2023 Groundwater Monitoring, Extraction, and Remediation System Progress Report

Los Reales Sustainability Campus Landfill
WQARF Site
January through December 2023

City of Tucson Environmental and General Services Department

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→ The Power of Commitment

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1. Introduction

1.1 Purpose and Report Organization

This 2023 Groundwater Monitoring, Extraction and Remediation System Progress Report (Report) documents groundwater monitoring and sampling activities completed from July through December 2023 and groundwater treatment system performance for calendar year 2023, for the Los Reales Sustainability Campus Landfill (Los Reales Landfill) Arizona Department of Environmental Quality (ADEQ) Water Quality Assurance Revolving Fund (WQARF) site (Site) in Tucson, Arizona. Details of the first half 2023 groundwater monitoring and sampling activities and the related analytical data and assessment were previously provided in the January through June 2023 Semi-Annual Groundwater Monitoring Report dated January 25, 2024.

This Report has been prepared by GHD Services Inc. (GHD) on behalf of the City of Tucson Environmental and General Services Department (COT-EGSD) in accordance with ADEQ's Municipal Solid Waste Landfill Master Facility Plan Approval number 07019500.13 for the Site, Section 3(b); the Site's December 2012 Sampling and Analysis Plan (SAP) and May 2017 and September 2017 addendums; and in accordance with City of Tucson Contract 222982-04 with GHD. This report also satisfies reporting requirements of the Site's Arizona Department of Water Resources Poor Quality Groundwater Withdrawal Permit (PQGWP), number 59-209994.0002.

1.2 Scope and Limitations

This Report has been prepared by GHD for COT-EGSD and may only be used and relied on by COT-EGSD for the purpose agreed between GHD and COT-EGSD as set out in Section 1.1 of this report.

GHD otherwise disclaims responsibility to any person other than COT-EGSD arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report (refer Section 1.3 of this report). GHD disclaims liability arising from any of the assumptions being incorrect.

1.3 Assumptions

GHD assumes historical data received for the Site as provided by COT-EGSD is accurate and reliable.

1.4 Background and Local Context

The Site is located within the southeastern portion of the City of Tucson at 5300 East Los Reales Road in Tucson, Arizona (**Figure 1**). The Los Reales Landfill is an active municipal solid waste landfill, which is owned and operated by the City of Tucson. The Site is regulated by ADEQ's Solid Waste Unit for municipal solid waste disposal activities and by the WQARF program for groundwater monitoring and treatment activities. The Site's Southwest Disposal Area (SWDA) was previously remediated under the Voluntary Remediation Program (VRP) to address environmental subsurface impacts; however, in October 2018 ADEQ issued a VRP Cessation of

Oversight letter for the SWDA. The City of Tucson historically operated a soil vapor extraction (SVE) system at the SWDA to remove soil vapor concentrations of concern from the vadose zone. The SVE system was last operated from November 2011 to February 2012 and SVE activities were terminated after documentation of diminishing returns.

Site groundwater is impacted by volatile organic compounds (VOCs) tetrachloroethene (PCE) and trichloroethene (TCE) at concentrations above ADEQ's aquifer water quality standards (AWQS). The City of Tucson operates a groundwater remediation system to capture and treat VOC-impacted groundwater beneath the Site and at downgradient locations. Select wells have also exhibited exceedances of the respective AWQS for arsenic, chromium, and/or lead. As such, three extraction wells (LLM-530, LLM-539, and WR-466A) are sampled for these constituents and other metals annually along with general chemistry parameters.

1.4.1 Private Wells

Two registered private potable water supply wells, Marble Well #1 and JFJ, are located north and west of the landfill boundaries, respectively. Marble Well #1 is hydraulically downgradient of the landfill and JFJ is hydraulically cross-gradient of the landfill (**Figure 2**). Groundwater samples analyzed for VOCs are collected semi-annually from Marble Well #1 and annually from JFJ.

1.4.2 Extraction Wells

Twenty groundwater extraction wells are actively or intermittently extracting groundwater at the Site, with extractions primarily targeting a shallow aquifer zone (SAZ) and a deep aquifer zone (DAZ) as detailed further below. Groundwater sampling of all 20 extraction wells is required annually (typically in the first half of a calendar year), while 3 of the 20 extraction wells are sampled during the second half of a calendar year for VOCs only.

1.4.3 Groundwater Sampling Events

As described above, two groundwater sampling events are required at the Site. Monitoring and/or extraction wells to be sampled are listed in the below tables by event, including the required analytical and each well's function with respect to monitoring and remediation at the Site. The focus of this annual report is the second half sampling event completed in August 2023 and the resulting analytical data.

First Half Sampling Event

Well ID	Parameter	Well Function
LLM-554, WR-173B, WR-471A	VOCs	Deep Sentinel
LLM-530	VOCs, General Chemistry and Metals	Extraction
LLM-536, LLM-537, LLM-538	VOCs	
LLM-539	VOCs, General Chemistry and Metals	
LLM-540, LLM-544, LLM-548, LLM-549, LLM-551, R-061A, R-062B, R-063A, WR-135A, WR-174A, WR-355A, WR-379B	VOCs	
WR-466A	VOCs, General Chemistry and Metals	
WR-470A	VOCs	Extraction
JFJ, Marble #1	VOCs	Private Wells
R-062A, R-065A, WR-049A, WR-184A, WR-372A, WR-374A, WR-375A, WR-379A, WR-380A	VOCs	Shallow Plume Definition

Well ID	Parameter	Well Function
LLM-555, LLM-556, WR-047B, WR-048A, WR-172A, WR-175A, WR-176A, WR-185A, WR-378A, WR-465A, WR-468A, WR-469A	VOCs	Shallow Sentinel

Second Half Sampling Event

Well ID	Parameter	Well Function
LLM-554	VOCs	Deep Sentinel
LLM-530, LLM-539, WR-466A	VOCs	Extraction
Marble #1	VOCs	Private Well
R-062A, WR-049A	VOCs	Shallow Plume Definition
LLM-555, LLM-556	VOCs	Shallow Sentinel

1.4.4 Annual Reporting

The Report includes the following:

- **Groundwater Elevations and Flow Direction.** Depth-to-groundwater measurements and the associated groundwater elevations are provided in table format, and a figure showing groundwater elevations, hydraulic gradient, and flow direction(s) is also provided.
- **Groundwater Data Trend Analyses and Interpretations.** The following items are included:
  - Analytical results for VOCs and arsenic, chromium, and lead (when applicable)
  - Figures showing monitoring well locations and PCE and TCE isoconcentration lines
  - Time-series graphs of PCE for select monitoring wells in the context of groundwater remediation
  - Where applicable, updated analytical is included based on completion of the August 2023 groundwater sampling event
- **Groundwater Treatment System Performance.** The following items are included:
  - Influent and effluent analytical results for VOCs
  - Operations summary table
  - Summary of groundwater extraction and injection volumes, as required by the Site's PQGWP
  - Average extraction rates, system uptime, volumes, pounds of VOCs removed, and disposition of treated groundwater

2. Conceptual Site Model

2.1 Los Reales Landfill Area Geology

Deposits in the vicinity of the landfill are comprised of recent alluvium, the Fort Lowell Formation and the Upper Tinaja Beds. Groundwater occurs in the Fort Lowell Formation, which consists of a sequence of unconsolidated to poorly consolidated interbedded clays, clayey silts, sandy silts, coarse sands, and gravels. Where saturated, the Fort Lowell Formation and the underlying upper Tinaja beds comprise the principal aquifer in the Tucson basin. The base of the Fort Lowell Formation may occur at depths ranging from 300 to 350 feet below ground surface (bgs) and groundwater within the Fort Lowell Formation is unconfined. Sedimentary deposits within the Fort Lowell Formation appear to have been deposited by fluvial processes (i.e., stream channel deposits).

According to boring logs from Site wells, deposits are saturated below the water table in most locations; in other words, no perched aquifers are known to exist. Groundwater flow is to the northwest from the landfill.

It was originally thought that a silty clay layer acted as an aquitard, dividing the Fort Lowell Formation into an upper zone above 240 feet bgs and a lower zone below 240 feet bgs. The upper zone consists of silty and clayey sands and gravels except for a few areas with well sorted gravels. In general, the lower zone consists of well sorted sands and gravels with intervals of clay and silt. The silty clay layer between the zones ranges from zero to ten feet in thickness and is saturated in some locations.

Based on a review of lithologic data, COT-EGSD does not believe that there is a Site-wide continuous silty clay layer that hydraulically separates the two zones. Deposits are heterogeneous with varying transmissivities, and PCE contamination in groundwater may move into areas with higher transmissivity, as evidenced by PCE detections in deep screened wells WR-471A and R-062B.

2.2 Los Reales Landfill Area Hydrogeology

The Regional Aquifer underlying the Tucson Basin consists of three primary water-bearing units. These units, in descending stratigraphic order, are the Quaternary Age Fort Lowell Formation, the Tertiary Tinaja Beds, and the Tertiary Pantano Formation. The Fort Lowell Formation is the most productive part of the aquifer. At the Site, the upper portion of the Regional Aquifer is distinguished into zones:

– SAZ - generally from the top of the water table down to 240 feet bgs
– DAZ - generally deeper than 240 feet bgs

Thus, the monitoring well network is divided into SAZ and DAZ wells, including “long screen” wells that are screened across both aquifer zones. Note that many of the long screen wells installed at the Site are now equipped with pumps that were previously raised to the shallow zone in each well, and in such cases, in this report GHD treats these wells as SAZ wells. Details on long screen wells with raised pumps are included in **Table 1**.

2.3 Los Reales Landfill Groundwater Extraction System

In 1999, a pump and treat system with ten extraction wells and two reinjection wells was constructed to capture and treat groundwater migrating beneath the northwest corner of the Site. In 2007, seven extraction wells and one injection well were added to the system to remediate groundwater migrating north of the Site. In 2009, three additional wells were added to contain and remediate groundwater along the Site’s western boundary. In addition, well R-062B was converted to an extraction well in March 2010 to reduce migration of PCE within the SAZ. Additional changes to the extraction well network have also occurred since 2010.

3. Groundwater Monitoring and Evaluation

Section 3 presents a Site groundwater evaluation comparing recent analytical results from groundwater sampling conducted by GHD in August 2023 to the April 2023 analytical results for the limited number of wells required to be sampled during the annual groundwater monitoring and sampling event. The limited number of wells are listed in Section 1.4.3.

Groundwater monitoring wells at the Site are screened at specific depths to facilitate monitoring of the horizontal distribution of contaminants within two saturated zones. Monitoring wells were selected for monitoring and sampling based on their respective screen intervals, not based on stratigraphic or lithologic boundaries.

Table 1 provides monitoring well construction information for Site wells and includes comments with respect to their target zones and purpose. **Figure 2** is a Site map which depicts the approximate locations of Site wells.

3.1 Analytical Data

In August 2023, a total of 19 samples were collected that included 12 wells (eight of nine plus four additional wells that could not be sampled in April 2023) as follows:

– 12 monitoring wells consisting of six SAZ wells, two long screen wells, and one DAZ well
– One private well
– Two shallow remediation (i.e., extraction) wells

At the request of COT-EGSD, resampling was attempted at wells that could not be sampled during the April 2023 sampling event, and hence the number of wells sampled in addition to the required nine. Other collected samples included two duplicates, two equipment blanks, one granular activated carbon effluent sample, and two trip blanks. Field documentation from the August 2023 groundwater sampling event, including groundwater purge/sampling log sheets (COT-EGSD template) are provided in **Appendix A**.

Shallow remediation well LLM-539 was not sampled due to lack of available groundwater (i.e., groundwater level was only 2.5 feet above the pump intake per facility supervisory control and data acquisition).

Prior to purging and/or sampling monitoring wells, a water level measurement was obtained from each monitoring well using an electronic water level indicator. Groundwater quality sampling and hydraulic monitoring of the monitoring wells were conducted in accordance with the SAP. Water quality field parameters, including pH, temperature, specific conductivity, dissolved oxygen, oxidation-reduction potential, and turbidity were monitored during purging. Well purge logs and documentation of groundwater parameters are included in **Appendix A.** After at least three to five well volumes were purged from the monitoring well dependent upon stabilization of parameters, a groundwater sample was collected for analysis of VOCs by Environmental Protection Agency (EPA) Test Method 8260B.

Sampling methods varied during the August 2023 groundwater sampling event:

– Wells R-062A and WR-379A were sampled via Hydrasleeve®.
– Three wells were sampled via a dedicated sampling port at the wellhead.
– The remaining seven wells were sampled via dedicated pumps and a custom pump controller assembly.

At the request of COT-EGSD, samples collected by GHD were analyzed by the Tucson Water Quality Laboratory (TWQL), who subcontracted analytical services to Legend Technical Services, Inc. The August 2023 laboratory analytical reports, as provided by TWQL, are included in **Appendix B**.

3.2 Groundwater Evaluation

3.2.1 August 2023 Groundwater Elevations

This section presents the hydrogeologic conditions, namely groundwater elevation data, for comparison to prior groundwater sampling events. Groundwater elevation data for August 2023 is presented in **Table 2** for monitoring wells located at the Site. A map showing Site monitoring well locations is included as **Figure 2**. SAZ groundwater elevations and contours for August 2023 are presented on **Figure 3**. **Figure 4** depicts hydrographs for selected shallow, long, and deep screened wells.

In August 2023, groundwater flow was overall to the northwest across the Site, which appears consistent with data collected during prior sampling events. As of August 2023, groundwater was encountered in the vicinity of the Site monitoring well network within the SAZ at an average depth of approximately 214 feet bgs, which is slightly higher than the April 2023 average depth of 210 feet bgs. According to information presented on

Figure 4, groundwater elevations at most wells increased slightly with exceptions at some wells, most likely due to their proximity to active extraction and/or injection wells.

Based on the August 2023 groundwater elevations at monitoring wells WR-047B, WR-172A, and WR-175A, the horizontal hydraulic gradient was 2.0×10^{-3} feet per foot, similar to April 2023 (1.69×10^{-3} feet per foot).

3.2.2 August 2023 Groundwater Chemistry

Isoconcentration maps which include PCE and TCE contours based on the latest available 2023 data are provided in **Figures 5** and **6**, respectively. These figures present April and August 2023 analytical data and include slight updates to contours based on August 2023 concentrations, where applicable. The only significant change to the contours presented in the Semi-Annual Groundwater Monitoring Report for 2023 is respective to **Figure 5**, where the PCE isoconcentration line was shifted upgradient due to a concentration decrease at LLM-530 (near northwest corner of landfill). PCE trend charts respective to the last decade of trends for selected wells are provided in **Figures 7** through **13** and include August 2023 data where applicable. Overall, PCE and TCE analytical data from August 2023 was similar to that of April 2023.

VOC analytical results from the August 2023 groundwater sampling event show that PCE and TCE continue to be detected in SAZ Site groundwater at concentrations exceeding the respective AWQS. No other VOC chemicals of concern were detected at concentrations greater than an applicable AWQS in August 2023. No VOCs were detected in the private well (Marble #1) or DAZ monitoring well LLM-554. Analytical results for the remaining ten sampled wells are further assessed below based on the well's function as identified in Section 1.4.3 and are compared to prior sampling results presented in **Table 3** and **Figures 5** and **6**.

3.2.2.1 PCE and TCE in Remediation Wells

In August 2023, groundwater samples were collected from 2 SAZ remediation wells as follows:

– Well WR-466A had an identical PCE concentration to April 2023, remaining below the AWQS of 5.0 micrograms per liter (µg/L); TCE remained below laboratory detection limits.
– As mentioned above, well LLM-530 had a slight decrease in PCE concentration from 5.46 µg/L to 4.49 µg/L, below the AWQS of 5.0 µg/L; TCE also decreased from a detected concentration of 2.03 µg/L to non-detect at the laboratory reporting limit of 2.00 µg/L.

3.2.2.2 PCE and TCE in SAZ and Long Screen Monitoring Wells

In August 2023, groundwater samples were collected from six SAZ monitoring wells and two long screen monitoring wells. With respect to PCE concentrations, four of six SAZ monitoring wells exhibited PCE concentration decreases, all of which were slight decreases. Some of the decreases were from prior detections to non-detect at laboratory reporting limits in August 2023. Two SAZ monitoring wells and the two long screen monitoring wells (WR-172A and WR-185A) were consistently non-detect for PCE at laboratory reporting limits.

With respect to TCE concentrations, SAZ monitoring well R-062A, which was previously sampled in August 2022, was non-detect for TCE compared to the prior detection of 0.63 µg/L. TCE concentrations at SAZ well WR-049A remained relatively unchanged (7.8 µg/L in April 2023 versus 7.94/8.00 µg/L [primary/duplicate] in August 2023). The remaining four SAZ monitoring wells and two long screen monitoring wells were consistently non-detect for TCE at laboratory reporting limits.

4. 2023 Groundwater Treatment System Performance

Groundwater extraction volumes, injection volumes, run times (days), and average pumping rates by month are presented in **Table 4**. The following is a summary of key 2023 metrics:

– Groundwater was extracted at an average rate of 76.4 gallons per minute (gpm) compared to 82.1 gpm reported for 2022.
– Approximately 34.9 million gallons of groundwater were extracted and treated at the Site during 2023 compared to 37.4 million gallons reported for 2022.
– Operational runtime was approximately 88 percent compared to 86 percent reported for 2022.
– Approximately 17.4 million gallons, or 52 percent of the extracted/treated groundwater, was used for dust control and irrigation at the Site. The remaining volume of approximately 17.5 million gallons was injected into the Regional Aquifer via DAZ wells IJ-001, IJ-002, and R-105A.
– The system has extracted and treated approximately 817.3 million gallons of groundwater since startup in 1999.

During 2023, monthly influent groundwater and effluent treated groundwater samples were collected at the treatment system and were subsequently submitted for VOC analysis. **Table 4** presents influent PCE and TCE concentrations used in mass removal calculations. Note that data entry errors were identified in Table 5 of the 2022 Annual Report that were recently corrected and resulted in a slight increase of the total mass removed in 2022; these corrections are reflected in the 2023 mass-removed calculations presented in **Table 4**.

During 2023, the treatment system removed approximately 1.37 pounds of PCE and 0.21 pounds of TCE. Since startup in 1999, the system has removed approximately 40.3 pounds of PCE and 14.7 pounds of TCE. In addition, there were no detections of any VOC constituents at or above laboratory reporting limits in the effluent samples. All 2023 process sampling laboratory analytical reports, as provided by TWQL, are included in **Appendix B**.

This Report also includes **Table 5**, Annual Summary of Extraction and Injection, which provides information and data needed for reporting under the Site's PQGWP.

5. SWDA - SVE System

As previously discussed in section 1.4, the Site accepted and disposed of low-level hazardous wastes containing VOCs in the SWDA from 1977 to 1980. From May 2003 through February 2012, COT-EGSD intermittently operated an SVE system at the SWDA. The SVE system reduced vadose zone VOC vapor concentrations. According to the 2020 Groundwater Monitoring, Soil Vapor Extraction System, and Groundwater Remediation System Progress Report, as a result of SVE, approximately 490 pounds of VOCs, including 104 pounds of PCE and 55 pounds of TCE, were extracted from the vadose zone.

In 2008, groundwater protection levels (GPLs) were calculated for soil vapor contaminants of concern (COCs). A GPL is a maximum concentration of a COC in soil vapor that could exist immediately above the capillary fringe, that if transported into groundwater, would be protective of groundwater quality (i.e., at concentrations less than the AWQS).

Soil vapor samples were collected at the SWDA beginning in 2003, including triennial sampling events beginning in 2015. The last soil vapor sampling event was conducted in December 2021 as presented in the

2021 Groundwater Monitoring, Soil Vapor Extraction System, and Groundwater Remediation System Progress Report.

Based on the historical SWDA soil vapor data results, it was determined that the SVE system effectively remediated vadose zone soils and vapor is no longer a threat to groundwater quality. Therefore, in December 2021 and with ADEQ approval COT-EGSD discontinued soil vapor monitoring at the SWDA. Accordingly, COT-EGSD plans to soon abandon the SVE network.

Tables

Table 1

Well Construction Information

Los Reales Landfill

Tucson, Arizona

ADWR Well ID #	City of Tucson Well Name	Land Owner	Northing (AZ State Plane NAD 83)	Easting (AZ State Plane NAD 83)	TOC Elevation (ft AMSL)	TOC Elevation Note	Approximate Land Surface Elevation (ft AMSL)	Land Elevation Note	Boring Depth (ft)	Well Depth (ft)	Pump Inlet Depth (ft)	Screen Interval (ft bgs)	Well Diameter	Comment
55-566878	IJ-001A	COT	408600.61	1018664.23	2701.77	TOST[1]	2704.07	COT-BR[1]	324	324	--	268 - 318	6-INCH	Deep Remediation (injection)
55-566879	IJ-002A	COT	408603.64	1019109.46	2706.83	TOST[1]	2709.05	COT-BR[1]	319	319	--	262.5 - 312.5	6-INCH	Deep Remediation (injection)
55-904655	LLM-500	Abandoned	406878.93	1019265.16	2805.98	COT-BR[1] (Not TOC)	2805.44	METAL CASING	325	320	--	220-280, 300-320	5-INCH	Nested Shallow Monitor/SVE/Abandoned 2013
55-904731	LLM-501	COT	408599.97	1017263.62	2697.38	TOST[1]	2696.95	COT-BR[1]	290	280	274.3	265-280	5-INCH	Deep Monitor
55-216286	LLM-513	COT	408644.25	1014593.27	2672.69	TOST[1]	2673.07	COT-BR[1]	290	290	261.0	260-290	5-INCH	Deep Monitor
55-216285	LLM-530	COT	408005.70	1017225.39	2698.82	TOST	2700.36	COT-BR[1]	232	230	223.1	192-230	5-INCH	Shallow Remediation (extraction)
55-218103	LLM-536	COT	408574.11	1018134.53	2698.41	TOST	2699.60	COT-BR[1]	231	230	228.0	190-230	5-INCH	Shallow Remediation (extraction)
55-218102	LLM-537	COT	408594.21	1017673.49	2696.03	TOST	2697.11	COT-BR[1]	232	230	228.0	190-230	5-INCH	Shallow Remediation (extraction)
55-910171	LLM-538	COT	407398.76	1017226.70	2691.33	TOST	2692.90	COT-BR[1]	230	230	225.0	190-230	5-INCH	Shallow Remediation (extraction)
55-218252	LLM-539	COT	407112.74	1017237.71	2690.22	TOST	2691.71	COT-BR[1]	230	230	226.0	190-230	5-INCH	Shallow Remediation (extraction)
55-218253	LLM-540	COT	406800.85	1017243.89	2689.95	TOST	2691.27	COT-BR[1]	230	230	226.0	190-230	5-INCH	Shallow Remediation (extraction)
55-219962	LLM-543	PC	411329.88	1018405.85	2692.41	TOST[1]	2692.85	COT-BR[1]	301	300	285.5	280-300	5-INCH	Deep Monitor
55-218769	LLM-544	COT	408254.47	1017221.66	2700.14	TOST	2702.05	COT-BR[1]	240	240	236.0	190-240	5-INCH	Shallow Remediation (extraction)
55-220488	LLM-548	COT	408586.64	1017907.30	2697.37	TOST	2699.08	COT-BR[1]	236	236	228.0	185-235	6-INCH	Shallow Remediation (extraction)
55-220489	LLM-549	COT	408584.82	1017456.42	2694.75	TOST	2696.77	COT-BR[1]	236	236	228.0	185-235	6-INCH	Shallow Remediation (extraction)
55-221183	LLM-551	COT	407713.75	1017228.74	2696.65	TOC	2698.63	COT-BR[1]	230	230	226.2	190-230	6-INCH	Shallow Remediation (extraction)
55-918189	LLM-554	COT	409484.66	1019424.04	2703.86	TOST	2704.15	COT-BR	302	300	281.3	270-300	5-INCH	Deep Monitor
55-918188	LLM-555	COT	409455.34	1018859.61	2701.36	TOST	2701.79	COT-BR	232	230	226.3	180-230	5-INCH	Shallow Monitor
55-919512	LLM-556	ASL	409731.55	1015925.10	2679.33	TOC	2678.62	CONCRETE	231	230	225.0	180-230	5-INCH	Shallow Monitor
55-553828	R-010A	Abandoned	407687.17	1017234.98	2696.30	SEAL	2698.66	CONCRETE	287	230	--	187 - 227.5	6-INCH	Shallow Remediation/Abandoned 2012
55-553824	R-011A	Abandoned	408599.56	1018137.49	2696.89	--	2699.21	--	287	230	--	187 - 227	6-INCH	Shallow Remediation/Abandoned 2008
55-559122	R-015B	Abandoned	408610.96	1017675.53	2694.01	--	2696.43	--	218	218	--	188 - 213	6-INCH	Shallow Remediation/Abandoned 2008
55-565269	R-023A	COT	408599.50	1017457.87	2695.89	TOST[1]	2697.69	COT-BR[1]	230	230	219.0	185 - 225	6-INCH	Shallow Monitor
55-565270	R-024A	COT	408618.48	1017912.70	2697.31	TOST[1]	2699.75	COT-BR[1]	230	230	225.0	185 - 225	6-INCH	Shallow Monitor
55-565271	R-025A	Abandoned	408265.95	1017233.48	2699.41	SEAL	2701.87	CONCRETE	235	235	--	189 - 229	6-INCH	Shallow Remediation/Abandoned 2009
55-565272	R-026A	Abandoned	407981.70	1017242.92	2697.53	--	2700.03	--	230	230	--	185 - 225	6-INCH	Shallow Remediation/Abandoned 2008
55-575179	R-061A	COT	408588.10	1019333.29	2711.78	TOST	2715.06	COT-BR[1]	240	240	230.0	195 - 235	5-INCH	Shallow Remediation (extraction)
55-575180	R-062A	COT	408587.52	1019535.00	2712.85	TOC[1]	2716.11	COT-BR[1]	245	245	hydrasleeve	200 - 240	5-INCH	Shallow Monitor
55-583862	R-062B	COT	408587.99	1019526.34	2715.71	STEELRING	2716.00	COT-BR[1]	290	290	275.0	265 - 285	5-INCH	Deep Remediation (extraction)
55-575181	R-063A	COT	408596.45	1019729.65	2715.27	TOST	2718.40	COT-BR[1]	245	245	234.0	200 - 240	5-INCH	Shallow Remediation (extraction)
55-575182	R-064A	COT	408596.71	1020195.96	2720.32	TOC[1]	2719.74	COT-BR[1]	245	245	--	200 - 240	5-INCH	Shallow Monitor
55-575183	R-065A	COT	408581.42	1020375.83	2721.99	TOST[1]	2721.25	COT-BR[1]	245	245	242.8	200 - 240	5-INCH	Shallow Monitor
55-592316	R-105A	COT	408575.52	1021232.88	2724.91	TOST	2728.50	COT-BR[1]	430	426	--	321 - 421	5-INCH	Deep Remediation (injection)
55-592314	R-106A	COT	408589.99	1019232.83	2713.94	TOC[1]	2713.03	COT-BR[1]	231	230	--	210 - 220	5-INCH	Shallow Monitor
55-592315	R-107A	COT	408586.60	1019458.39	2716.01	TOC[1]	2715.34	COT-BR[1]	236	230	--	210 - 220	5-INCH	Shallow Monitor
55-592317	R-108A	COT	408591.72	1019618.66	2717.82	TOC[1]	2716.57	COT-BR[1]	236	230	--	210 - 220	5-INCH	Shallow Monitor
55-594918	R-109A	COT	405982.53	1017237.15	2688.17	TOC[1]	2689.06	COT-BR[1]	226	220	--	90 - 220	6-INCH	Nested Shallow Monitor/SVE
55-594918	R-109B	COT	405971.15	1017237.98	2687.88	SV	--	--	226	65	--	20 - 60	2-INCH	Nested Shallow Monitor/SVE
55-594919	R-110A	COT	405785.08	1017437.62	2686.31	TOC[1]	2687.36	COT-BR[1]	226	220	--	90 - 220	6-INCH	Nested Shallow Monitor/SVE
55-594919	R-110B	COT	405785.48	1017447.85	2686.07	SV	--	--	226	65	--	20 - 60	2-INCH	Nested Shallow Monitor/SVE
55-594920	R-111A	COT	406010.20	1017628.63	2691.62	TOC[1]	2692.74	COT-BR[1]	226	220	--	90 - 220	6-INCH	Nested Shallow Monitor/SVE
55-594920	R-111B	COT	406020.96	1017628.89	2691.50	SV	--	--	226	65	--	20 - 60	2-INCH	Nested Shallow Monitor/SVE

