.200	
Chloroethane	75-00-3	< 0.200	
Chloroform	67-66-3	< 0.200	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724088**
Analysis Date:	6/2/2014 4:44:00 PM	Analyst:	564
Instrument ID:	AIRMS4		

Sample Numbers: L700915-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11, -12, -13, -14, -15, -16, -17

Method Blank

Analyte	CAS	RDL	Qualifier
Chloromethane	74-87-3	< 0.200	
cis-1,2-Dichloroethene	156-59-2	< 0.200	
cis-1,3-Dichloropropene	10061-01-5	< 0.200	
Cyclohexane	110-82-7	< 0.200	
Dichlorodifluoromethane	75-71-8	< 0.200	
Ethanol	64-17-5	< 0.630	
Ethylbenzene	100-41-4	< 0.200	
Heptane	142-82-5	< 0.200	
Hexachloro-1,3-butadiene	87-68-3	< 0.630	
Isopropylbenzene	98-82-8	< 0.200	
m&p-Xylene	1330-20-7	< 0.400	
Methyl Butyl Ketone	591-78-6	< 1.25	
Methyl Methacrylate	80-62-6	< 0.200	
MTBE	1634-04-4	< 0.200	
Methylene Chloride	75-09-2	< 0.200	
Naphthalene	91-20-3	< 0.630	
n-Hexane	110-54-3	< 0.200	
o-Xylene	95-47-6	< 0.200	
Propene	115-07-1	< 0.400	
Styrene	100-42-5	< 0.200	
Tetrachloroethylene	127-18-4	< 0.200	
Tetrahydrofuran	109-99-9	< 0.200	
Toluene	108-88-3	< 0.200	
trans-1,2-Dichloroethene	156-60-5	< 0.200	
trans-1,3-Dichloropropene	10061-02-6	< 0.200	
Trichloroethylene	79-01-6	< 0.200	
Trichlorofluoromethane	75-69-4	< 0.200	
Vinyl acetate	108-05-4	< 0.200	
Vinyl Bromide	593-60-2	< 0.200	
Vinyl chloride	75-01-4	< 0.200	

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724285**
Analysis Date:	6/3/2014 11:06:00 AM	Analyst:	564
Instrument ID:	AIRMS4		
Sample Numbers:	L700915-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -12, -13, -14, -15		

Method Blank

Analyte	CAS	RDL	Qualifier
1,1,1-Trichloroethane	71-55-6	< 0.200	
1,1,2,2-Tetrachloroethane	79-34-5	< 0.200	
1,1,2-Trichloroethane	79-00-5	< 0.200	
1,1,2-Trichlorotrifluoroethane	76-13-1	< 0.200	
1,1-Dichloroethane	75-34-3	< 0.200	
1,1-Dichloroethene	75-35-4	< 0.200	
1,2,4-Trichlorobenzene	120-82-1	< 0.630	
1,2,4-Trimethylbenzene	95-63-6	< 0.200	
1,2-Dibromoethane	106-93-4	< 0.200	
1,2-Dichlorobenzene	95-50-1	< 0.200	
1,2-Dichloroethane	107-06-2	< 0.200	
1,2-Dichloropropane	78-87-5	< 0.200	
1,2-Dichlorotetrafluoroethane	76-14-2	< 0.200	
1,3,5-Trimethylbenzene	108-67-8	< 0.200	
1,3-Butadiene	106-99-0	< 2.00	
1,3-Dichlorobenzene	541-73-1	< 0.200	
1,4-Dichlorobenzene	106-46-7	< 0.200	
1,4-Dioxane	123-91-1	< 0.200	
2,2,4-Trimethylpentane	540-84-1	< 0.200	
2-Butanone (MEK)	78-93-3	< 1.25	
2-Chlorotoluene	95-49-8	< 0.200	
2-Propanol	67-63-0	< 1.25	
4-Ethyltoluene	622-96-8	< 0.200	
4-Methyl-2-pentanone (MIBK)	108-10-1	< 1.25	
Acetone	67-64-1	< 1.25	
Allyl Chloride	107-05-1	< 0.200	
Benzene	71-43-2	< 0.200	
Benzyl Chloride	100-44-7	< 0.200	
Bromodichloromethane	75-27-4	< 0.200	
Bromoform	75-25-2	< 0.600	
Bromomethane	74-83-9	< 0.200	
Carbon disulfide	75-15-0	< 0.200	
Carbon tetrachloride	56-23-5	< 0.200	
Chlorobenzene	108-90-7	< 0.200	
Dibromochloromethane	124-48-1	< 0.200	
Chloroethane	75-00-3	< 0.200	
Chloroform	67-66-3	< 0.200	

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724285**
Analysis Date:	6/3/2014 11:06:00 AM	Analyst:	564
Instrument ID:	AIRMS4		
Sample Numbers:	L700915-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -12, -13, -14, -15		

Method Blank

Analyte	CAS	RDL	Qualifier
Chloromethane	74-87-3	< 0.200	
cis-1,2-Dichloroethene	156-59-2	< 0.200	
cis-1,3-Dichloropropene	10061-01-5	< 0.200	
Cyclohexane	110-82-7	< 0.200	
Dichlorodifluoromethane	75-71-8	< 0.200	
Ethanol	64-17-5	< 0.630	
Ethylbenzene	100-41-4	< 0.200	
Heptane	142-82-5	< 0.200	
Hexachloro-1,3-butadiene	87-68-3	< 0.630	
Isopropylbenzene	98-82-8	< 0.200	
m&p-Xylene	1330-20-7	< 0.400	
Methyl Butyl Ketone	591-78-6	< 1.25	
Methyl Methacrylate	80-62-6	< 0.200	
MTBE	1634-04-4	< 0.200	
Methylene Chloride	75-09-2	< 0.200	
Naphthalene	91-20-3	< 0.630	
n-Hexane	110-54-3	< 0.200	
o-Xylene	95-47-6	< 0.200	
Propene	115-07-1	< 0.400	
Styrene	100-42-5	< 0.200	
Tetrachloroethylene	127-18-4	< 0.200	
Tetrahydrofuran	109-99-9	< 0.200	
Toluene	108-88-3	< 0.200	
trans-1,2-Dichloroethene	156-60-5	< 0.200	
trans-1,3-Dichloropropene	10061-02-6	< 0.200	
Trichloroethylene	79-01-6	< 0.200	
Trichlorofluoromethane	75-69-4	< 0.200	
Vinyl acetate	108-05-4	< 0.200	
Vinyl Bromide	593-60-2	< 0.200	
Vinyl chloride	75-01-4	< 0.200	

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724465**
Analysis Date:	6/5/2014 7:51:00 AM	Analyst:	564
Instrument ID:	AIRMS4		
Sample Numbers:	L700915-04, -13		

Method Blank

Analyte	CAS	RDL	Qualifier
1,1,1-Trichloroethane	71-55-6	< 0.200	
1,1,2,2-Tetrachloroethane	79-34-5	< 0.200	
1,1,2-Trichloroethane	79-00-5	< 0.200	
1,1,2-Trichlorotrifluoroethane	76-13-1	< 0.200	
1,1-Dichloroethane	75-34-3	< 0.200	
1,1-Dichloroethene	75-35-4	< 0.200	
1,2,4-Trichlorobenzene	120-82-1	< 0.630	
1,2,4-Trimethylbenzene	95-63-6	< 0.200	
1,2-Dibromoethane	106-93-4	< 0.200	
1,2-Dichlorobenzene	95-50-1	< 0.200	
1,2-Dichloroethane	107-06-2	< 0.200	
1,2-Dichloropropane	78-87-5	< 0.200	
1,2-Dichlorotetrafluoroethane	76-14-2	< 0.200	
1,3,5-Trimethylbenzene	108-67-8	< 0.200	
1,3-Butadiene	106-99-0	< 2.00	
1,3-Dichlorobenzene	541-73-1	< 0.200	
1,4-Dichlorobenzene	106-46-7	< 0.200	
1,4-Dioxane	123-91-1	< 0.200	
2,2,4-Trimethylpentane	540-84-1	< 0.200	
2-Butanone (MEK)	78-93-3	< 1.25	
2-Chlorotoluene	95-49-8	< 0.200	
2-Propanol	67-63-0	< 1.25	
4-Ethyltoluene	622-96-8	< 0.200	
4-Methyl-2-pentanone (MIBK)	108-10-1	< 1.25	
Acetone	67-64-1	< 1.25	
Allyl Chloride	107-05-1	< 0.200	
Benzene	71-43-2	< 0.200	
Benzyl Chloride	100-44-7	< 0.200	
Bromodichloromethane	75-27-4	< 0.200	
Bromoform	75-25-2	< 0.600	
Bromomethane	74-83-9	< 0.200	
Carbon disulfide	75-15-0	< 0.200	
Carbon tetrachloride	56-23-5	< 0.200	
Chlorobenzene	108-90-7	< 0.200	
Dibromochloromethane	124-48-1	< 0.200	
Chloroethane	75-00-3	< 0.200	
Chloroform	67-66-3	< 0.200	

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724465**
Analysis Date:	6/5/2014 7:51:00 AM	Analyst:	564
Instrument ID:	AIRMS4		
Sample Numbers:	L700915-04, -13		

Method Blank

Analyte	CAS	RDL	Qualifier
Chloromethane	74-87-3	< 0.200	
cis-1,2-Dichloroethene	156-59-2	< 0.200	
cis-1,3-Dichloropropene	10061-01-5	< 0.200	
Cyclohexane	110-82-7	< 0.200	
Dichlorodifluoromethane	75-71-8	< 0.200	
Ethanol	64-17-5	< 0.630	
Ethylbenzene	100-41-4	< 0.200	
Heptane	142-82-5	< 0.200	
Hexachloro-1,3-butadiene	87-68-3	< 0.630	
Isopropylbenzene	98-82-8	< 0.200	
m&p-Xylene	1330-20-7	< 0.400	
Methyl Butyl Ketone	591-78-6	< 1.25	
Methyl Methacrylate	80-62-6	< 0.200	
MTBE	1634-04-4	< 0.200	
Methylene Chloride	75-09-2	< 0.200	
Naphthalene	91-20-3	< 0.630	
n-Hexane	110-54-3	< 0.200	
o-Xylene	95-47-6	< 0.200	
Propene	115-07-1	< 0.400	
Styrene	100-42-5	< 0.200	
Tetrachloroethylene	127-18-4	< 0.200	
Tetrahydrofuran	109-99-9	< 0.200	
Toluene	108-88-3	< 0.200	
trans-1,2-Dichloroethene	156-60-5	< 0.200	
trans-1,3-Dichloropropene	10061-02-6	< 0.200	
Trichloroethylene	79-01-6	< 0.200	
Trichlorofluoromethane	75-69-4	< 0.200	
Vinyl acetate	108-05-4	< 0.200	
Vinyl Bromide	593-60-2	< 0.200	
Vinyl chloride	75-01-4	< 0.200	

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724088**
Analysis Date:	6/2/2014 4:44:00 PM	Analyst:	564
Instrument ID:	AIRMS4		
Sample Numbers:	L700915-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11, -12, -13, -14, -15, -16, -17		

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,1,1-Trichloroethane	1	3.75	4.5887	122	70 - 130	
1,1,2,2-Tetrachloroethane	1	3.75	4.4814	120	70 - 130	
1,1,2-Trichloroethane	1	3.75	4.5464	121	70 - 130	
1,1,2-Trichlorotrifluoroethane	1	3.75	4.5753	122	70 - 130	
1,1-Dichloroethane	1	3.75	4.5806	122	70 - 130	
1,1-Dichloroethene	1	3.75	4.5823	122	70 - 130	
1,2,4-Trichlorobenzene	1	3.75	4.6530	124	59.7 - 155	
1,2,4-Trimethylbenzene	1	3.75	4.5568	122	70 - 130	
1,2-Dibromoethane	1	3.75	4.6161	123	70 - 130	
1,2-Dichlorobenzene	1	3.75	4.6029	123	70 - 130	
1,2-Dichloroethane	1	3.75	4.6578	124	70 - 130	
1,2-Dichloropropane	1	3.75	4.5832	122	70 - 130	
1,2-Dichlorotetrafluoroethane	1	3.75	4.4615	119	70 - 130	
1,3,5-Trimethylbenzene	1	3.75	4.5370	121	70 - 130	
1,3-Butadiene	1	3.75	4.6989	125	70 - 130	
1,3-Dichlorobenzene	1	3.75	4.5469	121	70 - 130	
1,4-Dichlorobenzene	1	3.75	4.6032	123	70 - 130	
1,4-Dioxane	1	3.75	4.4484	119	70 - 130	
2,2,4-Trimethylpentane	1	3.75	4.6544	124	70 - 130	
Methyl Ethyl Ketone	1	3.75	4.2804	114	70 - 130	
2-Chlorotoluene	1	3.75	4.8678	130	70 - 130	
2-Propanol	1	3.75	4.0273	107	62.2 - 137	
4-Ethyltoluene	1	3.75	4.5384	121	70 - 130	
4-Methyl-2-pentanone (MIBK)	1	3.75	4.3370	116	51.3 - 144	
Acetone	1	3.75	4.1581	111	70 - 130	
Allyl Chloride	1	3.75	4.5640	122	70 - 130	
Benzene	1	3.75	4.6011	123	70 - 130	
Benzyl Chloride	1	3.75	4.6382	124	70 - 130	
Bromodichloromethane	1	3.75	4.7365	126	70 - 130	
Bromoform	1	3.75	4.6718	125	70 - 130	
Bromomethane	1	3.75	4.7848	128	70 - 130	
Carbon disulfide	1	3.75	4.4272	118	70 - 130	
Carbon tetrachloride	1	3.75	4.5805	122	70 - 130	
Chlorobenzene	1	3.75	4.6152	123	70 - 130	
Dibromochloromethane	1	3.75	4.6571	124	70 - 130	
Chloroethane	1	3.75	4.5491	121	70 - 130	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724088**
Analysis Date:	6/2/2014 4:44:00 PM	Analyst:	564
Instrument ID:	AIRMS4		
Sample Numbers:	L700915-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11, -12, -13, -14, -15, -16, -17		