Table 1

Well Construction Information

Los Reales Landfill

Tucson, Arizona

ADWR Well ID #	City of Tucson Well Name	Land Owner	Northing (AZ State Plane NAD 83)	Easting (AZ State Plane NAD 83)	TOC Elevation (ft AMSL)	TOC Elevation Note	Approximate Land Surface Elevation (ft AMSL)	Land Elevation Note	Boring Depth (ft)	Well Depth (ft)	Pump Inlet Depth (ft)	Screen Interval (ft bgs)	Well Diameter	Comment
55-594923	R-112A	COT	406250.69	1017401.85	2687.54	TOC[1]	2688.45	COT-BR[1]	226	220	--	90 - 220	6-INCH	Nested Shallow Monitor/SVE
55-594923	R-112B	COT	406250.77	1017391.03	2687.25	SV	--	--	226	65	--	20 - 60	2-INCH	Nested Shallow Monitor/SVE
55-594921	R-113A	COT	406022.65	1017436.45	2688.82	SV	--	--	226	123	--	90 - 120	2-INCH	Nested Shallow Monitor/SVE
55-594922	R-113B	COT	406011.65	1017437.96	2689.05	TOC[1]	2690.25	COT-BR[1]	226	220	--	160 - 220	6-INCH	Nested Shallow Monitor/SVE
55-594921	R-113C	COT	406022.85	1017436.94	2688.88	SV	--	--	226	62	--	25 - 60	2-INCH	Nested Shallow Monitor/SVE
55-573282	WR-047A/B	COT	404646.51	1022480.75	2730.48	TOST[1]	2730.14	COT-BR[1]	1155	280	274.4	210-280	6-INCH	Long Screen Monitor
55-500457	WR-048A	COT	406127.65	1017378.10	2689.19	TOC[1]	2688.62	COT-BR[1]	355	225	216.0	202 - 225	6-INCH	Shallow Monitor (modified Nov. 06)
55-500458	WR-049A	COT	406275.68	1017746.12	2694.16	TOST[1]	2692.56	COT-BR[1]	355	229	221.5	202 - 229	6-INCH	Shallow Monitor (modified Nov. 06)
55-517157	WR-135A	COT	408519.99	1017255.87	2694.12	TOST	2696.30	COT-BR[1]	285	230	220.0	185 - 228	6-INCH	Shallow Remediation (extraction)
55-566013	WR-136B	COT	408584.73	1019952.63	2719.51	TOST[1]	2718.98	COT-BR[1]	245	245	--	209 - 239	6-INCH	Shallow Monitor
55-527398	WR-172A	ASL	411396.41	1016967.36	2681.73	TOST[1]	2681.25	COT-BR[1]	285	280	231.0	180 - 280	6-INCH	Long Screen Monitor/Raised pump in May 2013 to sample from shallow zone
55-527402	WR-173A	Abandoned	410033.84	1016972.32	2688.57	TOST	2691.43	COT-BR[1]	280	230	--	179 - 222.7	6-INCH	Shallow Remediation/Abandoned Nov. 2018
55-559121	WR-173B	ASL	410033.41	1016990.58	2692.34	TOST[1]	2691.24	COT-BR[1]	280	280	256.0	260 - 275	4-INCH	Deep Monitor
55-559123	WR-173C	ASL	410038.95	1016980.66	2691.98	TOC[1]	2691.08	COT-BR[1]	211	211	--	190-205	4-INCH	Shallow Monitor
55-527401	WR-174A	ASL	408750.87	1015895.23	2687.70	SEAL	2690.43	COT-BR[1]	285	230	215.0	184 - 221	6-INCH	Shallow Remediation (extraction)
55-527400	WR-175A	ASL	408766.40	1014595.75	2676.55	TOST[1]	2675.83	COT-BR[1]	286	225	217.2	179 - 225	6-INCH	Shallow Monitor (modified Nov. 06)
55-527399	WR-176A	ASL	411388.09	1014561.78	2663.83	TOST[1]	2663.24	COT-BR[1]	277	275	231.0	174 - 275	6-INCH	Long Screen Monitor/Raised pump in May 2013 to sample from shallow zone
55-527403	WR-184A	COT	410018.97	1019762.12	2706.48	TOST[1]	2705.59	COT-BR[1]	305	240	237.5	200-240	6-INCH	Shallow Monitor (modified Aug. 05)
55-527404	WR-185A	COT	405999.21	1014622.67	2682.73	TOST[1]	2682.00	COT-BR[1]	285	280	231.0	180-280	6-INCH	Long Screen Monitor/Raised pump to sample from shallow zone in June 2013.
55-553826	WR-253A	Abandoned	408559.89	1017286.11	2697.81	--	2694.56	--	205	205	--	190 - 205	2-INCH	Shallow Monitor/Abandoned 2006
55-553826	WR-253B	Abandoned	408559.89	1017286.11	2697.83	--	2694.58	--	265	265	--	250 - 265	2-INCH	Deep Monitor/Abandoned 2006
55-553825	WR-272A	COT	408594.62	1017655.79	2698.32	TOC[1]	2697.50	COT-BR[1]	205	205	--	185 - 205	2-INCH	Shallow Monitor (Dry)
55-553825	WR-272B	COT	408594.82	1017656.07	2698.34	TOC[1]	2697.50	COT-BR[1]	280	280	--	253 - 273	4-INCH	Deep Monitor
55-566880	WR-325A	COT	408112.34	1017238.22	2702.20	TOST[1]	2701.14	COT-BR[1]	285	285	--	259.5 - 279.5	6-INCH	Deep Monitor
55-579026	*WR-355A	COT	406353.39	1017235.21	2687.54	TOC	2689.30	COT-BR[1]	228	225	222.2	171-219	5-INCH	Shallow Remediation (extraction)/Soil Vapor Monitor
55-579024	*WR-360A	COT	405858.63	1017272.22	2690.70	TOST[1]	2689.76	COT-BR[1]	230	230	212.5	175-225	8-INCH	Shallow Monitor
55-579025	*WR-361A	COT	406100.38	1017232.54	2691.27	TOST[1]	2690.70	COT-BR[1]	228	225	209.5	170-220	8-INCH	Shallow Monitor
55-583861	WR-372A	COT	408133.49	1017235.25	2701.78	TOST[1]	2701.33	COT-BR[1]	234	234	229.8	189 - 229	5-INCH	Shallow Monitor
55-583865	WR-373A	COT	408428.13	1017281.37	2698.90	TOST[1]	2698.44	COT-BR[1]	234	234	230.0	189 - 229	5-INCH	Shallow Monitor
55-583866	WR-374A	COT	408499.25	1017391.93	2697.09	TOST[1]	2696.47	COT-BR[1]	229	229	226.8	194 - 224	5-INCH	Shallow Monitor
55-583867	WR-375A	COT	408621.30	1017558.24	2698.28	TOST[1]	2697.77	COT-BR[1]	229	229	227.3	194 - 224	5-INCH	Shallow Monitor
55-583858	WR-376A	COT	408603.03	1020787.48	2718.73	TOST	2721.81	COT-BR[1]	244	244	hydrasleeve	199 - 239	5-INCH	Shallow Monitor (former extraction well)
55-583864	WR-378A	COT	408579.49	1021183.00	2727.91	TOC[1]	2727.72	COT-BR[1]	244	244	hydrasleeve	209 - 239	5-INCH	Shallow Monitor
55-583860	WR-379A	COT	408598.85	1019127.40	2707.69	TOST	2710.78	COT-BR[1]	244	244	hydrasleeve	199 - 239	5-INCH	Shallow Monitor (former extraction well)
55-918190	WR-379B	COT	408595.77	1019115.47	2706.70	TOST	2710.00	COT-BR	249	245	240.0	200-244.5	5-INCH	Shallow Remediation (extraction)
55-583863	WR-380A	COT	408604.16	1018524.30	2703.11	TOST[1]	2702.07	COT-BR[1]	239	239	237.2	193.5 - 233.5	5-INCH	Shallow Monitor
55-902792	WR-465A	COT	409983.68	1020978.59	2721.05	TOST[1]	2720.37	COT-BR[1]	240	240	hydrasleeve	184.4 - 240	5-INCH	Shallow Monitor
55-902791	WR-466A	PC	410053.76	1019145.93	2698.24	TOST	2701.33	COT-BR[1]	235	235	231.0	195 - 235	5-INCH	Shallow Remediation (extraction)
55-902794	WR-468A	PC	411330.95	1018356.18	2692.26	TOST[1]	2692.63	COT-BR[1]	235	235	231.0	180 - 235	5-INCH	Shallow Monitor

Table 1
Well Construction Information
Los Reales Landfill
Tucson, Arizona

ADWR Well ID #	City of Tucson Well Name	Land Owner	Northing (AZ State Plane NAD 83)	Easting (AZ State Plane NAD 83)	TOC Elevation (ft AMSL)	TOC Elevation Note	Approximate Land Surface Elevation (ft AMSL)	Land Elevation Note	Boring Depth (ft)	Well Depth (ft)	Pump Inlet Depth (ft)	Screen Interval (ft bgs)	Well Diameter	Comment
55-902819	WR-469A	Raceway Partners	407377.35	1015833.51	2683.11	TOST[1]	2682.10	COT-BR[1]	240	240	231.0	185 - 235	5-INCH	Shallow Monitor
55-902793	WR-470A	COT	410032.92	1019844.41	2703.20	TOST	2706.49	COT-BR[1]	241	240	235.0	200-240	5-INCH	Shallow Remediation (extraction)
55-902795	WR-471A	COT	410016.79	1019834.86	2706.10	TOST[1]	2705.63	COT-BR[1]	300	295	291.0	255 - 295	5-INCH	Deep Monitor
55-591750	Marble Well	Monterra Group	--	--	--	--	--	--	350	320	300.0	280-320	5-INCH	Exempt private well at 4811 E. Los Reales Rd. ADWR database lists in Township 14, Range 15, Section 23
55-568906	Racetrack Well (691)	Raceway Partners	--	--	--	--	--	--	380	--	257.0	268 - 373	8-INCH	Exempt private well
55-598990	Junque for Jesus/Erler (JFJ)	Erler	--	--	--	--	--	--	340	340	235.0	320 - 340	5 3/4 - INCH	Exempt private well
55-619475	Town & Country (432P)	Town & Country	--	--	--	--	--	--	500	500	--	177-500	12-INCH	Non-exempt private well

Notes:

ADWR = Arizona Department of Water Resources
NAD = North American Datum
TOC = top of casing
ft AMSL = feet above mean sea level
ft bgs = feet below ground surface
COT = City of Tucson
TOST = top of sounding tube
-- = well is not equiped with pump or not surveyed or information not available
SVE = soil vapor extraction
CONCRETE = concrete pad
SEAL = sanitary seal
STEELRING = steelring fitted to TOC
SV= Soil Vapor Well only
[1] Well position was surveyed in August 2012

Table 2
Water Table Elevations
Los Reales Landfill
Tucson, Arizona

Well ID	Date	DTW (ft bgs)	Corr Factor (ft)	Corr DTW (ft)	Location of Benchmark	Benchmark Elevation (ft. AMSL)	WTE (ft)	DTW Collected by	Comments
IJ-001A	08/22/23	NM	--	NM	TOST	2701.77	NM	--	
IJ-002A	08/22/23	157.40	--	157.40	TOST	2706.83	2549.43	GHD	Well was actively injecting. Vegitation overgrown
LLM-501	08/24/23	211.64	-0.40	211.24	TOST	2696.95	2485.71	GHD	Possible mold in cap for casing
LLM-513	08/21/23	187.74	0.39	188.13	TOST	2673.07	2484.94	GHD	
LLM-530	08/22/23	NM	--	NM	TOST	2698.82	NM	GHD	
LLM-536	08/22/23	222.02	--	222.02	TOST	2698.41	2476.39	GHD	
LLM-537	08/22/23	NM	--	NM	TOST	2696.03	NM	GHD	Transducer tube capped, unable to tag DTW
LLM-538	08/22/23	220.70	--	220.70	TOST	2691.33	2470.63	GHD	Pump running
LLM-539	NA	NM	--	NM	TOST	2690.22	NM	GHD	No sounding tube present.
LLM-540	NA	NM	--	NM	TOST	2689.95	NM	GHD	No sounding tube present.
LLM-543	08/21/23	210.45	--	210.45	TOST	2692.41	2481.96	GHD	
LLM-544	08/22/23	230.62	--	230.62	TOST	2700.14	2469.52	GHD	
LLM-548	08/22/23	226.63	--	226.63	TOST	2697.37	2470.74	GHD	
LLM-549	NA	NM	--	NM	TOST	2694.75	NM	GHD	No sounding tube present.
LLM-551	08/22/23	215.90	--	215.90	TOC	2696.65	2480.75	GHD	
LLM-554	08/23/23	216.85	0.29	217.14	TOST	2704.15	2487.01	GHD	Standing water in vault
LLM-555	08/22/23	215.25	0.28	215.53	TOST	2701.79	2486.26	GHD	
LLM-556	08/21/23	196.92	0.99	197.91	TOC	2678.62	2480.71	GHD	
R-023A	08/22/23	212.60	1.85	214.45	TOST	2697.69	2483.24	GHD	
R-024A	08/22/23	214.37	2.43	216.80	TOST	2699.75	2482.95	GHD	
R-061A	08/22/23	230.50	--	230.50	TOC	2696.65	2466.15	GHD	Actively pumping, spigot leaking
R-062A	08/21/23	225.11	--	225.11	TOC	2712.85	2487.74	GHD	
R-062B	08/22/23	237.08	--	237.08	STEELRING	2715.71	2478.63	GHD	
R-063A	08/22/23	232.15	--	232.15	TOST	2715.27	2483.12	GHD	Heavy lid, needs gas strut.
R-064A	08/22/23	230.44	-0.58	229.86	TOC	2719.74	2489.88	GHD	Broken hinges
R-065A	08/22/23	232.70	-0.75	231.95	TOST	2721.25	2489.30	GHD	Broken hinges
R-105A	08/22/23	NM	--	NM	TOST	2724.91	NM	GHD	Sounder at 16', posisble rainwater intrusion?
R-106A	08/22/23	224.02	-0.87	223.15	TOC	2713.03	2489.88	GHD	
R-107A	08/22/23	NM	-0.65	NM	TOC	2715.34	NM	GHD	Tape went to 320', no water, well info table says TD is 230'
R-108A	08/22/23	224.22	-1.19	223.03	TOC	2716.57	2493.54	GHD	

Table 2
Water Table Elevations
Los Reales Landfill
Tucson, Arizona

Well ID	Date	DTW (ft bgs)	Corr Factor (ft)	Corr DTW (ft)	Location of Benchmark	Benchmark Elevation (ft. AMSL)	WTE (ft)	DTW Collected by	Comments
R-109A	08/22/23	195.63	0.91	196.54	TOC	2689.06	2492.52	GHD	Unsafe due to biologicals (tall grass, open holes, dead snake)
R-110A	08/22/23	193.38	1.03	194.41	TOC	2687.36	2492.95	GHD	
R-111A	08/22/23	198.70	1.18	199.88	TOC	2692.74	2492.86	GHD	
R-112A	NA	NM	1.08	NM	TOC	2688.45	NM	GHD	Burried/ abandoned/ damaged
R-113B	NA	NM	1.19	NM	TOC	2690.25	NM	GHD	Burried
WR-047B	08/21/23	233.13	-0.33	232.80	TOST	2730.14	2497.34	GHD	Broken vault hinges
WR-048A	08/22/23	197.33	-0.52	196.81	TOC	2688.62	2491.81	GHD	
WR-049A	08/22/23	201.17	-1.61	199.56	TOST	2692.56	2493.00	GHD	Power cable crimped under vault lid.
WR-135A	NA	NM	--	NM	TOST	2694.12	NM	GHD	No sounding tube present.
WR-136B	08/22/23	229.94	-0.24	229.70	TOST	2718.98	2489.28	GHD	Hinges tight/ sticking.
WR-172A	08/21/23	201.04	-0.50	200.54	TOST	2681.25	2480.71	GHD	
WR-173B	08/21/23	209.13	-1.07	208.06	TOST	2691.24	2483.18	GHD	
WR-173C	08/21/23	DRY	--	--	TOC	2691.98	--	GHD	
WR-174A	NA	NM	--	NM	SEAL	2687.70	NM	GHD	No sounding tube present.
WR-175A	08/21/23	192.75	-0.71	192.04	TOST	2675.83	2483.79	GHD	
WR-176A	08/21/23	185.54	-0.66	184.88	TOST	2663.24	2478.36	GHD	
WR-184A	08/22/23	219.97	-0.44	219.53	TOST	2705.59	2486.06	GHD	Ants
WR-185A	08/21/23	190.14	-0.73	189.41	TOST	2682.00	2492.59	GHD	
WR-272A	08/22/23	DRY	-0.85	--	TOC	2697.50	--	GHD	
WR-272B	08/22/23	210.25	-0.84	209.41	TOC	2697.50	2488.09	GHD	
WR-325A	08/22/23	214.45	-0.87	213.58	TOST	2701.14	2487.56	GHD	
WR-355A	NA	NM	-1.23	NM	TOC	2687.54	NM	GHD	No sounding tube present.
WR-360A	08/22/23	198.04	-0.97	197.07	TOST	2689.76	2492.69	GHD	
WR-361A	08/22/23	198.72	-0.60	198.12	TOST	2690.70	2492.58	GHD	Unsafe. See additional comments
WR-372A	08/22/23	219.40	-0.41	218.99	TOST	2701.33	2482.34	GHD	
WR-373A	08/22/23	214.38	-0.47	213.91	TOST	2698.44	2484.53	GHD	
WR-374A	08/22/23	212.17	-0.58	211.59	TOST	2696.47	2484.88	GHD	
WR-375A	08/22/23	212.59	-0.50	212.09	TOST	2697.77	2485.68	GHD	
WR-376A	08/22/23	228.95	--	228.95	TOST	2718.73	2489.78	GHD	No j-plug present
WR-378A	08/22/23	231.78	-0.24	231.54	TOC	2727.72	2496.18	GHD	Well vault broken and burried

Table 2
Water Table Elevations
Los Reales Landfill
Tucson, Arizona

Well ID	Date	DTW (ft bgs)	Corr Factor (ft)	Corr DTW (ft)	Location of Benchmark	Benchmark Elevation (ft. AMSL)	WTE (ft)	DTW Collected by	Comments
WR-379A	08/21/23	222.12	--	222.12	TOST	2707.69	2485.57	GHD	
WR-379B	08/22/23	231.98	--	231.98	TOST	2706.70	2474.72	GHD	No well ID pesent
WR-380A	08/22/23	214.08	-1.12	212.96	TOST	2702.07	2489.11	GHD	
WR-465A	08/22/23	234.02	-0.51	233.51	TOST	2720.37	2486.86	GHD	No j-plug present
WR-466A	NA	NM	--	NM	TOST	2698.24	NM	GHD	Stuck water level tape left behind by others. Could not remove. Did not want to risk further tangling.
WR-468A	08/21/23	210.05	0.37	210.42	TOST	2692.63	2482.21	GHD	
WR-469A	08/22/23	194.42	-1.03	193.39	TOST	2682.10	2488.71	GHD	
WR-470A	08/22/23	218.45	--	218.45	TOST	2703.20	2484.75	GHD	
WR-471A	08/22/23	220.35	-0.52	219.83	TOST	2705.63	2485.80	GHD	

Notes:

DTW = depth to water
ft bgs = feet below ground surface
Corr = correction
ft. AMSL = feet Above Mean Sea Level
WTE = Water Table Elevation
NA = Not Available
NM = Not Monitored
TOST = Top of Sounding Tube
TOC = Top of Casing
STEELRING = steelring fitted to TOC
SEAL = sanitary seal

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
LLM-500	05/16/06	<0.5	<0.5	<0.5	2.1	<0.5	2.0	0.7	0.5	<0.5
LLM-500	01/23/07	<0.5	<0.5	2.7	4.8	1.8	4.7	2.3	0.7	<0.5
LLM-500	01/23/07	<0.5	<0.5	2.8	4.7	2.0	4.7	2.3	0.8	<0.5
LLM-500	07/24/07	<0.5	<0.5	1.9	5.0	0.6	4.8	2.1	0.6	<0.5
LLM-500	07/24/08	<0.5	<0.5	<0.5	4.2	<0.5	4.0	1.6	0.8	<0.5
LLM-500	02/04/09	<0.5	<0.5	1.7	6.4	<0.5	**5.3**	2.4	0.9	<0.5
LLM-500	08/06/09	<0.5	<0.5	2.0	2.2	0.6	4.8	2.2	0.6	<0.5
LLM-500	02/10/10	<0.5	<0.5	<0.5	2.2	<0.5	2.8	1.1	<0.5	<0.5
LLM-500	08/04/10	<0.5	<0.5	<0.5	3.1	<0.5	3.6	1.4	0.7	<0.5
LLM-500	09/21/10	<0.5	<0.5	<0.5	3.4	<0.5	**5.9**	2.1	1.0	<0.5
LLM-500	01/27/11	<0.5	<0.5	<0.5	6.8	<0.5	**6.9**	2.3	1.1	<0.5
LLM-500	07/27/11	<0.5	<0.5	<0.5	5.8	<0.5	**7.6**	2.3	1.1	<0.5
LLM-500	01/24/12	<0.5	<0.5	<0.5	8.6	<0.5	**9.4**	2.5	1.2	<0.5
LLM-500	07/18/12	<0.5	<0.5	<0.5	6	<0.5	**10.5**	2.4	1.2	<0.5
LLM-500	01/29/13	<0.5	<0.5	0.5	5.2	<0.5	**12.8**	3.2	1.2	<0.5
LLM-500	03/27/13	<0.5	<0.5	<0.5	4.3	<0.5	**9.9**	2.4	1.1	<0.5
LLM-501	05/22/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-501	07/24/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-501	01/18/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-501	07/23/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-501	01/24/08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-501	07/21/08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-501	07/21/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-501	01/26/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-501	07/26/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-501	07/26/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-501	01/24/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-501	01/23/12	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-501	01/23/12	<0.5	<0.5	<0.5	<2	<5	<0.5	<0.5	<2	<0.5
LLM-501	01/14/13	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-501	01/09/14	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-501	01/07/15	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-501	01/06/16	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-501	02/07/17	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-513	07/13/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-513	01/26/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-513	01/13/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-513	01/11/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-513	01/11/12	<0.5	<0.5	<0.5	<2	<5	<0.5	<0.5	<2	<0.5
LLM-513	01/18/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-513	01/13/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-513	01/13/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-513	01/07/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-513	01/07/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-513	02/07/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
LLM-530	07/17/08	0.6	<0.5	<0.5	9.3	<0.5	**11.5**	**5.7**	2.0	<0.5
LLM-530	01/26/09	0.5	<0.5	<0.5	9.4	<0.5	**12.5**	**6.0**	1.7	<0.5
LLM-530	01/26/09	0.5	<0.5	<0.5	9.6	<0.5	**12.8**	**6.2**	1.7	<0.5
LLM-530	07/20/09	0.6	<0.5	<0.5	8.5	<0.5	**14.4**	**6.4**	1.8	<0.5
LLM-530	01/26/10	0.5	<0.5	<0.5	6.8	<0.5	**13.8**	**6.5**	1.9	<0.5
LLM-530	07/22/10	<0.5	<0.5	<0.5	6.6	<0.5	**11.6**	**5.5**	1.6	<0.5
LLM-530	01/20/11	<0.5	<0.5	<0.5	5.3	<0.5	**10.7**	4.9	1.3	<0.5
LLM-530	07/25/11	<0.5	<0.5	<0.5	7.9	<0.5	**11**	4.6	1.7	<0.5
LLM-530	01/19/12	<0.5	<0.5	<0.5	7.6	<0.5	**10.4**	4.2	1.4	<0.5
LLM-530	07/23/12	<0.5	<0.5	<0.5	3.7	<0.5	**9.1**	4.1	1.2	<0.5
LLM-530	01/24/13	<0.5	<0.5	<0.5	3.9	<0.5	**8.5**	3.7	1.2	<0.5
LLM-530	01/24/13	<0.5	<0.5	<0.5	3.7	<0.5	**8.6**	3.6	1.2	<0.5
LLM-530	07/22/13	<0.5	<0.5	<0.5	4.7	<0.5	**8**	3.6	1.4	<0.5
LLM-530	07/22/13	<0.5	<0.5	<0.5	3.7	<0.5	**8.3**	3.7	1.4	<0.5
LLM-530	01/23/14	<0.5	<0.5	<0.5	3.3	<0.5	**8**	3.3	1.3	<0.5
LLM-530	07/21/14	<0.5	<0.5	<0.5	3.5	<0.5	**7.5**	2.9	1.2	<0.5
LLM-530	01/20/15	<0.5	<0.5	<0.5	3.5	<0.5	**6.3**	2.5	0.8	<0.5
LLM-530	07/20/15	<0.5	<0.5	<0.5	2.6	<0.5	**6.8**	2.9	1.1	<0.5
LLM-530	01/21/16	<0.5	<0.5	<0.5	3.4	<0.5	**7.8**	3	1.5	<0.5
LLM-530	07/20/16	<0.5	<0.5	<0.5	2.1	<0.5	**6.7**	2.6	0.9	<0.5
LLM-530	02/22/17	<0.5	<0.5	<0.5	2.1	<0.5	**6.8**	2.4	0.9	<0.5
LLM-530	08/23/17	<0.5	<0.5	<0.5	2.4	<0.5	**6.0**	2.5	0.9	<0.5
LLM-530	08/23/17	<0.5	<0.5	<0.5	2.4	<0.5	**6.1**	2.4	1	<0.5
LLM-530	02/22/18	<0.5	<0.5	<0.5	2.6	<0.5	**6.1**	2.2	0.8	<0.5
LLM-530	08/07/18	<0.5	<0.5	<0.5	1.9	<0.5	**5.8**	2.3	0.9	<0.5
LLM-530	03/13/19	<0.5	<0.5	<0.5	1.6	<0.5	**5.5**	2.1	0.7	<0.5
LLM-530	08/20/19	<0.5	<0.5	<0.5	1.5	<0.5	**5.3**	2.1	0.7	<0.5
LLM-530	08/20/19	<0.5	<0.5	<0.5	1.5	<0.5	5.0	2.1	0.7	<0.5
LLM-530	05/21/20	<0.5	<0.5	<0.5	1.2	<0.5	**5.4**	2	0.7	<0.5
LLM-530	11/13/20	<0.5	<0.5	<0.5	1.3	<0.5	5.0	1.9	0.6	<0.5
LLM-530	05/17/21	<0.5	<0.5	<0.5	0.9	<0.5	4.3	2	0.6	<0.5
LLM-530	10/07/21	<0.5	<0.5	<0.5	1.2	<0.5	**5.2**	2.2	0.8	<0.5
LLM-530	04/01/22	<0.5	<0.5	<0.5	1.22	<0.5	**5.11**	2.34	0.667	<0.5
LLM-530	08/13/22	<0.5	<0.5	<0.5	1.42	<0.5	4.91	1.99	0.614	<0.5
LLM-530	04/18/23	<2.00	<2.00	<2.00	<2.00	<2.00	**5.46**	2.03	<2.00	<0.500
LLM-530	08/21/23	<2.00	<2.00	<2.00	<2.00	<2.00	4.49	<2.00	<2.00	<0.500
LLM-536	01/26/09	0.6	0.7	<0.5	3	<0.5	**6.1**	1.9	1.5	<0.5
LLM-536	07/20/09	<0.5	0.5	<0.5	1.8	<0.5	4.8	1.5	1	<0.5
LLM-536	07/20/09	<0.5	<0.5	<0.5	1.7	<0.5	4.8	1.5	0.8	<0.5
LLM-536	01/25/10	<0.5	<0.5	<0.5	1.5	<0.5	**5.0**	1.6	1.1	<0.5
LLM-536	07/22/10	<0.5	<0.5	<0.5	1.2	<0.5	3.7	1.2	0.8	<0.5
LLM-536	01/20/11	<0.5	<0.5	<0.5	1.3	<0.5	3.3	1	0.7	<0.5
LLM-536	07/25/11	<0.5	<0.5	<0.5	1.4	<0.5	3.1	0.7	0.8	<0.5
LLM-536	01/24/12	<0.5	<0.5	<0.5	2.1	<0.5	3	0.8	0.8	<0.5
LLM-536	01/24/12	<0.5	<0.5	<0.5	<2	<5	2.48	0.89	<2	<0.5
LLM-536	07/19/12	<0.5	<0.5	<0.5	1.1	<0.5	2.3	0.6	0.5	<0.5
LLM-536	01/23/13	<0.5	<0.5	<0.5	1.2	<0.5	2.3	0.6	0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
LLM-536	07/18/13	<0.5	<0.5	<0.5	1.1	<0.5	1.9	<0.5	0.6	<0.5
LLM-536	01/22/14	<0.5	<0.5	<0.5	1	<0.5	2.4	0.5	0.5	<0.5
LLM-536	07/17/14	<0.5	<0.5	<0.5	1	<0.5	1.8	<0.5	0.5	<0.5
LLM-536	01/21/15	<0.5	<0.5	<0.5	1.2	<0.5	2.3	<0.5	0.5	<0.5
LLM-536	07/16/15	<0.5	<0.5	<0.5	0.6	<0.5	1.3	<0.5	<0.5	<0.5
LLM-536	01/20/16	<0.5	<0.5	<0.5	1	<0.5	1.6	<0.5	0.5	<0.5
LLM-536	07/19/16	<0.5	<0.5	<0.5	0.6	<0.5	1.4	<0.5	<0.5	<0.5
LLM-536	02/21/17	<0.5	<0.5	<0.5	0.6	<0.5	1.1	<0.5	<0.5	<0.5
LLM-536	08/22/17	<0.5	<0.5	<0.5	0.7	<0.5	1.3	<0.5	<0.5	<0.5
LLM-536	02/28/18	<0.5	<0.5	<0.5	0.5	<0.5	1.4	<0.5	<0.5	<0.5
LLM-536	03/13/19	<0.5	<0.5	<0.5	0.8	<0.5	1.5	<0.5	<0.5	<0.5
LLM-536	05/21/20	<0.5	<0.5	<0.5	0.6	<0.5	1.3	<0.5	<0.5	<0.5
LLM-536	05/21/20	<0.5	<0.5	<0.5	0.5	<0.5	1.5	<0.5	<0.5	<0.5
LLM-536	05/17/21	<0.5	<0.5	<0.5	<0.5	<0.5	1.5	<0.5	<0.5	<0.5
LLM-536	04/01/22	<0.5	<0.5	<0.5	0.552	<0.5	1.61	<0.5	<0.5	<0.5
LLM-536	04/17/23	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<1.00
LLM-537	01/29/09	<0.5	<0.5	<0.5	0.9	<0.5	1.2	<0.5	<0.5	<0.5
LLM-537	07/20/09	<0.5	<0.5	<0.5	0.9	<0.5	1.6	0.6	<0.5	<0.5
LLM-537	01/25/10	<0.5	<0.5	<0.5	1.1	<0.5	2.2	0.7	<0.5	<0.5
LLM-537	07/22/10	<0.5	<0.5	<0.5	1.2	<0.5	2.3	0.6	0.5	<0.5
LLM-537	01/20/11	<0.5	<0.5	<0.5	1.2	<0.5	2.4	0.9	<0.5	<0.5
LLM-537	07/25/11	<0.5	<0.5	<0.5	2.1	<0.5	3	1	0.7	<0.5
LLM-537	01/19/12	0.7	<0.5	<0.5	2.2	<0.5	2.7	0.9	0.6	<0.5
LLM-537	07/19/12	<0.5	<0.5	<0.5	1	<0.5	2.6	0.9	<0.5	<0.5
LLM-537	01/23/13	<0.5	<0.5	<0.5	1.4	<0.5	2.8	1	0.5	<0.5
LLM-537	07/18/13	<0.5	<0.5	<0.5	1.4	<0.5	2.6	0.9	0.6	<0.5
LLM-537	01/22/14	1.3	<0.5	<0.5	1.4	<0.5	3	1	0.6	<0.5
LLM-537	07/17/14	<0.5	<0.5	<0.5	2.1	<0.5	3.3	1.1	0.8	<0.5
LLM-537	01/21/15	1.3	<0.5	<0.5	1.9	<0.5	2.8	1	0.6	<0.5
LLM-537	07/16/15	<0.5	<0.5	<0.5	1.4	<0.5	2.7	0.9	0.7	<0.5
LLM-537	01/20/16	1.0	<0.5	<0.5	1.8	<0.5	3.2	1.3	0.9	<0.5
LLM-537	07/19/16	<0.5	<0.5	<0.5	1.0	<0.5	2.1	0.7	0.5	<0.5
LLM-537	02/21/17	<0.5	<0.5	<0.5	1.7	<0.5	2.8	0.9	0.8	<0.5
LLM-537	08/22/17	0.6	<0.5	<0.5	0.9	<0.5	2.2	0.7	0.6	<0.5
LLM-537	02/28/18	<0.5	<0.5	<0.5	1.0	<0.5	2.0	0.8	<0.5	<0.5
LLM-537	03/13/19	<0.5	<0.5	<0.5	1	<0.5	2.0	0.7	<0.5	<0.5
LLM-537	05/21/20	0.7	<0.5	<0.5	<0.5	<0.5	1.5	0.5	<0.5	<0.5
LLM-537	05/17/21	<0.5	<0.5	<0.5	1	<0.5	2.0	0.7	<0.5	<0.5
LLM-537	04/01/22	<0.5	<0.5	<0.5	0.815	<0.5	2.11	0.783	<0.5	<0.5
LLM-537	04/01/22	<0.5	<0.5	<0.5	0.774	<0.5	2.18	0.831	<0.5	<0.5
LLM-537	04/17/23	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<0.500
LLM-538	01/06/09	<0.5	<0.5	<0.5	3.7	<0.5	**5.5**	2.3	0.6	<0.5
LLM-538	07/20/09	<0.5	<0.5	<0.5	3.8	<0.5	**5.6**	2.3	0.6	<0.5
LLM-538	01/25/10	0.5	<0.5	<0.5	3.2	<0.5	**10.6**	4.4	0.8	<0.5
LLM-538	07/22/10	<0.5	<0.5	<0.5	2.5	<0.5	**8.6**	3.9	0.6	<0.5
LLM-538	01/20/11	0.5	<0.5	<0.5	3	<0.5	**8.7**	4	0.6	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
LLM-538	07/25/11	0.6	<0.5	<0.5	3.7	<0.5	**10.5**	4.1	0.8	<0.5
LLM-538	01/19/12	<0.5	<0.5	<0.5	4.5	<0.5	**9.4**	4	0.6	<0.5
LLM-538	07/23/12	<0.5	<0.5	<0.5	1.8	<0.5	4.9	2	<0.5	<0.5
LLM-538	01/24/13	<0.5	<0.5	<0.5	1.5	<0.5	**6.6**	2.8	<0.5	<0.5
LLM-538	07/22/13	<0.5	<0.5	<0.5	2.5	<0.5	**9**	3.9	0.6	<0.5
LLM-538	01/23/14	<0.5	<0.5	<0.5	1.9	<0.5	**8.1**	3.4	0.5	<0.5
LLM-538	01/21/15	<0.5	<0.5	<0.5	2.8	<0.5	**8.6**	3.6	0.5	<0.5
LLM-538	07/20/15	<0.5	<0.5	<0.5	1.6	<0.5	**8.1**	3.2	0.5	<0.5
LLM-538	01/21/16	<0.5	<0.5	<0.5	2	<0.5	**8.0**	3.3	0.6	<0.5
LLM-538	07/20/16	<0.5	<0.5	<0.5	1.6	<0.5	**8.8**	3.6	0.5	<0.5
LLM-538	02/22/17	<0.5	<0.5	<0.5	1.9	<0.5	**8.2**	3.2	<0.5	<0.5
LLM-538	08/23/17	<0.5	<0.5	<0.5	1.6	<0.5	**7.9**	3.1	<0.5	<0.5
LLM-538	02/22/18	<0.5	<0.5	<0.5	1.8	<0.5	**7.8**	3.2	<0.5	<0.5
LLM-538	03/13/19	<0.5	<0.5	<0.5	0.9	<0.5	**7.0**	2.8	<0.5	<0.5
LLM-538	05/21/20	<0.5	<0.5	<0.5	0.8	<0.5	**6.6**	2.4	<0.5	<0.5
LLM-538	05/17/21	<0.5	<0.5	<0.5	0.8	<0.5	**5.8**	2.4	<0.5	<0.5
LLM-538	04/01/22	<0.5	<0.5	<0.5	0.967	<0.5	**6.8**	2.95	<0.5	<0.5
LLM-538	04/20/23	<2.00	<2.00	<2.00	<2.00	<2.00	**7.34**	2.51	<2.00	<0.500
LLM-539	01/06/09	<0.5	<0.5	<0.5	2.3	<0.5	**6.2**	2.7	<0.5	<0.5
LLM-539	07/20/09	<0.5	<0.5	<0.5	1.9	<0.5	4.5	1.9	<0.5	<0.5
LLM-539	01/25/10	<0.5	<0.5	<0.5	2	<0.5	**6.6**	2.8	<0.5	<0.5
LLM-539	07/22/10	<0.5	<0.5	<0.5	1.7	<0.5	**7.4**	3.2	<0.5	<0.5
LLM-539	01/20/11	<0.5	<0.5	<0.5	2.5	<0.5	**8.7**	3.6	<0.5	<0.5
LLM-539	07/25/11	<0.5	<0.5	<0.5	2.7	<0.5	**10.2**	3.8	0.6	<0.5
LLM-539	01/19/12	<0.5	<0.5	<0.5	2.6	<0.5	**8**	3.3	<0.5	<0.5
LLM-539	07/23/12	<0.5	<0.5	<0.5	1.7	<0.5	**6.9**	3.1	<0.5	<0.5
LLM-539	01/24/13	<0.5	<0.5	<0.5	1.3	<0.5	**7.7**	2.9	<0.5	<0.5
LLM-539	07/22/13	<0.5	<0.5	<0.5	2.4	<0.5	**11.8**	4.4	0.5	<0.5
LLM-539	01/23/14	<0.5	<0.5	<0.5	2.2	<0.5	**11.6**	4	0.6	<0.5
LLM-539	07/21/14	<0.5	<0.5	<0.5	2	<0.5	**10.8**	3.7	0.5	<0.5
LLM-539	01/20/15	<0.5	<0.5	<0.5	2.2	<0.5	**10.1**	3.6	<0.5	<0.5
LLM-539	07/20/15	<0.5	<0.5	<0.5	1.6	<0.5	**10.1**	3.6	<0.5	<0.5
LLM-539	07/20/15	<0.5	<0.5	<0.5	1.6	<0.5	**10.2**	3.5	0.5	<0.5
LLM-539	01/21/16	<0.5	<0.5	<0.5	1.9	<0.5	**10.6**	3.9	0.6	<0.5
LLM-539	07/20/16	<0.5	<0.5	<0.5	1.2	<0.5	**9**	3.1	<0.5	<0.5
LLM-539	02/22/17	<0.5	<0.5	<0.5	1.5	<0.5	**9.2**	3	<0.5	<0.5
LLM-539	08/23/17	<0.5	<0.5	<0.5	1.4	<0.5	**8.8**	3	<0.5	<0.5
LLM-539	02/22/18	<0.5	<0.5	<0.5	1.5	<0.5	**7.4**	2.3	<0.5	<0.5
LLM-539	08/07/18	<0.5	<0.5	<0.5	1.1	<0.5	**7.7**	2.4	<0.5	<0.5
LLM-539	03/13/19	<0.5	<0.5	<0.5	0.9	<0.5	**7.2**	2.6	<0.5	<0.5
LLM-539	08/20/19	<0.5	<0.5	<0.5	1	<0.5	**7.3**	2.5	<0.5	<0.5
LLM-539	05/21/20	<0.5	<0.5	<0.5	0.6	<0.5	**6.8**	2.2	<0.5	<0.5
LLM-539	11/13/20	<0.5	<0.5	<0.5	0.9	<0.5	**7.3**	2.3	<0.5	<0.5
LLM-539	05/17/21	<0.5	<0.5	<0.5	<0.5	<0.5	4.1	2	<0.5	<0.5
LLM-539	10/07/21	<0.5	<0.5	<0.5	<0.5	<0.5	4.9	2.2	<0.5	<0.5
LLM-539	03/31/22	<0.5	<0.5	<0.5	0.88	<0.5	**7.58**	2.66	<0.5	<0.5
LLM-539	08/13/22	<0.5	<0.5	<0.5	0.867	<0.5	**6.98**	2.29	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
LLM-539	08/13/22	<0.5	<0.5	<0.5	0.614	<0.5	**5.45**	2.14	<0.5	<0.5
LLM-540	01/05/09	<0.5	<0.5	<0.5	2.2	<0.5	**13.7**	4.5	0.6	<0.5
LLM-540	07/20/09	<0.5	<0.5	<0.5	3.3	<0.5	**17.2**	**5.9**	<0.5	<0.5
LLM-540	01/25/10	<0.5	<0.5	<0.5	1.6	<0.5	**10.5**	3.4	<0.5	<0.5
LLM-540	07/22/10	<0.5	<0.5	<0.5	1.1	<0.5	**9.2**	3	<0.5	<0.5
LLM-540	01/20/11	<0.5	<0.5	<0.5	1.7	<0.5	**12.4**	4.1	<0.5	<0.5
LLM-540	07/25/11	<0.5	<0.5	<0.5	2.3	<0.5	**11.9**	3.5	0.6	<0.5
LLM-540	01/19/12	<0.5	<0.5	<0.5	2.9	<0.5	**10.6**	3.3	<0.5	<0.5
LLM-540	07/23/12	<0.5	<0.5	<0.5	1	<0.5	4.5	1.8	<0.5	<0.5
LLM-540	08/27/12	<0.5	<0.5	<0.5	1.4	<0.5	**10.4**	3.2	<0.5	<0.5
LLM-540	08/27/12	<0.5	<0.5	<0.5	1..5	<0.5	**11**	3.4	<0.5	<0.5
LLM-540	01/24/13	<0.5	<0.5	<0.5	1.5	<0.5	**10.1**	3.1	<0.5	<0.5
LLM-540	07/22/13	<0.5	<0.5	<0.5	1.4	<0.5	**10.4**	3.2	<0.5	<0.5
LLM-540	01/23/14	<0.5	<0.5	<0.5	1.2	<0.5	**9.4**	2.9	<0.5	<0.5
LLM-540	01/23/14	<0.5	<0.5	<0.5	1.2	<0.5	**10**	3.3	<0.5	<0.5
LLM-540	07/21/14	<0.5	<0.5	<0.5	1.3	<0.5	**8.4**	2.5	<0.5	<0.5
LLM-540	01/20/15	<0.5	<0.5	<0.5	0.8	<0.5	**5.7**	1.8	<0.5	<0.5
LLM-540	07/20/15	<0.5	<0.5	<0.5	0.9	<0.5	**7.1**	2.2	<0.5	<0.5
LLM-540	01/21/16	<0.5	<0.5	<0.5	1.2	<0.5	**8.6**	2.7	<0.5	<0.5
LLM-540	07/20/16	<0.5	<0.5	<0.5	0.9	<0.5	**8.1**	2.3	<0.5	<0.5
LLM-540	02/22/17	<0.5	<0.5	<0.5	0.7	<0.5	**6.1**	1.8	<0.5	<0.5
LLM-540	08/23/17	<0.5	<0.5	<0.5	1.1	<0.5	**8.3**	2.7	<0.5	<0.5
LLM-540	02/22/18	<0.5	<0.5	<0.5	1.2	<0.5	**9.2**	2.6	<0.5	<0.5
LLM-540	03/13/19	<0.5	<0.5	<0.5	0.9	<0.5	**9.0**	2.6	<0.5	<0.5
LLM-540	05/21/20	<0.5	<0.5	<0.5	0.6	<0.5	**7.0**	2	<0.5	<0.5
LLM-540	05/17/21	<0.5	<0.5	<0.5	0.6	<0.5	**7.3**	2.3	<0.5	<0.5
LLM-540	04/01/22	<0.5	<0.5	<0.5	0.937	<0.5	**8.64**	2.90	<0.5	<0.5
LLM-540	04/01/22	<0.5	<0.5	<0.5	<0.5	<0.5	2.00	0.727	<0.5	<0.5
LLM-540	04/20/23	<2.00	<2.00	<2.00	<2.00	<2.00	**7.01**	<2.00	<2.00	<0.500
LLM-543	01/18/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-543	07/14/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-543	01/12/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-543	07/12/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-543	01/15/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-543	07/10/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-543	01/14/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-543	07/09/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-543	01/12/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-543	07/08/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-543	01/11/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-543	01/11/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-543	07/07/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-543	02/09/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-543	08/15/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-544	08/03/10	<0.5	<0.5	<0.5	1.1	0.6	2.6	1.4	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
LLM-544	01/20/11	<0.5	<0.5	<0.5	6.2	<0.5	**7.6**	3.7	1.5	<0.5
LLM-544	07/25/11	<0.5	<0.5	<0.5	5.6	<0.5	**8.8**	3.7	1.6	<0.5
LLM-544	07/25/11	<0.5	<0.5	<0.5	5.37	<3	**7.17**	3.74	<2	<0.5
LLM-544	01/19/12	<0.5	<0.5	<0.5	8	<0.5	**8.8**	3.8	1.3	<0.5
LLM-544	07/19/12	<0.5	<0.5	<0.5	4.3	<0.5	**7.4**	3.4	1.2	<0.5
LLM-544	01/23/13	<0.5	<0.5	<0.5	4	<0.5	**7.1**	3.2	1	<0.5
LLM-544	07/18/13	<0.5	<0.5	<0.5	4.9	<0.5	**8**	3.6	1.3	<0.5
LLM-544	01/22/14	<0.5	<0.5	<0.5	4.5	<0.5	**8.2**	3.3	1.3	<0.5
LLM-544	07/17/14	<0.5	<0.5	<0.5	3.6	<0.5	**7.8**	3.3	1	<0.5
LLM-544	01/21/15	<0.5	<0.5	<0.5	5.3	<0.5	**7.3**	2.8	1.1	<0.5
LLM-544	07/16/15	<0.5	<0.5	<0.5	3.1	<0.5	**7.1**	2.9	1	<0.5
LLM-544	01/20/16	<0.5	<0.5	<0.5	3.1	<0.5	**6.4**	2.8	0.9	<0.5
LLM-544	07/19/16	<0.5	<0.5	<0.5	2.6	<0.5	**5.8**	2.5	0.8	<0.5
LLM-544	07/19/16	<0.5	<0.5	<0.5	2.4	<0.5	**5.8**	2.4	0.8	<0.5
LLM-544	02/21/17	<0.5	<0.5	<0.5	2.8	<0.5	**5.7**	2.4	0.8	<0.5
LLM-544	08/22/17	<0.5	<0.5	<0.5	0.7	<0.5	3.4	1.6	<0.5	<0.5
LLM-544	02/28/18	<0.5	<0.5	<0.5	2.2	<0.5	**5.7**	2.5	0.6	<0.5
LLM-544	03/13/19	<0.5	<0.5	<0.5	1.7	<0.5	5.0	2.0	0.5	<0.5
LLM-544	05/21/20	<0.5	<0.5	<0.5	1.6	<0.5	**5.2**	1.8	<0.5	<0.5
LLM-544	05/17/21	<0.5	<0.5	<0.5	1.4	<0.5	**5.1**	2.2	<0.5	<0.5
LLM-544	04/01/22	<0.5	<0.5	<0.5	1.56	<0.5	4.88	2.19	0.532	<0.5
LLM-544	04/14/23	<0.5	<0.5	<0.5	1.73	<0.5	**5.14**	2.04	0.525	<0.5
LLM-548	07/25/11	<0.5	<0.5	<0.5	3.1	<0.5	4.2	1.4	1	<0.5
LLM-548	01/19/12	<0.5	<0.5	<0.5	4.3	<0.5	4.6	1.6	0.9	<0.5
LLM-548	07/19/12	<0.5	<0.5	<0.5	2.5	<0.5	4.6	1.6	1	<0.5
LLM-548	01/23/13	0.6	<0.5	<0.5	1.4	<0.5	2	<0.5	<0.5	<0.5
LLM-548	07/18/13	0.5	<0.5	<0.5	2.6	<0.5	4.6	1.7	1	<0.5
LLM-548	01/22/14	0.5	<0.5	<0.5	2.1	<0.5	4.3	1.6	0.9	<0.5
LLM-548	07/17/14	0.5	<0.5	<0.5	2.6	<0.5	4.3	1.5	1.0	<0.5
LLM-548	01/21/15	<0.5	<0.5	<0.5	2.3	<0.5	3.3	1.2	0.7	<0.5
LLM-548	07/16/15	<0.5	<0.5	<0.5	1.5	<0.5	2.4	0.9	0.6	<0.5
LLM-548	01/20/16	<0.5	<0.5	<0.5	2.4	<0.5	3.4	1.2	0.9	<0.5
LLM-548	07/19/16	<0.5	<0.5	<0.5	1.8	<0.5	3.1	1.1	0.7	<0.5
LLM-548	02/21/17	<0.5	<0.5	<0.5	1.8	<0.5	3.0	1.0	0.7	<0.5
LLM-548	08/22/17	<0.5	<0.5	<0.5	1.7	<0.5	2.9	1.1	0.7	<0.5
LLM-548	02/28/18	<0.5	<0.5	<0.5	1.2	<0.5	3.1	1.2	0.5	<0.5
LLM-548	03/13/19	<0.5	<0.5	<0.5	1.4	<0.5	2.6	0.9	0.5	<0.5
LLM-548	05/21/20	<0.5	<0.5	<0.5	0.8	<0.5	2.1	0.7	<0.5	<0.5
LLM-548	05/17/21	<0.5	<0.5	<0.5	0.5	<0.5	2.3	1.1	<0.5	<0.5
LLM-548	04/01/22	<0.5	<0.5	<0.5	1.35	<0.5	2.57	1.02	0.514	<0.5
LLM-548	04/14/23	<0.5	<0.5	<0.5	0.893	<0.5	2.41	0.786	<0.5	<0.5
LLM-549	07/25/11	<0.5	<0.5	<0.5	2.3	<0.5	2.8	0.8	0.7	<0.5
LLM-549	01/19/12	<0.5	<0.5	<0.5	3.2	<0.5	3.8	1.2	0.7	<0.5
LLM-549	07/19/12	<0.5	<0.5	<0.5	2	<0.5	3.2	1	0.6	<0.5
LLM-549	01/23/13	<0.5	<0.5	<0.5	2.1	<0.5	3.4	1.1	0.7	<0.5
LLM-549	07/18/13	<0.5	<0.5	<0.5	1.8	<0.5	3.6	1.2	0.7	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
LLM-549	01/22/14	<0.5	<0.5	<0.5	2.2	<0.5	3.5	1.2	0.8	<0.5
LLM-549	07/17/14	<0.5	<0.5	<0.5	3	<0.5	4.3	1.3	1.1	<0.5
LLM-549	01/21/15	<0.5	<0.5	<0.5	2.7	<0.5	4.0	1.3	0.9	<0.5
LLM-549	07/16/15	<0.5	<0.5	<0.5	2	<0.5	3.6	1.1	1	<0.5
LLM-549	01/20/16	<0.5	<0.5	<0.5	2.3	<0.5	4.3	1.3	1.1	<0.5
LLM-549	07/19/16	<0.5	<0.5	<0.5	1.8	<0.5	3.8	1.3	0.9	<0.5
LLM-549	02/21/17	<0.5	<0.5	<0.5	1.5	<0.5	4.8	1.6	1	<0.5
LLM-549	08/22/17	<0.5	<0.5	<0.5	1.9	<0.5	4.3	1.6	1	<0.5
LLM-549	02/28/18	<0.5	<0.5	<0.5	1.4	<0.5	5.0	1.8	0.7	<0.5
LLM-549	03/13/19	<0.5	<0.5	<0.5	1.7	<0.5	5.0	1.8	0.9	<0.5
LLM-549	05/21/20	<0.5	<0.5	<0.5	1	<0.5	4.9	1.8	0.8	<0.5
LLM-549	05/17/21	<0.5	<0.5	<0.5	1.3	<0.5	4.9	2.2	0.8	<0.5
LLM-549	04/01/22	0.612	<0.5	<0.5	1.90	<0.5	**5.60**	2.48	1.01	<0.5
LLM-549	04/17/23	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<1.00
LLM-551	03/27/12	<0.5	<0.5	<0.5	5.7	<0.5	**9.3**	4	0.8	<0.5
LLM-551	07/19/12	<0.5	<0.5	<0.5	4.5	<0.5	**8.6**	4	0.7	<0.5
LLM-551	07/19/12	<0.5	<0.5	<0.5	4.2	<0.5	**8.3**	4	0.7	<0.5
LLM-551	01/23/13	<0.5	<0.5	<0.5	3.8	<0.5	**8.9**	4.2	0.7	<0.5
LLM-551	07/18/13	<0.5	<0.5	<0.5	3.9	<0.5	**8.0**	3.7	0.7	<0.5
LLM-551	01/22/14	<0.5	<0.5	<0.5	3	<0.5	**7.2**	3.5	0.6	<0.5
LLM-551	01/22/14	<0.5	<0.5	<0.5	3.1	<0.5	**7.6**	3.8	0.6	<0.5
LLM-551	07/17/14	<0.5	<0.5	<0.5	3.6	<0.5	**7.9**	3.8	0.7	<0.5
LLM-551	01/21/15	<0.5	<0.5	<0.5	3.5	<0.5	**7.0**	3.4	0.5	<0.5
LLM-551	01/21/15	<0.5	<0.5	<0.5	3.4	<0.5	**6.7**	3.4	0.6	<0.5
LLM-551	07/16/15	<0.5	<0.5	<0.5	2.2	<0.5	**6.2**	3.1	0.5	<0.5
LLM-551	07/16/15	<0.5	<0.5	<0.5	2.1	<0.5	**6.2**	3.1	0.6	<0.5
LLM-551	01/20/16	<0.5	<0.5	<0.5	2.8	<0.5	**6.9**	3.2	0.7	<0.5
LLM-551	07/19/16	<0.5	<0.5	<0.5	2.2	<0.5	**6.3**	3	0.5	<0.5
LLM-551	02/21/17	<0.5	<0.5	<0.5	2	<0.5	**6.4**	3.9	<0.5	<0.5
LLM-551	08/22/17	<0.5	<0.5	<0.5	1.9	<0.5	4.8	2.4	<0.5	<0.5
LLM-551	02/28/18	<0.5	<0.5	<0.5	1.6	<0.5	4.9	2.3	<0.5	<0.5
LLM-551	02/28/18	<0.5	<0.5	<0.5	1.6	<0.5	**5.3**	2.3	<0.5	<0.5
LLM-551	03/13/19	<0.5	<0.5	<0.5	1.3	<0.5	**5.4**	2.7	<0.5	<0.5
LLM-551	03/13/19	<0.5	<0.5	<0.5	1.6	<0.5	**5.4**	2.5	<0.5	<0.5
LLM-551	05/21/20	<0.5	<0.5	<0.5	1	<0.5	**5.2**	2.4	<0.5	<0.5
LLM-551	05/17/21	<0.5	<0.5	<0.5	1.3	<0.5	5.0	2.6	<0.5	<0.5
LLM-551	04/01/22	<0.5	<0.5	<0.5	1.19	<0.5	**5.44**	2.53	<0.5	<0.5
LLM-551	04/14/23	<0.5	<0.5	<0.5	1.36	<0.5	4.45	1.70	<0.5	<0.5
LLM-554	07/28/15	<0.16	<0.19	<0.13	ND	<0.28	1.2	<0.15	<0.25	<0.22
LLM-554	01/12/16	<0.5	<0.5	<0.5	0.6	<0.5	1.2	<0.5	<0.5	<0.5
LLM-554	07/12/16	<0.5	<0.5	<0.5	<0.5	<0.5	1.0	<0.5	<0.5	<0.5
LLM-554	07/12/16	<0.5	<0.5	<0.5	0.5	<0.5	1.1	<0.5	<0.5	<0.5
LLM-554	02/13/17	<0.5	<0.5	<0.5	<0.5	<0.5	1.1	<0.5	<0.5	<0.5
LLM-554	08/16/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-554	02/14/18	<0.5	<0.5	<0.5	0.6	<0.5	1.0	<0.5	<0.5	<0.5
LLM-554	08/02/18	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
LLM-554	03/20/19	<0.5	<0.5	<0.5	<0.5	<0.5	1.0	<0.5	<0.5	<0.5
LLM-554	08/21/19	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5
LLM-554	05/14/20	<0.5	<0.5	<0.5	<0.5	<0.5	1.1	<0.5	<0.5	<0.5
LLM-554	11/17/20	<0.5	<0.5	<0.5	<0.5	<0.5	1.1	<0.5	<0.5	<0.5
LLM-554	05/12/21	<0.5	<0.5	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5
LLM-554	10/08/21	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5	<0.5
LLM-554	03/28/22	<0.5	<0.5	<0.5	<0.5	<0.5	1.08	<0.5	<0.5	<0.5
LLM-554	08/15/22	<0.5	<0.5	<0.5	0.564	<0.5	1.04	<0.5	<0.5	<0.5
LLM-554	04/18/23	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<0.500
LLM-554	04/18/23	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<0.500
LLM-554	08/23/23	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<0.500
LLM-555	07/28/15	1.2	<0.19	<0.13	ND	<0.28	**6.8**	1.3	2	<0.22
LLM-555	01/14/16	1	<0.5	<0.5	1.3	<0.5	**5.3**	1	1.6	<0.5
LLM-555	01/14/16	1.1	<0.5	<0.5	1.7	<0.5	**5.9**	1.2	2	<0.5
LLM-555	07/13/16	1	<0.5	<0.5	1.1	<0.5	**6.1**	1.2	1.7	<0.5
LLM-555	02/14/17	0.6	<0.5	<0.5	1.4	<0.5	5.0	0.9	1.6	<0.5
LLM-555	08/16/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-555	02/14/18	0.5	<0.5	<0.5	2.8	<0.5	**5.1**	0.9	1.4	<0.5
LLM-555	08/23/18	<0.5	<0.5	<0.5	0.5	<0.5	3.7	0.7	0.6	<0.5
LLM-555	03/20/19	<0.5	<0.5	<0.5	1.1	<0.5	**5.1**	0.8	1.1	<0.5
LLM-555	08/21/19	<0.5	<0.5	<0.5	1.3	<0.5	4.3	0.8	1	<0.5
LLM-555	05/19/20	<0.5	<0.5	<0.5	0.6	<0.5	1.1	<0.5	<0.5	<0.5
LLM-555	11/20/20	<0.5	<0.5	<0.5	0.7	<0.5	3.8	0.6	0.7	<0.5
LLM-555	11/20/20	<0.5	<0.5	<0.5	0.6	<0.5	3.3	0.5	<0.5	<0.5
LLM-555	05/14/21	<0.5	<0.5	<0.5	0.6	<0.5	3.5	0.5	0.6	<0.5
LLM-555	10/08/21	<0.5	<0.5	<0.5	0.6	<0.5	3.4	0.7	0.8	<0.5
LLM-555	03/29/22	0.52	<0.5	<0.5	1.96	<0.5	**5.2**	0.81	1.42	<0.5
LLM-555	08/15/22	<0.5	<0.5	<0.5	1.12	<0.5	4.12	0.682	0.986	<0.5
LLM-555	04/19/23	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<0.500
LLM-555	04/19/23	<2.00	<2.00	<2.00	<2.00	<2.00	3.78	<2.00	<2.00	<0.500
LLM-555	08/24/23	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<1.00
LLM-556	07/12/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-556	02/09/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-556	08/10/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-556	02/08/18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-556	08/02/18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-556	03/19/19	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-556	08/21/19	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
LLM-556	05/13/20	<0.5	<0.5	<0.5	1.1	<0.5	0.6	<0.5	<0.5	<0.5
LLM-556	05/13/20	<0.5	<0.5	<0.5	1.1	<0.5	0.7	<0.5	<0.5	<0.5
LLM-556	11/17/20	<0.5	<0.5	<0.5	0.9	<0.5	0.5	<0.5	<0.5	<0.5
LLM-556	05/18/21	<0.5	0.6	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5
LLM-556	10/07/21	<0.5	<0.5	<0.5	0.9	<0.5	0.8	<0.5	<0.5	<0.5
LLM-556	03/26/22	<0.5	<0.5	<0.5	0.969	<0.5	0.707	<0.5	<0.5	<0.5
LLM-556	08/15/22	<0.5	<0.5	<0.5	0.969	<0.5	0.698	<0.5	<0.5	<0.5
LLM-556	04/17/23	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<0.500