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Chloroform	1	3.75	4.6108	123	70 - 130	
Chloromethane	1	3.75	4.4117	118	70 - 130	
cis-1,2-Dichloroethene	1	3.75	4.4942	120	70 - 130	
cis-1,3-Dichloropropene	1	3.75	4.6080	123	70 - 130	
Cyclohexane	1	3.75	4.6095	123	70 - 130	
Dichlorodifluoromethane	1	3.75	4.3520	116	70 - 130	
Ethanol	1	3.75	4.1354	110	52.6 - 145	
Ethylbenzene	1	3.75	4.5512	121	70 - 130	
Heptane	1	3.75	4.6404	124	70 - 130	
Hexachloro-1,3-butadiene	1	3.75	4.4812	119	55.7 - 144	
Isopropylbenzene	1	3.75	4.5635	122	70 - 130	
m&p-Xylene	1	7.5	8.9666	120	70 - 130	
Methyl Butyl Ketone	1	3.75	4.3597	116	36.5 - 155	
Methyl Methacrylate	1	3.75	4.1616	111	70 - 130	
MTBE	1	3.75	4.4100	118	70 - 130	
Methylene Chloride	1	3.75	4.3191	115	70 - 130	
Naphthalene	1	3.75	4.4639	119	53.4 - 158	
n-Hexane	1	3.75	4.5787	122	70 - 130	
o-Xylene	1	3.75	4.5759	122	70 - 130	
Propene	1	3.75	4.4907	120	70 - 130	
Styrene	1	3.75	4.6508	124	70 - 130	
Tetrachloroethylene	1	3.75	4.6144	123	70 - 130	
Tetrahydrofuran	1	3.75	4.3631	116	70 - 130	
Toluene	1	3.75	4.5611	122	70 - 130	
trans-1,2-Dichloroethene	1	3.75	4.5468	121	70 - 130	
trans-1,3-Dichloropropene	1	3.75	4.5388	121	70 - 130	
Trichloroethylene	1	3.75	4.6356	124	70 - 130	
Trichlorofluoromethane	1	3.75	4.6058	123	70 - 130	
Vinyl acetate	1	3.75	4.5379	121	70 - 130	
Vinyl Bromide	1	3.75	4.5523	121	70 - 130	
Vinyl chloride	1	3.75	4.8517	129	70 - 130	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724088**
Analysis Date:	6/2/2014 4:44:00 PM	Analyst:	564
Instrument ID:	AIRMS4		

Sample Numbers: L700915-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11, -12, -13, -14, -15, -16, -17

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,1,1-Trichloroethane	1	3.75	4.1943	112	70 - 130	
1,1,2,2-Tetrachloroethane	1	3.75	4.0254	107	70 - 130	
1,1,2-Trichloroethane	1	3.75	4.2113	112	70 - 130	
1,1,2-Trichlorotrifluoroethane	1	3.75	4.1978	112	70 - 130	
1,1-Dichloroethane	1	3.75	4.1611	111	70 - 130	
1,1-Dichloroethene	1	3.75	4.1478	111	70 - 130	
1,2,4-Trichlorobenzene	1	3.75	4.3521	116	59.7 - 155	
1,2,4-Trimethylbenzene	1	3.75	4.1052	109	70 - 130	
1,2-Dibromoethane	1	3.75	4.2538	113	70 - 130	
1,2-Dichlorobenzene	1	3.75	4.1740	111	70 - 130	
1,2-Dichloroethane	1	3.75	4.3267	115	70 - 130	
1,2-Dichloropropane	1	3.75	4.1746	111	70 - 130	
1,2-Dichlorotetrafluoroethane	1	3.75	4.0451	108	70 - 130	
1,3,5-Trimethylbenzene	1	3.75	4.0680	108	70 - 130	
1,3-Butadiene	1	3.75	3.9284	105	70 - 130	
1,3-Dichlorobenzene	1	3.75	4.1158	110	70 - 130	
1,4-Dichlorobenzene	1	3.75	4.2273	113	70 - 130	
1,4-Dioxane	1	3.75	3.9628	106	70 - 130	
2,2,4-Trimethylpentane	1	3.75	4.1375	110	70 - 130	
Methyl Ethyl Ketone	1	3.75	3.9493	105	70 - 130	
2-Chlorotoluene	1	3.75	4.0894	109	70 - 130	
2-Propanol	1	3.75	3.5597	94.9	62.2 - 137	
4-Ethyltoluene	1	3.75	4.1343	110	70 - 130	
4-Methyl-2-pentanone (MIBK)	1	3.75	3.9428	105	51.3 - 144	
Acetone	1	3.75	3.7526	100	70 - 130	
Allyl Chloride	1	3.75	4.0973	109	70 - 130	
Benzene	1	3.75	4.1997	112	70 - 130	
Benzyl Chloride	1	3.75	4.2319	113	70 - 130	
Bromodichloromethane	1	3.75	4.3668	116	70 - 130	
Bromoform	1	3.75	4.3184	115	70 - 130	
Bromomethane	1	3.75	4.0936	109	70 - 130	
Carbon disulfide	1	3.75	3.9414	105	70 - 130	
Carbon tetrachloride	1	3.75	4.1535	111	70 - 130	
Chlorobenzene	1	3.75	4.1943	112	70 - 130	
Dibromochloromethane	1	3.75	4.3381	116	70 - 130	
Chloroethane	1	3.75	4.0896	109	70 - 130	

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724088**
Analysis Date:	6/2/2014 4:44:00 PM	Analyst:	564
Instrument ID:	AIRMS4		
Sample Numbers:	L700915-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11, -12, -13, -14, -15, -16, -17		

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Chloroform	1	3.75	4.2003	112	70 - 130	
Chloromethane	1	3.75	3.9594	106	70 - 130	
cis-1,2-Dichloroethene	1	3.75	4.0950	109	70 - 130	
cis-1,3-Dichloropropene	1	3.75	4.1609	111	70 - 130	
Cyclohexane	1	3.75	4.1056	109	70 - 130	
Dichlorodifluoromethane	1	3.75	4.1020	109	70 - 130	
Ethanol	1	3.75	3.5508	94.7	52.6 - 145	
Ethylbenzene	1	3.75	4.0873	109	70 - 130	
Heptane	1	3.75	4.1618	111	70 - 130	
Hexachloro-1,3-butadiene	1	3.75	4.2004	112	55.7 - 144	
Isopropylbenzene	1	3.75	4.1194	110	70 - 130	
m&p-Xylene	1	7.5	8.0772	108	70 - 130	
Methyl Butyl Ketone	1	3.75	3.9454	105	36.5 - 155	
Methyl Methacrylate	1	3.75	3.7675	100	70 - 130	
MTBE	1	3.75	3.9801	106	70 - 130	
Methylene Chloride	1	3.75	3.8130	102	70 - 130	
Naphthalene	1	3.75	4.1552	111	53.4 - 158	
n-Hexane	1	3.75	4.1109	110	70 - 130	
o-Xylene	1	3.75	4.1542	111	70 - 130	
Propene	1	3.75	4.0133	107	70 - 130	
Styrene	1	3.75	4.2024	112	70 - 130	
Tetrachloroethylene	1	3.75	4.2665	114	70 - 130	
Tetrahydrofuran	1	3.75	3.8714	103	70 - 130	
Toluene	1	3.75	4.1502	111	70 - 130	
trans-1,2-Dichloroethene	1	3.75	4.1234	110	70 - 130	
trans-1,3-Dichloropropene	1	3.75	4.1917	112	70 - 130	
Trichloroethylene	1	3.75	4.2066	112	70 - 130	
Trichlorofluoromethane	1	3.75	4.1982	112	70 - 130	
Vinyl acetate	1	3.75	4.0540	108	70 - 130	
Vinyl Bromide	1	3.75	4.1762	111	70 - 130	
Vinyl chloride	1	3.75	4.1280	110	70 - 130	

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724088**
Analysis Date:	6/2/2014 4:44:00 PM	Analyst:	564
Instrument ID:	AIRMS4		

Sample Numbers: L700915-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11, -12, -13, -14, -15, -16, -17

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	% Rec Qual	% RPD	Control Limits	RPD Qual
1,1,1-Trichloroethane	1	3.75	4.5887	122	4.1943	112	70 - 130		8.98	25	
1,1,2,2-Tetrachloroethane	1	3.75	4.4814	120	4.0254	107	70 - 130		10.7	25	
1,1,2-Trichloroethane	1	3.75	4.5464	121	4.2113	112	70 - 130		7.65	25	
1,1,2-Trichlorotrifluoroethane	1	3.75	4.5753	122	4.1978	112	70 - 130		8.61	25	
1,1-Dichloroethane	1	3.75	4.5806	122	4.1611	111	70 - 130		9.6	25	
1,1-Dichloroethene	1	3.75	4.5823	122	4.1478	111	70 - 130		9.95	25	
1,2,4-Trichlorobenzene	1	3.75	4.6530	124	4.3521	116	59.7 - 155		6.68	25	
1,2,4-Trimethylbenzene	1	3.75	4.5568	122	4.1052	109	70 - 130		10.4	25	
1,2-Dibromoethane	1	3.75	4.6161	123	4.2538	113	70 - 130		8.17	25	
1,2-Dichlorobenzene	1	3.75	4.6029	123	4.1740	111	70 - 130		9.77	25	
1,2-Dichloroethane	1	3.75	4.6578	124	4.3267	115	70 - 130		7.37	25	
1,2-Dichloropropane	1	3.75	4.5832	122	4.1746	111	70 - 130		9.33	25	
1,2-Dichlorotetrafluoroethane	1	3.75	4.4615	119	4.0451	108	70 - 130		9.79	25	
1,3,5-Trimethylbenzene	1	3.75	4.5370	121	4.0680	108	70 - 130		10.9	25	
1,3-Butadiene	1	3.75	4.6989	125	3.9284	105	70 - 130		17.9	25	
1,3-Dichlorobenzene	1	3.75	4.5469	121	4.1158	110	70 - 130		9.95	25	
1,4-Dichlorobenzene	1	3.75	4.6032	123	4.2273	113	70 - 130		8.51	25	
1,4-Dioxane	1	3.75	4.4484	119	3.9628	106	70 - 130		11.6	25	
2,2,4-Trimethylpentane	1	3.75	4.6544	124	4.1375	110	70 - 130		11.8	25	
Methyl Ethyl Ketone	1	3.75	4.2804	114	3.9493	105	70 - 130		8.05	25	
2-Chlorotoluene	1	3.75	4.8678	130	4.0894	109	70 - 130		17.4	25	
2-Propanol	1	3.75	4.0273	107	3.5597	94.9	62.2 - 137		12.3	25	
4-Ethyltoluene	1	3.75	4.5384	121	4.1343	110	70 - 130		9.32	25	
4-Methyl-2-pentanone (MIBK)	1	3.75	4.3370	116	3.9428	105	51.3 - 144		9.52	25	
Acetone	1	3.75	4.1581	111	3.7526	100	70 - 130		10.2	25	
Allyl Chloride	1	3.75	4.5640	122	4.0973	109	70 - 130		10.8	25	
Benzene	1	3.75	4.6011	123	4.1997	112	70 - 130		9.12	25	
Benzyl Chloride	1	3.75	4.6382	124	4.2319	113	70 - 130		9.16	25	
Bromodichloromethane	1	3.75	4.7365	126	4.3668	116	70 - 130		8.12	25	
Bromoform	1	3.75	4.6718	125	4.3184	115	70 - 130		7.86	25	
Bromomethane	1	3.75	4.7848	128	4.0936	109	70 - 130		15.6	25	
Carbon disulfide	1	3.75	4.4272	118	3.9414	105	70 - 130		11.6	25	
Carbon tetrachloride	1	3.75	4.5805	122	4.1535	111	70 - 130		9.78	25	
Chlorobenzene	1	3.75	4.6152	123	4.1943	112	70 - 130		9.56	25	
Dibromochloromethane	1	3.75	4.6571	124	4.3381	116	70 - 130		7.09	25	
Chloroethane	1	3.75	4.5491	121	4.0896	109	70 - 130		10.6	25	

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724088**
Analysis Date:	6/2/2014 4:44:00 PM	Analyst:	564
Instrument ID:	AIRMS4		

Sample Numbers: L700915-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11, -12, -13, -14, -15, -16, -17

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	% Rec Qual	% RPD	Control Limits	RPD Qual
Chloroform	1	3.75	4.6108	123	4.2003	112	70 - 130		9.32	25	
Chloromethane	1	3.75	4.4117	118	3.9594	106	70 - 130		10.8	25	
cis-1,2-Dichloroethene	1	3.75	4.4942	120	4.0950	109	70 - 130		9.3	25	
cis-1,3-Dichloropropene	1	3.75	4.6080	123	4.1609	111	70 - 130		10.2	25	
Cyclohexane	1	3.75	4.6095	123	4.1056	109	70 - 130		11.6	25	
Dichlorodifluoromethane	1	3.75	4.3520	116	4.1020	109	70 - 130		5.92	25	
Ethanol	1	3.75	4.1354	110	3.5508	94.7	52.6 - 145		15.2	25	
Ethylbenzene	1	3.75	4.5512	121	4.0873	109	70 - 130		10.7	25	
Heptane	1	3.75	4.6404	124	4.1618	111	70 - 130		10.9	25	
Hexachloro-1,3-butadiene	1	3.75	4.4812	119	4.2004	112	55.7 - 144		6.47	25	
Isopropylbenzene	1	3.75	4.5635	122	4.1194	110	70 - 130		10.2	25	
m&p-Xylene	1	7.5	8.9666	120	8.0772	108	70 - 130		10.4	25	
Methyl Butyl Ketone	1	3.75	4.3597	116	3.9454	105	36.5 - 155		9.98	25	
Methyl Methacrylate	1	3.75	4.1616	111	3.7675	100	70 - 130		9.94	25	
MTBE	1	3.75	4.4100	118	3.9801	106	70 - 130		10.2	25	
Methylene Chloride	1	3.75	4.3191	115	3.8130	102	70 - 130		12.4	25	
Naphthalene	1	3.75	4.4639	119	4.1552	111	53.4 - 158		7.16	25	
n-Hexane	1	3.75	4.5787	122	4.1109	110	70 - 130		10.8	25	
o-Xylene	1	3.75	4.5759	122	4.1542	111	70 - 130		9.66	25	
Propene	1	3.75	4.4907	120	4.0133	107	70 - 130		11.2	25	
Styrene	1	3.75	4.6508	124	4.2024	112	70 - 130		10.1	25	
Tetrachloroethylene	1	3.75	4.6144	123	4.2665	114	70 - 130		7.83	25	
Tetrahydrofuran	1	3.75	4.3631	116	3.8714	103	70 - 130		11.9	25	
Toluene	1	3.75	4.5611	122	4.1502	111	70 - 130		9.43	25	
trans-1,2-Dichloroethene	1	3.75	4.5468	121	4.1234	110	70 - 130		9.77	25	
trans-1,3-Dichloropropene	1	3.75	4.5388	121	4.1917	112	70 - 130		7.95	25	
Trichloroethylene	1	3.75	4.6356	124	4.2066	112	70 - 130		9.7	25	
Trichlorofluoromethane	1	3.75	4.6058	123	4.1982	112	70 - 130		9.26	25	
Vinyl acetate	1	3.75	4.5379	121	4.0540	108	70 - 130		11.3	25	
Vinyl Bromide	1	3.75	4.5523	121	4.1762	111	70 - 130		8.62	25	
Vinyl chloride	1	3.75	4.8517	129	4.1280	110	70 - 130		16.1	25	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724285**
Analysis Date:	6/3/2014 11:06:00 AM	Analyst:	564
Instrument ID:	AIRMS4		
Sample Numbers:	L700915-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -12, -13, -14, -15		