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
LLM-556	08/24/23	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<0.500
R-010A	03/28/96	<0.5	<2	<0.5	9.2	<2	2.8	<0.5	<2	<0.5
R-010A	04/09/96	<0.5	<2	<0.5	4.1	<2	1.6	<0.5	<2	<0.5
R-010A	09/10/99	<0.5	NS	<0.5	<3.0	<1.0	**10.0**	4.0	<1.0	<1.0
R-010A	01/15/02	NS	NS	NS	NS	NS	**19.0**	**7.5**	NS	NS
R-010A	07/21/03	1.4	<0.5	<0.5	11.1	<0.5	**24.2**	**9.8**	2.4	<0.5
R-010A	01/05/04	1.4	<0.5	<0.5	12.9	<0.5	**25.8**	**10.4**	2.2	<0.5
R-010A	07/26/04	1.7	<0.5	<0.5	9.7	<0.5	**31.4**	**11.2**	2.7	<0.5
R-010A	01/27/05	1.2	<0.5	<0.5	8.2	<0.5	**24.6**	**8.5**	2.1	<0.5
R-010A	07/28/05	1.2	<0.5	<0.5	8.1	<0.5	**23.8**	**8.9**	2.1	<0.5
R-010A	01/18/06	1.5	<0.5	<0.5	9.1	<0.5	**30.0**	**10.7**	2.4	<0.5
R-010A	07/21/06	1.4	<0.5	<0.5	10.6	<0.5	**23.4**	**9.4**	2.1	<0.5
R-010A	01/17/07	1.4	<0.5	<0.5	8.5	<0.5	**25.1**	**9.5**	1.9	<0.5
R-010A	01/23/08	1.2	<0.5	<0.5	8.3	<0.5	**19.9**	**7.8**	2.1	<0.5
R-010A	01/23/08	1.1	<0.5	<0.5	8.5	<0.5	**19.7**	**7.6**	2.3	<0.5
R-010A	07/17/08	1.1	<0.5	<0.5	7.8	<0.5	**17.5**	**7.0**	1.7	<0.5
R-010A	01/26/09	1.0	<0.5	<0.5	8.4	<0.5	**17.1**	**7.0**	1.5	<0.5
R-010A	07/20/09	0.9	<0.5	<0.5	7.0	<0.5	**17.4**	**6.7**	1.5	<0.5
R-010A	01/25/10	0.8	<0.5	<0.5	6.1	<0.5	**16.3**	**6.2**	1.5	<0.5
R-010A	07/22/10	0.6	<0.5	<0.5	5.6	<0.5	**12.7**	**5.4**	1.1	<0.5
R-010A	07/22/10	0.6	<0.5	<0.5	5.4	<0.5	**12.5**	**5.3**	1.2	<0.5
R-010A	01/20/11	0.6	<0.5	<0.5	7.1	<0.5	**12.5**	**5.4**	1.1	<0.5
R-010A	07/25/11	0.5	<0.5	<0.5	6.3	<0.5	**11.4**	4.9	1.2	<0.5
R-011A	01/15/02	NS	NS	NS	NS	NS	0.9	<0.5	NS	NS
R-011A	07/21/03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
R-011A	01/05/04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
R-011A	07/26/04	<0.5	<0.5	<0.5	0.5	<0.5	1.0	<0.5	<0.5	<0.5
R-011A	03/03/05	NS	NS	NS	NS	NS	NS	NS	NS	NS
R-011A	08/04/05	0.5	<0.5	0.6	2.2	<0.5	3.7	1.3	1.0	<0.5
R-011A	08/04/05	0.6	<0.5	0.5	2.3	<0.5	4.0	1.3	1.0	<0.5
R-011A	01/18/06	0.9	0.9	<0.5	2.3	<0.5	**9.1**	2.9	1.2	<0.5
R-011A	07/21/06	1.2	0.7	<0.5	1.8	<0.5	4.0	2.2	0.6	<0.5
R-011A	01/17/07	1.0	1.2	<0.5	5.1	<0.5	**13.8**	3.6	3.8	<0.5
R-011A	07/19/07	1.7	1.0	0.6	2.1	<0.5	**7.4**	3.0	1.1	<0.5
R-011A	01/23/08	2.2	1.7	<0.5	3.4	<0.5	**12.3**	4.3	1.7	<0.5
R-011A	07/17/08	2.8	1.3	13.4	1.6	<0.5	3.3	0.8	0.7	<0.5
R-015B	09/10/99	<0.5	NS	<0.5	<3.0	<1.0	4.7	1.5	<1.0	<1.0
R-015B	01/15/02	NS	NS	NS	NS	NS	**5.1**	1.8	NS	NS
R-015B	07/21/03	<0.5	<0.5	<0.5	3.5	<0.5	**5.3**	2.0	1.0	<0.5
R-015B	01/05/04	<0.5	<0.5	<0.5	3.9	<0.5	4.8	1.9	0.8	<0.5
R-015B	07/26/04	<0.5	<0.5	<0.5	5.6	<0.5	**6.4**	2.2	1.5	<0.5
R-015B	01/31/05	0.6	<0.5	<0.5	6.5	<0.5	**9.1**	3.0	1.6	<0.5
R-015B	07/28/05	<0.5	<0.5	<0.5	3.5	<0.5	**6.7**	2.4	1.0	<0.5
R-015B	01/18/06	<0.5	<0.5	<0.5	1.8	<0.5	4.9	1.6	0.8	<0.5
R-015B	07/21/06	<0.5	<0.5	<0.5	2.1	<0.5	4.2	1.7	0.7	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
R-015B	01/17/07	<0.5	<0.5	<0.5	4.2	<0.5	**7.6**	3.0	1.1	<0.5
R-015B	07/19/07	0.5	<0.5	<0.5	1.6	<0.5	4.2	1.6	0.7	<0.5
R-015B	01/23/08	0.8	<0.5	<0.5	3.3	<0.5	**6.3**	2.2	1.4	<0.5
R-015B	07/17/08	0.8	<0.5	<0.5	3.2	<0.5	**5.1**	2.1	1.1	<0.5
R-023A	09/10/99	<0.5	NS	<0.5	<3.0	<1.0	**5.9**	1.5	<1.0	<1.0
R-023A	01/15/02	NS	NS	NS	NS	NS	**6.0**	1.7	NS	NS
R-023A	07/21/03	<0.5	<0.5	<0.5	3.4	<0.5	**6.0**	1.9	1.2	<0.5
R-023A	01/06/04	<0.5	<0.5	<0.5	4.0	<0.5	**5.6**	1.8	1.2	<0.5
R-023A	07/26/04	<0.5	<0.5	<0.5	3.9	<0.5	**6.5**	1.8	1.6	<0.5
R-023A	01/27/05	<0.5	<0.5	<0.5	2.4	<0.5	4.8	1.2	1.0	<0.5
R-023A	01/27/05	<0.5	<0.5	<0.5	2.4	<0.5	4.8	1.2	1.0	<0.5
R-023A	07/28/05	<0.5	<0.5	<0.5	2.3	<0.5	4.8	1.4	0.8	<0.5
R-023A	07/28/05	<0.5	<0.5	<0.5	2.4	<0.5	4.8	1.4	0.9	<0.5
R-023A	01/18/06	<0.5	<0.5	<0.5	2.1	<0.5	**6.2**	1.8	1.1	<0.5
R-023A	07/21/06	<0.5	<0.5	<0.5	3.4	<0.5	**5.6**	1.8	1.3	<0.5
R-023A	01/17/07	<0.5	<0.5	<0.5	2.0	<0.5	4.6	1.4	0.7	<0.5
R-023A	07/19/07	<0.5	<0.5	<0.5	2.3	<0.5	4.5	1.4	0.8	<0.5
R-023A	01/23/08	<0.5	<0.5	<0.5	2.4	<0.5	**6.6**	2.0	1.4	<0.5
R-023A	07/17/08	<0.5	<0.5	<0.5	2.0	<0.5	4.5	1.4	1.0	<0.5
R-023A	01/29/09	<0.5	<0.5	<0.5	2.9	<0.5	5.0	1.7	0.9	<0.5
R-023A	07/20/09	<0.5	<0.5	<0.5	2.5	<0.5	4.9	1.7	1.2	<0.5
R-023A	01/25/10	<0.5	<0.5	<0.5	2.1	<0.5	4.4	1.3	0.9	<0.5
R-023A	07/22/10	<0.5	<0.5	<0.5	2.6	<0.5	**5.1**	1.6	0.8	<0.5
R-023A	01/20/11	<0.5	<0.5	<0.5	2.7	<0.5	4	1.3	0.8	<0.5
R-024A	09/10/99	<0.5	NS	<0.5	<3.0	<1.0	4.1	1.6	<1.0	<1.0
R-024A	01/15/02	NS	NS	NS	NS	NS	**13.0**	4.3	NS	NS
R-024A	07/21/03	0.8	0.6	<0.5	5.0	<0.5	**10.8**	3.9	2.2	<0.5
R-024A	01/06/04	0.9	<0.5	<0.5	5.0	<0.5	**8.7**	3.2	1.5	<0.5
R-024A	07/26/04	0.8	<0.5	<0.5	4.2	<0.5	**10.7**	3.7	2.0	<0.5
R-024A	01/27/05	0.8	<0.5	<0.5	3.3	<0.5	**10.6**	3.5	1.6	<0.5
R-024A	08/03/05	1.3	<0.5	<0.5	4.9	<0.5	**8.1**	2.7	0.6	<0.5
R-024A	01/18/06	0.7	<0.5	<0.5	2.2	<0.5	**10.3**	3.5	1.5	<0.5
R-024A	07/21/06	0.6	<0.5	<0.5	3.0	<0.5	**8.0**	3.0	1.6	<0.5
R-024A	01/17/07	1.0	<0.5	<0.5	3.0	<0.5	**8.0**	3.0	1.0	<0.5
R-024A	07/19/07	<0.5	<0.5	<0.5	2.0	<0.5	**6.2**	2.4	0.9	<0.5
R-024A	01/23/08	<0.5	<0.5	<0.5	<0.5	<0.5	3.4	1.6	<0.5	<0.5
R-024A	07/17/08	0.6	<0.5	<0.5	1.7	<0.5	4.9	2.0	0.8	<0.5
R-024A	01/29/09	0.6	<0.5	<0.5	2.2	<0.5	4.9	2.0	0.7	<0.5
R-024A	07/20/09	<0.5	<0.5	<0.5	1.6	<0.5	**5.1**	2.1	0.7	<0.5
R-024A	01/25/10	<0.5	<0.5	<0.5	1.3	<0.5	4.8	1.8	0.6	<0.5
R-024A	07/22/10	<0.5	<0.5	<0.5	3.0	<0.5	**6.2**	2.4	1.1	<0.5
R-024A	01/20/11	<0.5	<0.5	<0.5	2.8	<0.5	**5.4**	2.1	0.9	<0.5
R-025A	09/10/99	<0.5	NS	<0.5	<3.0	<1.0	**9.2**	4.6	<1.0	<1.0
R-025A	01/15/02	NS	NS	NS	NS	NS	**12.0**	**5.6**	NS	NS
R-025A	07/21/03	<0.5	<0.5	<0.5	8.0	<0.5	**9.8**	5.0	2.2	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
R-025A	01/20/04	0.7	<0.5	<0.5	4.7	<0.5	**7.8**	3.3	0.6	<0.5
R-025A	07/26/04	0.7	<0.5	<0.5	9.5	<0.5	**12.0**	**5.8**	2.2	<0.5
R-025A	03/03/05	0.5	<0.5	<0.5	7.7	<0.5	**13.1**	**6.5**	2.2	<0.5
R-025A	03/03/05	0.5	<0.5	<0.5	7.7	<0.5	**13.1**	**6.5**	2.2	<0.5
R-025A	08/03/05	0.6	<0.5	<0.5	8.4	<0.5	**14.2**	**7.3**	2.7	<0.5
R-025A	08/03/05	0.6	<0.5	<0.5	8.8	<0.5	**14.5**	**7.5**	2.8	<0.5
R-025A	01/18/06	<0.5	<0.5	<0.5	6.1	<0.5	**16.4**	**6.5**	3.3	<0.5
R-025A	07/21/06	<0.5	<0.5	<0.5	9.3	<0.5	**14.9**	**7.2**	3.6	<0.5
R-025A	01/17/07	<0.5	<0.5	<0.5	8.4	<0.5	**16.1**	**7.2**	3.1	<0.5
R-025A	01/17/07	<0.5	<0.5	<0.5	8.1	<0.5	**15.3**	**7.0**	3.0	<0.5
R-025A	07/19/07	<0.5	<0.5	<0.5	7.4	<0.5	**16.6**	**7.7**	3.2	<0.5
R-025A	01/23/08	0.5	<0.5	<0.5	6.5	0.6	**16.2**	**7.4**	3.4	<0.5
R-025A	07/17/08	0.5	<0.5	<0.5	6.2	<0.5	**13.7**	**6.8**	3.0	<0.5
R-025A	01/29/09	0.5	<0.5	<0.5	7.8	<0.5	**15.0**	**7.1**	3.0	<0.5
R-025A	07/20/09	0.5	<0.5	<0.5	7.2	<0.5	**14.8**	**7.1**	3.2	<0.5
R-025A	01/25/10	<0.5	<0.5	<0.5	4.4	<0.5	**12.3**	**5.5**	2.6	<0.5
R-026A	09/10/99	<0.5	NS	<0.5	<3.0	<1.0	**5.8**	2.6	<1.0	<1.0
R-026A	01/15/02	NS	NS	NS	NS	NS	**9.4**	4.1	NS	NS
R-026A	07/21/03	<0.5	<0.5	<0.5	9.6	<0.5	**11.8**	**5.8**	2.8	<0.5
R-026A	01/06/04	<0.5	<0.5	<0.5	11.1	<0.5	**12.2**	**5.9**	2.0	<0.5
R-026A	07/26/04	0.5	<0.5	<0.5	10.2	<0.5	**13.6**	**6.2**	2.4	<0.5
R-026A	01/31/05	<0.5	<0.5	<0.5	7.0	<0.5	**10.5**	4.1	1.7	<0.5
R-026A	07/28/05	<0.5	<0.5	<0.5	7.6	<0.5	**11.6**	**5.3**	2.0	<0.5
R-026A	01/18/06	<0.5	<0.5	<0.5	8.0	<0.5	**13.2**	**5.6**	1.9	<0.5
R-026A	07/21/06	<0.5	<0.5	<0.5	10.1	<0.5	**12.2**	**6.0**	1.7	<0.5
R-026A	01/17/07	0.5	<0.5	<0.5	7.8	<0.5	**11.9**	**5.5**	1.5	<0.5
R-061A	09/30/99	<0.5	NS	<0.5	<3.0	<1.0	**21.0**	1.9	<1.0	<1.0
R-061A	09/30/99	<0.5	NS	<0.5	15.0	<1.0	**20.0**	2.4	7.7	<1.0
R-061A	01/17/02	NS	NS	NS	NS	NS	**19.0**	1.6	NS	NS
R-061A	01/17/02	NS	NS	NS	NS	NS	**19.0**	1.6	NS	NS
R-061A	07/26/06	11.2	<0.5	0.7	5.9	<0.5	**11.0**	3.7	8.9	<0.5
R-061A	01/25/07	7.5	<0.5	<0.5	5.0	**13.7**	**9.5**	2.4	7.3	<0.5
R-061A	02/05/08	2.7	<0.5	0.5	9.4	<0.5	**20.3**	4.0	7.6	<0.5
R-061A	07/17/08	2.1	<0.5	0.5	8.4	<0.5	**18.3**	3.6	6.4	<0.5
R-061A	01/26/09	1.6	<0.5	<0.5	6.4	<0.5	**15.8**	3.4	4.1	<0.5
R-061A	01/25/10	1.9	<0.5	0.6	8.0	<0.5	**23.9**	4.5	6.7	<0.5
R-061A	07/22/10	1.7	<0.5	0.6	6.6	<0.5	**17.1**	3.4	4.9	<0.5
R-061A	01/20/11	1.6	<0.5	0.5	8	<0.5	**17.4**	3.4	4.9	<0.5
R-061A	07/25/11	1.6	<0.5	<0.5	8.6	<0.5	**17.8**	3	5.8	<0.5
R-061A	01/19/12	1.7	<0.5	0.6	14.8	<0.5	**21.4**	4	6.3	<0.5
R-061A	07/23/12	1.6	<0.5	0.6	10.3	<0.5	**22.2**	3.8	5.9	<0.5
R-061A	01/24/13	1.6	<0.5	0.8	9.7	<0.5	**23**	4.4	6	<0.5
R-061A	07/22/13	1.4	<0.5	0.7	7.9	<0.5	**19.4**	3.8	4.5	<0.5
R-061A	01/23/14	1.6	<0.5	0.8	9.8	<0.5	**25.1**	**5.2**	6.5	<0.5
R-061A	07/21/14	1.2	<0.5	0.6	7.9	<0.5	**20.1**	3.8	4.8	<0.5
R-061A	01/20/15	0.9	<0.5	0.5	8.4	<0.5	**17.2**	3.1	4.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
R-061A	07/20/15	1.2	<0.5	0.7	6.2	<0.5	**19.5**	4	4.8	<0.5
R-061A	01/21/16	1.4	<0.5	0.8	10.8	<0.5	**25.5**	4.7	7.6	<0.5
R-061A	07/20/16	0.8	<0.5	0.5	5.3	<0.5	**18.2**	3	4.4	<0.5
R-061A	07/20/16	0.8	<0.5	<0.5	6	<0.5	**19.9**	3.3	4.8	<0.5
R-061A	02/22/17	1.4	<0.5	0.7	7.4	<0.5	**21.9**	4	5.8	<0.5
R-061A	08/23/17	1	<0.5	<0.5	4.9	<0.5	**16.3**	3	3.8	<0.5
R-061A	02/22/18	0.6	<0.5	<0.5	5.8	<0.5	**15.2**	2.2	3.3	<0.5
R-061A	03/13/19	0.9	<0.5	0.6	4.7	<0.5	**17.6**	3.2	3.4	<0.5
R-061A	05/21/20	0.9	<0.5	0.6	3.5	<0.5	**17.8**	3.2	3.1	<0.5
R-061A	05/17/21	1	<0.5	0.6	3.1	<0.5	**16.4**	3.4	2.9	<0.5
R-061A	04/01/22	1.15	<0.5	0.715	3.82	<0.5	**22.6**	4.54	3.48	<0.5
R-061A	04/20/23	<2.00	<2.00	<2.00	3.73	<2.00	**20.3**	3.36	3.04	<0.500
R-062A	09/29/99	<0.5	NS	<0.5	<3.0	<1.0	**19.0**	1.7	<1.0	<1.0
R-062A	05/14/01	<0.5	<0.5	<0.5	8.1	<0.5	**22.0**	1.4	4.3	<0.5
R-062A	01/22/02	NS	NS	NS	NS	NS	**26.0**	1.9	NS	NS
R-062A	01/21/03	<0.5	<0.5	<0.5	9.1	<0.5	**29.4**	2.3	4.7	<0.5
R-062A	07/23/03	<0.5	<0.5	<0.5	7.0	<0.5	**22.9**	1.9	3.7	<0.5
R-062A	01/13/04	<0.5	<0.5	<0.5	7.8	<0.5	**19.9**	1.6	3.4	<0.5
R-062A	07/27/04	<0.5	<0.5	<0.5	7.0	<0.5	**18.4**	1.5	3.7	<0.5
R-062A	01/18/05	<0.5	<0.5	<0.5	5.2	<0.5	**19.2**	1.4	3.6	<0.5
R-062A	01/18/05	<0.5	<0.5	<0.5	5.2	<0.5	**19.2**	1.4	3.6	<0.5
R-062A	08/01/05	<0.5	<0.5	<0.5	3.3	<0.5	**17.3**	1.5	2.8	<0.5
R-062A	08/01/05	<0.5	<0.5	<0.5	3.3	<0.5	**16.9**	1.4	2.7	<0.5
R-062A	01/31/06	3.0	<0.5	<0.5	2.5	<0.5	**13.4**	1.7	3.8	<0.5
R-062A	01/31/06	2.9	<0.5	<0.5	2.5	<0.5	**13.0**	1.8	3.7	<0.5
R-062A	08/01/06	4.9	<0.5	<0.5	2.1	<0.5	**9.6**	1.9	2.9	<0.5
R-062A	01/24/07	4.7	<0.5	<0.5	2.9	<0.5	**9.6**	1.9	3.6	<0.5
R-062A	02/05/08	0.8	<0.5	<0.5	3.1	<0.5	**6.0**	1.1	2.6	<0.5
R-062A	07/23/08	<0.5	<0.5	<0.5	3.6	<0.5	**5.9**	1.0	1.9	<0.5
R-062A	01/26/09	<0.5	<0.5	<0.5	2.1	<0.5	4.0	0.8	1.2	<0.5
R-062A	07/20/09	<0.5	<0.5	<0.5	4	<0.5	**6.5**	1.2	2.5	<0.5
R-062A	01/25/10	<0.5	<0.5	<0.5	2.9	<0.5	**6.0**	1.0	2.2	<0.5
R-062A	08/04/10	0.6	<0.5	<0.5	1.0	<0.5	4.0	0.5	0.7	<0.5
R-062A	03/01/11	<0.5	<0.5	<0.5	<0.5	<0.5	3.6	<0.5	<0.5	<0.5
R-062A	07/20/11	0.7	<0.5	<0.5	<0.5	<0.5	4.6	<0.5	0.6	<0.5
R-062A	01/18/12	<0.5	<0.5	<0.5	<0.5	<0.5	2.5	<0.5	<0.5	<0.5
R-062A	01/18/12	0.67	<0.5	<0.5	<2	<5	1.89	<0.5	<2	<0.5
R-062A	07/18/12	0.8	<0.5	<0.5	0.6	<0.5	4.9	<0.5	0.9	<0.5
R-062A	01/29/13	0.8	<0.5	<0.5	0.7	<0.5	4.6	<0.5	1	<0.5
R-062A	07/17/13	0.7	<0.5	<0.5	1.4	<0.5	**5.5**	0.5	1.4	<0.5
R-062A	01/22/14	0.6	<0.5	<0.5	1.1	<0.5	4.8	<0.5	1.1	<0.5
R-062A	07/17/14	0.6	<0.5	<0.5	1.6	<0.5	**5.4**	0.5	1.1	<0.5
R-062A	01/20/15	<0.5	<0.5	<0.5	1.6	<0.5	**5.2**	<0.5	1	<0.5
R-062A	07/15/15	<0.5	<0.5	<0.5	1	<0.5	4.7	<0.5	0.9	<0.5
R-062A	01/20/16	0.6	<0.5	<0.5	1	<0.5	**5.1**	<0.5	1	<0.5
R-062A	07/18/16	0.5	<0.5	<0.5	1.3	<0.5	**6.3**	0.6	1.3	<0.5
R-062A	02/16/17	<0.5	<0.5	<0.5	0.8	<0.5	3.1	<0.5	0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
R-062A	08/24/17	<0.5	<0.5	<0.5	0.7	<0.5	3.0	<0.5	0.5	<0.5
R-062A	02/21/18	<0.5	<0.5	<0.5	1.8	<0.5	**5.4**	0.6	0.8	<0.5
R-062A	08/09/18	<0.5	<0.5	<0.5	0.8	<0.5	2.2	<0.5	<0.5	<0.5
R-062A	03/18/19	<0.5	<0.5	<0.5	2.2	<0.5	**5.7**	0.9	1.1	<0.5
R-062A	08/20/19	<0.5	<0.5	<0.5	2.5	<0.5	**5.1**	0.8	1.1	<0.5
R-062A	05/14/20	<0.5	<0.5	<0.5	0.9	0.6	**5.1**	0.6	0.6	<0.5
R-062A	11/17/20	<0.5	<0.5	<0.5	1.1	<0.5	**5.2**	0.8	<0.5	<0.5
R-062A	05/06/21	<0.5	<0.5	<0.5	1	<0.5	**5.5**	0.6	1	<0.5
R-062A	10/07/21	<0.5	<0.5	<0.5	0.9	<0.5	**6.2**	0.5	1.1	<0.5
R-062A	10/07/21	0.5	<0.5	<0.5	0.9	<0.5	**6.5**	0.8	1.2	<0.5
R-062A	04/04/22	0.837	<0.5	<0.5	1.15	<0.5	**7.52**	0.762	1.60	<0.5
R-062A	08/19/22	<0.5	<0.5	<0.5	0.893	<0.5	**5.59**	0.63	1.04	<0.5
R-062A	08/29/23	<4.00	<4.00	<4.00	<4.00	<4.00	4.4	<4.00	<4.00	<1.00
R-062A	08/29/23	<4.00	<4.00	<4.00	<4.00	<4.00	4.7	<4.00	<4.00	<1.00
R-062B	01/26/01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
R-062B	02/09/01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
R-062B	01/23/02	NS	NS	NS	NS	NS	0.6	<0.5	NS	NS
R-062B	01/28/03	<0.5	<0.5	<0.5	0.7	<0.5	1.1	<0.5	<0.5	<0.5
R-062B	07/23/03	<0.5	<0.5	<0.5	0.9	<0.5	1.3	<0.5	<0.5	<0.5
R-062B	01/08/04	<0.5	<0.5	<0.5	1.1	<0.5	1.4	<0.5	<0.5	<0.5
R-062B	07/27/04	<0.5	<0.5	<0.5	0.8	<0.5	1.5	<0.5	0.5	<0.5
R-062B	01/18/05	<0.5	<0.5	<0.5	1.0	<0.5	2.2	<0.5	0.7	<0.5
R-062B	07/26/05	<0.5	<0.5	<0.5	1.2	<0.5	2.3	0.6	0.7	<0.5
R-062B	01/24/06	<0.5	<0.5	<0.5	1.4	<0.5	2.4	0.6	0.8	<0.5
R-062B	07/26/06	<0.5	<0.5	<0.5	2.3	<0.5	3.3	0.8	1.1	<0.5
R-062B	01/23/07	<0.5	<0.5	<0.5	1.7	<0.5	3.4	0.9	0.9	<0.5
R-062B	07/24/07	<0.5	<0.5	<0.5	2.8	<0.5	4.2	1.1	1.2	<0.5
R-062B	01/28/08	<0.5	<0.5	<0.5	2.5	<0.5	4.7	1.2	1.5	<0.5
R-062B	07/23/08	<0.5	<0.5	<0.5	2.7	<0.5	5.0	1.2	1.3	<0.5
R-062B	02/03/09	<0.5	<0.5	<0.5	3.4	<0.5	**5.4**	1.3	1.6	<0.5
R-062B	07/23/09	<0.5	<0.5	<0.5	3.4	<0.5	**6.3**	1.5	1.8	<0.5
R-062B	01/27/10	<0.5	<0.5	<0.5	2.4	<0.5	**6.2**	1.4	1.4	<0.5
R-062B	07/22/10	<0.5	<0.5	<0.5	2.5	<0.5	**5.7**	1.2	1.6	<0.5
R-062B	01/20/11	<0.5	<0.5	<0.5	3.3	<0.5	**5.5**	1.2	1.3	<0.5
R-062B	07/25/11	<0.5	<0.5	<0.5	3.5	<0.5	**5.8**	1.1	1.8	<0.5
R-062B	01/19/12	<0.5	<0.5	<0.5	4.4	<0.5	4.9	1	1.4	<0.5
R-062B	07/23/12	<0.5	<0.5	<0.5	2.8	<0.5	5.0	1	1.2	<0.5
R-062B	01/24/13	<0.5	<0.5	<0.5	2.7	<0.5	**5.2**	1.1	1.2	<0.5
R-062B	07/22/13	<0.5	<0.5	<0.5	2.5	<0.5	**5.3**	1.1	1.3	<0.5
R-062B	01/23/14	<0.5	<0.5	<0.5	2.7	<0.5	**5.7**	1.1	1.4	<0.5
R-062B	07/21/14	<0.5	<0.5	<0.5	2.5	<0.5	**5.1**	1	1.3	<0.5
R-062B	01/20/15	<0.5	<0.5	<0.5	3.8	<0.5	**5.8**	1.2	1.4	<0.5
R-062B	07/20/15	<0.5	<0.5	<0.5	2.4	<0.5	**5.2**	1	1.4	<0.5
R-062B	01/21/16	<0.5	<0.5	<0.5	3.3	<0.5	**5.3**	1.1	1.7	<0.5
R-062B	07/20/16	<0.5	<0.5	<0.5	2.2	<0.5	4.8	1	1.1	<0.5
R-062B	02/22/17	<0.5	<0.5	<0.5	2.4	<0.5	4.4	0.8	1.2	<0.5
R-062B	08/23/17	<0.5	<0.5	<0.5	2.5	<0.5	4.7	1.1	1.4	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
R-062B	02/22/18	<0.5	<0.5	<0.5	4.1	<0.5	**7.8**	1.6	1.7	<0.5
R-062B	03/13/19	<0.5	<0.5	<0.5	2	<0.5	4.2	0.8	1	<0.5
R-062B	05/21/20	<0.5	<0.5	<0.5	1.7	<0.5	4.3	1	1	<0.5
R-062B	05/17/21	<0.5	<0.5	<0.5	1.6	<0.5	3.7	1	1	<0.5
R-062B	04/01/22	<0.5	<0.5	<0.5	1.92	<0.5	4.05	1.02	1.08	<0.5
R-062B	04/19/23	<2.00	<2.00	<2.00	2.37	<2.00	4.51	<2.00	<2.00	<0.500
R-063A	09/16/99	<0.5	NS	<0.5	7.8	<1.0	**16.0**	1.4	5.8	<1.0
R-063A	09/17/99	<0.5	NS	<0.5	7.9	<1.0	**21.0**	1.9	6.1	<1.0
R-063A	01/23/02	NS	NS	NS	NS	NS	**29.0**	2.1	NS	NS
R-063A	01/23/02	NS	NS	NS	NS	NS	**29.0**	2.1	NS	NS
R-063A	07/27/06	<0.5	<0.5	<0.5	4.1	<0.5	**25.8**	3.1	3.8	<0.5
R-063A	01/30/07	0.8	<0.5	<0.5	4.9	<0.5	**18.0**	2.3	2.9	<0.5
R-063A	02/05/08	<0.5	<0.5	<0.5	1.7	<0.5	**7.0**	0.8	1.2	<0.5
R-063A	01/26/09	<0.5	<0.5	<0.5	1.1	<0.5	3.6	<0.5	0.6	<0.5
R-063A	08/06/09	<0.5	<0.5	<0.5	1.1	<0.5	4.0	<0.5	0.9	<0.5
R-063A	01/25/10	<0.5	<0.5	<0.5	1.1	<0.5	4.5	<0.5	0.8	<0.5
R-063A	07/22/10	<0.5	<0.5	<0.5	2.0	<0.5	**5.6**	0.6	1.2	<0.5
R-063A	01/20/11	<0.5	<0.5	<0.5	2.2	<0.5	**7.4**	0.7	1.2	<0.5
R-063A	07/25/11	<0.5	<0.5	<0.5	0.7	<0.5	**5.8**	<0.5	1.2	<0.5
R-063A	01/19/12	<0.5	<0.5	<0.5	1.5	<0.5	4.7	<0.5	1	<0.5
R-063A	07/23/12	<0.5	<0.5	<0.5	<0.5	<0.5	2.2	<0.5	<0.5	<0.5
R-063A	01/24/13	<0.5	<0.5	<0.5	1.6	<0.5	**8.3**	0.7	1.6	<0.5
R-063A	07/22/13	<0.5	<0.5	<0.5	1.7	<0.5	**8**	0.7	1.8	<0.5
R-063A	01/23/14	<0.5	<0.5	<0.5	1	<0.5	**7.1**	0.7	1.4	<0.5
R-063A	07/21/14	<0.5	<0.5	<0.5	1.1	<0.5	**6**	0.5	1.2	<0.5
R-063A	01/20/15	<0.5	<0.5	<0.5	2.3	<0.5	**7.9**	0.7	2	<0.5
R-063A	07/20/15	<0.5	<0.5	<0.5	1.5	<0.5	**7.3**	0.6	1.8	<0.5
R-063A	01/21/16	<0.5	<0.5	<0.5	2	<0.5	**7.5**	0.6	2.2	<0.5
R-063A	07/20/16	<0.5	<0.5	<0.5	1	<0.5	**5.7**	0.5	1.2	<0.5
R-063A	02/22/17	<0.5	<0.5	<0.5	1.3	<0.5	**5.5**	<0.5	1.4	<0.5
R-063A	08/23/17	<0.5	<0.5	<0.5	1.2	<0.5	4.7	<0.5	1.2	<0.5
R-063A	02/22/18	<0.5	<0.5	<0.5	1.9	<0.5	**6.5**	0.6	1.3	<0.5
R-063A	03/19/19	<0.5	<0.5	<0.5	1.4	<0.5	**5.8**	0.6	1.3	<0.5
R-063A	05/21/20	<0.5	<0.5	<0.5	1.9	<0.5	**7.4**	0.8	1.6	<0.5
R-063A	05/19/21	<0.5	<0.5	<0.5	1.7	<0.5	**5.6**	0.8	1.4	<0.5
R-063A	04/08/22	<0.5	<0.5	<0.5	2.88	<0.5	**8.44**	1.13	2.17	<0.5
R-064A	09/14/99	<0.5	NS	<0.5	<3.0	<1.0	**5.5**	0.8	<1.0	<1.0
R-064A	09/15/99	<0.5	NS	<0.5	<3.0	<1.0	4.4	0.6	<1.0	<1.0
R-064A	09/15/99	<0.5	NS	<0.5	<3.0	<1.0	4.4	0.6	<1.0	<1.0
R-064A	01/18/07	<0.5	<0.5	<0.5	1.3	<0.5	3.7	<0.5	<0.5	<0.5
R-064A	07/24/07	<0.5	<0.5	<0.5	1.0	<0.5	3.7	<0.5	<0.5	<0.5
R-064A	01/28/08	<0.5	<0.5	<0.5	1.4	<0.5	3.7	<0.5	<0.5	<0.5
R-064A	07/23/08	<0.5	<0.5	<0.5	1.5	<0.5	3.2	<0.5	<0.5	<0.5
R-064A	02/02/09	<0.5	<0.5	<0.5	1.7	<0.5	3.1	<0.5	<0.5	<0.5
R-064A	07/22/09	<0.5	<0.5	<0.5	2.5	<0.5	3.7	<0.5	0.6	<0.5
R-064A	07/28/10	<0.5	<0.5	<0.5	0.9	<0.5	2.5	<0.5	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
R-065A	09/18/99	<0.5	NS	<0.5	<3.0	<1.0	**22.0**	2.7	<1.0	<1.0
R-065A	01/21/02	NS	NS	NS	NS	NS	**24.0**	2.7	NS	NS
R-065A	01/21/03	<0.5	<0.5	<0.5	5.8	<0.5	**22.4**	2.8	0.8	<0.5
R-065A	01/12/04	<0.5	<0.5	<0.5	4.0	<0.5	**13.6**	1.7	<0.5	<0.5
R-065A	01/19/05	<0.5	<0.5	<0.5	0.1	<0.5	**6.7**	0.6	<0.5	<0.5
R-065A	01/19/05	<0.5	<0.5	<0.5	0.1	<0.5	**6.7**	0.6	<0.5	<0.5
R-065A	01/25/06	<0.5	<0.5	<0.5	1.1	<0.5	4.1	0.6	<0.5	<0.5
R-065A	01/25/06	<0.5	<0.5	<0.5	1.2	<0.5	4.4	0.6	<0.5	<0.5
R-065A	01/23/07	<0.5	<0.5	<0.5	1.8	<0.5	4.3	0.5	<0.5	<0.5
R-065A	01/27/10	<0.5	<0.5	<0.5	1.5	<0.5	2.8	<0.5	<0.5	<0.5
R-065A	01/25/11	<0.5	<0.5	<0.5	3	<0.5	3.2	<0.5	0.6	<0.5
R-065A	07/19/11	<0.5	<0.5	<0.5	3.8	<0.5	4.3	<0.5	0.8	<0.5
R-065A	01/17/12	<0.5	<0.5	<0.5	2.1	<0.5	2.1	<0.5	<0.5	<0.5
R-065A	07/17/12	<0.5	<0.5	<0.5	3.5	<0.5	3.8	<0.5	0.7	<0.5
R-065A	01/17/13	<0.5	<0.5	<0.5	2.3	<0.5	3.4	0.5	0.5	<0.5
R-065A	07/15/13	<0.5	<0.5	<0.5	1.5	<0.5	2.3	<0.5	<0.5	<0.5
R-065A	07/15/13	<0.5	<0.5	<0.5	1.6	<0.5	2.3	<0.5	<0.5	<0.5
R-065A	01/16/14	<0.5	<0.5	<0.5	1.5	<0.5	3.3	<0.5	0.5	<0.5
R-065A	07/10/14	<0.5	<0.5	<0.5	1.5	<0.5	3.9	0.6	<0.5	<0.5
R-065A	01/14/15	<0.5	<0.5	<0.5	2.8	<0.5	3.6	0.5	0.6	<0.5
R-065A	07/13/15	<0.5	<0.5	<0.5	1.7	<0.5	**5.1**	0.7	0.6	<0.5
R-065A	07/13/15	<0.5	<0.5	<0.5	1.5	<0.5	4.6	0.7	0.5	<0.5
R-065A	01/14/16	<0.5	<0.5	<0.5	3	<0.5	**5.7**	0.8	0.8	<0.5
R-065A	07/14/16	<0.5	<0.5	<0.5	2.7	<0.5	**5.2**	0.7	0.8	<0.5
R-065A	02/14/17	<0.5	<0.5	<0.5	1.5	<0.5	5.0	0.6	<0.5	<0.5
R-065A	08/17/17	<0.5	<0.5	<0.5	3	<0.5	**6.0**	0.8	0.8	<0.5
R-065A	02/14/18	<0.5	<0.5	<0.5	3.7	<0.5	**6.5**	0.8	0.6	<0.5
R-065A	03/20/19	<0.5	<0.5	<0.5	2	<0.5	**10.6**	1.2	0.7	<0.5
R-065A	03/20/19	<0.5	<0.5	<0.5	2	<0.5	**10.6**	1.2	0.7	<0.5
R-065A	05/20/20	<0.5	<0.5	<0.5	2	<0.5	**9**	1	0.6	<0.5
R-065A	05/19/21	<0.5	<0.5	<0.5	1.5	<0.5	**7.2**	0.9	0.6	<0.5
R-065A	03/30/22	<0.5	<0.5	<0.5	2.39	<0.5	**15.4**	1.73	0.838	<0.5
R-065A	04/20/23	<2.00	<2.00	<2.00	2.64	<2.00	**12.4**	<2.00	<2.00	<0.500
R-065A	04/20/23	<2.00	<2.00	<2.00	2.61	<2.00	**12.2**	<2.00	<2.00	<0.500
R-105A	07/27/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
R-109A	05/07/03	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
R-110A	05/07/03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
R-111A	05/07/03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
R-112A	05/08/03	<0.5	<0.5	<0.5	<0.5	<0.5	1.5	1.2	<0.5	<0.5
R-112A	05/08/03	<0.5	<0.5	<0.5	<0.5	<0.5	1.5	1.2	<0.5	<0.5
R-113B	05/08/03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-047B	07/07/99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	07/07/99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	01/25/00	<.5	<0.5	<.5	<1	<1	<1	<.5	<1	<1
WR-047B	08/09/00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	01/18/01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	07/24/01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	01/15/02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	07/16/02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	07/16/02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	01/28/03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	07/22/03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	01/13/04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	07/07/04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	07/07/04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	01/12/05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	01/12/05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	07/11/05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	07/11/05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	01/17/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	01/17/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	07/26/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	01/10/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	07/12/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	01/15/08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	07/10/08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	01/15/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	07/09/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	01/13/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	07/15/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	01/12/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	07/18/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	07/18/11	<0.5	<0.5	<0.5	<2	<3	<0.5	<0.5	<2	<0.5
WR-047B	01/11/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	07/12/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	01/14/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	07/11/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	01/09/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	07/31/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	01/13/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	07/09/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	01/06/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	07/11/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	02/07/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	08/09/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	02/07/18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	03/18/19	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	05/12/20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-047B	05/12/21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	03/24/22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	03/24/22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-047B	04/12/23	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-048A	02/05/90	<0.3	<0.3	<0.4	<2	<0.4	0.5	0.5	<1.4	<1
WR-048A	08/14/90	<0.4	<0.4	<0.4	<2	<0.4	<0.4	<0.4	<0.4	<1
WR-048A	04/03/91	<0.3	<0.3	<0.3	<1	<0.3	0.4	0.3	<1	<1
WR-048A	09/17/91	<0.3	<0.3	<0.3	<1	<0.3	0.4	0.4	<1	<1
WR-048A	03/25/92	<0.3	<0.3	<0.3	<1.1	<0.3	0.3	0.3	<1	<1
WR-048A	08/31/92	<0.3	<0.3	<0.3	<1.1	<0.3	0.7	0.7	<1	<1
WR-048A	04/07/93	<0.3	<0.3	<0.3	<1.1	<0.3	0.7	0.7	<1	<1
WR-048A	09/08/93	<0.3	<0.3	<0.3	<1.1	<0.3	<0.4	0.4	<1	<1
WR-048A	03/30/94	<0.3	<0.3	<0.3	<1	<0.3	0.6	0.6	<1	<1
WR-048A	09/26/94	<2	<2	NS	NS	<10	<2	<2	<2	<2
WR-048A	03/21/95	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-048A	09/28/95	<0.5	<0.5	<0.5	<0.5	<1	0.7	<0.5	<0.5	<0.5
WR-048A	03/14/96	<0.5	<0.5	NS	<0.5	<0.5	0.6	0.5	<0.5	<0.5
WR-048A	06/27/96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-048A	09/23/96	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
WR-048A	03/26/97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-048A	09/18/97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-048A	01/12/98	<0.5	<0.5	<0.5	<1	<1	<1	<0.5	<1	<1
WR-048A	07/29/98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
WR-048A	07/07/99	<0.5	<0.5	<0.5	0.6	<0.5	0.7	0.5	<0.5	<0.5
WR-048A	01/25/00	<0.5	<0.5	<0.5	<1	<1	<1	0.7	<1	<1
WR-048A	08/08/00	<0.5	<0.5	<0.5	0.9	<0.5	1.6	0.8	<0.5	<0.5
WR-048A	01/18/01	<0.5	0.6	<0.5	2.1	<0.5	3.9	3.2	<0.5	<0.5
WR-048A	07/24/01	<0.5	<0.5	<0.5	0.8	<0.5	2.2	1.7	<0.5	<0.5
WR-048A	01/15/02	<0.5	<0.5	<0.5	0.7	<0.5	2.1	1.6	<0.5	<0.5
WR-048A	07/17/02	<0.5	<0.5	<0.5	0.6	<0.5	1.3	0.9	<0.5	<0.5
WR-048A	01/30/03	<0.5	<0.5	<0.5	1.6	<0.5	3.6	2.6	<0.5	<0.5
WR-048A	07/15/03	<0.5	<0.5	<0.5	0.9	<0.5	1.6	1.0	<0.5	<0.5
WR-048A	01/14/04	<0.5	<0.5	<0.5	1.0	<0.5	1.8	1.2	<0.5	<0.5
WR-048A	07/07/04	<0.5	<0.5	<0.5	0.5	<0.5	1.1	0.7	<0.5	<0.5
WR-048A	01/12/05	<0.5	<0.5	<0.5	0.7	<0.5	2.1	1.2	<0.5	<0.5
WR-048A	01/12/05	<0.5	<0.5	<0.5	0.7	<0.5	2.1	1.2	<0.5	<0.5
WR-048A	07/13/05	<0.5	<0.5	<0.5	0.8	<0.5	1.6	1.0	<0.5	<0.5
WR-048A	07/13/05	<0.5	<0.5	<0.5	0.8	<0.5	1.6	1.0	<0.5	<0.5
WR-048A	01/10/06	<0.5	<0.5	<0.5	1.0	<0.5	2.6	1.6	<0.5	<0.5
WR-048A	07/26/06	<0.5	<0.5	<0.5	0.5	<0.5	1.1	0.7	<0.5	<0.5
WR-048A	02/01/07	<0.5	<0.5	<0.5	1.2	<0.5	3.9	2.2	<0.5	<0.5
WR-048A	07/17/07	<0.5	<0.5	<0.5	1.0	<0.5	3.3	1.7	<0.5	<0.5
WR-048A	01/22/08	<0.5	<0.5	<0.5	1.0	<0.5	4.2	2.3	<0.5	<0.5
WR-048A	07/15/08	<0.5	<0.5	<0.5	0.8	<0.5	3.0	1.5	<0.5	<0.5
WR-048A	01/22/09	<0.5	<0.5	<0.5	0.5	<0.5	1.7	0.8	<0.5	<0.5
WR-048A	07/15/09	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5
WR-048A	01/19/10	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-048A	07/19/10	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
WR-048A	01/13/11	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5
WR-048A	01/11/12	<0.5	<0.5	<0.5	0.8	<0.5	0.7	<0.5	<0.5	<0.5
WR-048A	01/18/13	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5
WR-048A	01/15/14	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5
WR-048A	01/15/14	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5
WR-048A	01/14/15	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
WR-048A	01/12/16	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
WR-048A	02/13/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-048A	02/13/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-048A	02/13/18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-048A	03/19/19	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-048A	05/12/20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-048A	05/12/21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-048A	05/12/21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-048A	03/26/22	<0.5	<0.5	<0.5	<0.5	<0.5	3.41	1.72	<0.5	<0.5
WR-048A	04/18/23	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<0.500
WR-049A	10/22/90	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<1	<2
WR-049A	04/02/91	<0.3	<0.3	<0.3	<1	<0.3	<0.3	<0.3	<1	<1
WR-049A	09/17/91	<0.3	<0.3	<0.3	<1	<0.3	<0.4	<0.3	<1	<1
WR-049A	03/25/92	<0.3	<0.3	<0.3	<1.1	<0.3	<0.4	<0.3	<1	<1
WR-049A	08/31/92	<0.3	<0.3	<0.3	<1.1	<0.3	<0.4	<0.3	<1	<1
WR-049A	04/07/93	<0.3	<0.3	<0.3	<1.1	<0.3	<0.3	<0.3	<1	<1
WR-049A	09/08/93	<0.3	<0.3	<0.3	<1.1	<0.3	<0.4	<0.3	<1	<1
WR-049A	03/30/94	<0.3	<0.3	<0.3	<1	<0.3	<0.3	0.4	<1	<1
WR-049A	09/26/94	<2	<2	NS	NS	<10	<2	<2	NS	<2
WR-049A	03/21/95	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-049A	09/28/95	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
WR-049A	03/15/96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-049A	06/27/96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-049A	09/23/96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-049A	03/26/97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-049A	09/18/97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-049A	01/12/98	<0.5	<0.5	<0.5	<1	<1	<1	<0.5	<1	<1
WR-049A	07/29/98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-049A	07/07/99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-049A	01/25/00	<.5	<0.5	<.5	<1	<1	<1	<.5	<1	<1
WR-049A	08/08/00	<0.5	<0.5	<0.5	<0.5	<0.5	1.6	1.0	<0.5	<0.5
WR-049A	01/18/01	<0.5	<0.5	<0.5	2.0	<0.5	3.9	3.6	<0.5	<0.5
WR-049A	07/24/01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-049A	01/15/02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-049A	07/17/02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-049A	01/30/03	<0.5	<0.5	<0.5	<0.5	<0.5	1.1	1.0	<0.5	<0.5
WR-049A	07/16/03	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	0.6	<0.5	<0.5
WR-049A	01/13/04	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	0.6	<0.5	<0.5
WR-049A	07/07/04	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	0.7	<0.5	<0.5
WR-049A	01/11/05	<0.5	<0.5	<0.5	1.0	<0.5	**5.3**	2.4	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-049A	07/13/05	<0.5	<0.5	<0.5	1.1	<0.5	4.2	2.0	<0.5	<0.5
WR-049A	01/24/06	0.5	<0.5	<0.5	2.0	<0.5	**10.5**	3.5	<0.5	<0.5
WR-049A	01/24/06	0.5	<0.5	<0.5	2.0	<0.5	**11.2**	3.8	<0.5	<0.5
WR-049A	08/02/06	0.5	<0.5	<0.5	1.7	<0.5	**9.4**	3.5	<0.5	<0.5
WR-049A	02/01/07	1.0	<0.5	<0.5	1.3	<0.5	**23.2**	**8.7**	<0.5	<0.5
WR-049A	07/18/07	1.0	<0.5	<0.5	1.2	<0.5	**24.9**	**7.6**	<0.5	<0.5
WR-049A	01/22/08	1.0	<0.5	<0.5	1.3	<0.5	**27.8**	**8.3**	<0.5	<0.5
WR-049A	07/16/08	1.3	<0.5	<0.5	1.7	<0.5	**30.5**	**9.3**	<0.5	<0.5
WR-049A	01/22/09	1.3	<0.5	<0.5	2.0	<0.5	**31.0**	**10.2**	<0.5	<0.5
WR-049A	07/16/09	1.4	<0.5	<0.5	4.6	<0.5	**37.9**	**14.3**	0.7	<0.5
WR-049A	01/21/10	1.2	<0.5	<0.5	3.6	<0.5	**30.2**	**15.4**	0.6	<0.5
WR-049A	07/21/10	1.1	<0.5	<0.5	2.8	<0.5	**25.0**	**14.5**	<0.5	<0.5
WR-049A	01/19/11	1.2	<0.5	<0.5	4.6	<0.5	**28.9**	**14.9**	<0.5	<0.5
WR-049A	07/21/11	1.2	<0.5	<0.5	4.3	<0.5	**28.6**	**13.6**	0.6	<0.5
WR-049A	01/24/12	1.2	<0.5	<0.5	6.7	<0.5	**26.1**	**12.2**	<0.5	<0.5
WR-049A	07/18/12	1.2	<0.5	<0.5	4.1	<0.5	**26.4**	**12**	<0.5	<0.5
WR-049A	01/24/13	1.2	<0.5	<0.5	4.1	<0.5	**26.2**	**13.3**	<0.5	<0.5
WR-049A	07/17/13	1.4	<0.5	<0.5	4.6	<0.5	**28.3**	**15**	0.6	<0.5
WR-049A	01/21/14	1.3	<0.5	<0.5	4.2	<0.5	**28**	**15.2**	0.7	<0.5
WR-049A	07/15/14	1.5	<0.5	<0.5	5.2	<0.5	**29.6**	**16**	0.7	<0.5
WR-049A	01/15/15	1.1	<0.5	<0.5	2.8	<0.5	**17.4**	**10.2**	<0.5	<0.5
WR-049A	07/14/15	1.3	<0.5	<0.5	2.4	<0.5	**23**	**12.3**	<0.5	<0.5
WR-049A	01/19/16	1.5	<0.5	<0.5	3.8	<0.5	**22.8**	**11.6**	0.5	<0.5
WR-049A	07/14/16	1.3	<0.5	<0.5	2.5	<0.5	**20.4**	**11.2**	0.5	<0.5
WR-049A	02/16/17	0.9	<0.5	<0.5	2.3	<0.5	**18.4**	**8.8**	<0.5	<0.5
WR-049A	08/17/17	1.7	<0.5	<0.5	4.1	<0.5	**27.3**	**13.2**	0.5	<0.5
WR-049A	02/26/18	1.2	<0.5	<0.5	2.2	<0.5	**16.8**	**7.9**	<0.5	<0.5
WR-049A	08/08/18	1.2	<0.5	<0.5	1.2	<0.5	**11.6**	**11.7**	<0.5	<0.5
WR-049A	04/02/19	1.5	<0.5	<0.5	1.6	<0.5	**20.8**	**10.2**	<0.5	<0.5
WR-049A	08/21/19	1.8	<0.5	<0.5	2.8	<0.5	**26.1**	**12.8**	0.6	<0.5
WR-049A	06/01/20	1.8	<0.5	<0.5	2	<0.5	**29.2**	**13**	0.5	<0.5
WR-049A	06/01/20	1.7	<0.5	<0.5	2.1	<0.5	**29.4**	**12.6**	0.5	<0.5
WR-049A	11/20/20	1.9	<0.5	<0.5	2.7	<0.5	**32.9**	**13.5**	0.6	<0.5
WR-049A	05/20/21	2	<0.5	<0.5	1.8	<0.5	**26.7**	**13.9**	0.5	<0.5
WR-049A	10/08/21	1.5	<0.5	<0.5	2	<0.5	**24.9**	**11**	<0.5	<0.5
WR-049A	03/30/22	1.66	<0.5	<0.5	1.99	<0.5	**26.6**	**11.3**	0.570	<0.5
WR-049A	08/15/22	1.27	<0.5	<0.5	2.24	<0.5	**28.1**	**10.3**	<0.5	<0.5
WR-049A	04/20/23	<4.00	<4.00	<4.00	<4.00	<4.00	**23.4**	**7.80**	<4.00	<1.00
WR-049A	08/24/23	<4.00	<4.00	<4.00	<4.00	<4.00	**21.7**	**7.94**	<4.00	<1.00
WR-049A	08/24/23	<4.00	<4.00	<4.00	<4.00	<4.00	**21.2**	**8.00**	<4.00	<1.00
WR-135A	08/14/90	<0.4	<0.4	<0.4	48.3	0.6	**18.8**	4.4	2.1	<1
WR-135A	04/02/91	0.3	<0.3	<0.3	11.0	0.3	**15.6**	3.7	<1	<1
WR-135A	09/17/91	0.3	<0.3	<0.3	10.1	1.1	**18.1**	4.8	<1	<1
WR-135A	03/25/92	<0.3	<0.3	<0.3	4.7	0.9	**19.4**	5.0	<1	<1
WR-135A	09/01/92	0.9	0.4	<0.3	9.3	3.3	**30.4**	**10.8**	1.7	<1
WR-135A	04/06/93	0.8	<0.3	<0.3	2.8	2.4	**24.5**	**8.2**	<1	<1
WR-135A	09/07/93	0.7	<0.3	<0.3	4.5	2.4	**23.9**	**7.7**	<1	<1