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,1,1-Trichloroethane	1	3.75	4.6277	123	70 - 130	
1,1,2,2-Tetrachloroethane	1	3.75	4.5275	121	70 - 130	
1,1,2-Trichloroethane	1	3.75	4.6282	123	70 - 130	
1,1,2-Trichlorotrifluoroethane	1	3.75	4.6401	124	70 - 130	
1,1-Dichloroethane	1	3.75	4.5878	122	70 - 130	
1,1-Dichloroethene	1	3.75	4.6322	124	70 - 130	
1,2,4-Trichlorobenzene	1	3.75	4.7276	126	59.7 - 155	
1,2,4-Trimethylbenzene	1	3.75	4.5615	122	70 - 130	
1,2-Dibromoethane	1	3.75	4.7433	126	70 - 130	
1,2-Dichlorobenzene	1	3.75	4.5891	122	70 - 130	
1,2-Dichloroethane	1	3.75	4.6977	125	70 - 130	
1,2-Dichloropropane	1	3.75	4.6778	125	70 - 130	
1,2-Dichlorotetrafluoroethane	1	3.75	4.5059	120	70 - 130	
1,3,5-Trimethylbenzene	1	3.75	4.5740	122	70 - 130	
1,3-Butadiene	1	3.75	4.6229	123	70 - 130	
1,3-Dichlorobenzene	1	3.75	4.5782	122	70 - 130	
1,4-Dichlorobenzene	1	3.75	4.6307	123	70 - 130	
1,4-Dioxane	1	3.75	4.4375	118	70 - 130	
2,2,4-Trimethylpentane	1	3.75	4.6110	123	70 - 130	
Methyl Ethyl Ketone	1	3.75	4.4077	118	70 - 130	
2-Chlorotoluene	1	3.75	4.9009	131	70 - 130	L1
2-Propanol	1	3.75	3.9516	105	62.2 - 137	
4-Ethyltoluene	1	3.75	4.5778	122	70 - 130	
4-Methyl-2-pentanone (MIBK)	1	3.75	4.3933	117	51.3 - 144	
Acetone	1	3.75	4.1699	111	70 - 130	
Allyl Chloride	1	3.75	4.5550	121	70 - 130	
Benzene	1	3.75	4.6525	124	70 - 130	
Benzyl Chloride	1	3.75	4.5890	122	70 - 130	
Bromodichloromethane	1	3.75	4.7314	126	70 - 130	
Bromoform	1	3.75	4.7363	126	70 - 130	
Bromomethane	1	3.75	4.7949	128	70 - 130	
Carbon disulfide	1	3.75	4.3582	116	70 - 130	
Carbon tetrachloride	1	3.75	4.6084	123	70 - 130	
Chlorobenzene	1	3.75	4.7229	126	70 - 130	
Dibromochloromethane	1	3.75	4.7349	126	70 - 130	
Chloroethane	1	3.75	4.6108	123	70 - 130	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724285**
Analysis Date:	6/3/2014 11:06:00 AM	Analyst:	564
Instrument ID:	AIRMS4		
Sample Numbers:	L700915-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -12, -13, -14, -15		

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Chloroform	1	3.75	4.6210	123	70 - 130	
Chloromethane	1	3.75	4.4369	118	70 - 130	
cis-1,2-Dichloroethene	1	3.75	4.5423	121	70 - 130	
cis-1,3-Dichloropropene	1	3.75	4.6719	125	70 - 130	
Cyclohexane	1	3.75	4.7186	126	70 - 130	
Dichlorodifluoromethane	1	3.75	4.7035	125	70 - 130	
Ethanol	1	3.75	3.9455	105	52.6 - 145	
Ethylbenzene	1	3.75	4.5489	121	70 - 130	
Heptane	1	3.75	4.7181	126	70 - 130	
Hexachloro-1,3-butadiene	1	3.75	4.5126	120	55.7 - 144	
Isopropylbenzene	1	3.75	4.5591	122	70 - 130	
m&p-Xylene	1	7.5	9.0380	121	70 - 130	
Methyl Butyl Ketone	1	3.75	4.4508	119	36.5 - 155	
Methyl Methacrylate	1	3.75	4.1716	111	70 - 130	
MTBE	1	3.75	4.3661	116	70 - 130	
Methylene Chloride	1	3.75	4.2301	113	70 - 130	
Naphthalene	1	3.75	4.6237	123	53.4 - 158	
n-Hexane	1	3.75	4.5513	121	70 - 130	
o-Xylene	1	3.75	4.6234	123	70 - 130	
Propene	1	3.75	4.4955	120	70 - 130	
Styrene	1	3.75	4.6752	125	70 - 130	
Tetrachloroethylene	1	3.75	4.7275	126	70 - 130	
Tetrahydrofuran	1	3.75	4.3648	116	70 - 130	
Toluene	1	3.75	4.6428	124	70 - 130	
trans-1,2-Dichloroethene	1	3.75	4.5151	120	70 - 130	
trans-1,3-Dichloropropene	1	3.75	4.6544	124	70 - 130	
Trichloroethylene	1	3.75	4.6547	124	70 - 130	
Trichlorofluoromethane	1	3.75	4.5620	122	70 - 130	
Vinyl acetate	1	3.75	4.4736	119	70 - 130	
Vinyl Bromide	1	3.75	4.6670	124	70 - 130	
Vinyl chloride	1	3.75	4.8866	130	70 - 130	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724285**
Analysis Date:	6/3/2014 11:06:00 AM	Analyst:	564
Instrument ID:	AIRMS4		
Sample Numbers:	L700915-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -12, -13, -14, -15		

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,1,1-Trichloroethane	1	3.75	4.6150	123	70 - 130	
1,1,2,2-Tetrachloroethane	1	3.75	4.5989	123	70 - 130	
1,1,2-Trichloroethane	1	3.75	4.7635	127	70 - 130	
1,1,2-Trichlorotrifluoroethane	1	3.75	4.6884	125	70 - 130	
1,1-Dichloroethane	1	3.75	4.6661	124	70 - 130	
1,1-Dichloroethene	1	3.75	4.6766	125	70 - 130	
1,2,4-Trichlorobenzene	1	3.75	4.9181	131	59.7 - 155	
1,2,4-Trimethylbenzene	1	3.75	4.6281	123	70 - 130	
1,2-Dibromoethane	1	3.75	4.7980	128	70 - 130	
1,2-Dichlorobenzene	1	3.75	4.7072	126	70 - 130	
1,2-Dichloroethane	1	3.75	4.8052	128	70 - 130	
1,2-Dichloropropane	1	3.75	4.7178	126	70 - 130	
1,2-Dichlorotetrafluoroethane	1	3.75	4.5945	123	70 - 130	
1,3,5-Trimethylbenzene	1	3.75	4.6101	123	70 - 130	
1,3-Butadiene	1	3.75	4.4801	119	70 - 130	
1,3-Dichlorobenzene	1	3.75	4.7399	126	70 - 130	
1,4-Dichlorobenzene	1	3.75	4.7623	127	70 - 130	
1,4-Dioxane	1	3.75	4.5134	120	70 - 130	
2,2,4-Trimethylpentane	1	3.75	4.6599	124	70 - 130	
Methyl Ethyl Ketone	1	3.75	4.5771	122	70 - 130	
2-Chlorotoluene	1	3.75	3.6529	97.4	70 - 130	
2-Propanol	1	3.75	3.9871	106	62.2 - 137	
4-Ethyltoluene	1	3.75	4.6508	124	70 - 130	
4-Methyl-2-pentanone (MIBK)	1	3.75	4.4823	120	51.3 - 144	
Acetone	1	3.75	4.1916	112	70 - 130	
Allyl Chloride	1	3.75	4.5694	122	70 - 130	
Benzene	1	3.75	4.7142	126	70 - 130	
Benzyl Chloride	1	3.75	4.7539	127	70 - 130	
Bromodichloromethane	1	3.75	4.8512	129	70 - 130	
Bromoform	1	3.75	4.8595	130	70 - 130	
Bromomethane	1	3.75	4.7106	126	70 - 130	
Carbon disulfide	1	3.75	4.4587	119	70 - 130	
Carbon tetrachloride	1	3.75	4.6371	124	70 - 130	
Chlorobenzene	1	3.75	4.8255	129	70 - 130	
Dibromochloromethane	1	3.75	4.9012	131	70 - 130	L1
Chloroethane	1	3.75	4.5990	123	70 - 130	

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724285**
Analysis Date:	6/3/2014 11:06:00 AM	Analyst:	564
Instrument ID:	AIRMS4		
Sample Numbers:	L700915-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -12, -13, -14, -15		

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Chloroform	1	3.75	4.6129	123	70 - 130	
Chloromethane	1	3.75	4.4862	120	70 - 130	
cis-1,2-Dichloroethene	1	3.75	4.6326	124	70 - 130	
cis-1,3-Dichloropropene	1	3.75	4.8011	128	70 - 130	
Cyclohexane	1	3.75	4.6330	124	70 - 130	
Dichlorodifluoromethane	1	3.75	4.3423	116	70 - 130	
Ethanol	1	3.75	4.1148	110	52.6 - 145	
Ethylbenzene	1	3.75	4.6515	124	70 - 130	
Heptane	1	3.75	4.7398	126	70 - 130	
Hexachloro-1,3-butadiene	1	3.75	4.6522	124	55.7 - 144	
Isopropylbenzene	1	3.75	4.6158	123	70 - 130	
m&p-Xylene	1	7.5	9.1574	122	70 - 130	
Methyl Butyl Ketone	1	3.75	4.4767	119	36.5 - 155	
Methyl Methacrylate	1	3.75	4.2222	113	70 - 130	
MTBE	1	3.75	4.4940	120	70 - 130	
Methylene Chloride	1	3.75	4.2392	113	70 - 130	
Naphthalene	1	3.75	4.7341	126	53.4 - 158	
n-Hexane	1	3.75	4.6315	124	70 - 130	
o-Xylene	1	3.75	4.6398	124	70 - 130	
Propene	1	3.75	4.4412	118	70 - 130	
Styrene	1	3.75	4.7613	127	70 - 130	
Tetrachloroethylene	1	3.75	4.8467	129	70 - 130	
Tetrahydrofuran	1	3.75	4.4205	118	70 - 130	
Toluene	1	3.75	4.6826	125	70 - 130	
trans-1,2-Dichloroethene	1	3.75	4.6246	123	70 - 130	
trans-1,3-Dichloropropene	1	3.75	4.7271	126	70 - 130	
Trichloroethylene	1	3.75	4.8088	128	70 - 130	
Trichlorofluoromethane	1	3.75	4.5875	122	70 - 130	
Vinyl acetate	1	3.75	4.5646	122	70 - 130	
Vinyl Bromide	1	3.75	4.6785	125	70 - 130	
Vinyl chloride	1	3.75	4.6922	125	70 - 130	

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724285**
Analysis Date:	6/3/2014 11:06:00 AM	Analyst:	564
Instrument ID:	AIRMS4		
Sample Numbers:	L700915-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -12, -13, -14, -15		

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	% Rec Qual	% RPD	Control Limits	RPD Qual
1,1,1-Trichloroethane	1	3.75	4.6277	123	4.6150	123	70 - 130		0.27	25	
1,1,2,2-Tetrachloroethane	1	3.75	4.5275	121	4.5989	123	70 - 130		1.56	25	
1,1,2-Trichloroethane	1	3.75	4.6282	123	4.7635	127	70 - 130		2.88	25	
1,1,2-Trichlorotrifluoroethane	1	3.75	4.6401	124	4.6884	125	70 - 130		1.04	25	
1,1-Dichloroethane	1	3.75	4.5878	122	4.6661	124	70 - 130		1.69	25	
1,1-Dichloroethene	1	3.75	4.6322	124	4.6766	125	70 - 130		0.95	25	
1,2,4-Trichlorobenzene	1	3.75	4.7276	126	4.9181	131	59.7 - 155		3.95	25	
1,2,4-Trimethylbenzene	1	3.75	4.5615	122	4.6281	123	70 - 130		1.45	25	
1,2-Dibromoethane	1	3.75	4.7433	126	4.7980	128	70 - 130		1.15	25	
1,2-Dichlorobenzene	1	3.75	4.5891	122	4.7072	126	70 - 130		2.54	25	
1,2-Dichloroethane	1	3.75	4.6977	125	4.8052	128	70 - 130		2.26	25	
1,2-Dichloropropane	1	3.75	4.6778	125	4.7178	126	70 - 130		0.85	25	
1,2-Dichlorotetrafluoroethane	1	3.75	4.5059	120	4.5945	123	70 - 130		1.95	25	
1,3,5-Trimethylbenzene	1	3.75	4.5740	122	4.6101	123	70 - 130		0.78	25	
1,3-Butadiene	1	3.75	4.6229	123	4.4801	119	70 - 130		3.14	25	
1,3-Dichlorobenzene	1	3.75	4.5782	122	4.7399	126	70 - 130		3.47	25	
1,4-Dichlorobenzene	1	3.75	4.6307	123	4.7623	127	70 - 130		2.8	25	
1,4-Dioxane	1	3.75	4.4375	118	4.5134	120	70 - 130		1.7	25	
2,2,4-Trimethylpentane	1	3.75	4.6110	123	4.6599	124	70 - 130		1.05	25	
Methyl Ethyl Ketone	1	3.75	4.4077	118	4.5771	122	70 - 130		3.77	25	
2-Chlorotoluene	1	3.75	4.9009	131	3.6529	97.4	70 - 130	L1	29.2	25	R2
2-Propanol	1	3.75	3.9516	105	3.9871	106	62.2 - 137		0.9	25	
4-Ethyltoluene	1	3.75	4.5778	122	4.6508	124	70 - 130		1.58	25	
4-Methyl-2-pentanone (MIBK)	1	3.75	4.3933	117	4.4823	120	51.3 - 144		2	25	
Acetone	1	3.75	4.1699	111	4.1916	112	70 - 130		0.52	25	
Allyl Chloride	1	3.75	4.5550	121	4.5694	122	70 - 130		0.32	25	
Benzene	1	3.75	4.6525	124	4.7142	126	70 - 130		1.32	25	
Benzyl Chloride	1	3.75	4.5890	122	4.7539	127	70 - 130		3.53	25	
Bromodichloromethane	1	3.75	4.7314	126	4.8512	129	70 - 130		2.5	25	
Bromoform	1	3.75	4.7363	126	4.8595	130	70 - 130		2.57	25	
Bromomethane	1	3.75	4.7949	128	4.7106	126	70 - 130		1.77	25	
Carbon disulfide	1	3.75	4.3582	116	4.4587	119	70 - 130		2.28	25	
Carbon tetrachloride	1	3.75	4.6084	123	4.6371	124	70 - 130		0.62	25	
Chlorobenzene	1	3.75	4.7229	126	4.8255	129	70 - 130		2.15	25	
Dibromochloromethane	1	3.75	4.7349	126	4.9012	131	70 - 130	L1	3.45	25	
Chloroethane	1	3.75	4.6108	123	4.5990	123	70 - 130		0.26	25	