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-135A	01/27/94	<0.2	<0.2	<0.2	NS	<2	**20.0**	**6.5**	NS	1.1
WR-135A	03/04/94	0.9	0.4	0.4	<1	2.3	**24.0**	**7.1**	1.0	0.6
WR-135A	08/01/94	<1	<1	<1	<10	2.2	**17.0**	**7.1**	<1	<1
WR-135A	09/26/94	<2	<2	NS	NS	<10	**48.0**	**12.0**	<2	<2
WR-135A	01/18/95	0.8	<0.5	<0.5	3.0	2.8	**23.0**	**9.7**	0.9	<0.5
WR-135A	03/16/95	0.7	<0.5	<0.5	7.7	3.4	**18.5**	**8.9**	<0.5	<0.5
WR-135A	07/11/95	0.9	<0.5	0.6	7.9	**5.2**	**22.9**	**12.4**	0.5	0.7
WR-135A	09/28/95	1.0	<0.5	0.6	3.8	2.6	**26.0**	**9.9**	0.6	0.7
WR-135A	12/20/95	0.7	<0.3	0.5	3.8	2.8	**25.0**	**6.6**	0.6	0.6
WR-135A	03/14/96	0.8	<0.5	NS	8.2	3.3	**24.3**	**8.9**	<0.5	0.6
WR-135A	06/27/96	1.2	<0.5	1.0	5.2	**5.2**	**36.0**	**9.1**	0.8	0.7
WR-135A	09/23/96	1.5	<0.5	1.4	9.0	**5.5**	**34.0**	**12.2**	1.1	1.1
WR-135A	03/24/97	1.2	<0.5	1.3	5.5	4.7	**30.8**	**14.0**	1.1	0.7
WR-135A	09/10/99	0.6	NS	0.6	<3.0	1.0	**11.0**	**5.4**	<1.0	<1.0
WR-135A	01/15/02	NS	NS	NS	NS	NS	2.9	1.3	NS	NS
WR-135A	07/21/03	<0.5	<0.5	<0.5	0.8	<0.5	2.8	1.3	<0.5	<0.5
WR-135A	01/07/04	<0.5	<0.5	<0.5	0.8	<0.5	2.0	0.9	<0.5	<0.5
WR-135A	07/26/04	<0.5	<0.5	<0.5	0.8	<0.5	1.9	0.8	<0.5	<0.5
WR-135A	01/27/05	<0.5	<0.5	<0.5	0.7	<0.5	2.0	0.8	<0.5	<0.5
WR-135A	07/28/05	<0.5	<0.5	<0.5	0.8	<0.5	2.6	1.0	<0.5	<0.5
WR-135A	01/18/06	<0.5	<0.5	<0.5	0.8	<0.5	2.7	1.0	<0.5	<0.5
WR-135A	07/21/06	<0.5	<0.5	<0.5	0.8	<0.5	1.9	0.8	<0.5	<0.5
WR-135A	01/17/07	<0.5	<0.5	<0.5	1.1	<0.5	3.2	1.3	0.5	<0.5
WR-135A	07/19/07	<0.5	<0.5	<0.5	0.9	<0.5	2.3	1.0	<0.5	<0.5
WR-135A	01/23/08	<0.5	<0.5	<0.5	0.6	<0.5	2.3	1.0	<0.5	<0.5
WR-135A	07/17/08	<0.5	<0.5	<0.5	<0.5	<0.5	1.0	<0.5	<0.5	<0.5
WR-135A	01/29/09	<0.5	<0.5	<0.5	1	<0.5	2.8	1.3	<0.5	<0.5
WR-135A	07/20/09	<0.5	<0.5	<0.5	0.6	<0.5	2.4	1.2	<0.5	<0.5
WR-135A	01/25/10	<0.5	<0.5	<0.5	0.5	<0.5	1.9	0.8	<0.5	<0.5
WR-135A	07/22/10	<0.5	<0.5	<0.5	0.6	<0.5	1.3	0.5	<0.5	<0.5
WR-135A	01/20/11	<0.5	<0.5	<0.5	0.6	<0.5	0.9	<0.5	<0.5	<0.5
WR-135A	07/25/11	<0.5	<0.5	<0.5	0.5	<0.5	0.6	<0.5	<0.5	<0.5
WR-135A	01/19/12	<0.5	<0.5	<0.5	0.7	<0.5	0.7	<0.5	<0.5	<0.5
WR-135A	07/19/12	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-135A	01/23/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-135A	07/18/13	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5
WR-135A	07/18/13	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-135A	01/22/14	<0.5	<0.5	<0.5	0.6	<0.5	0.6	<0.5	<0.5	<0.5
WR-135A	07/17/14	<0.5	<0.5	<0.5	0.8	<0.5	0.8	<0.5	<0.5	<0.5
WR-135A	01/21/15	<0.5	<0.5	<0.5	0.8	<0.5	0.5	<0.5	<0.5	<0.5
WR-135A	07/16/15	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5
WR-135A	01/20/16	<0.5	<0.5	<0.5	0.9	<0.5	0.6	<0.5	<0.5	<0.5
WR-135A	07/19/16	<0.5	<0.5	<0.5	0.6	<0.5	0.5	<0.5	<0.5	<0.5
WR-135A	02/21/17	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5
WR-135A	08/22/17	<0.5	<0.5	<0.5	0.7	<0.5	0.5	<0.5	<0.5	<0.5
WR-135A	02/28/18	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5
WR-135A	03/13/19	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5
WR-135A	05/21/20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-135A	05/17/21	<0.5	<0.5	<0.5	0.7	<0.5	0.6	<0.5	<0.5	<0.5
WR-135A	04/01/22	<0.5	<0.5	<0.5	0.594	<0.5	<0.5	<0.5	<0.5	<0.5
WR-136A	02/05/90	<0.3	<0.3	<0.4	<2	<0.4	3.2	<0.3	<1.4	<1
WR-136A	08/14/90	<0.4	<0.4	<0.4	<2	<0.4	2.9	<0.4	<0.4	<1
WR-136A	04/02/91	<0.3	<0.3	<0.3	2.2	<0.3	3.2	0.2	<1	<1
WR-136A	09/17/91	<0.3	<0.3	<0.3	<1	<0.3	3.3	<0.3	<1	<1
WR-136A	03/25/92	<0.3	<0.3	<0.3	1.3	<0.3	3.6	<0.3	<1	<1
WR-136A	08/31/92	<0.3	<0.3	<0.3	1.6	<0.3	2.9	<0.3	<1	<1
WR-136A	04/06/93	<0.3	<0.3	<0.3	<1.1	<0.3	3.5	<0.3	<1	<1
WR-136A	09/07/93	<0.3	<0.3	<0.3	<1.1	<0.3	3.2	<0.3	<1	<1
WR-136A	03/30/94	<0.3	<0.3	<0.3	<1	<0.3	1.8	<0.3	0.7	<1
WR-136A	09/26/94	<2	<2	NS	NS	<10	<2	<2	<2	<2
WR-136A	03/21/95	<0.5	<0.5	<0.5	2.3	<0.5	2.8	<0.5	1.0	<0.5
WR-136A	09/27/95	<0.5	<0.5	<0.5	0.6	<1	2.0	<0.5	<0.5	<0.5
WR-136A	12/20/95	<0.4	<0.3	<0.2	0.5	<2	1.7	<0.4	0.5	<0.4
WR-136A	03/14/96	<0.5	<0.5	<0.5	<0.5	1.1	<0.5	<0.5	<0.5	
WR-136A	06/27/96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-136A	09/23/96	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5
WR-136A	03/24/97	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5
WR-136A	09/18/97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-136A	01/12/98	<0.5	<0.5	<0.5	<1	<1	<1	<0.5	<1	<1
WR-136A	07/29/98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-136A	07/07/99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-136A	01/25/00	<.5	<0.5	<.5	<1	<1	<1	<.5	<1	<1
WR-136A	08/08/00	<0.5	<0.5	<0.5	0.6	<0.5	0.9	<0.5	<0.5	<0.5
WR-136A	01/18/01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-136A	07/24/01	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
WR-136A	01/15/02	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
WR-136A	01/15/02	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
WR-136B	01/24/02	NS	NS	NS	NS	NS	**17.0**	1.8	NS	NS
WR-136B	01/28/03	<0.5	<0.5	<0.5	2.7	<0.5	**17.9**	2.1	0.6	<0.5
WR-136B	07/23/03	<0.5	<0.5	<0.5	3.7	<0.5	**16.1**	1.8	0.7	<0.5
WR-136B	01/08/04	<0.5	<0.5	<0.5	3.6	<0.5	**15.5**	1.7	0.6	<0.5
WR-136B	07/27/04	<0.5	<0.5	<0.5	2.4	<0.5	**13.4**	1.4	0.6	<0.5
WR-136B	01/26/05	<0.5	<0.5	<0.5	0.8	<0.5	**9.0**	0.8	<0.5	<0.5
WR-136B	07/27/05	<0.5	<0.5	<0.5	1.1	<0.5	**9.5**	0.9	<0.5	<0.5
WR-136B	01/25/06	<0.5	<0.5	<0.5	0.6	<0.5	**7.5**	0.7	<0.5	<0.5
WR-136B	08/01/06	<0.5	<0.5	<0.5	2.2	<0.5	**7.4**	0.7	<0.5	<0.5
WR-136B	01/24/07	<0.5	<0.5	<0.5	2.2	<0.5	**5.8**	0.6	<0.5	<0.5
WR-136B	07/25/07	<0.5	<0.5	<0.5	2.3	<0.5	**5.4**	<0.5	0.5	<0.5
WR-136B	01/29/08	<0.5	<0.5	<0.5	1.6	<0.5	4	<0.5	0.8	<0.5
WR-136B	07/24/08	<0.5	<0.5	<0.5	2.0	<0.5	3.8	<0.5	<0.5	<0.5
WR-136B	02/03/09	<0.5	<0.5	<0.5	1.7	<0.5	2.7	<0.5	<0.5	<0.5
WR-136B	07/22/09	<0.5	<0.5	<0.5	1.6	<0.5	2.7	<0.5	<0.5	<0.5
WR-136B	01/26/10	<0.5	<0.5	<0.5	0.6	<0.5	2.5	<0.5	<0.5	<0.5
WR-136B	07/27/10	<0.5	<0.5	<0.5	<0.5	<0.5	3.2	<0.5	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-136B	01/26/11	<0.5	<0.5	<0.5	3.4	<0.5	4.8	0.5	1.1	<0.5
WR-136B	01/23/12	<0.5	<0.5	<0.5	2.7	<0.5	2.4	<0.5	<0.5	<0.5
WR-136B	01/16/13	<0.5	<0.5	<0.5	1	<0.5	1.8	<0.5	<0.5	<0.5
WR-136B	01/16/14	<0.5	<0.5	<0.5	0.6	<0.5	1.2	<0.5	<0.5	<0.5
WR-136B	01/15/15	<0.5	<0.5	<0.5	1.1	<0.5	1.9	<0.5	<0.5	<0.5
WR-136B	01/13/16	<0.5	<0.5	<0.5	<0.5	<0.5	1.3	<0.5	<0.5	<0.5
WR-136B	02/16/17	<0.5	<0.5	<0.5	<0.5	<0.5	1.4	<0.5	<0.5	<0.5
WR-172A	07/05/90	<0.4	<0.4	<0.4	<2	<0.4	<0.4	<0.4	<0.4	<1
WR-172A	10/22/90	<0.4	<0.4	<0.4	<2	<0.4	<0.4	<0.4	<0.4	<1
WR-172A	04/03/91	<0.3	<0.3	<0.3	<1	<0.3	<0.3	<0.3	<1	<1
WR-172A	09/17/91	<0.3	<0.3	<0.3	<1	<0.3	<0.4	<0.3	<1	<1
WR-172A	03/26/92	<0.3	<0.3	<0.3	<1.1	<0.3	<0.4	<0.3	<1	<1
WR-172A	08/31/92	<0.3	<0.3	<0.3	<1.1	<0.3	<0.4	<0.3	<1	<1
WR-172A	04/05/93	<0.3	<0.3	<0.3	<1.1	<0.3	<0.3	<0.3	<1	<1
WR-172A	09/07/93	<0.3	<0.3	<0.3	<1.1	<0.3	<0.4	<0.3	<1	<1
WR-172A	03/29/94	<0.3	<0.3	<0.3	<1	<0.3	<0.3	<0.3	<1	<1
WR-172A	08/01/94	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	01/18/95	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5
WR-172A	03/22/95	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	09/18/95	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
WR-172A	12/20/95	<0.4	<0.3	<0.2	<0.3	<2	<0.4	<0.4	<0.3	<0.4
WR-172A	03/14/96	<0.5	<0.5	NS	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	06/27/96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	09/25/96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	03/26/97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	09/16/97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	01/13/98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	07/28/98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	07/06/99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	01/24/00	<.5	<0.5	<.5	<1	<1	<1	<.5	<1	<1
WR-172A	08/07/00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	01/17/01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	07/23/01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	01/14/02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	07/15/02	<0.5	<0.5	<0.5	NS	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	01/27/03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	07/14/03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	01/12/04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	07/06/04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	01/10/05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	07/11/05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	01/17/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	07/26/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	07/26/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	01/11/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	07/16/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	07/16/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-172A	01/16/08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	07/14/08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	01/20/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	07/13/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	01/19/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	07/15/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	01/11/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	07/13/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	01/09/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	07/11/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	01/11/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	07/09/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	01/08/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	07/08/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	01/06/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	07/07/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	07/07/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	01/05/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	07/06/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	07/06/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	02/02/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	08/08/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	02/06/18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	03/18/19	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	05/19/20	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	05/10/21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	03/22/22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	03/22/22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-172A	08/23/23	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<0.500
WR-173A	07/12/90	<0.4	<0.4	<0.4	<2	<0.4	**5.7**	0.6	0.9	<1
WR-173A	10/22/90	0.4	<0.4	<0.4	11.8	<0.4	**22.6**	2.9	3.6	<1
WR-173A	04/03/91	0.4	<0.3	<0.3	8.4	<0.3	**22.3**	2.9	4.0	<1
WR-173A	09/17/91	0.5	<0.3	<0.3	6.8	<0.3	**25.1**	3.5	3.0	<1
WR-173A	03/26/92	0.4	<0.3	<0.3	3.2	<0.3	**22.8**	2.8	3.7	<1
WR-173A	08/31/92	0.5	<0.3	<0.3	5.1	<0.3	**22.0**	3.0	2.8	<1
WR-173A	04/05/93	0.6	<0.3	<0.3	3.1	<0.3	**23.6**	2.7	<1	<1
WR-173A	09/07/93	0.4	<0.3	<0.3	3.4	<0.3	**21.5**	3.0	4.5	<1
WR-173A	01/27/94	<0.2	0.2	<0.2	NS	<2	**17.0**	1.8	NS	<0.2
WR-173A	03/29/94	0.7	0.4	<0.3	<1	<0.3	**23.9**	2.7	3.6	<1
WR-173A	08/01/94	<0.5	<0.5	<0.5	<5	<0.5	**15.0**	2.3	1.4	<0.5
WR-173A	09/26/94	<2	<2	NS	NS	<10	**21.0**	2.2	<2	<2
WR-173A	01/18/95	0.5	<0.5	<0.5	2.3	<2	**19.0**	2.9	1.8	<0.5
WR-173A	03/22/95	0.5	<0.5	<0.5	6.9	<0.5	**21.5**	3.6	2.9	<0.5
WR-173A	09/27/95	0.5	<0.5	<0.5	2.6	<1	**20.0**	2.8	2.3	<0.5
WR-173A	12/20/95	0.4	<0.3	<0.2	3.3	<2	**17.0**	1.7	2.8	<0.4
WR-173A	03/14/96	0.5	<0.5	NS	5.9	<0.5	**19.6**	2.6	2.4	<0.5
WR-173A	06/27/96	0.5	<0.5	<0.5	2.9	<0.5	**21.0**	1.8	2.4	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-173A	09/23/96	0.6	<0.5	<0.5	5.9	<0.5	**19.4**	2.7	3.3	<0.5
WR-173A	03/24/97	<0.5	<0.5	<0.5	3.5	<0.5	**15.9**	2.9	3.3	<0.5
WR-173A	09/10/99	<0.5	NS	<0.5	<3.0	<1.0	**9.7**	1.4	<1.0	<1.0
WR-173A	01/15/02	NS	NS	NS	NS	NS	3.3	<0.5	NS	NS
WR-173A	07/21/03	<0.5	<0.5	<0.5	1.3	<0.5	4.6	0.6	0.8	<0.5
WR-173A	07/21/03	<0.5	<0.5	<0.5	1.3	<0.5	4.6	0.9	0.9	<0.5
WR-173A	01/07/04	<0.5	<0.5	<0.5	1.6	<0.5	4.6	0.7	0.8	<0.5
WR-173A	07/26/04	<0.5	<0.5	<0.5	1.8	<0.5	**6.2**	0.9	1.4	<0.5
WR-173A	01/27/05	<0.5	<0.5	<0.5	1.6	<0.5	**8.3**	1.0	1.6	<0.5
WR-173A	07/28/05	<0.5	<0.5	<0.5	1.0	<0.5	4.2	0.6	0.9	<0.5
WR-173A	01/18/06	<0.5	<0.5	<0.5	0.9	<0.5	3.6	<0.5	0.8	<0.5
WR-173A	07/21/06	<0.5	<0.5	<0.5	1.0	<0.5	3.3	<0.5	0.7	<0.5
WR-173A	01/17/07	<0.5	<0.5	<0.5	0.8	<0.5	3.3	<0.5	0.6	<0.5
WR-173A	07/19/07	<0.5	<0.5	<0.5	1.0	<0.5	3.6	0.6	0.7	<0.5
WR-173A	01/23/08	<0.5	<0.5	<0.5	0.7	<0.5	3.0	<0.5	0.6	<0.5
WR-173A	07/17/08	<0.5	<0.5	<0.5	0.6	<0.5	2.3	<0.5	<0.5	<0.5
WR-173A	01/26/09	<0.5	<0.5	<0.5	0.5	<0.5	2.3	<0.5	<0.5	<0.5
WR-173A	07/20/09	<0.5	<0.5	<0.5	<0.5	<0.5	2.5	<0.5	<0.5	<0.5
WR-173A	01/25/10	<0.5	<0.5	<0.5	<0.5	<0.5	2.3	<0.5	<0.5	<0.5
WR-173A	01/25/10	<0.5	<0.5	<0.5	<0.5	<0.5	2.4	<0.5	<0.5	<0.5
WR-173A	07/22/10	<0.5	<0.5	<0.5	<0.5	<0.5	2.0	<0.5	<0.5	<0.5
WR-173A	01/20/11	<0.5	<0.5	<0.5	<0.5	<0.5	2.1	<0.5	<0.5	<0.5
WR-173A	07/25/11	<0.5	<0.5	<0.5	0.8	<0.5	2.3	<0.5	0.5	<0.5
WR-173A	01/19/12	<0.5	<0.5	<0.5	0.8	<0.5	1.6	<0.5	<0.5	<0.5
WR-173A	07/19/12	<0.5	<0.5	<0.5	<0.5	<0.5	1.6	<0.5	<0.5	<0.5
WR-173A	01/23/13	<0.5	<0.5	<0.5	<0.5	<0.5	1.6	<0.5	<0.5	<0.5
WR-173A	07/18/13	<0.5	<0.5	<0.5	<0.5	<0.5	1.8	<0.5	<0.5	<0.5
WR-173A	01/22/14	<0.5	<0.5	<0.5	<0.5	<0.5	1.4	<0.5	<0.5	<0.5
WR-173A	01/21/15	<0.5	<0.5	<0.5	0.5	<0.5	1.6	<0.5	<0.5	<0.5
WR-173A	07/16/15	<0.5	<0.5	<0.5	<0.5	<0.5	1.5	<0.5	<0.5	<0.5
WR-173A	01/20/16	<0.5	<0.5	<0.5	0.7	<0.5	2	<0.5	<0.5	<0.5
WR-173A	07/19/16	<0.5	<0.5	<0.5	<0.5	<0.5	1.7	<0.5	<0.5	<0.5
WR-173A	02/21/17	<0.5	<0.5	<0.5	0.6	<0.5	2	<0.5	<0.5	<0.5
WR-173B	01/13/98	<0.5	<0.5	<0.5	<1	<1	2.0	<0.5	<1	<1
WR-173B	07/28/98	<0.5	<0.5	<0.5	NS	<0.5	0.9	<0.5	<0.5	<0.5
WR-173B	07/06/99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	01/26/00	<.5	<0.5	<.5	<1	<1	<1	<.5	<1	<1
WR-173B	08/07/00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	01/17/01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	07/23/01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	01/14/02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	07/15/02	<0.5	<0.5	<0.5	NS	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	01/27/03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	07/14/03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	01/12/04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	01/10/05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	07/11/05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-173B	01/09/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	07/12/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	07/12/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	01/08/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	07/11/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	07/11/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	01/14/08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	01/14/08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	07/09/08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	07/09/08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	01/14/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	01/14/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	07/08/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	01/12/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	07/15/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	01/11/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	01/11/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	01/09/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	01/11/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	01/11/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	01/08/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	01/08/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	01/06/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	01/06/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	02/02/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	02/02/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	02/06/18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	03/14/19	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	03/14/19	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	05/08/20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	05/11/21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	05/11/21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	03/22/22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-173B	04/12/23	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-174A	07/16/90	<0.4	<0.4	<0.4	2.6	<0.4	1.6	<0.4	<0.4	<1
WR-174A	10/22/90	<0.4	<0.4	<0.4	18.0	<0.4	4.3	0.7	0.4	<1
WR-174A	04/03/91	<0.3	<0.3	<0.3	7.7	<0.3	3.5	0.6	<1	<1
WR-174A	09/17/91	<0.3	<0.3	<0.3	5.8	<0.3	**5.4**	0.8	<1	<1
WR-174A	03/26/92	<0.3	<0.3	<0.3	2.3	<0.3	4.5	0.7	<1	<1
WR-174A	08/31/92	<0.3	<0.3	<0.3	3.7	<0.3	4.6	0.9	<1	<1
WR-174A	04/03/93	<0.3	<0.3	<0.3	2.4	<0.3	4.7	0.9	<1	<1
WR-174A	09/07/93	<0.3	<0.3	<0.3	2.4	<0.3	**5.1**	0.9	<1	<1
WR-174A	01/27/94	<0.2	<0.2	<0.2	NS	<2	3.0	0.3	NS	<0.2
WR-174A	03/30/94	<0.3	<0.3	<0.3	<1	<0.3	4.5	1.0	0.8	<1
WR-174A	08/01/94	<0.5	<0.5	<0.5	<5	<0.5	3.2	<0.5	<0.5	<0.5
WR-174A	09/26/94	<2	<2	NS	NS	<10	3.3	<2	<2	<2
WR-174A	01/18/95	<0.5	<0.5	<0.5	4.4	<2	4.3	1.1	1.1	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-174A	03/22/95	<0.5	<0.5	<0.5	10.3	<0.5	**5.2**	1.3	1.0	<0.5
WR-174A	09/28/95	<0.5	<0.5	<0.5	3.7	<1	4.7	1.1	0.7	<0.5
WR-174A	12/20/95	<0.4	<0.3	<0.2	5.0	<2	4.6	0.7	0.9	<0.4
WR-174A	03/13/96	<0.5	<0.5	NS	8.5	<0.5	<0.5	<0.5	0.9	<0.5
WR-174A	06/27/96	<0.5	<0.5	<0.5	5.0	<0.5	**5.9**	0.9	0.9	<0.5
WR-174A	09/25/96	<0.5	<0.5	<0.5	8.3	<0.5	**6.1**	1.6	1.1	<0.5
WR-174A	03/26/97	<0.5	<0.5	<0.5	6.4	<0.5	**5.6**	2.0	1.0	<0.5
WR-174A	09/10/99	<0.5	NS	<0.5	<3.0	<1.0	**7.5**	2.7	<1.0	<1.0
WR-174A	01/15/02	NS	NS	NS	NS	NS	**7.2**	2.7	NS	NS
WR-174A	07/21/03	<0.5	<0.5	<0.5	4.3	<0.5	**7.7**	3.2	1.0	<0.5
WR-174A	01/07/04	<0.5	<0.5	<0.5	5.0	<0.5	**8.2**	3.2	0.8	<0.5
WR-174A	07/26/04	<0.5	<0.5	<0.5	4.4	<0.5	**8.4**	3.4	1.0	<0.5
WR-174A	01/27/05	<0.5	<0.5	<0.5	3.0	<0.5	**7.4**	2.8	0.8	<0.5
WR-174A	07/28/05	<0.5	<0.5	<0.5	3.4	<0.5	**8.4**	3.1	0.8	<0.5
WR-174A	01/18/06	<0.5	<0.5	<0.5	3.4	<0.5	**9.2**	3.2	1.0	<0.5
WR-174A	01/18/06	<0.5	<0.5	<0.5	3.6	<0.5	**8.9**	3.2	0.9	<0.5
WR-174A	07/21/06	<0.5	<0.5	<0.5	4.3	<0.5	**8.4**	3.6	0.8	<0.5
WR-174A	07/21/06	<0.5	<0.5	<0.5	4.4	<0.5	**8.7**	3.7	1.0	<0.5
WR-174A	01/17/07	<0.5	<0.5	<0.5	3.1	<0.5	**7.4**	3.2	0.6	<0.5
WR-174A	07/19/07	<0.5	<0.5	<0.5	3.3	<0.5	**6.8**	3.1	0.7	<0.5
WR-174A	07/19/07	<0.5	<0.5	<0.5	3.3	<0.5	**6.9**	3.0	0.7	<0.5
WR-174A	01/23/08	<0.5	<0.5	<0.5	3.2	<0.5	**7.4**	3.0	0.8	<0.5
WR-174A	07/17/08	<0.5	<0.5	<0.5	2.9	<0.5	**6.9**	3.0	0.7	<0.5
WR-174A	07/17/08	<0.5	<0.5	<0.5	2.8	<0.5	**6.6**	2.9	0.6	<0.5
WR-174A	01/26/09	<0.5	<0.5	<0.5	3.5	<0.5	**6.5**	2.9	0.6	<0.5
WR-174A	07/20/09	<0.5	<0.5	<0.5	2.7	<0.5	**6.7**	3.2	0.6	<0.5
WR-174A	01/25/10	<0.5	<0.5	<0.5	2.4	<0.5	**6.8**	3.0	0.6	<0.5
WR-174A	07/22/10	<0.5	<0.5	<0.5	1.9	<0.5	**5.6**	2.3	0.5	<0.5
WR-174A	01/20/11	<0.5	<0.5	<0.5	2.5	<0.5	**6**	2.9	<0.5	<0.5
WR-174A	01/20/11	<0.5	<0.5	<0.5	2.5	<0.5	**6**	2.8	<0.5	<0.5
WR-174A	08/16/11	<0.5	<0.5	<0.5	2.5	<0.5	**5.3**	2.4	<0.5	<0.5
WR-174A	01/19/12	<0.5	<0.5	<0.5	2.8	<0.5	4.9	2.3	<0.5	<0.5
WR-174A	07/19/12	<0.5	<0.5	<0.5	1.9	<0.5	4.3	2.1	<0.5	<0.5
WR-174A	01/23/13	<0.5	<0.5	<0.5	1.4	<0.5	4.2	2.2	<0.5	<0.5
WR-174A	01/23/13	<0.5	<0.5	<0.5	1.5	<0.5	4.2	2.3	<0.5	<0.5
WR-174A	07/18/13	<0.5	<0.5	<0.5	1.3	<0.5	3.8	2.2	<0.5	<0.5
WR-174A	01/22/14	<0.5	<0.5	<0.5	1.2	<0.5	3.7	2.2	<0.5	<0.5
WR-174A	07/17/14	<0.5	<0.5	<0.5	1.6	<0.5	3.8	2.1	<0.5	<0.5
WR-174A	07/17/14	<0.5	<0.5	<0.5	1.7	<0.5	4.1	2.2	<0.5	<0.5
WR-174A	01/21/15	<0.5	<0.5	<0.5	<0.5	<0.5	2.3	1.6	<0.5	<0.5
WR-174A	07/16/15	<0.5	<0.5	<0.5	1.2	<0.5	3.6	1.7	<0.5	<0.5
WR-174A	01/20/16	<0.5	<0.5	<0.5	1.9	<0.5	4.2	1.9	<0.5	<0.5
WR-174A	01/20/16	<0.5	<0.5	<0.5	1.9	<0.5	4.1	1.9	<0.5	<0.5
WR-174A	07/19/16	<0.5	<0.5	<0.5	1	<0.5	3.5	1.6	<0.5	<0.5
WR-174A	02/21/17	<0.5	<0.5	<0.5	1.3	<0.5	3.3	1.5	<0.5	<0.5
WR-174A	02/21/17	<0.5	<0.5	<0.5	1.2	<0.5	3.7	1.6	<0.5	<0.5
WR-174A	08/23/17	<0.5	<0.5	<0.5	1.4	<0.5	4.1	1.9	<0.5	<0.5
WR-174A	02/28/18	<0.5	<0.5	<0.5	0.9	<0.5	2.9	1.4	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-174A	03/13/19	<0.5	<0.5	<0.5	1	<0.5	2.9	1.3	<0.5	<0.5
WR-174A	05/21/20	<0.5	<0.5	<0.5	0.6	<0.5	2.3	1.2	<0.5	<0.5
WR-174A	05/17/21	<0.5	<0.5	<0.5	0.7	<0.5	2.6	1.3	<0.5	<0.5
WR-174A	05/17/21	<0.5	<0.5	<0.5	0.7	<0.5	2.5	1.6	<0.5	<0.5
WR-174A	04/01/22	<0.5	<0.5	<0.5	0.831	<0.5	2.40	1.51	<0.5	<0.5
WR-174A	04/14/23	<0.5	<0.5	<0.5	1.05	<0.5	2.66	1.21	<0.5	<0.5
WR-174A	04/14/23	<0.5	<0.5	<0.5	0.861	<0.5	2.53	1.15	<0.5	<0.5
WR-175A	07/18/90	<0.4	<0.4	<0.4	<2	<0.4	<0.4	<0.4	<0.4	<1
WR-175A	10/22/90	<0.4	<0.4	<0.4	<2	<0.4	<0.4	<0.4	<0.4	<1
WR-175A	04/03/91	<0.3	<0.3	<0.3	<1	<0.3	<0.3	<0.3	<1	<1
WR-175A	09/17/91	<0.3	<0.3	<0.3	<1	<0.3	<0.4	<0.3	<1	<1
WR-175A	03/26/92	<0.3	<0.3	<0.3	<1.1	<0.3	<0.4	<0.3	<1	<1
WR-175A	09/01/92	<0.3	<0.3	<0.3	<1.1	0.6	<0.4	<0.3	<1	<1
WR-175A	04/06/93	<0.3	<0.3	<0.3	<1.1	<0.3	<0.3	<0.3	<1	<1
WR-175A	09/07/93	<0.3	<0.3	<0.3	<1.1	<0.3	<0.4	<0.3	<1	<1
WR-175A	01/27/94	<0.2	<0.2	<0.2	NS	<2	<0.2	<0.2	NS	<0.2
WR-175A	03/30/94	<0.3	<0.3	<0.3	<1	<0.3	<0.3	<0.3	<1	<1
WR-175A	08/01/94	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	01/18/95	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5
WR-175A	03/22/95	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	09/27/95	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
WR-175A	12/21/95	<0.4	<0.3	<0.2	<0.3	<2	0.6	<0.4	<0.3	<0.4
WR-175A	03/13/96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	06/27/96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	09/25/96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	03/26/97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	09/16/97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	01/13/98	<0.5	<0.5	<0.5	<1	<1	<1	<0.5	<1	<1
WR-175A	07/28/98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	07/06/99	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	01/24/00	<.5	<0.5	<.5	<1	<1	<1	<.5	<1	<1
WR-175A	08/07/00	<0.5	0.6	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5
WR-175A	01/17/01	<0.5	0.7	<0.5	0.6	<0.5	0.5	<0.5	<0.5	<0.5
WR-175A	07/23/01	<0.5	0.6	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
WR-175A	01/14/02	<0.5	0.7	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
WR-175A	07/15/02	<0.5	1.0	<0.5	NS	<0.5	1.0	0.8	<0.5	<0.5
WR-175A	01/27/03	<0.5	1.5	<0.5	0.7	<0.5	1.1	0.8	<0.5	<0.5
WR-175A	07/14/03	<0.5	1.5	<0.5	0.5	<0.5	1.3	0.8	<0.5	<0.5
WR-175A	01/12/04	<0.5	1.8	<0.5	0.6	<0.5	1.3	0.9	<0.5	<0.5
WR-175A	07/06/04	<0.5	1.9	<0.5	<0.5	<0.5	1.3	0.9	<0.5	<0.5
WR-175A	01/10/05	<0.5	2.0	<0.5	<0.5	<0.5	1.2	0.8	<0.5	<0.5
WR-175A	07/12/05	<0.5	2.5	<0.5	0.6	<0.5	1.3	0.9	<0.5	<0.5
WR-175A	01/19/06	<0.5	2.4	<0.5	<0.5	<0.5	1.2	0.8	<0.5	<0.5
WR-175A	07/25/06	<0.5	2.6	<0.5	0.6	<0.5	1.3	0.9	<0.5	<0.5
WR-175A	02/01/07	<0.5	3.4	<0.5	0.6	<0.5	1.2	0.8	<0.5	<0.5
WR-175A	07/16/07	<0.5	2.3	<0.5	<0.5	<0.5	1.2	0.7	<0.5	<0.5
WR-175A	01/16/08	<0.5	2.4	<0.5	<0.5	<0.5	1.0	0.6	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-175A	01/16/08	<0.5	2.4	<0.5	<0.5	<0.5	1.0	0.6	<0.5	<0.5
WR-175A	07/15/08	<0.5	2.3	<0.5	<0.5	<0.5	1.0	0.6	<0.5	<0.5
WR-175A	07/15/08	<0.5	2.2	<0.5	<0.5	<0.5	1.0	0.6	<0.5	<0.5
WR-175A	01/21/09	<0.5	1.8	<0.5	<0.5	<0.5	0.9	0.6	<0.5	<0.5
WR-175A	01/21/09	<0.5	1.8	<0.5	<0.5	<0.5	0.8	0.5	<0.5	<0.5
WR-175A	07/14/09	<0.5	1.5	<0.5	<0.5	<0.5	1.0	0.5	<0.5	<0.5
WR-175A	01/19/10	<0.5	1.6	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5
WR-175A	07/20/10	<0.5	1.2	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5
WR-175A	01/13/11	<0.5	1.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5
WR-175A	01/13/11	<0.5	1.4	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5
WR-175A	07/20/11	<0.5	1.3	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
WR-175A	01/18/12	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	08/06/12	<0.5	1	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5
WR-175A	01/17/13	<0.5	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	07/16/13	<0.5	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	01/14/14	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	07/10/14	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	01/08/15	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	07/09/15	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	01/07/16	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	07/11/16	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	02/08/17	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	08/10/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	02/08/18	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	04/15/19	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	05/08/20	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	05/10/21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	03/23/22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-175A	04/13/23	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	07/23/90	<0.4	<0.4	<0.4	<2	<0.4	<0.4	<0.4	<0.4	<1
WR-176A	10/22/90	<0.4	<0.4	<0.4	<2	<0.4	<0.4	<0.4	<0.4	<1
WR-176A	04/03/91	<0.3	<0.3	<0.3	<1	<0.3	<0.3	<0.3	<1	<1
WR-176A	09/17/91	<0.3	<0.3	<0.3	<1	<0.3	<0.4	<0.3	<1	<1
WR-176A	03/26/92	<0.3	<0.3	<0.3	<1.1	<0.3	<0.4	<0.3	<1	<1
WR-176A	09/01/92	<0.3	<0.3	<0.3	<1.1	0.6	<0.4	<0.3	<1	<1
WR-176A	04/06/93	<0.3	<0.3	<0.3	<1.1	<0.3	<0.3	<0.3	<1	<1
WR-176A	09/07/93	<0.3	<0.3	<0.3	<1.1	<0.3	<0.4	<0.3	<1	<1
WR-176A	01/27/94	<0.2	<0.2	<0.2	NS	<2	<0.2	<0.2	NS	<0.2
WR-176A	03/29/94	<0.3	<0.3	<0.3	<1	<0.3	<0.3	<0.3	<1	<1
WR-176A	08/01/94	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	01/18/95	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5
WR-176A	03/22/95	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	09/27/95	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
WR-176A	12/20/95	<0.4	<0.3	<0.2	<0.3	<2	<0.4	<0.4	<0.3	<0.4
WR-176A	03/13/96	<0.5	<0.5	NS	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	06/27/96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	09/25/96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-176A	03/26/97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	09/16/97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	01/13/98	<0.5	<0.5	<0.5	<1	<1	<1	<0.5	<1	<1
WR-176A	07/28/98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	07/06/99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	01/24/00	<0.5	<0.5	<.5	<1	<1	<1	<0.5	<1	<1
WR-176A	08/08/00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	01/17/01	<0.5	<0.5	<0.5	2.1	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	07/23/01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	01/14/02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	08/05/02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	01/27/03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	07/14/03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	01/12/04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	07/06/04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	01/10/05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	07/11/05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	01/18/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	07/26/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	01/08/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	07/11/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	01/14/08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	07/09/08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	01/14/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	07/08/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	01/12/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	07/15/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	01/11/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	07/13/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	07/13/11	<0.5	<0.5	<0.5	<2	<3	<0.5	<0.5	<2	<0.5
WR-176A	01/09/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	07/10/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	07/10/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	01/11/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	07/09/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	07/09/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	01/08/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	07/08/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	01/06/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	07/07/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	01/05/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	07/06/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	02/02/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	08/08/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	08/08/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	02/06/18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	02/06/18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	03/14/19	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-176A	05/08/20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	05/10/21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	03/22/22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-176A	04/13/23	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-184A	12/19/90	<0.4	<0.4	<0.4	<2	<0.4	<0.4	<0.4	<0.4	<1
WR-184A	01/28/91	<0.4	<0.4	<0.4	<2	<0.4	0.4	<0.4	<0.4	<1
WR-184A	04/03/91	<0.3	<0.3	<0.3	<1	<0.3	0.4	<0.3	<1	<1
WR-184A	09/17/91	<0.3	<0.3	<0.3	<1	<0.3	0.3	<0.3	<1	<1
WR-184A	03/26/92	<0.3	<0.3	<0.3	<1.1	<0.3	<0.4	<0.3	<1	<1
WR-184A	08/31/92	<0.3	<0.3	<0.3	<1.1	<0.3	0.4	<0.3	<1	<1
WR-184A	04/06/93	<0.3	<0.3	<0.3	<1.1	<0.3	<0.3	<0.3	<1	<1
WR-184A	09/07/93	<0.3	<0.3	<0.3	<1.1	<0.3	<0.4	<0.3	<1	<1
WR-184A	03/29/94	<0.3	<0.3	<0.3	<1	<0.3	0.4	<0.3	<1	<1
WR-184A	09/26/94	<2	<2	NS	NS	<10	<2	<2	<2	<2
WR-184A	03/21/95	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-184A	09/27/95	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
WR-184A	12/20/95	<0.4	<0.3	<0.2	<0.3	<2	<0.4	<0.4	<0.3	<0.4
WR-184A	03/13/96	<0.5	<0.5	NS	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-184A	06/27/96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-184A	09/25/96	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5
WR-184A	03/26/97	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5
WR-184A	09/16/97	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5
WR-184A	01/12/98	<0.5	<0.5	<0.5	<1	<1	<1	<0.5	<1	<1
WR-184A	07/28/98	<0.5	<0.5	<0.5	NS	<0.5	<0.5	<0.5	<0.5	<0.5
WR-184A	07/06/99	<0.5	<0.5	<0.5	0.7	<0.5	1.3	<0.5	<0.5	<0.5
WR-184A	01/24/00	<.5	<0.5	<.5	<1	<1	1.5	<.5	<1	<1
WR-184A	08/09/00	<0.5	<0.5	<0.5	1.0	<0.5	3.1	0.6	<0.5	<0.5
WR-184A	01/17/01	<0.5	<0.5	<0.5	1.2	<0.5	3.4	0.8	<0.5	<0.5
WR-184A	07/23/01	<0.5	<0.5	<0.5	0.9	<0.5	4.7	1.0	<0.5	<0.5
WR-184A	01/14/02	<0.5	<0.5	<0.5	0.9	<0.5	4.6	0.9	<0.5	<0.5
WR-184A	07/16/02	<0.5	<0.5	<0.5	1.2	<0.5	4.7	1.0	<0.5	<0.5
WR-184A	01/28/03	<0.5	<0.5	<0.5	1.4	<0.5	**7.2**	1.2	<0.5	<0.5
WR-184A	07/17/03	<0.5	<0.5	<0.5	2.6	<0.5	**8.3**	1.5	<0.5	<0.5
WR-184A	01/15/04	<0.5	<0.5	<0.5	2.4	<0.5	**8.3**	1.6	<0.5	<0.5
WR-184A	07/19/04	<0.5	<0.5	<0.5	1.6	<0.5	**8.5**	1.4	<0.5	<0.5
WR-184A	01/13/05	<0.5	<0.5	<0.5	1.9	<0.5	**11.3**	1.6	<0.5	<0.5
WR-184A	07/13/05	<0.5	<0.5	<0.5	4.0	<0.5	**16.0**	2.6	0.5	<0.5
WR-184A	11/15/05	<1.0	<0.5	<0.5	4.7	<3.0	**15.0**	2.2	<2.0	<0.5
WR-184A	01/12/06	<0.5	<0.5	<0.5	3.6	<0.5	**17.3**	2.2	0.5	<0.5
WR-184A	01/12/06	<0.5	<0.5	<0.5	3.6	<0.5	**18.1**	2.5	0.6	<0.5
WR-184A	07/17/06	<0.5	<0.5	<0.5	3.2	<0.5	**11.6**	1.6	<0.5	<0.5
WR-184A	01/16/07	<0.5	<0.5	<0.5	2.3	<0.5	**9.4**	1.2	<0.5	<0.5
WR-184A	07/18/07	<0.5	<0.5	<0.5	2.1	<0.5	**7.4**	1	<0.5	<0.5
WR-184A	01/17/08	<0.5	<0.5	<0.5	2.3	<0.5	**9.3**	1.3	<0.5	<0.5
WR-184A	07/16/08	<0.5	<0.5	<0.5	2.1	<0.5	**7.0**	1.0	<0.5	<0.5
WR-184A	01/22/09	<0.5	<0.5	<0.5	2.0	<0.5	**7.6**	1.1	<0.5	<0.5
WR-184A	07/15/09	<0.5	<0.5	<0.5	1.8	<0.5	**8.5**	1.3	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-184A	01/20/10	<0.5	<0.5	<0.5	1.3	<0.5	**8.4**	1.2	<0.5	<0.5
WR-184A	07/21/10	<0.5	<0.5	<0.5	0.8	<0.5	**8.6**	1.4	<0.5	<0.5
WR-184A	01/19/11	<0.5	<0.5	<0.5	1.8	<0.5	**10.2**	1.5	<0.5	<0.5
WR-184A	07/21/11	<0.5	<0.5	<0.5	1.6	<0.5	**10.8**	1.4	<0.5	<0.5
WR-184A	01/18/12	<0.5	<0.5	<0.5	1.5	<0.5	5	0.7	<0.5	<0.5
WR-184A	08/06/12	<0.5	<0.5	<0.5	0.6	<0.5	4.3	0.6	<0.5	<0.5
WR-184A	01/17/13	<0.5	<0.5	<0.5	1.1	<0.5	**5.2**	0.8	<0.5	<0.5
WR-184A	07/16/13	<0.5	<0.5	<0.5	1.9	<0.5	**7.3**	1.0	<0.5	<0.5
WR-184A	01/16/14	<0.5	<0.5	<0.5	1.2	<0.5	**6.6**	1.0	<0.5	<0.5
WR-184A	07/15/14	<0.5	<0.5	<0.5	2.2	<0.5	**10.1**	1.5	<0.5	<0.5
WR-184A	01/15/15	<0.5	<0.5	<0.5	1.8	<0.5	**8.5**	1.2	<0.5	<0.5
WR-184A	07/14/15	<0.5	<0.5	<0.5	1.3	<0.5	**7.4**	1.0	<0.5	<0.5
WR-184A	01/19/16	<0.5	<0.5	<0.5	1.9	<0.5	**7.3**	1.0	<0.5	<0.5
WR-184A	07/14/16	<0.5	<0.5	<0.5	1	<0.5	**6.3**	0.8	<0.5	<0.5
WR-184A	02/15/17	<0.5	<0.5	<0.5	1.2	<0.5	**7.9**	0.9	<0.5	<0.5
WR-184A	02/15/17	<0.5	<0.5	<0.5	1.2	<0.5	**8.4**	0.9	<0.5	<0.5
WR-184A	08/17/17	<0.5	<0.5	<0.5	1.1	<0.5	**7.2**	1.0	<0.5	<0.5
WR-184A	02/20/18	<0.5	<0.5	<0.5	1.7	<0.5	**9.7**	1.0	<0.5	<0.5
WR-184A	04/02/19	<0.5	<0.5	<0.5	1.1	<0.5	**9.0**	1.0	<0.5	<0.5
WR-184A	05/20/20	<0.5	<0.5	<0.5	0.9	<0.5	**8.1**	1.1	<0.5	<0.5
WR-184A	05/19/21	<0.5	<0.5	<0.5	0.8	<0.5	**6.0**	1.0	<0.5	<0.5
WR-184A	05/19/21	<0.5	<0.5	<0.5	0.7	<0.5	**5.4**	1.1	<0.5	<0.5
WR-184A	03/29/22	<0.5	<0.5	<0.5	1.14	<0.5	**8.7**	1.08	<0.5	<0.5
WR-184A	04/19/23	<4.00	<4.00	<4.00	<4.00	<4.00	**5.24**	<4.00	<4.00	<1.00
WR-184A	04/19/23	<4.00	<4.00	<4.00	<4.00	<4.00	**6.26**	<4.00	<4.00	<1.00
WR-185A	12/21/90	<0.4	<0.4	<0.4	<2	<0.4	<0.4	<0.4	<0.4	<1
WR-185A	01/28/91	<0.4	<0.4	<0.4	<2	<0.4	<0.4	<0.4	<0.4	<1
WR-185A	04/03/91	<0.3	<0.3	<0.3	<1	<0.3	<0.3	<0.3	<1	<1
WR-185A	09/17/91	<0.3	<0.3	<0.3	<1	<0.3	<0.4	<0.3	<1	<1
WR-185A	03/26/92	<0.3	<0.3	<0.3	<1.1	<0.3	<0.4	<0.3	<1	<1
WR-185A	09/01/92	<0.3	<0.3	<0.3	<1.1	0.6	<0.4	<0.3	<1	<1
WR-185A	04/06/93	<0.3	<0.3	<0.3	<1.1	<0.3	<0.3	<0.3	<1	<1
WR-185A	09/07/93	<0.3	<0.3	<0.3	<1.1	<0.3	<0.4	<0.3	<1	<1
WR-185A	03/30/94	<0.3	<0.3	<0.3	<1	<0.3	<0.3	<0.3	<1	<1
WR-185A	09/27/94	<2	<2	NS	NS	<10	<2	<2	<2	<2
WR-185A	03/23/95	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	09/27/95	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
WR-185A	03/13/96	<0.5	<0.5	NS	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	06/27/96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	09/25/96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	03/26/97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	09/16/97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	01/13/98	<0.5	<0.5	<0.5	<1	<1	<1	<0.5	<1	<1
WR-185A	07/28/98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	07/06/99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	01/24/00	<.5	<0.5	<.5	<1	<1	<1	<0.5	<1	<1
WR-185A	08/08/00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-185A	01/17/01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	07/23/01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	01/14/02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	07/16/02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	01/28/03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	07/15/03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	01/13/04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	07/07/04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	01/12/05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	07/12/05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	07/12/05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	01/18/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	07/26/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	01/10/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	07/12/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	07/12/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	01/14/08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	07/10/08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	01/15/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	07/09/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	01/12/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	01/12/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	07/15/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	07/15/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	01/11/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	07/13/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	01/09/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	01/09/12	<0.5	<0.5	<0.5	<2	<5	<0.5	<0.5	<2	<0.5
WR-185A	07/11/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	01/11/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	07/10/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	01/09/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	07/08/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	01/06/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	07/07/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	01/06/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	07/06/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	02/02/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	08/08/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	02/07/18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	03/18/19	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	05/18/20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	05/11/21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	03/22/22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-185A	08/24/23	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<0.500
WR-253B	01/25/02	NS	NS	NS	NS	NS	<0.5	<0.5	NS	NS
WR-253B	01/31/03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-253B	07/29/03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-253B	01/20/04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-253B	07/28/04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-253B	01/25/05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-253B	07/25/05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-272B	01/23/02	NS	NS	NS	NS	NS	<0.5	<0.5	NS	NS
WR-272B	01/30/03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-272B	07/24/03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-272B	01/15/04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-272B	07/28/04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-272B	01/25/05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-272B	07/25/05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-272B	01/18/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-272B	01/18/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-272B	07/24/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-272B	07/24/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-272B	01/17/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	01/23/02	NS	NS	NS	NS	NS	<0.5	<0.5	NS	NS
WR-325A	01/30/03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	07/29/03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	01/15/04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	07/28/04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	01/25/05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	07/25/05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	07/25/05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	01/19/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	01/19/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	07/24/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	07/24/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	01/17/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	01/24/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	07/19/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	01/18/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	07/17/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	01/16/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	07/16/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	01/14/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	07/11/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	01/14/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	07/14/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	01/20/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	07/18/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	02/16/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	08/24/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-325A	08/24/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-355A	08/09/00	<0.5	1.8	<0.5	3.0	<0.5	**9.3**	**6.9**	0.6	<0.5
WR-355A	01/18/01	2.3	4.4	<0.5	6.2	<0.5	**41.0**	**14.4**	2.1	<0.5
WR-355A	07/25/01	<0.5	0.9	<0.5	1.2	<0.5	**11.8**	4.3	0.5	<0.5
WR-355A	01/16/02	<0.5	<0.5	<0.5	0.8	<0.5	4.5	2.3	<0.5	<0.5
WR-355A	07/17/02	<0.5	<0.5	<0.5	1.0	<0.5	3.9	2.8	<0.5	<0.5
WR-355A	01/30/03	<0.5	0.8	<0.5	1.1	<0.5	**6.0**	3.6	<0.5	<0.5
WR-355A	07/17/03	<0.5	0.8	<0.5	1.0	<0.5	4.5	3.0	<0.5	<0.5
WR-355A	01/15/04	<0.5	<0.5	<0.5	1.2	<0.5	4.5	3.0	<0.5	<0.5
WR-355A	07/08/04	<0.5	<0.5	<0.5	0.9	<0.5	4.1	2.8	<0.5	<0.5
WR-355A	01/13/05	<0.5	<0.5	<0.5	0.7	<0.5	4.8	2.5	<0.5	<0.5
WR-355A	07/13/05	<0.5	<0.5	<0.5	1.0	<0.5	4.4	2.7	<0.5	<0.5
WR-355A	01/11/06	<0.5	<0.5	<0.5	1.2	<0.5	**9.3**	4.1	<0.5	<0.5
WR-355A	01/11/06	<0.5	<0.5	<0.5	1.6	<0.5	**10.7**	4.4	<0.5	<0.5
WR-355A	07/13/06	<0.5	<0.5	<0.5	1.6	<0.5	**8.0**	4.2	<0.5	<0.5
WR-355A	01/16/07	<0.5	<0.5	<0.5	0.7	<0.5	**6.0**	2.1	<0.5	<0.5
WR-355A	07/18/07	<0.5	<0.5	<0.5	1.2	<0.5	**7.7**	2.5	<0.5	<0.5
WR-355A	01/22/08	<0.5	<0.5	<0.5	1.0	<0.5	**7.9**	2.4	<0.5	<0.5
WR-355A	07/16/08	<0.5	<0.5	<0.5	1.7	<0.5	**13.0**	4.2	<0.5	<0.5
WR-355A	01/22/09	<0.5	<0.5	<0.5	1.7	<0.5	**10.7**	4.3	<0.5	<0.5
WR-355A	07/16/09	<0.5	<0.5	<0.5	1.7	<0.5	**9.8**	4.4	<0.5	<0.5
WR-355A	01/20/10	<0.5	<0.5	<0.5	0.8	<0.5	**7.6**	4.3	<0.5	<0.5
WR-355A	07/20/10	<0.5	<0.5	<0.5	2.3	<0.5	**8.2**	4.7	0.6	<0.5
WR-355A	01/19/11	<0.5	<0.5	<0.5	1.4	<0.5	**5.9**	3.5	<0.5	<0.5
WR-355A	01/19/11	<0.5	<0.5	<0.5	1.8	<0.5	**6.3**	3.6	<0.5	<0.5
WR-355A	07/21/11	<0.5	<0.5	<0.5	2.1	<0.5	**6.7**	3.7	<0.5	<0.5
WR-355A	07/21/11	<0.5	<0.5	<0.5	2.3	<3	**6.44**	3.59	<2	<0.5
WR-355A	01/18/12	<0.5	<0.5	<0.5	1.5	<0.5	3.5	2.1	<0.5	<0.5
WR-355A	07/23/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-355A	07/23/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-355A	01/24/13	<0.5	<0.5	<0.5	<0.5	<0.5	2.6	1.4	<0.5	<0.5
WR-355A	07/22/13	<0.5	<0.5	<0.5	0.7	<0.5	3	1.6	<0.5	<0.5
WR-355A	01/23/14	<0.5	<0.5	<0.5	0.7	<0.5	4	2.1	<0.5	<0.5
WR-355A	07/21/14	<0.5	<0.5	<0.5	<0.5	<0.5	1.5	0.8	<0.5	<0.5
WR-355A	01/20/15	<0.5	<0.5	<0.5	<0.5	<0.5	1.4	0.8	<0.5	<0.5
WR-355A	01/20/15	<0.5	<0.5	<0.5	<0.5	<0.5	1.5	0.8	<0.5	<0.5
WR-355A	07/20/15	<0.5	<0.5	<0.5	<0.5	<0.5	2.8	1.5	<0.5	<0.5
WR-355A	01/21/16	<0.5	<0.5	<0.5	0.6	<0.5	3.1	1.6	<0.5	<0.5
WR-355A	07/20/16	<0.5	<0.5	<0.5	<0.5	<0.5	1.8	1.0	<0.5	<0.5
WR-355A	02/22/17	<0.5	<0.5	<0.5	<0.5	<0.5	1.4	0.8	<0.5	<0.5
WR-355A	08/23/17	<0.5	<0.5	<0.5	<0.5	<0.5	1.9	1	<0.5	<0.5
WR-355A	02/22/18	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
WR-355A	02/22/18	<0.5	<0.5	<0.5	<0.5	<0.5	1.1	0.6	<0.5	<0.5
WR-355A	03/13/19	<0.5	<0.5	<0.5	<0.5	<0.5	2.9	1.5	<0.5	<0.5
WR-355A	05/21/20	<0.5	<0.5	<0.5	<0.5	<0.5	2.8	1.3	<0.5	<0.5
WR-355A	05/17/21	<0.5	<0.5	<0.5	<0.5	<0.5	1.4	0.7	<0.5	<0.5
WR-355A	05/17/21	<0.5	<0.5	<0.5	<0.5	<0.5	1.3	0.6	<0.5	<0.5
WR-355A	04/01/22	<0.5	<0.5	<0.5	<0.5	<0.5	1.15	0.634	<0.5	<0.5
WR-355A	04/18/23	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<0.500