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724285**
Analysis Date:	6/3/2014 11:06:00 AM	Analyst:	564
Instrument ID:	AIRMS4		
Sample Numbers:	L700915-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -12, -13, -14, -15		

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	% Rec Qual	% RPD	Control Limits	RPD Qual
Chloroform	1	3.75	4.6210	123	4.6129	123	70 - 130		0.18	25	
Chloromethane	1	3.75	4.4369	118	4.4862	120	70 - 130		1.11	25	
cis-1,2-Dichloroethene	1	3.75	4.5423	121	4.6326	124	70 - 130		1.97	25	
cis-1,3-Dichloropropene	1	3.75	4.6719	125	4.8011	128	70 - 130		2.73	25	
Cyclohexane	1	3.75	4.7186	126	4.6330	124	70 - 130		1.83	25	
Dichlorodifluoromethane	1	3.75	4.7035	125	4.3423	116	70 - 130		7.99	25	
Ethanol	1	3.75	3.9455	105	4.1148	110	52.6 - 145		4.2	25	
Ethylbenzene	1	3.75	4.5489	121	4.6515	124	70 - 130		2.23	25	
Heptane	1	3.75	4.7181	126	4.7398	126	70 - 130		0.46	25	
Hexachloro-1,3-butadiene	1	3.75	4.5126	120	4.6522	124	55.7 - 144		3.05	25	
Isopropylbenzene	1	3.75	4.5591	122	4.6158	123	70 - 130		1.24	25	
m&p-Xylene	1	7.5	9.0380	121	9.1574	122	70 - 130		1.31	25	
Methyl Butyl Ketone	1	3.75	4.4508	119	4.4767	119	36.5 - 155		0.58	25	
Methyl Methacrylate	1	3.75	4.1716	111	4.2222	113	70 - 130		1.21	25	
MTBE	1	3.75	4.3661	116	4.4940	120	70 - 130		2.89	25	
Methylene Chloride	1	3.75	4.2301	113	4.2392	113	70 - 130		0.22	25	
Naphthalene	1	3.75	4.6237	123	4.7341	126	53.4 - 158		2.36	25	
n-Hexane	1	3.75	4.5513	121	4.6315	124	70 - 130		1.75	25	
o-Xylene	1	3.75	4.6234	123	4.6398	124	70 - 130		0.36	25	
Propene	1	3.75	4.4955	120	4.4412	118	70 - 130		1.22	25	
Styrene	1	3.75	4.6752	125	4.7613	127	70 - 130		1.82	25	
Tetrachloroethylene	1	3.75	4.7275	126	4.8467	129	70 - 130		2.49	25	
Tetrahydrofuran	1	3.75	4.3648	116	4.4205	118	70 - 130		1.27	25	
Toluene	1	3.75	4.6428	124	4.6826	125	70 - 130		0.85	25	
trans-1,2-Dichloroethene	1	3.75	4.5151	120	4.6246	123	70 - 130		2.39	25	
trans-1,3-Dichloropropene	1	3.75	4.6544	124	4.7271	126	70 - 130		1.55	25	
Trichloroethylene	1	3.75	4.6547	124	4.8088	128	70 - 130		3.26	25	
Trichlorofluoromethane	1	3.75	4.5620	122	4.5875	122	70 - 130		0.56	25	
Vinyl acetate	1	3.75	4.4736	119	4.5646	122	70 - 130		2.01	25	
Vinyl Bromide	1	3.75	4.6670	124	4.6785	125	70 - 130		0.25	25	
Vinyl chloride	1	3.75	4.8866	130	4.6922	125	70 - 130		4.06	25	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724465**
Analysis Date:	6/5/2014 7:51:00 AM	Analyst:	564
Instrument ID:	AIRMS4		
Sample Numbers:	L700915-04, -13		

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,1,1-Trichloroethane	1	3.75	3.7272	99.4	70 - 130	
1,1,2,2-Tetrachloroethane	1	3.75	3.7769	101	70 - 130	
1,1,2-Trichloroethane	1	3.75	4.0685	108	70 - 130	
1,1,2-Trichlorotrifluoroethane	1	3.75	3.9458	105	70 - 130	
1,1-Dichloroethane	1	3.75	3.8445	103	70 - 130	
1,1-Dichloroethene	1	3.75	3.6753	98	70 - 130	
1,2,4-Trichlorobenzene	1	3.75	4.5408	121	59.7 - 155	
1,2,4-Trimethylbenzene	1	3.75	3.9078	104	70 - 130	
1,2-Dibromoethane	1	3.75	4.0118	107	70 - 130	
1,2-Dichlorobenzene	1	3.75	4.1508	111	70 - 130	
1,2-Dichloroethane	1	3.75	3.6155	96.4	70 - 130	
1,2-Dichloropropane	1	3.75	3.9352	105	70 - 130	
1,2-Dichlorotetrafluoroethane	1	3.75	3.8001	101	70 - 130	
1,3,5-Trimethylbenzene	1	3.75	3.9131	104	70 - 130	
1,3-Butadiene	1	3.75	3.1796	84.8	70 - 130	
1,3-Dichlorobenzene	1	3.75	4.1867	112	70 - 130	
1,4-Dichlorobenzene	1	3.75	4.2729	114	70 - 130	
1,4-Dioxane	1	3.75	3.8078	102	70 - 130	
2,2,4-Trimethylpentane	1	3.75	3.8366	102	70 - 130	
Methyl Ethyl Ketone	1	3.75	3.6451	97.2	70 - 130	
2-Chlorotoluene	1	3.75	3.8174	102	70 - 130	
2-Propanol	1	3.75	3.2427	86.5	62.2 - 137	
4-Ethyltoluene	1	3.75	3.9295	105	70 - 130	
4-Methyl-2-pentanone (MIBK)	1	3.75	3.4472	91.9	51.3 - 144	
Acetone	1	3.75	3.2269	86.1	70 - 130	
Allyl Chloride	1	3.75	3.6162	96.4	70 - 130	
Benzene	1	3.75	3.9846	106	70 - 130	
Benzyl Chloride	1	3.75	4.0074	107	70 - 130	
Bromodichloromethane	1	3.75	3.8104	102	70 - 130	
Bromoform	1	3.75	4.2709	114	70 - 130	
Bromomethane	1	3.75	3.5213	93.9	70 - 130	
Carbon disulfide	1	3.75	3.6379	97	70 - 130	
Carbon tetrachloride	1	3.75	3.8663	103	70 - 130	
Chlorobenzene	1	3.75	4.1660	111	70 - 130	
Dibromochloromethane	1	3.75	4.0948	109	70 - 130	
Chloroethane	1	3.75	3.8458	103	70 - 130	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724465**
Analysis Date:	6/5/2014 7:51:00 AM	Analyst:	564
Instrument ID:	AIRMS4		
Sample Numbers:	L700915-04, -13		

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Chloroform	1	3.75	3.8299	102	70 - 130	
Chloromethane	1	3.75	3.7091	98.9	70 - 130	
cis-1,2-Dichloroethene	1	3.75	3.7581	100	70 - 130	
cis-1,3-Dichloropropene	1	3.75	3.9290	105	70 - 130	
Cyclohexane	1	3.75	3.9400	105	70 - 130	
Dichlorodifluoromethane	1	3.75	3.7352	99.6	70 - 130	
Ethanol	1	3.75	2.8305	75.5	52.6 - 145	
Ethylbenzene	1	3.75	3.9136	104	70 - 130	
Heptane	1	3.75	3.7634	100	70 - 130	
Hexachloro-1,3-butadiene	1	3.75	4.4292	118	55.7 - 144	
Isopropylbenzene	1	3.75	3.9230	105	70 - 130	
m&p-Xylene	1	7.5	7.6917	103	70 - 130	
Methyl Butyl Ketone	1	3.75	3.4905	93.1	36.5 - 155	
Methyl Methacrylate	1	3.75	3.1852	84.9	70 - 130	
MTBE	1	3.75	3.6620	97.7	70 - 130	
Methylene Chloride	1	3.75	3.4857	93	70 - 130	
Naphthalene	1	3.75	4.2029	112	53.4 - 158	
n-Hexane	1	3.75	3.7814	101	70 - 130	
o-Xylene	1	3.75	3.8679	103	70 - 130	
Propene	1	3.75	3.4936	93.2	70 - 130	
Styrene	1	3.75	4.0376	108	70 - 130	
Tetrachloroethylene	1	3.75	4.3553	116	70 - 130	
Tetrahydrofuran	1	3.75	3.4826	92.9	70 - 130	
Toluene	1	3.75	3.9809	106	70 - 130	
trans-1,2-Dichloroethene	1	3.75	3.7197	99.2	70 - 130	
trans-1,3-Dichloropropene	1	3.75	3.8548	103	70 - 130	
Trichloroethylene	1	3.75	3.9067	104	70 - 130	
Trichlorofluoromethane	1	3.75	3.7894	101	70 - 130	
Vinyl acetate	1	3.75	3.5636	95	70 - 130	
Vinyl Bromide	1	3.75	3.9885	106	70 - 130	
Vinyl chloride	1	3.75	3.7250	99.3	70 - 130	

Parameters in bold text are reported in this SDG

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724465**
Analysis Date:	6/5/2014 7:51:00 AM	Analyst:	564
Instrument ID:	AIRMS4		
Sample Numbers:	L700915-04, -13		

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,1,1-Trichloroethane	1	3.75	3.7632	100	70 - 130	
1,1,2,2-Tetrachloroethane	1	3.75	3.8633	103	70 - 130	
1,1,2-Trichloroethane	1	3.75	4.1049	109	70 - 130	
1,1,2-Trichlorotrifluoroethane	1	3.75	3.9527	105	70 - 130	
1,1-Dichloroethane	1	3.75	3.7900	101	70 - 130	
1,1-Dichloroethene	1	3.75	3.7047	98.8	70 - 130	
1,2,4-Trichlorobenzene	1	3.75	4.7091	126	59.7 - 155	
1,2,4-Trimethylbenzene	1	3.75	3.9840	106	70 - 130	
1,2-Dibromoethane	1	3.75	4.1331	110	70 - 130	
1,2-Dichlorobenzene	1	3.75	4.2897	114	70 - 130	
1,2-Dichloroethane	1	3.75	3.6130	96.3	70 - 130	
1,2-Dichloropropane	1	3.75	3.9746	106	70 - 130	
1,2-Dichlorotetrafluoroethane	1	3.75	3.8158	102	70 - 130	
1,3,5-Trimethylbenzene	1	3.75	3.9493	105	70 - 130	
1,3-Butadiene	1	3.75	3.1280	83.4	70 - 130	
1,3-Dichlorobenzene	1	3.75	4.3056	115	70 - 130	
1,4-Dichlorobenzene	1	3.75	4.3107	115	70 - 130	
1,4-Dioxane	1	3.75	3.8491	103	70 - 130	
2,2,4-Trimethylpentane	1	3.75	3.8447	103	70 - 130	
Methyl Ethyl Ketone	1	3.75	3.7113	99	70 - 130	
2-Chlorotoluene	1	3.75	3.8349	102	70 - 130	
2-Propanol	1	3.75	3.1872	85	62.2 - 137	
4-Ethyltoluene	1	3.75	3.9974	107	70 - 130	
4-Methyl-2-pentanone (MIBK)	1	3.75	3.4272	91.4	51.3 - 144	
Acetone	1	3.75	3.1518	84	70 - 130	
Allyl Chloride	1	3.75	3.5924	95.8	70 - 130	
Benzene	1	3.75	4.0332	108	70 - 130	
Benzyl Chloride	1	3.75	4.0135	107	70 - 130	
Bromodichloromethane	1	3.75	3.7870	101	70 - 130	
Bromoform	1	3.75	4.3956	117	70 - 130	
Bromomethane	1	3.75	3.9868	106	70 - 130	
Carbon disulfide	1	3.75	3.7544	100	70 - 130	
Carbon tetrachloride	1	3.75	3.8798	103	70 - 130	
Chlorobenzene	1	3.75	4.2375	113	70 - 130	
Dibromochloromethane	1	3.75	4.1795	111	70 - 130	
Chloroethane	1	3.75	3.8486	103	70 - 130	

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724465**
Analysis Date:	6/5/2014 7:51:00 AM	Analyst:	564
Instrument ID:	AIRMS4		
Sample Numbers:	L700915-04, -13		

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
Chloroform	1	3.75	3.8303	102	70 - 130	
Chloromethane	1	3.75	3.6715	97.9	70 - 130	
cis-1,2-Dichloroethene	1	3.75	3.7335	99.6	70 - 130	
cis-1,3-Dichloropropene	1	3.75	3.9612	106	70 - 130	
Cyclohexane	1	3.75	3.9274	105	70 - 130	
Dichlorodifluoromethane	1	3.75	3.6900	98.4	70 - 130	
Ethanol	1	3.75	2.8956	77.2	52.6 - 145	
Ethylbenzene	1	3.75	3.9952	107	70 - 130	
Heptane	1	3.75	3.7688	101	70 - 130	
Hexachloro-1,3-butadiene	1	3.75	4.5547	121	55.7 - 144	
Isopropylbenzene	1	3.75	4.0259	107	70 - 130	
m&p-Xylene	1	7.5	7.7538	103	70 - 130	
Methyl Butyl Ketone	1	3.75	3.4731	92.6	36.5 - 155	
Methyl Methacrylate	1	3.75	3.1347	83.6	70 - 130	
MTBE	1	3.75	3.6400	97.1	70 - 130	
Methylene Chloride	1	3.75	3.4166	91.1	70 - 130	
Naphthalene	1	3.75	4.3168	115	53.4 - 158	
n-Hexane	1	3.75	3.8953	104	70 - 130	
o-Xylene	1	3.75	3.8960	104	70 - 130	
Propene	1	3.75	3.4301	91.5	70 - 130	
Styrene	1	3.75	4.1420	110	70 - 130	
Tetrachloroethylene	1	3.75	4.4462	119	70 - 130	
Tetrahydrofuran	1	3.75	3.5051	93.5	70 - 130	
Toluene	1	3.75	4.0234	107	70 - 130	
trans-1,2-Dichloroethene	1	3.75	3.7169	99.1	70 - 130	
trans-1,3-Dichloropropene	1	3.75	3.8495	103	70 - 130	
Trichloroethylene	1	3.75	3.9850	106	70 - 130	
Trichlorofluoromethane	1	3.75	3.7241	99.3	70 - 130	
Vinyl acetate	1	3.75	3.4821	92.9	70 - 130	
Vinyl Bromide	1	3.75	4.0395	108	70 - 130	
Vinyl chloride	1	3.75	3.8769	103	70 - 130	

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724465**
Analysis Date:	6/5/2014 7:51:00 AM	Analyst:	564
Instrument ID:	AIRMS4		
Sample Numbers:	L700915-04, -13		

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	% Rec Qual	% RPD	Control RPD Limits	RPD Qual
1,1,1-Trichloroethane	1	3.75	3.7272	99.4	3.7632	100	70 - 130		0.96	25	
1,1,2,2-Tetrachloroethane	1	3.75	3.7769	101	3.8633	103	70 - 130		2.26	25	
1,1,2-Trichloroethane	1	3.75	4.0685	108	4.1049	109	70 - 130		0.89	25	
1,1,2-Trichlorotrifluoroethane	1	3.75	3.9458	105	3.9527	105	70 - 130		0.17	25	
1,1-Dichloroethane	1	3.75	3.8445	103	3.7900	101	70 - 130		1.43	25	
1,1-Dichloroethene	1	3.75	3.6753	98	3.7047	98.8	70 - 130		0.8	25	
1,2,4-Trichlorobenzene	1	3.75	4.5408	121	4.7091	126	59.7 - 155		3.64	25	
1,2,4-Trimethylbenzene	1	3.75	3.9078	104	3.9840	106	70 - 130		1.93	25	
1,2-Dibromoethane	1	3.75	4.0118	107	4.1331	110	70 - 130		2.98	25	
1,2-Dichlorobenzene	1	3.75	4.1508	111	4.2897	114	70 - 130		3.29	25	
1,2-Dichloroethane	1	3.75	3.6155	96.4	3.6130	96.3	70 - 130		0.07	25	
1,2-Dichloropropane	1	3.75	3.9352	105	3.9746	106	70 - 130		1	25	
1,2-Dichlorotetrafluoroethane	1	3.75	3.8001	101	3.8158	102	70 - 130		0.41	25	
1,3,5-Trimethylbenzene	1	3.75	3.9131	104	3.9493	105	70 - 130		0.92	25	
1,3-Butadiene	1	3.75	3.1796	84.8	3.1280	83.4	70 - 130		1.64	25	
1,3-Dichlorobenzene	1	3.75	4.1867	112	4.3056	115	70 - 130		2.8	25	
1,4-Dichlorobenzene	1	3.75	4.2729	114	4.3107	115	70 - 130		0.88	25	
1,4-Dioxane	1	3.75	3.8078	102	3.8491	103	70 - 130		1.08	25	
2,2,4-Trimethylpentane	1	3.75	3.8366	102	3.8447	103	70 - 130		0.21	25	
Methyl Ethyl Ketone	1	3.75	3.6451	97.2	3.7113	99	70 - 130		1.8	25	
2-Chlorotoluene	1	3.75	3.8174	102	3.8349	102	70 - 130		0.46	25	
2-Propanol	1	3.75	3.2427	86.5	3.1872	85	62.2 - 137		1.73	25	
4-Ethyltoluene	1	3.75	3.9295	105	3.9974	107	70 - 130		1.71	25	
4-Methyl-2-pentanone (MIBK)	1	3.75	3.4472	91.9	3.4272	91.4	51.3 - 144		0.58	25	
Acetone	1	3.75	3.2269	86.1	3.1518	84	70 - 130		2.36	25	
Allyl Chloride	1	3.75	3.6162	96.4	3.5924	95.8	70 - 130		0.66	25	
Benzene	1	3.75	3.9846	106	4.0332	108	70 - 130		1.21	25	
Benzyl Chloride	1	3.75	4.0074	107	4.0135	107	70 - 130		0.15	25	
Bromodichloromethane	1	3.75	3.8104	102	3.7870	101	70 - 130		0.61	25	
Bromoform	1	3.75	4.2709	114	4.3956	117	70 - 130		2.88	25	
Bromomethane	1	3.75	3.5213	93.9	3.9868	106	70 - 130		12.4	25	
Carbon disulfide	1	3.75	3.6379	97	3.7544	100	70 - 130		3.15	25	
Carbon tetrachloride	1	3.75	3.8663	103	3.8798	103	70 - 130		0.35	25	
Chlorobenzene	1	3.75	4.1660	111	4.2375	113	70 - 130		1.7	25	
Dibromochloromethane	1	3.75	4.0948	109	4.1795	111	70 - 130		2.05	25	
Chloroethane	1	3.75	3.8458	103	3.8486	103	70 - 130		0.07	25	

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724465**
Analysis Date:	6/5/2014 7:51:00 AM	Analyst:	564
Instrument ID:	AIRMS4		
Sample Numbers:	L700915-04, -13		

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	% Rec Qual	% RPD	Control Limits	RPD Qual
Chloroform	1	3.75	3.8299	102	3.8303	102	70 - 130		0.01	25	
Chloromethane	1	3.75	3.7091	98.9	3.6715	97.9	70 - 130		1.02	25	
cis-1,2-Dichloroethene	1	3.75	3.7581	100	3.7335	99.6	70 - 130		0.66	25	
cis-1,3-Dichloropropene	1	3.75	3.9290	105	3.9612	106	70 - 130		0.82	25	
Cyclohexane	1	3.75	3.9400	105	3.9274	105	70 - 130		0.32	25	
Dichlorodifluoromethane	1	3.75	3.7352	99.6	3.6900	98.4	70 - 130		1.22	25	
Ethanol	1	3.75	2.8305	75.5	2.8956	77.2	52.6 - 145		2.27	25	
Ethylbenzene	1	3.75	3.9136	104	3.9952	107	70 - 130		2.06	25	
Heptane	1	3.75	3.7634	100	3.7688	101	70 - 130		0.14	25	
Hexachloro-1,3-butadiene	1	3.75	4.4292	118	4.5547	121	55.7 - 144		2.79	25	
Isopropylbenzene	1	3.75	3.9230	105	4.0259	107	70 - 130		2.59	25	
m&p-Xylene	1	7.5	7.6917	103	7.7538	103	70 - 130		0.8	25	
Methyl Butyl Ketone	1	3.75	3.4905	93.1	3.4731	92.6	36.5 - 155		0.5	25	
Methyl Methacrylate	1	3.75	3.1852	84.9	3.1347	83.6	70 - 130		1.6	25	
MTBE	1	3.75	3.6620	97.7	3.6400	97.1	70 - 130		0.6	25	
Methylene Chloride	1	3.75	3.4857	93	3.4166	91.1	70 - 130		2	25	
Naphthalene	1	3.75	4.2029	112	4.3168	115	53.4 - 158		2.67	25	
n-Hexane	1	3.75	3.7814	101	3.8953	104	70 - 130		2.97	25	
o-Xylene	1	3.75	3.8679	103	3.8960	104	70 - 130		0.72	25	
Propene	1	3.75	3.4936	93.2	3.4301	91.5	70 - 130		1.84	25	
Styrene	1	3.75	4.0376	108	4.1420	110	70 - 130		2.55	25	
Tetrachloroethylene	1	3.75	4.3553	116	4.4462	119	70 - 130		2.06	25	
Tetrahydrofuran	1	3.75	3.4826	92.9	3.5051	93.5	70 - 130		0.64	25	
Toluene	1	3.75	3.9809	106	4.0234	107	70 - 130		1.06	25	
trans-1,2-Dichloroethene	1	3.75	3.7197	99.2	3.7169	99.1	70 - 130		0.07	25	
trans-1,3-Dichloropropene	1	3.75	3.8548	103	3.8495	103	70 - 130		0.14	25	
Trichloroethylene	1	3.75	3.9067	104	3.9850	106	70 - 130		1.98	25	
Trichlorofluoromethane	1	3.75	3.7894	101	3.7241	99.3	70 - 130		1.74	25	
Vinyl acetate	1	3.75	3.5636	95	3.4821	92.9	70 - 130		2.31	25	
Vinyl Bromide	1	3.75	3.9885	106	4.0395	108	70 - 130		1.27	25	
Vinyl chloride	1	3.75	3.7250	99.3	3.8769	103	70 - 130		4	25	

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Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724088**
Analysis Date:	6/2/2014 4:44:00 PM	Analyst:	564
Instrument ID:	AIRMS4		

Sample Numbers: L700915-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11, -12, -13, -14, -15, -16, -17

Internal Standard Response and Retention Time Summary

File ID: ICAL AVG
Analyzed: 053114

	IS2				CB	
	Response	**RT**	**Response**	**RT**	**Response**	**RT**
12 Hr. Std	3721004	11.54	897393	10.14	3185857	16.22
Upper Limit	5210000	12.04	1260000	10.64	4460000	16.72
Lower Limit	2230000	11.04	538000	9.64	1910000	15.72
Sample ID	**Response**	**RT**	**Response**	**RT**	**Response**	**RT**
L700915-01 2X	2907724	11.54	701255	10.14	2529121	16.22
L700915-02 2X	2629680	11.54	642753	10.15	2277836	16.23
L700915-03 2X	3541380	11.54	853089	10.14	3082752	16.22
L700915-04 2X	3605977	11.54	871816	10.15	3135668	16.23
L700915-05 2X	3784635	11.54	909964	10.14	3288503	16.22
L700915-06 2X	3373749	11.54	833111	10.14	2916284	16.22
L700915-07 2X	3513528	11.54	855043	10.14	3017647	16.22
L700915-08 2X	3322113	11.54	812582	10.14	3021998	16.22
L700915-09 2X	3512441	11.54	850227	10.14	3038498	16.22
L700915-10 2X	3819016	11.54	928586	10.15	3289583	16.23
L700915-11 2X	3490720	11.54	851914	10.14	3026872	16.22
L700915-12 2X	3663885	11.54	887848	10.14	3149907	16.22
L700915-13 2X	3628269	11.55	887002	10.16	3163306	16.23
L700915-14 2X	3511049	11.54	840908	10.14	2998897	16.22
L700915-15 2X	3623812	11.54	868971	10.15	3151580	16.23
L700915-16 2X	3528676	11.54	856395	10.14	3032307	16.22
L700915-17 2X	3534171	11.54	860560	10.14	3058567	16.22
LCSD WG724088	3131559	11.54	768409	10.14	2701193	16.22
LCS WG724088	2901776	11.54	703652	10.15	2474590	16.22
BLANK WG724088	2722402	11.54	663886	10.14	2351059	16.22

Legend:
IS2 -- 1,4-Difluorobenzene
 -- Bromochloromethane
CB -- Chlorobenzene-d5

Parameters in bold text are reported in this SDG

ESC LAB SCIENCES
YOUR LAB OF CHOICE

12065 Lebanon Rd
Mt. Juliet, TN 37122
(615) 758-5858
(800) 767-5859
Fax (615) 758-5859
Tax I.D 62-0814289
Est. 1970

Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724285**
Analysis Date:	6/3/2014 11:06:00 AM	Analyst:	564
Instrument ID:	AIRMS4		
Sample Numbers:	L700915-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -12, -13, -14, -15		

Internal Standard Response and Retention Time Summary

File ID: ICAL AVG
Analyzed: 053114

	IS2				CB	
	Response	**RT**	**Response**	**RT**	**Response**	**RT**
12 Hr. Std	3721004	11.54	897393	10.14	3185857	16.22
Upper Limit	5210000	12.04	1260000	10.64	4460000	16.72
Lower Limit	2230000	11.04	538000	9.64	1910000	15.72
Sample ID	**Response**	**RT**	**Response**	**RT**	**Response**	**RT**
L700915-01 16X	3298113	11.54	811114	10.15	2876719	16.23
L700915-02 16X	3200551	11.54	791702	10.14	2751206	16.22
L700915-03 10X	3518889	11.54	840570	10.15	2998487	16.23
L700915-04 10X	3532094	11.54	869377	10.15	3069834	16.23
L700915-05 10X	3676200	11.54	899543	10.15	3178217	16.23
L700915-06 16X	2698937	11.54	755619	10.15	2216016	16.23
L700915-07 20X	3418053	11.54	835509	10.14	2947131	16.22
L700915-08 10X	3193686	11.54	791441	10.14	2919752	16.22
L700915-09 10X	3502351	11.54	860955	10.15	3018610	16.23
L700915-10 10X	3159873	11.54	778569	10.14	2729500	16.22
L700915-12 8X	3454560	11.54	843837	10.14	2956276	16.22
L700915-13 16X	3457414	11.54	836480	10.15	2959978	16.23
L700915-14 8X	3506771	11.54	865451	10.14	2992239	16.23
L700915-15 8X	3473808	11.54	857816	10.14	3024571	16.22
LCSD WG724285	3703906	11.54	918628	10.14	3209034	16.22
LCS WG724285	3763968	11.54	923410	10.15	3259627	16.23
BLANK WG724285	3582131	11.54	884833	10.14	3088926	16.22