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-360A	08/09/00	<0.5	**13.2**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-360A	01/18/01	<0.5	**22.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-360A	07/25/01	<0.5	**8.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-360A	01/16/02	<0.5	**7.3**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-360A	07/17/02	<0.5	5.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-360A	01/30/03	<0.5	6.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-360A	07/15/03	<0.5	4.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-360A	01/14/04	<0.5	2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-360A	07/08/04	<0.5	1.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-360A	01/11/05	<0.5	1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-360A	07/12/05	<0.5	1.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-360A	01/09/06	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-360A	01/09/06	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-360A	07/11/06	<0.5	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-360A	01/08/07	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-360A	01/08/07	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-360A	07/14/09	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5
WR-360A	07/14/09	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5
WR-360A	01/12/11	<0.5	0.5	<0.5	0.8	<0.5	0.6	<0.5	<0.5	<0.5
WR-360A	01/11/12	<0.5	<0.5	<0.5	0.8	<0.5	0.5	<0.5	<0.5	<0.5
WR-360A	01/18/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-360A	01/13/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-360A	01/07/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-360A	01/11/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-360A	02/08/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-360A	02/08/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-361A	08/09/00	<0.5	**10.8**	<0.5	1.2	<0.5	1.4	0.8	0.5	<0.5
WR-361A	01/18/01	<0.5	4.2	<0.5	2.6	<0.5	2.8	2.1	0.6	<0.5
WR-361A	07/25/01	<0.5	6.4	<0.5	1.7	<0.5	3.8	2.9	0.6	<0.5
WR-361A	01/16/02	<0.5	**15.7**	<0.5	1.1	<0.5	2.2	1.4	<0.5	<0.5
WR-361A	07/17/02	0.8	**19.1**	<0.5	0.9	<0.5	2.0	1.2	<0.5	<0.5
WR-361A	01/30/03	0.8	**22.4**	<0.5	1.2	<0.5	2.4	1.4	0.5	<0.5
WR-361A	07/16/03	1.0	**25.4**	<0.5	0.8	<0.5	2.3	1.2	<0.5	<0.5
WR-361A	01/14/04	<0.5	**8.8**	<0.5	0.7	<0.5	1.1	0.6	<0.5	<0.5
WR-361A	07/07/04	0.8	4.8	<0.5	0.5	<0.5	1.0	0.6	<0.5	<0.5
WR-361A	01/13/05	1.1	3.9	<0.5	<0.5	<0.5	1.3	0.8	<0.5	<0.5
WR-361A	07/12/05	1.2	3.3	<0.5	0.5	<0.5	1.1	0.7	<0.5	<0.5
WR-361A	01/10/06	1.3	3.7	<0.5	0.5	<0.5	1.2	0.6	<0.5	<0.5
WR-361A	07/11/06	0.8	3.6	<0.5	0.5	<0.5	1.1	0.6	<0.5	<0.5
WR-361A	01/10/07	0.6	1.9	<0.5	<0.5	<0.5	1.2	0.6	<0.5	<0.5
WR-361A	01/21/09	<0.5	<0.5	<0.5	0.6	<0.5	0.7	<0.5	<0.5	<0.5
WR-361A	07/14/09	<0.5	<0.5	<0.5	0.6	<0.5	1.4	<0.5	<0.5	<0.5
WR-361A	01/20/10	<0.5	<0.5	<0.5	0.7	<0.5	2.0	<0.5	<0.5	<0.5
WR-361A	01/20/10	<0.5	<0.5	<0.5	0.7	<0.5	2.2	<0.5	<0.5	<0.5
WR-361A	07/19/10	<0.5	<0.5	<0.5	0.9	<0.5	2.9	0.5	<0.5	<0.5
WR-361A	01/18/11	<0.5	<0.5	<0.5	1.2	<0.5	4.1	0.8	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-361A	07/18/11	<0.5	<0.5	<0.5	0.8	<0.5	3.8	0.7	<0.5	<0.5
WR-361A	01/17/12	<0.5	<0.5	<0.5	1.5	<0.5	4.2	0.8	<0.5	<0.5
WR-361A	07/18/12	<0.5	<0.5	<0.5	0.8	<0.5	4	0.7	<0.5	<0.5
WR-361A	01/17/13	<0.5	<0.5	<0.5	<0.5	<0.5	3.6	0.7	<0.5	<0.5
WR-361A	01/17/13	<0.5	<0.5	<0.5	<0.5	<0.5	4	0.7	<0.5	<0.5
WR-361A	07/15/13	<0.5	<0.5	<0.5	<0.5	<0.5	3.5	0.7	<0.5	<0.5
WR-361A	01/16/14	<0.5	<0.5	<0.5	<0.5	<0.5	3.6	0.7	<0.5	<0.5
WR-361A	07/14/14	<0.5	<0.5	<0.5	0.5	<0.5	3.4	0.6	<0.5	<0.5
WR-361A	07/14/14	<0.5	<0.5	<0.5	0.6	<0.5	3.6	0.7	<0.5	<0.5
WR-361A	01/14/15	<0.5	<0.5	<0.5	0.6	<0.5	3.9	0.8	<0.5	<0.5
WR-361A	07/13/15	<0.5	<0.5	<0.5	<0.5	<0.5	3.1	0.6	<0.5	<0.5
WR-361A	01/13/16	<0.5	<0.5	<0.5	<0.5	<0.5	3	0.6	<0.5	<0.5
WR-361A	07/13/16	<0.5	<0.5	<0.5	<0.5	<0.5	2.4	<0.5	<0.5	<0.5
WR-361A	02/14/17	<0.5	<0.5	<0.5	<0.5	<0.5	2.3	<0.5	<0.5	<0.5
WR-361A	08/16/17	<0.5	<0.5	<0.5	<0.5	<0.5	2.8	<0.5	<0.5	<0.5
WR-361A	08/16/17	<0.5	<0.5	<0.5	<0.5	<0.5	2.8	<0.5	<0.5	<0.5
WR-372A	12/14/00	<0.5	<0.5	<0.5	1.4	<0.5	**6.7**	3.9	1.0	<0.5
WR-372A	01/18/01	<0.5	<0.5	<0.5	7.2	<0.5	**13.0**	**6.4**	2.9	<0.5
WR-372A	01/24/02	NS	NS	NS	NS	NS	**14.0**	**7.3**	NS	NS
WR-372A	01/30/03	<0.5	0.6	<0.5	12.2	<0.5	**16.8**	**9.2**	4.4	<0.5
WR-372A	01/15/04	0.6	0.7	<0.5	18.9	<0.5	**20.0**	**10.4**	5.1	0.6
WR-372A	01/24/05	<0.5	<0.5	<0.5	8.2	<0.5	**15.1**	**6.6**	3.6	<0.5
WR-372A	01/24/05	<0.5	<0.5	<0.5	8.2	<0.5	**15.1**	**6.6**	3.6	<0.5
WR-372A	01/30/06	0.5	0.6	<0.5	10.7	<0.5	**18.6**	**7.9**	5.0	<0.5
WR-372A	01/30/06	0.6	0.5	<0.5	11.1	<0.5	**19.2**	**8.1**	5.2	<0.5
WR-372A	01/29/07	<0.5	<0.5	<0.5	9.4	<0.5	**12.5**	**6.9**	2.7	<0.5
WR-372A	01/29/07	<0.5	<0.5	<0.5	9.2	<0.5	**12.7**	**6.8**	2.5	<0.5
WR-372A	01/27/11	<0.5	<0.5	<0.5	6	<0.5	**12**	**5.5**	1.8	<0.5
WR-372A	01/27/11	<0.5	<0.5	<0.5	5.6	<0.5	**11.2**	**5.2**	1.7	<0.5
WR-372A	01/24/12	<0.5	<0.5	<0.5	4.9	<0.5	**9.5**	4.2	1.1	<0.5
WR-372A	01/24/13	<0.5	<0.5	<0.5	2.5	<0.5	**6.8**	3.1	0.7	<0.5
WR-372A	01/21/14	<0.5	<0.5	<0.5	3.8	<0.5	**7.4**	3.4	0.8	<0.5
WR-372A	01/15/15	<0.5	<0.5	<0.5	3.5	<0.5	**6.4**	2.9	0.7	<0.5
WR-372A	01/14/16	<0.5	<0.5	<0.5	3	<0.5	**8.3**	3.4	0.9	<0.5
WR-372A	02/15/17	<0.5	<0.5	<0.5	1.7	<0.5	**6.5**	2.8	0.6	<0.5
WR-372A	02/20/18	<0.5	<0.5	<0.5	2.2	<0.5	**6.2**	2.6	<0.5	<0.5
WR-372A	03/20/19	<0.5	<0.5	<0.5	1.8	<0.5	**7.1**	2.9	0.5	<0.5
WR-372A	05/19/20	<0.5	<0.5	<0.5	1.6	<0.5	**6.2**	2.4	<0.5	<0.5
WR-372A	05/19/20	<0.5	<0.5	<0.5	2.7	<0.5	**6.4**	2.5	0.5	<0.5
WR-372A	05/19/21	<0.5	<0.5	<0.5	2.4	<0.5	**5.6**	2.6	0.5	<0.5
WR-372A	03/29/22	<0.5	<0.5	<0.5	1.16	<0.5	**6.1**	2.36	<0.5	<0.5
WR-372A	04/19/23	<4.00	<4.00	<4.00	<4.00	<4.00	4.50	<4.00	<4.00	<1.00
WR-373A	01/17/01	1.3	<0.5	2.7	3.4	**9.0**	**18.0**	**9.5**	3.2	<0.5
WR-373A	01/22/02	NS	NS	NS	NS	NS	**19.0**	**11.0**	NS	NS
WR-373A	01/30/03	1.0	<0.5	2.8	3.2	<0.5	**11.3**	**6.2**	1.9	<0.5
WR-373A	01/14/04	0.9	<0.5	1.8	6.2	<0.5	**13.5**	**6.9**	2.6	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-373A	01/24/05	0.5	<0.5	0.7	3.0	<0.5	**10.3**	4.4	2.0	<0.5
WR-373A	01/24/05	0.5	<0.5	0.7	3.0	<0.5	**10.3**	4.4	2.0	<0.5
WR-373A	01/26/06	<0.5	<0.5	0.5	3.6	<0.5	**12.4**	**5.4**	2.8	<0.5
WR-373A	01/26/06	<0.5	<0.5	0.6	3.6	<0.5	**11.7**	**5.2**	2.6	<0.5
WR-373A	01/25/07	0.7	<0.5	0.6	3.5	<0.5	**10.3**	**5.7**	1.9	<0.5
WR-373A	07/28/10	<0.5	<0.5	<0.5	<0.5	<0.5	1.6	0.6	<0.5	<0.5
WR-373A	01/25/11	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5
WR-373A	01/23/12	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
WR-373A	01/18/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-373A	01/14/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-373A	01/13/15	<0.5	<0.5	<0.5	0.7	<0.5	0.8	<0.5	<0.5	<0.5
WR-373A	01/13/15	<0.5	<0.5	<0.5	0.7	<0.5	0.8	<0.5	<0.5	<0.5
WR-373A	02/03/16	<0.5	<0.5	<0.5	0.9	<0.5	1	<0.5	<0.5	<0.5
WR-373A	02/13/17	<0.5	<0.5	<0.5	0.8	<0.5	1.3	0.6	<0.5	<0.5
WR-374A	01/08/01	0.8	1.4	<0.5	6.0	5.0	**21.0**	**8.2**	5.2	<0.5
WR-374A	01/17/01	1.2	2.1	<0.5	8.0	**8.5**	**28.0**	**11.0**	8.7	0.5
WR-374A	05/02/01	1.8	3.5	<0.5	17.0	**9.1**	**33.0**	**14.0**	15.0	1.1
WR-374A	01/22/02	NS	NS	NS	NS	NS	**31.0**	**13.0**	NS	NS
WR-374A	01/29/03	1.6	3.6	<0.5	8.4	**8.4**	**28.6**	**13.5**	9.2	0.7
WR-374A	01/14/04	1.4	3.0	<0.5	9.8	4.8	**26.2**	**11.5**	8.3	<0.5
WR-374A	01/24/05	0.9	2.0	<0.5	4.8	2.3	**19.0**	**7.7**	4.9	<0.5
WR-374A	08/01/05	1.0	2.4	<0.5	5.8	1.8	**22.3**	**9.3**	6.2	<0.5
WR-374A	02/01/06	1.1	2.9	<0.5	9.4	1.9	**24.9**	**10.6**	8.6	<0.5
WR-374A	02/01/06	1.2	3.0	<0.5	9.4	2.0	**25.0**	**10.5**	8.5	0.6
WR-374A	01/30/07	1.0	2.1	<0.5	6.9	0.7	**17.9**	**8.1**	5.4	<0.5
WR-374A	01/27/11	0.5	0.7	<0.5	3.6	<0.5	**9.5**	4	1.5	<0.5
WR-374A	01/24/12	<0.5	<0.5	<0.5	4.3	<0.5	**7.9**	3.2	1.4	<0.5
WR-374A	01/23/13	<0.5	<0.5	<0.5	1.5	<0.5	3.9	1.8	<0.5	<0.5
WR-374A	04/29/13	<0.5	<0.5	<0.5	2.9	<0.5	**6**	2.4	1.4	<0.5
WR-374A	01/21/14	<0.5	<0.5	<0.5	3.5	<0.5	**6.5**	2.6	1.5	<0.5
WR-374A	01/15/15	<0.5	<0.5	<0.5	2.8	<0.5	4.2	1.6	0.8	<0.5
WR-374A	01/13/16	<0.5	<0.5	<0.5	1.8	<0.5	**6.3**	2.5	1.1	<0.5
WR-374A	02/15/17	0.5	0.7	<0.5	2.6	<0.5	**11.6**	4.7	2.1	<0.5
WR-374A	02/26/18	0.6	<0.5	<0.5	1.1	<0.5	**9.4**	4.7	0.5	<0.5
WR-374A	02/26/18	0.7	<0.5	<0.5	1.4	<0.5	**11.1**	**5.5**	0.7	<0.5
WR-374A	03/21/19	0.8	<0.5	1	0.5	0.8	**9.2**	**5.5**	<0.5	<0.5
WR-374A	03/21/19	0.9	<0.5	1.2	0.6	0.8	**10.4**	**5.9**	<0.5	<0.5
WR-374A	05/29/20	1	<0.5	1.9	0.6	1.5	**9**	**5.2**	0.6	<0.5
WR-374A	05/20/21	1.7	0.7	3.6	1.2	<0.5	**11.9**	**8.2**	0.7	<0.5
WR-374A	05/20/21	1.6	0.6	3.4	1.3	<0.5	**12.3**	**8.1**	1.2	<0.5
WR-374A	03/30/22	1.92	0.657	3.18	1.09	3.11	**14.2**	**8.7**	0.787	<0.5
WR-375A	12/21/00	<0.5	<0.5	<0.5	<0.5	<0.5	3.2	0.9	<0.5	<0.5
WR-375A	01/26/01	<0.5	<0.5	<0.5	4.6	<0.5	**10.0**	2.3	0.9	<0.5
WR-375A	01/25/02	NS	NS	NS	NS	NS	**13.0**	3.1	NS	NS
WR-375A	01/29/03	<0.5	<0.5	<0.5	7.3	<0.5	**14.0**	3.7	2.8	<0.5
WR-375A	01/14/04	<0.5	<0.5	<0.5	11.6	<0.5	**15.3**	4.2	3.7	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-375A	01/26/05	<0.5	<0.5	<0.5	6.3	<0.5	**13.9**	3.3	3.0	<0.5
WR-375A	01/26/05	<0.5	<0.5	<0.5	6.3	<0.5	**13.9**	3.3	3.0	<0.5
WR-375A	01/26/06	<0.5	<0.5	<0.5	5.9	<0.5	**13.1**	3.7	2.3	<0.5
WR-375A	01/25/07	<0.5	<0.5	<0.5	6.7	<0.5	**11.6**	3.9	2.2	<0.5
WR-375A	07/28/10	<0.5	<0.5	<0.5	5.4	<0.5	**10.6**	2.2	1.8	<0.5
WR-375A	01/26/11	<0.5	<0.5	<0.5	6.6	<0.5	**10.4**	3	1.6	<0.5
WR-375A	01/24/12	<0.5	<0.5	<0.5	5.2	<0.5	**5.9**	1.7	1	<0.5
WR-375A	01/22/13	<0.5	<0.5	<0.5	1.6	<0.5	**5.1**	1.4	0.7	<0.5
WR-375A	01/21/14	<0.5	<0.5	<0.5	3.4	<0.5	**6**	1.7	0.5	<0.5
WR-375A	01/15/15	<0.5	<0.5	<0.5	3.5	<0.5	**5.2**	1.6	1	<0.5
WR-375A	01/14/16	<0.5	<0.5	<0.5	4	<0.5	**9.2**	2.5	1.6	<0.5
WR-375A	02/15/17	<0.5	<0.5	<0.5	2.5	<0.5	**8.8**	2.4	1.3	<0.5
WR-375A	02/20/18	<0.5	<0.5	<0.5	3.2	<0.5	**10.4**	2.7	1.4	<0.5
WR-375A	03/21/19	<0.5	<0.5	<0.5	1.8	<0.5	**10.5**	3.0	1.2	<0.5
WR-375A	05/20/20	<0.5	<0.5	<0.5	1.2	<0.5	**8.2**	2.2	1	<0.5
WR-375A	05/19/21	<0.5	<0.5	<0.5	1.3	<0.5	**9.4**	3.2	1	<0.5
WR-375A	03/30/22	<0.5	<0.5	<0.5	0.73	<0.5	**12.2**	3.76	0.751	<0.5
WR-375A	04/17/23	<4.00	<4.00	<4.00	<4.00	<4.00	**11.9**	4.00	<4.00	<1.00
WR-376A	01/10/01	<0.5	<0.5	<0.5	1.6	<0.5	**21.0**	2.8	<0.5	<0.5
WR-376A	01/18/01	<0.5	<0.5	<0.5	2.3	<0.5	**20.0**	2.7	<0.5	<0.5
WR-376A	01/21/02	NS	NS	NS	NS	NS	**30.0**	4.0	NS	NS
WR-376A	01/27/03	<0.5	<0.5	<0.5	4.2	<0.5	**25.4**	3.7	0.5	<0.5
WR-376A	01/13/04	<0.5	<0.5	<0.5	2.8	<0.5	**15.6**	2.4	<0.5	<0.5
WR-376A	01/20/05	<0.5	<0.5	<0.5	2.8	<0.5	**18.0**	2.2	<0.5	<0.5
WR-376A	01/20/05	<0.5	<0.5	<0.5	2.8	<0.5	**18.0**	2.2	<0.5	<0.5
WR-376A	08/02/05	<0.5	<0.5	<0.5	3.9	<0.5	**20.7**	3.0	<0.5	<0.5
WR-376A	08/02/05	<0.5	<0.5	<0.5	3.8	<0.5	**20.9**	3.0	<0.5	<0.5
WR-376A	01/31/06	<0.5	<0.5	<0.5	6.0	<0.5	**21.9**	3.0	0.6	<0.5
WR-376A	01/29/07	<0.5	<0.5	<0.5	6.2	<0.5	**21.4**	3.0	0.5	<0.5
WR-376A	02/05/08	<0.5	<0.5	<0.5	2.7	<0.5	**15.4**	2.2	<0.5	<0.5
WR-376A	07/17/08	<0.5	<0.5	<0.5	3.5	<0.5	**14.8**	2.2	<0.5	<0.5
WR-376A	01/26/09	<0.5	<0.5	<0.5	3.8	<0.5	**13.0**	1.9	<0.5	<0.5
WR-376A	07/20/09	<0.5	<0.5	<0.5	3.0	<0.5	**14.1**	2.1	<0.5	<0.5
WR-376A	01/25/10	<0.5	<0.5	<0.5	2.8	<0.5	**14.0**	2.0	<0.5	<0.5
WR-376A	07/22/10	<0.5	<0.5	<0.5	2.6	<0.5	**11.8**	1.7	<0.5	<0.5
WR-376A	01/20/11	<0.5	<0.5	<0.5	1.7	<0.5	**7.2**	1.2	<0.5	<0.5
WR-376A	07/25/11	<0.5	<0.5	<0.5	4.1	<0.5	**13.9**	1.8	<0.5	<0.5
WR-376A	01/19/12	<0.5	<0.5	<0.5	2.5	<0.5	**9**	1.5	<0.5	<0.5
WR-376A	07/23/12	<0.5	<0.5	<0.5	1.5	<0.5	4.3	0.6	<0.5	<0.5
WR-376A	08/27/12	<0.5	<0.5	<0.5	1.2	<0.5	**6.4**	1	<0.5	<0.5
WR-376A	01/24/13	<0.5	<0.5	<0.5	1.7	<0.5	**7.2**	1.2	<0.5	<0.5
WR-376A	07/22/13	<0.5	<0.5	<0.5	0.8	<0.5	4.2	1	<0.5	<0.5
WR-376A	01/08/14	<0.5	<0.5	<0.5	<0.5	<0.5	2.3	<0.5	<0.5	<0.5
WR-376A	01/22/14	<0.5	<0.5	<0.5	1.3	<0.5	**7**	1.1	<0.5	<0.5
WR-376A	07/16/14	<0.5	<0.5	<0.5	2.9	<0.5	**9.6**	1.5	<0.5	<0.5
WR-376A	01/22/15	<0.5	<0.5	<0.5	1	<0.5	4	0.7	<0.5	<0.5
WR-376A	08/11/16	<0.5	<0.5	<0.5	1.2	<0.5	**7.6**	1.2	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-376A	02/16/17	<0.5	<0.5	<0.5	1.5	<0.5	**6.4**	1	<0.5	<0.5
WR-376A	08/21/17	<0.5	<0.5	<0.5	0.9	<0.5	4.9	0.9	<0.5	<0.5
WR-378A	01/19/01	<0.5	<0.5	<0.5	0.6	<0.5	0.8	<0.5	<0.5	<0.5
WR-378A	01/26/01	<0.5	<0.5	<0.5	1.0	<0.5	1.1	<0.5	<0.5	<0.5
WR-378A	05/02/01	<0.5	<0.5	<0.5	1.8	<0.5	0.8	<0.5	<0.5	<0.5
WR-378A	01/21/02	NS	NS	NS	NS	NS	0.9	<0.5	NS	NS
WR-378A	01/27/03	<0.5	<0.5	<0.5	0.5	<0.5	0.7	<0.5	<0.5	<0.5
WR-378A	07/24/03	<0.5	<0.5	<0.5	0.7	<0.5	0.6	<0.5	<0.5	<0.5
WR-378A	07/29/04	<0.5	<0.5	<0.5	1.7	<0.5	0.7	<0.5	<0.5	<0.5
WR-378A	01/19/05	<0.5	<0.5	<0.5	0.6	<0.5	0.7	<0.5	<0.5	<0.5
WR-378A	07/26/05	<0.5	<0.5	<0.5	1.9	<0.5	1.5	<0.5	<0.5	<0.5
WR-378A	01/19/06	<0.5	<0.5	<0.5	1.5	<0.5	0.7	<0.5	<0.5	<0.5
WR-378A	07/25/06	<0.5	<0.5	<0.5	1.2	<0.5	0.8	<0.5	<0.5	<0.5
WR-378A	01/18/07	<0.5	<0.5	<0.5	1.4	<0.5	0.9	<0.5	<0.5	<0.5
WR-378A	07/23/07	<0.5	<0.5	<0.5	1.0	<0.5	0.6	<0.5	<0.5	<0.5
WR-378A	01/24/08	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5
WR-378A	01/24/08	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5
WR-378A	07/21/08	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5
WR-378A	07/21/08	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5
WR-378A	02/02/09	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5
WR-378A	02/02/09	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-378A	07/21/09	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-378A	07/21/09	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-378A	01/26/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-378A	01/26/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-378A	07/26/10	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5
WR-378A	01/24/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-378A	01/24/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-378A	07/27/11	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5
WR-378A	01/25/12	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5
WR-378A	07/18/12	<0.5	<0.5	<0.5	<0.5	<0.5	1.6	<0.5	<0.5	<0.5
WR-378A	01/29/13	<0.5	<0.5	<0.5	<0.5	<0.5	3.6	<0.5	<0.5	<0.5
WR-378A	07/17/13	<0.5	<0.5	<0.5	<0.5	<0.5	1.6	<0.5	<0.5	<0.5
WR-378A	01/22/14	<0.5	<0.5	<0.5	<0.5	<0.5	3	<0.5	<0.5	<0.5
WR-378A	07/16/14	<0.5	<0.5	<0.5	<0.5	<0.5	1.5	<0.5	<0.5	<0.5
WR-378A	01/20/15	<0.5	<0.5	<0.5	<0.5	<0.5	1.6	<0.5	<0.5	<0.5
WR-378A	07/15/15	<0.5	<0.5	<0.5	<0.5	<0.5	1.9	<0.5	<0.5	<0.5
WR-378A	01/20/16	<0.5	<0.5	<0.5	<0.5	<0.5	2.6	<0.5	<0.5	<0.5
WR-378A	07/18/16	<0.5	<0.5	<0.5	<0.5	<0.5	2.4	<0.5	<0.5	<0.5
WR-378A	02/16/17	<0.5	<0.5	<0.5	<0.5	<0.5	**5.8**	<0.5	<0.5	<0.5
WR-378A	08/24/17	<0.5	<0.5	<0.5	<0.5	<0.5	1.0	<0.5	<0.5	<0.5
WR-378A	02/21/18	<0.5	<0.5	<0.5	<0.5	<0.5	2.4	<0.5	<0.5	<0.5
WR-378A	03/18/19	<0.5	<0.5	<0.5	<0.5	<0.5	1.7	<0.5	<0.5	<0.5
WR-378A	05/14/20	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5
WR-378A	05/06/21	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5
WR-378A	04/04/22	<0.5	<0.5	<0.5	<0.5	<0.5	0.57	<0.5	<0.5	<0.5
WR-378A	04/19/23	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<1.00