Legend:
IS2 -- 1,4-Difluorobenzene
-- Bromochloromethane
CB -- Chlorobenzene-d5

Parameters in bold text are reported in this SDG

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Est. 1970

Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724465**
Analysis Date:	6/5/2014 7:51:00 AM	Analyst:	564
Instrument ID:	AIRMS4		
Sample Numbers:	L700915-04, -13		

Internal Standard Response and Retention Time Summary

File ID: ICAL AVG
Analyzed: 060414B

	IS2				CB	
	Response	**RT**	**Response**	**RT**	**Response**	**RT**
12 Hr. Std	9608824	11.54	2488199	10.14	8622461	16.22
Upper Limit	13500000	12.04	3480000	10.64	12100000	16.72
Lower Limit	5770000	11.04	1490000	9.64	5170000	15.72
Sample ID	**Response**	**RT**	**Response**	**RT**	**Response**	**RT**
L700915-04 50X	12150070	11.54	3372306	10.14	11699650	16.22
L700915-13 200X	11671780	11.54	3175126	10.14	10477450	16.22
LCSD WG724465	12941370	11.54	3402161	10.14	11607180	16.22
LCS WG724465	12251990	11.54	3219080	10.14	11006570	16.22
BLANK WG724465	11714350	11.54	3166363	10.14	10402450	16.22

Legend:
IS2 -- 1,4-Difluorobenzene
 -- Bromochloromethane
CB -- Chlorobenzene-d5

Parameters in bold text are reported in this SDG

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Est. 1970

Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724088**
Analysis Date:	6/2/2014 4:44:00 PM	Analyst:	564
Instrument ID:	AIRMS4		

Sample Numbers: L700915-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11, -12, -13, -14, -15, -16, -17

Surrogate Summary

			BFB	
Laboratory Sample ID	Instrument	File ID	ppb	% Rec
L700915-01 2x	AIRMS4	0602_10	4.02	101
L700915-02 2x	AIRMS4	0602_11	3.98	99.6
L700915-03 2x	AIRMS4	0602_12	3.97	99.3
L700915-04 2x	AIRMS4	0602_13	3.92	98.0
L700915-05 2x	AIRMS4	0602_14	4.01	100
L700915-06 2x	AIRMS4	0602_15	3.97	99.1
L700915-07 2x	AIRMS4	0602_16	3.98	99.6
L700915-08 2x	AIRMS4	0602_17	4.00	100
L700915-09 2x	AIRMS4	0602_18	4.00	99.9
L700915-10 2x	AIRMS4	0602_19	4.01	100
L700915-11 2x	AIRMS4	0602_20	3.98	99.5
L700915-12 2x	AIRMS4	0602_21	3.91	97.8
L700915-13 2x	AIRMS4	0602_22	3.9	97.5
L700915-14 2x	AIRMS4	0602_23	4.06	102
L700915-15 2x	AIRMS4	0602_24	3.95	98.8
L700915-16 2x	AIRMS4	0602_25	4.04	101
L700915-17 2x	AIRMS4	0602_26	3.97	99.3
LCS WG724088	AIRMS4	0602_03	3.98	99.5
BLANK WG724088	AIRMS4	0602_05	3.9	97.6
LCSD WG724088	AIRMS4	0602_06	4.00	100

BFB --1,4-BROMOFLUOROBENZENE True Value: 4 ppb Limits: 60 - 140

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Est. 1970

Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724285**
Analysis Date:	6/3/2014 11:06:00 AM	Analyst:	564
Instrument ID:	AIRMS4		
Sample Numbers:	L700915-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -12, -13, -14, -15		

Surrogate Summary

			BFB	
Laboratory Sample ID	Instrument	File ID	ppb	% Rec
L700915-01 16x	AIRMS4	0603_06	3.93	98.3
L700915-02 16x	AIRMS4	0603_07	3.88	97.1
L700915-03 10x	AIRMS4	0603_08	3.92	98.0
L700915-04 10x	AIRMS4	0603_09	3.95	98.6
L700915-05 10x	AIRMS4	0603_10	3.89	97.3
L700915-06 16x	AIRMS4	0603_11	4.5	112
L700915-07 20x	AIRMS4	0603_12	3.89	97.2
L700915-08 10x	AIRMS4	0603_13	3.98	99.5
L700915-09 10x	AIRMS4	0603_14	3.96	99.1
L700915-10 10x	AIRMS4	0603_15	4.00	100
L700915-12 8x	AIRMS4	0603_16	3.93	98.2
L700915-13 16x	AIRMS4	0603_17	3.87	96.7
L700915-14 8x	AIRMS4	0603_18	3.92	98.0
L700915-15 8x	AIRMS4	0603_19	3.82	95.6
LCS WG724285	AIRMS4	0603_03	3.98	99.6
LCSD WG724285	AIRMS4	0603_04	3.95	98.8
BLANK WG724285	AIRMS4	0603_05	3.89	97.4

BFB --1,4-BROMOFLUOROBENZENE True Value: 4 ppb Limits: 60 - 140

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Est. 1970

Quality Control Summary
SDG: L700915
Allwyn Environmental

Test:	VOCs in Air by Method TO-15		
Project No:	002-105	Matrix:	Air - ppb
Project:	Los Reales Landfill VES Soil Vapor Survey	EPA ID:	TN00003
Collection Date:	5/22/2014	**Analytic Batch:**	**WG724465**
Analysis Date:	6/5/2014 7:51:00 AM	Analyst:	564
Instrument ID:	AIRMS4		
Sample Numbers:	L700915-04, -13		

Surrogate Summary

			BFB	
Laboratory Sample ID	Instrument	File ID	ppb	% Rec
L700915-04 50x	AIRMS4	0604B_17	3.77	94.3
L700915-13 200x	AIRMS4	0604B_22	3.71	92.8
LCS WG724465	AIRMS4	0604B_14	3.85	96.4
LCSD WG724465	AIRMS4	0604B_15	3.77	94.3
BLANK WG724465	AIRMS4	0604B_16	3.9	97.5

BFB --1,4-BROMOFLUOROBENZENE True Value: 4 ppb Limits: 60 - 140

Allwyn Environmental

1 West Deer Valley Rd, Bldg 2 Ste 305
Phoenix, AZ 85027

Billing Information:
Nichole Bowman
1 West Deer Valley Rd, Bldg 2 Ste 305
Phoenix, AZ 85027

Report to: **Keith Ross** kross@allwynenvironmental.com

Email To: twhitwer@allwynenvironmental.com;twhitwer@c

Project Description: LOS REALES LANDFILL VES — Soil Vapor Survey

City/State Collected: Tucson AZ

Phone: **623-215-3064**
Fax: **623-374-6637**

Client Project # 002-105

Lab Project # **ALLWYNGAZ-031814S**

Collected by (print): KEITH ROSS

Site/Facility ID # LOS REALES VES

P.O. #

Collected by (signature):

Immediately Packed on Ice N ✓ Y ___

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed

Email? ___No X__Yes
FAX? ___No ___Yes

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TO-15TIC Summa	Rem./Contaminant	Sample # (lab only)
LRL-VP-1	G	Air	5	5/22/14	0917	1	X		-01
LRL-VP-2	G	Air	5	5/22/14	0926	1	X		-02
LRL-VP-3	G	Air	5	5/22/14	0937	1	X		-03
LRL-VP-4	G	Air	5	5/22/14	0951	1	X		-04
LRL-VP-5	G	Air	5	5/22/14	1002	1	X		-05
LRL-VP-6	G	Air	5	5/22/14	1017	1	X		-06
LRL-AA-1	G	Air	0	5/22/14	1041	1	X		-07
LRL-VP-7	G	Air	5	5/22/14	1058	1	X		-08
LRL-VP-8	G	Air	5	5/22/14	1109	1	X		-09
LRL-VP-9	G	Air	5	5/22/14	1117	1	X		-10

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

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Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L700915

L129

Acctnum: **ALLWYNGAZ**
Template: **T94137**
Prelogin: **P469264**
TSR: **288 - Daphne Richards**
PB:

Shipped Via: **FedEX Ground**

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	5/22/14	1540	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	5/22/14	1830	FedEx
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____
Temp: 4.3 °C Bottles Received: 17
Date: 5-23-14 Time: 1000

Hold #
Condition: FCR 11A (lab use only) OK
COC Seal Intact: ___ Y ___ N ___ NA
pH Checked: ___ NCF: ___

Allwyn Environmental

1 West Deer Valley Rd, Bldg 2 Ste 305
Phoenix, AZ 85027

Billing Information:
Nichole Bowman
1 West Deer Valley Rd, Bldg 2 Ste 305
Phoenix, AZ 85027

Report to: **Keith Ross** kross@allwynenvironmental

Email To: twhitwer@allwynenvironmental.com;twhitwer@c

Project: LOS REALES LANDFILL VES
Description: Soil Vapor Survey

City/State Collected: TUCSON AZ

Phone: **623-215-3064**
Fax: **623-374-6637**

Client Project #: 002-105

Lab Project #: **ALLWYNGAZ-031814S**

Collected by (print): KEITH ROSS

Site/Facility ID #:

P.O. #:

Collected by (signature):

Immediately Packed on Ice N ✓ Y ___

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: JUNE 5, 2014

Email? ___No X Yes
FAX? ___No ___Yes

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TO-15TIC Summa	Rem./Contaminant	Sample # (lab only)
LRL-VP-10	G	Air	5	5/22/14	1126	1	X		-11
LRL-VP-11	G	Air	5	5/22/14	1203	1	X		-12
LRL-VP-12	G	Air	5	5/22/14	1216	1	X		-13
LRL-VP-13	G	Air	5	5/22/14	1239	1	X		-14
LRL-FIELD-DUP-1	G	Air	5	5/22/14	1007	1	X		-15
LRL-VP-14	G	Air	5	5/22/14	1226	1	X		-16
LRL-FIELD DUP-2	G	Air	5	5/22/14	1245	1	X		-17

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L700915

Table #

Acctnum: **ALLWYNGAZ**
Template: **T94137**
Prelogin: **P469264**
TSR: **288 - Daphne Richards**
PB:
Shipped Via: **FedEX Ground**

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	5/22/14	1540	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	5/22/14	1830	FedEx
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☑ FedEx ☐ Courier ☐ _____

Temp: AMB °C Bottles Received: 17

Date: 5-23-14 Time: 1000

Condition: (lab use only) OK

COC Seal Intact: ___Y ___N ___NA

pH Checked: NCF:

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:	Allwyn Environmental	Client ID:	LRL-VP-1
Project Desc.	Los Reales Landfill VES Soil Vapor Surv		
Matrix:	AIR	**ESC Sample No:**	L700915-01
Date Collected:	5/22/2014	**Lab File ID:**	0602_10
Date Analyzed:	6/2/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 14

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
001066-40-6	Silanol, trimethyl-	9.46	15.9	91.00	J
000541-05-9	Cyclotrisiloxane, hexamethyl-	14.14	5.29	91.00	J
000120-92-3	Cyclopentanone	15.45	12.6	91.00	J
000112-95-8	Eicosane	24.59	19.7	90.00	J
000112-95-8	Eicosane	25.42	9.52	90.00	J
000763-32-6	3-Buten-1-ol, 3-methyl-	13.64	10.6	87.00	J
001632-70-8	Undecane, 5-methyl-	20.08	25.5	87.00	J
006750-34-1	1-Dodecanol, 3,7,11-trimethyl-	20.80	4.32	86.00	J
000075-65-0	2-Propanol, 2-methyl-	8.00	29.9	83.00	J
000637-92-3	Propane, 2-ethoxy-2-methyl-	9.36	6.82	83.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

			Client ID:
Client Name:	Allwyn Environmental		LRL-VP-1
Project Desc.	Los Reales Landfill VES Soil Vapor Surv		
Matrix:	AIR	**ESC Sample No:**	L700915-01
Date Collected:	5/22/2014	**Lab File ID:**	0602_10
Date Analyzed:	6/2/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 14

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
001632-70-8	Undecane, 5-methyl-	21.14	6.71	83.00	J
000423-38-1	Butane, 1,1,3,4-tetrachloro-1,2,2,3,4,4-hexafluoro-	26.84	6.45	80.00	J
032357-83-8	Ether, hexyl pentyl	20.21	8.86	78.00	J
017301-32-5	Undecane, 4,7-dimethyl-	21.03	17.2	78.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:	Allwyn Environmental	Client ID:	LRL-VP-2
Project Desc.	Los Reales Landfill VES Soil Vapor Surv		
Matrix:	AIR	**ESC Sample No:**	L700915-02
Date Collected:	5/22/2014	**Lab File ID:**	0602_11
Date Analyzed:	6/2/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 14

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
001066-40-6	Silanol, trimethyl-	9.47	13.5	91.00	J
000629-99-2	Pentacosane	25.42	5.46	91.00	J
000112-95-8	Eicosane	24.59	14.9	90.00	J
000115-11-7	1-Propene, 2-methyl-	4.89	15.7	87.00	J
002213-23-2	Heptane, 2,4-dimethyl-	14.44	5.73	87.00	J
000120-92-3	Cyclopentanone	15.46	6.90	87.00	J
001632-70-8	Undecane, 5-methyl-	20.21	8.26	87.00	J
000075-65-0	2-Propanol, 2-methyl-	8.01	24.0	83.00	J
000637-92-3	Propane, 2-ethoxy-2-methyl-	9.37	9.70	83.00	J
000075-85-4	Amylene Hydrate	10.91	4.53	83.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:	Allwyn Environmental	Client ID:	LRL-VP-2
Project Desc.	Los Reales Landfill VES Soil Vapor Surv		
Matrix:	AIR	**ESC Sample No:**	L700915-02
Date Collected:	5/22/2014	**Lab File ID:**	0602_11
Date Analyzed:	6/2/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 14

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000109-66-0	Pentane	6.32	4.33	80.00	J
000630-06-8	Hexatriacontane	20.08	24.0	72.00	J
007045-71-8	Undecane, 2-methyl-	21.03	15.0	72.00	J
017301-32-5	Undecane, 4,7-dimethyl-	21.14	5.87	72.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

			Client ID:
Client Name:	Allwyn Environmental		LRL-VP-3
Project Desc.	Los Reales Landfill VES Soil Vapor Surv		
Matrix:	AIR	**ESC Sample No:**	L700915-03
Date Collected:	5/22/2014	**Lab File ID:**	0602_12
Date Analyzed:	6/2/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 11

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000629-50-5	Tridecane	24.88	15.9	94.00	J
001066-40-6	Silanol, trimethyl-	9.46	7.85	91.00	J
000112-40-3	Dodecane	22.98	13.1	91.00	J
002213-23-2	Heptane, 2,4-dimethyl-	14.44	1.90	90.00	J
001120-21-4	Undecane	20.93	3.87	90.00	J
000629-97-0	Docosane	24.59	9.69	90.00	J
000629-78-7	Heptadecane	25.42	4.25	90.00	J
000120-92-3	Cyclopentanone	15.46	5.42	87.00	J
000075-65-0	2-Propanol, 2-methyl-	8.00	6.67	83.00	J
000078-78-4	Butane, 2-methyl-	6.31	2.20	80.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:	Allwyn Environmental	Client ID:	LRL-VP-3
Project Desc.	Los Reales Landfill VES Soil Vapor Sur\		
Matrix:	AIR	**ESC Sample No:**	L700915-03
Date Collected:	5/22/2014	**Lab File ID:**	0602_12
Date Analyzed:	6/2/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 11

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
017301-32-5	Undecane, 4,7-dimethyl-	25.02	1.62	80.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:	Allwyn Environmental	Client ID:	LRL-VP-4
Project Desc.	Los Reales Landfill VES Soil Vapor Surv		
Matrix:	AIR	**ESC Sample No:**	L700915-04
Date Collected:	5/22/2014	**Lab File ID:**	0602_13
Date Analyzed:	6/2/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 14

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000763-32-6	3-Buten-1-ol, 3-methyl-	13.65	2.40	91.00	J
000629-78-7	Heptadecane	24.59	6.58	90.00	J
000629-78-7	Heptadecane	25.42	3.75	90.00	J
000630-06-8	Hexatriacontane	24.87	1.46	87.00	J
000075-65-0	2-Propanol, 2-methyl-	8.02	4.16	83.00	J
055644-10-5	Silanol, dimethyl(1,1,2-trimethylpropyl)-	9.47	17.7	83.00	J
000124-19-6	Nonanal	22.21	2.54	83.00	J
000115-11-7	1-Propene, 2-methyl-	4.90	2.46	80.00	J
000287-92-3	Cyclopentane	7.92	3.37	80.00	J
000541-05-9	Cyclotrisiloxane, hexamethyl-	14.14	14.7	80.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:	Allwyn Environmental	Client ID:	LRL-VP-4
Project Desc.	Los Reales Landfill VES Soil Vapor Sur\		
Matrix:	AIR	**ESC Sample No:**	L700915-04
Date Collected:	5/22/2014	**Lab File ID:**	0602_13
Date Analyzed:	6/2/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 14

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
032357-83-8	Ether, hexyl pentyl	21.03	1.91	78.00	J
000355-37-3	Hexane, 1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluoro-	6.82	2.91	74.00	J
000120-92-3	Cyclopentanone	15.46	4.51	72.00	J
017301-32-5	Undecane, 4,7-dimethyl-	20.08	2.86	72.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:	Allwyn Environmental	Client ID:	LRL-VP-5
Project Desc.	Los Reales Landfill VES Soil Vapor Surv		
Matrix:	AIR	**ESC Sample No:**	L700915-05
Date Collected:	5/22/2014	**Lab File ID:**	0602_14
Date Analyzed:	6/2/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 12

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
001066-40-6	Silanol, trimethyl-	9.46	12.2	91.00	J
017301-32-5	Undecane, 4,7-dimethyl-	20.21	2.02	90.00	J
000629-78-7	Heptadecane	24.59	11.6	90.00	J
000630-01-3	Hexacosane	24.87	2.01	90.00	J
000115-11-7	1-Propene, 2-methyl-	4.88	3.28	87.00	J
000120-92-3	Cyclopentanone	15.46	4.66	87.00	J
017301-32-5	Undecane, 4,7-dimethyl-	25.42	5.22	86.00	J
000355-37-3	Hexane, 1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluoro-	6.81	1.85	83.00	J
000075-65-0	2-Propanol, 2-methyl-	8.00	9.56	83.00	J
017301-32-5	Undecane, 4,7-dimethyl-	21.03	4.41	78.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:	Allwyn Environmental	Client ID:	LRL-VP-5
Project Desc.	Los Reales Landfill VES Soil Vapor Sur\		
Matrix:	AIR	**ESC Sample No:**	L700915-05
Date Collected:	5/22/2014	**Lab File ID:**	0602_14
Date Analyzed:	6/2/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 12

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000112-95-8	Eicosane	21.14	1.85	78.00	J
000075-07-0	Acetaldehyde	5.22	4.90	74.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:	Allwyn Environmental	Client ID:	LRL-VP-6
Project Desc.	Los Reales Landfill VES Soil Vapor Sur\		
Matrix:	AIR	**ESC Sample No:**	L700915-06
Date Collected:	5/22/2014	**Lab File ID:**	0602_15
Date Analyzed:	6/2/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 17

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
001066-40-6	Silanol, trimethyl-	9.47	3.38	91.00	J
000629-78-7	Heptadecane	24.59	17.7	90.00	J
000115-11-7	1-Propene, 2-methyl-	4.88	3.21	87.00	J
000120-92-3	Cyclopentanone	15.45	8.48	87.00	J
001632-70-8	Undecane, 5-methyl-	20.08	7.41	87.00	J
000071-36-3	1-Butanol	11.73	76.2	86.00	J
017301-32-5	Undecane, 4,7-dimethyl-	20.21	2.59	86.00	J
000112-95-8	Eicosane	24.75	2.68	86.00	J
000630-02-4	Octacosane	24.86	3.06	86.00	J
000629-94-7	Heneicosane	25.42	11.2	86.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:	Allwyn Environmental	Client ID:	LRL-VP-6
Project Desc.	Los Reales Landfill VES Soil Vapor Surv		
Matrix:	AIR	**ESC Sample No:**	L700915-06
Date Collected:	5/22/2014	**Lab File ID:**	0602_15
Date Analyzed:	6/2/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 17

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000075-65-0	2-Propanol, 2-methyl-	8.00	6.70	83.00	J
001632-70-8	Undecane, 5-methyl-	21.02	4.75	83.00	J
000544-76-3	Hexadecane	25.72	2.16	80.00	J
000123-72-8	Butanal	9.52	9.73	78.00	J
017312-63-9	Nonane, 5-butyl-	25.59	2.22	78.00	J
000075-07-0	Acetaldehyde	5.22	5.92	74.00	J
000638-68-6	Triacontane	25.02	2.64	72.00	J

Environmental Science Corp.

Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:	Allwyn Environmental	Client ID:	LRL-AA-1
Project Desc.	Los Reales Landfill VES Soil Vapor Sur\		
Matrix:	AIR	**ESC Sample No:**	L700915-07
Date Collected:	5/22/2014	**Lab File ID:**	0602_16
Date Analyzed:	6/2/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 4

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000075-37-6	Ethane, 1,1-difluoro-	4.21	3.82	91.00	J
001066-40-6	Silanol, trimethyl-	9.47	6.50	91.00	J
001191-96-4	Cyclopropane, ethyl-	7.90	4.44	86.00	J
000075-07-0	Acetaldehyde	5.22	1.71	74.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:	Allwyn Environmental	Client ID:	LRL-VP-7
Project Desc.	Los Reales Landfill VES Soil Vapor Surv		
Matrix:	AIR	**ESC Sample No:**	L700915-08
Date Collected:	5/22/2014	**Lab File ID:**	0602_17
Date Analyzed:	6/2/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 11

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000541-05-9	Cyclotrisiloxane, hexamethyl-	14.14	11.5	91.00	J
000120-92-3	Cyclopentanone	15.46	5.57	91.00	J
002213-23-2	Heptane, 2,4-dimethyl-	14.44	1.38	90.00	J
000544-76-3	Hexadecane	20.21	2.16	86.00	J
000629-78-7	Heptadecane	24.88	1.45	86.00	J
000075-65-0	2-Propanol, 2-methyl-	8.00	2.46	83.00	J
000109-66-0	Pentane	6.31	2.06	80.00	J
000078-78-4	Butane, 2-methyl-	5.86	1.47	72.00	J
000123-05-7	Hexanal, 2-ethyl-	18.86	3.37	72.00	J
007045-71-8	Undecane, 2-methyl-	21.02	3.20	72.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

			Client ID:
Client Name:	Allwyn Environmental		LRL-VP-7
Project Desc.	Los Reales Landfill VES Soil Vapor Sur\		
Matrix:	AIR	**ESC Sample No:**	L700915-08
Date Collected:	5/22/2014	**Lab File ID:**	0602_17
Date Analyzed:	6/2/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 11

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
003891-98-3	Dodecane, 2,6,10-trimethyl-	25.42	1.42	72.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:	Allwyn Environmental	Client ID:	LRL-VP-8
Project Desc.	Los Reales Landfill VES Soil Vapor Surv		
Matrix:	AIR	**ESC Sample No:**	L700915-09
Date Collected:	5/22/2014	**Lab File ID:**	0602_18
Date Analyzed:	6/2/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 15

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000112-40-3	Dodecane	22.98	2.26	94.00	J
001066-40-6	Silanol, trimethyl-	9.46	3.68	91.00	J
000541-05-9	Cyclotrisiloxane, hexamethyl-	14.14	2.75	91.00	J
000120-92-3	Cyclopentanone	15.45	3.40	90.00	J
000629-97-0	Docosane	24.59	17.1	90.00	J
000544-76-3	Hexadecane	24.75	2.46	90.00	J
056862-62-5	10-Methylnonadecane	24.86	2.73	90.00	J
000629-94-7	Heneicosane	25.42	9.79	90.00	J
000544-76-3	Hexadecane	20.21	2.92	86.00	J
000544-76-3	Hexadecane	25.72	1.85	86.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:	Allwyn Environmental	Client ID:	LRL-VP-8
Project Desc.	Los Reales Landfill VES Soil Vapor Surv		
Matrix:	AIR	**ESC Sample No:**	L700915-09
Date Collected:	5/22/2014	**Lab File ID:**	0602_18
Date Analyzed:	6/2/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 15

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000629-78-7	Heptadecane	20.08	11.2	83.00	J
017301-32-5	Undecane, 4,7-dimethyl-	21.14	2.79	78.00	J
000075-07-0	Acetaldehyde	5.22	6.25	74.00	J
007045-71-8	Undecane, 2-methyl-	21.03	6.99	72.00	J
062016-18-6	Octane, 5-ethyl-2-methyl-	25.59	2.05	72.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:	Allwyn Environmental	Client ID:	LRL-VP-9
Project Desc.	Los Reales Landfill VES Soil Vapor Surv		
Matrix:	AIR	**ESC Sample No:**	L700915-10
Date Collected:	5/22/2014	**Lab File ID:**	0602_19
Date Analyzed:	6/2/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 13

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000110-62-3	Pentanal	12.37	2.09	91.00	J
000120-92-3	Cyclopentanone	15.46	4.11	91.00	J
000112-95-8	Eicosane	24.86	1.88	91.00	J
000074-99-7	1-Propyne	4.48	1.89	90.00	J
000638-67-5	Tricosane	24.59	10.7	90.00	J
000629-78-7	Heptadecane	25.42	7.02	90.00	J
000071-36-3	1-Butanol	11.72	4.66	86.00	J
000109-66-0	Pentane	6.32	2.32	80.00	J
017301-32-5	Undecane, 4,7-dimethyl-	21.02	4.03	78.00	J
000066-25-1	Hexanal	15.10	2.97	74.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:	Allwyn Environmental	Client ID:	LRL-VP-9
Project Desc.	Los Reales Landfill VES Soil Vapor Sur\		
Matrix:	AIR	**ESC Sample No:**	L700915-10
Date Collected:	5/22/2014	**Lab File ID:**	0602_19
Date Analyzed:	6/2/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 13

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000078-78-4	Butane, 2-methyl-	5.87	2.01	72.00	J
001066-40-6	Silanol, trimethyl-	9.47	2.13	72.00	J
062238-13-5	Decane, 2,3,7-trimethyl-	20.08	5.04	72.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:	Allwyn Environmental	Client ID:	LRL-VP-10
Project Desc.	Los Reales Landfill VES Soil Vapor Surv		
Matrix:	AIR	**ESC Sample No:**	L700915-11
Date Collected:	5/22/2014	**Lab File ID:**	0602_20
Date Analyzed:	6/3/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 12

Concentration units: ppbv

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
001066-40-6	Silanol, trimethyl-	9.46	2.54	91.00	J
000541-05-9	Cyclotrisiloxane, hexamethyl-	14.14	5.53	91.00	J
000112-95-8	Eicosane	24.59	6.24	91.00	J
017301-32-5	Undecane, 4,7-dimethyl-	21.02	1.51	90.00	J
000629-78-7	Heptadecane	25.42	4.02	90.00	J
000078-78-4	Butane, 2-methyl-	5.86	1.59	86.00	J
000075-65-0	2-Propanol, 2-methyl-	8.00	1.50	83.00	J
000071-36-3	1-Butanol	11.72	3.24	80.00	J
000111-71-7	Heptanal	17.66	1.27	80.00	J
000109-66-0	Pentane	6.31	1.47	78.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

			Client ID:
Client Name:	Allwyn Environmental		LRL-VP-10
Project Desc.	Los Reales Landfill VES Soil Vapor Surv		
Matrix:	AIR	**ESC Sample No:**	L700915-11
Date Collected:	5/22/2014	**Lab File ID:**	0602_20
Date Analyzed:	6/3/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 12

Concentration units: ppbv

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000110-62-3	Pentanal	12.36	1.60	78.00	J
000120-92-3	Cyclopentanone	15.45	3.62	72.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:	Allwyn Environmental	Client ID:	LRL-VP-11
Project Desc.	Los Reales Landfill VES Soil Vapor Surv		
Matrix:	AIR	**ESC Sample No:**	L700915-12
Date Collected:	5/22/2014	**Lab File ID:**	0602_21
Date Analyzed:	6/3/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 11

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000611-14-3	Benzene, 1-ethyl-2-methyl-	18.78	2.41	94.00	J
000120-92-3	Cyclopentanone	15.46	1.72	91.00	J
000141-93-5	Benzene, 1,3-diethyl-	20.89	2.93	91.00	J
000091-57-6	Naphthalene, 2-methyl-	26.78	2.40	91.00	J
000071-36-3	1-Butanol	11.72	1.79	90.00	J
000541-05-9	Cyclotrisiloxane, hexamethyl-	14.14	2.51	90.00	J
000629-94-7	Heneicosane	24.59	4.52	90.00	J
000287-92-3	Cyclopentane	7.90	2.52	86.00	J
000629-94-7	Heneicosane	25.42	3.36	86.00	J
001066-40-6	Silanol, trimethyl-	9.47	1.54	83.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

			Client ID:
Client Name:	Allwyn Environmental		LRL-VP-11
Project Desc.	Los Reales Landfill VES Soil Vapor Sur\		
Matrix:	AIR	**ESC Sample No:**	L700915-12
Date Collected:	5/22/2014	**Lab File ID:**	0602_21
Date Analyzed:	6/3/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 11

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000109-66-0	Pentane	6.30	1.70	72.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:	Allwyn Environmental	Client ID:	LRL-VP-12
Project Desc.	Los Reales Landfill VES Soil Vapor Sur\		
Matrix:	AIR	**ESC Sample No:**	L700915-13
Date Collected:	5/22/2014	**Lab File ID:**	0602_22
Date Analyzed:	6/3/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 12

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000100-52-7	Benzaldehyde	19.84	1.50	98.00	J
001066-40-6	Silanol, trimethyl-	9.48	101	94.00	J
000124-18-5	Decane	18.74	0.931	91.00	J
000544-76-3	Hexadecane	24.59	1.34	90.00	J
000542-92-7	1,3-Cyclopentadiene	7.55	1.10	86.00	J
000071-36-3	1-Butanol	11.73	1.72	83.00	J
000115-11-7	1-Propene, 2-methyl-	4.89	3.06	81.00	J
000287-92-3	Cyclopentane	7.92	4.47	80.00	J
000075-65-0	2-Propanol, 2-methyl-	8.03	1.83	74.00	J
000078-78-4	Butane, 2-methyl-	5.88	1.24	72.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:	Allwyn Environmental	Client ID:	LRL-VP-12
Project Desc.	Los Reales Landfill VES Soil Vapor Sur\		
Matrix:	AIR	**ESC Sample No:**	L700915-13
Date Collected:	5/22/2014	**Lab File ID:**	0602_22
Date Analyzed:	6/3/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 12

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000109-66-0	Pentane	6.33	1.75	72.00	J
000541-05-9	Cyclotrisiloxane, hexamethyl-	14.14	2.41	72.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

			Client ID:
Client Name:	Allwyn Environmental		LRL-VP-13
Project Desc.	Los Reales Landfill VES Soil Vapor Sur\		
Matrix:	AIR	**ESC Sample No:**	L700915-14
Date Collected:	5/22/2014	**Lab File ID:**	0602_23
Date Analyzed:	6/3/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 15

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000541-05-9	Cyclotrisiloxane, hexamethyl-	14.14	6.11	91.00	J
000120-92-3	Cyclopentanone	15.45	4.17	91.00	J
000112-40-3	Dodecane	22.97	2.42	91.00	J
000112-95-8	Eicosane	24.59	20.1	91.00	J
000630-02-4	Octacosane	24.86	3.52	90.00	J
000115-11-7	1-Propene, 2-methyl-	4.87	6.57	87.00	J
017301-32-5	Undecane, 4,7-dimethyl-	21.02	5.28	86.00	J
000544-76-3	Hexadecane	24.75	3.12	86.00	J
000544-85-4	Dotriacontane	25.02	3.05	86.00	J
000544-76-3	Hexadecane	25.42	11.3	86.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:	Allwyn Environmental	Client ID:	LRL-VP-13
Project Desc.	Los Reales Landfill VES Soil Vapor Sur\		
Matrix:	AIR	**ESC Sample No:**	L700915-14
Date Collected:	5/22/2014	**Lab File ID:**	0602_23
Date Analyzed:	6/3/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 15

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000630-02-4	Octacosane	25.59	2.59	86.00	J
001066-40-6	Silanol, trimethyl-	9.46	2.71	83.00	J
000124-19-6	Nonanal	22.21	3.16	83.00	J
091531-51-0	6,6-Dimethylcycloocta-2,4-dienone	20.03	13.6	81.00	J
017301-32-5	Undecane, 4,7-dimethyl-	21.14	2.46	78.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:	Allwyn Environmental	Client ID:	LRL-FIELD-DUP
Project Desc.	Los Reales Landfill VES Soil Vapor Surv		
Matrix:	AIR	**ESC Sample No:**	L700915-15
Date Collected:	5/22/2014	**Lab File ID:**	0602_24
Date Analyzed:	6/3/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 13

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000112-40-3	Dodecane	22.98	1.30	91.00	J
002213-23-2	Heptane, 2,4-dimethyl-	14.44	1.49	90.00	J
000629-94-7	Heneicosane	24.59	6.81	90.00	J
000629-97-0	Docosane	25.42	4.03	90.00	J
000120-92-3	Cyclopentanone	15.46	4.53	87.00	J
001066-40-6	Silanol, trimethyl-	9.47	8.42	86.00	J
000629-50-5	Tridecane	24.87	1.23	86.00	J
000075-65-0	2-Propanol, 2-methyl-	8.01	5.91	83.00	J
000078-78-4	Butane, 2-methyl-	5.87	1.68	80.00	J
000071-36-3	1-Butanol	11.72	24.5	80.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

			Client ID:
Client Name:	Allwyn Environmental		LRL-FIELD-DUP
Project Desc.	Los Reales Landfill VES Soil Vapor Sur\		
Matrix:	AIR	**ESC Sample No:**	L700915-15
Date Collected:	5/22/2014	**Lab File ID:**	0602_24
Date Analyzed:	6/3/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 13

Concentration units: mg/l

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000109-66-0	Pentane	6.32	2.36	78.00	J
017301-32-5	Undecane, 4,7-dimethyl-	21.02	2.46	78.00	J
000107-83-5	Pentane, 2-methyl-	7.76	1.28	72.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

			Client ID:
Client Name:	Allwyn Environmental		LRL-VP-14
Project Desc.	Los Reales Landfill VES Soil Vapor Surv		
Matrix:	AIR	**ESC Sample No:**	L700915-16
Date Collected:	5/22/2014	**Lab File ID:**	0602_25
Date Analyzed:	6/3/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 13

Concentration units: ppbv

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000112-40-3	Dodecane	22.98	1.79	91.00	J
000112-95-8	Eicosane	24.59	8.63	91.00	J
000629-78-7	Heptadecane	25.42	4.46	90.00	J
017301-32-5	Undecane, 4,7-dimethyl-	20.08	11.5	86.00	J
017301-32-5	Undecane, 4,7-dimethyl-	20.22	4.23	86.00	J
017301-32-5	Undecane, 4,7-dimethyl-	21.14	3.22	86.00	J
000075-65-0	2-Propanol, 2-methyl-	8.01	1.94	83.00	J
000120-92-3	Cyclopentanone	15.46	4.20	83.00	J
001632-70-8	Undecane, 5-methyl-	21.02	8.29	83.00	J
002980-69-0	Undecane, 4-methyl-	21.28	1.76	83.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:	Allwyn Environmental	Client ID:	LRL-VP-14
Project Desc.	Los Reales Landfill VES Soil Vapor Surv		
Matrix:	AIR	**ESC Sample No:**	L700915-16
Date Collected:	5/22/2014	**Lab File ID:**	0602_25
Date Analyzed:	6/3/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 13

Concentration units: ppbv

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000109-66-0	Pentane	6.31	2.06	72.00	J
001066-40-6	Silanol, trimethyl-	9.47	2.39	72.00	J
000000-00-0	1-Iodo-2-methylnonane	20.96	2.82	72.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

			Client ID:
Client Name:	Allwyn Environmental		LRL-FIELD-DUP-2
Project Desc.	Los Reales Landfill VES Soil Vapor Surv		
Matrix:	AIR	**ESC Sample No:**	L700915-17
Date Collected:	5/22/2014	**Lab File ID:**	0602_26
Date Analyzed:	6/3/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 12

Concentration units: ppbv

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000629-50-5	Tridecane	24.88	3.29	95.00	J
000541-05-9	Cyclotrisiloxane, hexamethyl-	14.14	2.29	91.00	J
001120-21-4	Undecane	20.93	1.24	91.00	J
000112-40-3	Dodecane	22.98	2.92	91.00	J
000110-00-9	Furan	6.80	1.01	90.00	J
000629-99-2	Pentacosane	24.59	2.68	90.00	J
000629-92-5	Nonadecane	25.42	1.94	90.00	J
000120-92-3	Cyclopentanone	15.46	1.26	87.00	J
091531-51-0	6,6-Dimethylcycloocta-2,4-dienone	20.04	8.83	81.00	J
001191-96-4	Cyclopropane, ethyl-	7.90	2.01	80.00	J

Environmental Science Corp.
Laboratory Services

VOLATILES ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

			Client ID:
Client Name:	Allwyn Environmental		LRL-FIELD-DUP-2
Project Desc.	Los Reales Landfill VES Soil Vapor Sur\		
Matrix:	AIR	**ESC Sample No:**	L700915-17
Date Collected:	5/22/2014	**Lab File ID:**	0602_26
Date Analyzed:	6/3/2014	**Dilution Factor:**	2.00

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TIC's are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TIC's are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Number of TICs Found: 12

Concentration units: ppbv

CAS NO.	COMPOUND	RT	EST. CONC.	QF	QA
000110-62-3	Pentanal	12.36	0.966	78.00	J
000109-66-0	Pentane	6.31	1.93	72.00	J

APPENDIX B

FIELD SAMPLING SHEET

FIELD SOIL VAPOR SAMPLING LOG SHEET

Project Name: Los Reales Landfill Development VES | Project Number: 002-105 | Page 1 of 1

Project Address: 5300 E. Los Reales Rd, Tucson, AZ | Project Manager: Keith Ross | Phone: 602-377-9820

Sampling Location: Norht of closed Road SE of intersection of E. Los Reales Rd and S. Craycroft

Sampling Personnel: Rebecca Davey, Will Coleman, Keith Ross | Sampler Signature:

Drillng Equipment: Bobcat | Drilling Company: Johnson Env. Tech

Weather: Sunny | Ambient sample Location:

Flow Controller: 200 ml/min | Container Type: Summa | Container Size: 1 Liters | Leak Tracer: 1,1 DFA

Sample Tubing: Type: 1/8 Mylaf/- | Size (OD): 1/8 inches | Size ID: 1/8 Inches | Placement of LT: Probe top: — | Train:

Boring Diameter: 1¼ inches | Screen length: 0.5 Feet | Surface Cover: Soil

Soil Samples: Yes / No | Laboratory: ESC | Turnaround Time: X 5-7 days ____ 3-4 days ____ 2 days

Comments:

Allwyn ENVIRONMENTAL

SAMPLING INFORMATION

Sample Identification	Boring / Location ID	Depth (ft bgs)	Date	Time Start	Time End	Total Time	Purge/ Sample Rate (ml/L)	Purge ~~Volume~~ Time	Canister #	Flow Controller #	PID (ppmv)	Field Dup	Vacuum Pressure Start	Vacuum Pressure End	Comments / Description
LRL-VP-1	VP-1	5	5-22-14	9:10	9:17	7min	200mL/m	21s/7mL	174		0		28 psi	2in	EQST-8:44
LRL-VP-2	VP-2	5	5-22-14	9:20	9:26	6min	200mL/m	21s/7mL	175		0.2		28.5	4	8:47
LRL-VP-3	VP-3	5	5-22-14	9:31	9:39	8min	200mL/m	21s/7mL	918		0.1		30	4	8:51
LRL-VP-4	VP-4	5	5-22-14	9:43	9:51	8min	200mL/m	21s/7mL	300		0.1		29.5	4	8:54
LRL-VP-5	VP-5	5	5-22-14	9:57	10:02	5min	200mL/m	21s/7mL	614		0.1		26	2	8:59
LRL-VP-3	dup #1	5	5-22-14	9:31	9:37	6min	200mL/m	21s/7mL	1106		0.1	X	26	2	~~8:56~~ 8:51
LRL-VP-6	VP-6	5	5-22-14	10:06	1017	11min	200mL/m	21s/7mL	1064		0		26	2.5	9:26
LRL-VP-7	VP-7	5	5-22-14	10:50	10:58	8min	200mL/m	21s/7mL	1311		0		25	2.0	10:30
LRL-VP-8	VP-8	5	5-22-14	11:02	11:08	6min	200mL/m	21s/7mL	932		0		27	2.00	10:35
LRL-VP-9	VP-9	5	5-22-14	11:12	11:17	5min	200mL/m	21s/7mL	1223		0		25	2.00	10:39
LRL-VP-10	VP-10	5	5-22-14	11:20	11:26	6min	200mL/m	21s/7mL	1266		0		27.5	2.00	10:42
LRL-VP-11	VP-11	5	5-22-14	11:58	12:03	5min	200mL/m	21s/7mL	613		0		25	2	11:35
LRL-VP-12	VP-12	5	5-22-14	12:10	12:16	6min	200mL/m	21s/7mL	1105		0	X	26	2	11:40
LRL-VP-13	VP-13	5	5-22-14	12:30	12:38	8min	200mL/m	21s/7mL	1234		0		26	2	11:54
LRL-VP-14	VP-14	5	5-22-14	12:21	12:26	5min	200mL/m	21s/7mL	1334		0		26	2	11:49
LRL-VP-12Dup	#2 VP-12	5	5-22-14	12:40	12:45	5min	200mL/m	21s/7mL	1095		0		26	2	12:00
LRL-AA-1	NA	0	5/22/14	1041	1046	5min	200mL/m	NA			0		27	2	