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-379A	01/24/01	<0.5	<0.5	<0.5	3.8	<0.5	**14.0**	1.8	3.0	<0.5
WR-379A	01/25/02	NS	NS	NS	NS	NS	**17.0**	1.7	NS	NS
WR-379A	01/28/03	<0.5	<0.5	<0.5	5.0	<0.5	**17.4**	1.8	3.9	<0.5
WR-379A	01/12/04	<0.5	<0.5	<0.5	5.7	<0.5	**14.0**	1.8	3.3	<0.5
WR-379A	01/20/05	0.6	<0.5	<0.5	3.6	<0.5	**14.4**	1.8	3.7	<0.5
WR-379A	01/20/05	0.6	<0.5	<0.5	3.6	<0.5	**14.4**	1.8	3.7	<0.5
WR-379A	01/26/06	5.3	<0.5	<0.5	2.6	<0.5	**10.1**	2.0	4.8	<0.5
WR-379A	01/24/07	10.5	<0.5	1.0	7.4	**32.4**	**8.6**	3.6	8.9	<0.5
WR-379A	02/05/08	3.0	<0.5	<0.5	1.9	<0.5	**5.5**	1.5	2.6	<0.5
WR-379A	07/17/08	2.5	<0.5	<0.5	1.9	<0.5	5.0	1.4	2.0	<0.5
WR-379A	01/26/09	1.2	<0.5	<0.5	1.8	<0.5	3.7	1.0	1.5	<0.5
WR-379A	07/20/09	1.0	<0.5	<0.5	1.8	<0.5	3.9	0.9	1.3	<0.5
WR-379A	01/25/10	1.3	<0.5	<0.5	1.5	<0.5	4.8	1.1	1.6	<0.5
WR-379A	07/22/10	0.8	<0.5	<0.5	0.6	<0.5	2.9	0.7	0.8	<0.5
WR-379A	01/20/11	0.7	<0.5	<0.5	1	<0.5	3	0.6	0.9	<0.5
WR-379A	07/25/11	1	<0.5	<0.5	2.6	<0.5	**6.7**	1.3	1.9	<0.5
WR-379A	01/19/12	1.7	<0.5	<0.5	4.6	<0.5	**7.1**	1.8	2.1	<0.5
WR-379A	07/23/12	1.6	<0.5	<0.5	2.3	<0.5	**7.6**	2	1.6	<0.5
WR-379A	01/24/13	1.6	<0.5	<0.5	2.5	<0.5	**8.2**	2.1	1.7	<0.5
WR-379A	07/17/13	1.3	<0.5	<0.5	4.6	<0.5	**13.3**	2.9	2.9	<0.5
WR-379A	01/29/14	<0.5	<0.5	<0.5	0.6	<0.5	1.7	<0.5	<0.5	<0.5
WR-379A	07/16/14	<0.5	<0.5	<0.5	2.2	<0.5	**5.4**	1.1	1	<0.5
WR-379A	01/22/15	<0.5	<0.5	<0.5	1.4	<0.5	2.9	0.6	0.5	<0.5
WR-379A	07/15/15	<0.5	<0.5	<0.5	0.6	<0.5	1.8	<0.5	<0.5	<0.5
WR-379A	01/20/16	<0.5	<0.5	<0.5	<0.5	<0.5	1.1	<0.5	<0.5	<0.5
WR-379A	07/18/16	<0.5	<0.5	<0.5	0.5	<0.5	1.4	<0.5	<0.5	<0.5
WR-379A	02/16/17	<0.5	<0.5	<0.5	<0.5	<0.5	1.4	<0.5	<0.5	<0.5
WR-379A	08/24/17	<0.5	<0.5	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5
WR-379A	02/21/18	<0.5	<0.5	<0.5	0.7	<0.5	1.8	<0.5	<0.5	<0.5
WR-379A	03/18/19	<0.5	<0.5	<0.5	<0.5	<0.5	1.3	<0.5	<0.5	<0.5
WR-379A	05/14/20	<0.5	<0.5	<0.5	0.6	<0.5	1.8	0.5	<0.5	<0.5
WR-379A	05/06/21	<0.5	<0.5	<0.5	0.7	<0.5	2	0.5	<0.5	<0.5
WR-379A	04/04/22	<0.5	<0.5	<0.5	0.531	<0.5	1.61	<0.5	<0.5	<0.5
WR-379A	04/04/22	<0.5	<0.5	<0.5	<0.5	<0.5	1.62	<0.5	<0.5	<0.5
WR-379A	08/24/23	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<1.00
WR-379B	07/28/15	<0.16	<0.19	<0.13	ND	<0.28	2.4	0.5	<0.25	<0.22
WR-379B	02/22/18	0.8	<0.5	<0.5	3	<0.5	**11.1**	2.5	1.5	<0.5
WR-379B	03/13/19	1.3	<0.5	<0.5	2.2	<0.5	**9.6**	2.3	1.8	<0.5
WR-379B	05/21/20	1.2	<0.5	0.5	1.6	<0.5	**8.8**	2.3	1.3	<0.5
WR-379B	05/17/21	1	<0.5	<0.5	1.4	<0.5	**6.9**	2.1	1.2	<0.5
WR-379B	04/01/22	<0.5	<0.5	<0.5	1.21	<0.5	**5.34**	0.997	0.791	<0.5
WR-379B	04/19/23	<2.00	<2.00	<2.00	<2.00	<2.00	**7.59**	<2.00	<2.00	<0.500
WR-380A	02/08/01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-380A	01/24/02	NS	NS	NS	NS	NS	<0.5	<0.5	NS	NS
WR-380A	01/29/03	<0.5	<0.5	<0.5	0.5	<0.5	0.7	<0.5	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-380A	07/24/03	<0.5	<0.5	<0.5	0.8	<0.5	1.4	<0.5	1.0	<0.5
WR-380A	01/13/04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-380A	07/29/04	<0.5	<0.5	<0.5	0.7	<0.5	1.7	<0.5	0.8	<0.5
WR-380A	01/19/05	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5
WR-380A	01/19/05	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5
WR-380A	07/26/05	<0.5	<0.5	<0.5	1.0	<0.5	2.2	<0.5	1.5	<0.5
WR-380A	07/26/05	<0.5	<0.5	<0.5	1.1	<0.5	1.9	<0.5	1.5	<0.5
WR-380A	01/23/06	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
WR-380A	01/23/06	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5
WR-380A	07/25/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-380A	07/25/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-380A	01/17/07	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5
WR-380A	01/17/07	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
WR-380A	07/23/07	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5
WR-380A	01/24/08	<0.5	<0.5	<0.5	0.5	<0.5	3.0	0.6	0.7	<0.5
WR-380A	07/21/08	<0.5	<0.5	<0.5	<0.5	<0.5	1.8	<0.5	0.6	<0.5
WR-380A	02/02/09	<0.5	<0.5	<0.5	<0.5	<0.5	1.1	<0.5	<0.5	<0.5
WR-380A	07/22/09	<0.5	<0.5	<0.5	1.1	<0.5	3.5	0.6	1.3	<0.5
WR-380A	01/27/10	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5
WR-380A	07/26/10	<0.5	<0.5	<0.5	0.6	<0.5	2.1	<0.5	0.7	<0.5
WR-380A	01/25/11	<0.5	<0.5	<0.5	0.6	<0.5	2.1	<0.5	0.6	<0.5
WR-380A	07/19/11	<0.5	<0.5	<0.5	0.6	<0.5	1.8	<0.5	0.7	<0.5
WR-380A	01/12/12	<0.5	<0.5	<0.5	0.5	<0.5	1.3	<0.5	<0.5	<0.5
WR-380A	07/17/12	<0.5	<0.5	<0.5	<0.5	<0.5	2.3	0.5	0.5	<0.5
WR-380A	01/16/13	<0.5	<0.5	<0.5	<0.5	<0.5	1.3	<0.5	<0.5	<0.5
WR-380A	07/11/13	<0.5	<0.5	<0.5	<0.5	<0.5	1.5	<0.5	<0.5	<0.5
WR-380A	01/15/14	0.5	<0.5	<0.5	<0.5	<0.5	3.2	0.8	0.5	<0.5
WR-380A	07/31/14	<0.5	<0.5	<0.5	<0.5	<0.5	2.3	<0.5	0.6	<0.5
WR-380A	01/14/15	0.5	<0.5	<0.5	<0.5	<0.5	2.6	0.5	0.5	<0.5
WR-380A	07/09/15	0.5	<0.5	<0.5	<0.5	<0.5	2.7	0.6	0.7	<0.5
WR-380A	01/13/16	<0.5	<0.5	<0.5	0.5	<0.5	1	<0.5	<0.5	<0.5
WR-380A	07/11/16	<0.5	<0.5	<0.5	<0.5	<0.5	1.8	<0.5	0.5	<0.5
WR-380A	02/13/17	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5
WR-380A	08/15/17	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5
WR-380A	02/13/18	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5
WR-380A	03/19/19	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5
WR-380A	05/19/20	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5	<0.5
WR-380A	05/12/21	0.6	<0.5	<0.5	<0.5	<0.5	2	0.6	<0.5	<0.5
WR-380A	03/28/22	<0.5	<0.5	<0.5	<0.5	<0.5	1.23	<0.5	<0.5	<0.5
WR-380A	04/17/23	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<1.00
WR-465A	09/22/05	<0.5	<0.5	<0.5	<1.0	<2.0	<0.5	<0.5	<1.0	<0.5
WR-465A	11/15/05	<1.0	<0.5	<0.5	<2.0	<3.0	<0.5	<0.5	<2.0	<0.5
WR-465A	11/15/05	<1.0	<0.5	<0.5	<2.0	<3.0	<0.5	<0.5	<2.0	<0.5
WR-465A	01/10/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	01/10/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	07/11/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	07/12/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-465A	01/15/08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	07/10/08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	01/14/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	07/09/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	07/15/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	01/12/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	07/14/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	01/10/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	07/16/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	01/14/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	07/11/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	01/22/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	01/22/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	07/16/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	01/20/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	07/15/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	01/20/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	07/18/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	02/16/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	08/24/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	02/21/18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	03/18/19	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	05/13/20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	05/06/21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	04/04/22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-465A	04/18/23	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<1.00
WR-466A	09/21/05	<0.5	<0.5	<0.5	3.1	<2.0	**13.0**	1.8	<1.0	<0.5
WR-466A	11/15/05	<1.0	<0.5	<0.5	5.4	<3.0	**17.0**	2.0	<2.0	<0.5
WR-466A	01/12/06	<0.5	<0.5	<0.5	3.3	<0.5	**17.1**	2.1	0.6	<0.5
WR-466A	07/17/06	<0.5	<0.5	<0.5	4.3	<0.5	**16.4**	2.2	0.7	<0.5
WR-466A	01/16/07	<0.5	<0.5	<0.5	3.6	<0.5	**15.3**	2.0	0.6	<0.5
WR-466A	02/05/08	<0.5	<0.5	<0.5	1.7	<0.5	**7.9**	1.2	<0.5	<0.5
WR-466A	07/17/08	<0.5	<0.5	<0.5	1.5	<0.5	**5.2**	0.7	<0.5	<0.5
WR-466A	01/26/09	<0.5	<0.5	<0.5	1.4	<0.5	**5.9**	0.8	<0.5	<0.5
WR-466A	07/20/09	<0.5	<0.5	<0.5	1.5	<0.5	**6.7**	0.9	<0.5	<0.5
WR-466A	01/26/10	<0.5	<0.5	<0.5	1.4	<0.5	**7.3**	0.8	<0.5	<0.5
WR-466A	07/22/10	<0.5	<0.5	<0.5	0.6	<0.5	3.6	0.5	<0.5	<0.5
WR-466A	01/20/11	<0.5	<0.5	<0.5	1.5	<0.5	**5.4**	0.8	<0.5	<0.5
WR-466A	07/25/11	<0.5	<0.5	<0.5	0.7	<0.5	3.2	<0.5	<0.5	<0.5
WR-466A	01/19/12	<0.5	<0.5	<0.5	1	<0.5	3.3	<0.5	<0.5	<0.5
WR-466A	07/23/12	<0.5	<0.5	<0.5	1.3	<0.5	4.3	0.5	<0.5	<0.5
WR-466A	01/24/13	<0.5	<0.5	<0.5	0.5	<0.5	2.7	<0.5	<0.5	<0.5
WR-466A	07/22/13	<0.5	<0.5	<0.5	1.3	<0.5	4.4	0.6	<0.5	<0.5
WR-466A	01/23/14	<0.5	<0.5	<0.5	0.6	<0.5	2.2	<0.5	<0.5	<0.5
WR-466A	07/21/14	<0.5	<0.5	<0.5	0.6	<0.5	2.6	<0.5	<0.5	<0.5
WR-466A	07/21/14	<0.5	<0.5	<0.5	0.7	<0.5	2.7	<0.5	<0.5	<0.5
WR-466A	01/20/15	<0.5	<0.5	<0.5	1.4	<0.5	3.6	<0.5	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-466A	07/23/15	<0.5	<0.5	<0.5	0.5	<0.5	2.4	<0.5	<0.5	<0.5
WR-466A	01/21/16	<0.5	<0.5	<0.5	0.5	<0.5	2.4	<0.5	<0.5	<0.5
WR-466A	08/11/16	<0.5	<0.5	<0.5	1	<0.5	4	0.6	<0.5	<0.5
WR-466A	02/22/17	<0.5	<0.5	<0.5	0.6	<0.5	2	<0.5	<0.5	<0.5
WR-466A	02/22/17	<0.5	<0.5	<0.5	0.6	<0.5	2.1	<0.5	<0.5	<0.5
WR-466A	08/23/17	<0.5	<0.5	<0.5	<0.5	<0.5	1.9	<0.5	<0.5	<0.5
WR-466A	03/13/19	<0.5	<0.5	<0.5	0.7	<0.5	3.1	<0.5	<0.5	<0.5
WR-466A	03/13/19	<0.5	<0.5	<0.5	0.9	<0.5	3.1	<0.5	<0.5	<0.5
WR-466A	08/20/19	<0.5	<0.5	<0.5	<0.5	<0.5	1.7	<0.5	<0.5	<0.5
WR-466A	05/21/20	<0.5	<0.5	<0.5	0.7	<0.5	3.4	<0.5	<0.5	<0.5
WR-466A	05/21/20	<0.5	<0.5	<0.5	0.8	<0.5	3.4	<0.5	<0.5	<0.5
WR-466A	11/13/20	<0.5	<0.5	<0.5	1.0	<0.5	3.8	0.5	<0.5	<0.5
WR-466A	05/17/21	<0.5	<0.5	<0.5	0.8	<0.5	3.1	<0.5	<0.5	<0.5
WR-466A	10/07/21	<0.5	<0.5	<0.5	0.8	<0.5	3.8	<0.5	<0.5	<0.5
WR-466A	03/31/22	<0.5	<0.5	<0.5	0.51	<0.5	2.68	<0.5	<0.5	<0.5
WR-466A	08/19/22	<0.5	<0.5	<0.5	0.574	<0.5	2.16	<0.5	<0.5	<0.5
WR-466A	04/18/23	<2.00	<2.00	<2.00	<2.00	<2.00	2.24	<2.00	<2.00	<0.500
WR-466A	08/21/23	<2.00	<2.00	<2.00	<2.00	<2.00	2.24	<2.00	<2.00	<0.500
WR-468A	09/19/05	<1.0	<0.5	<0.5	<2.0	<3.0	0.65	<0.5	<2.0	<0.5
WR-468A	11/15/05	<1.0	<0.5	<0.5	<2.0	<3.0	<0.5	<0.5	<2.0	<0.5
WR-468A	01/11/06	<0.5	<0.5	<0.5	<0.5	<0.5	0.70	<0.5	<0.5	<0.5
WR-468A	07/17/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-468A	07/17/06	<0.5	<0.5	<0.5	<0.5	<0.5	0.50	<0.5	<0.5	<0.5
WR-468A	01/11/07	<0.5	<0.5	<0.5	<0.5	<0.5	0.50	<0.5	<0.5	<0.5
WR-468A	01/11/07	<0.5	<0.5	<0.5	<0.5	<0.5	0.50	<0.5	<0.5	<0.5
WR-468A	07/16/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	>0.5
WR-468A	01/16/08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	>0.5
WR-468A	07/14/08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-468A	01/20/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-468A	07/13/09	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
WR-468A	07/19/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-468A	01/18/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-468A	07/14/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-468A	01/12/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-468A	07/12/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-468A	01/15/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-468A	07/10/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-468A	01/14/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-468A	07/09/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-468A	01/12/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-468A	07/08/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-468A	01/11/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-468A	07/07/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-468A	02/09/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-468A	08/15/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-468A	02/08/18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-468A	03/20/19	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-468A	05/13/20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-468A	05/11/21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-468A	03/23/22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-468A	08/23/23	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<1.00
WR-469A	09/15/05	<1.0	0.58	<0.5	<2.0	<3.0	0.92	0.66	<2.0	<0.5
WR-469A	11/15/05	<1.0	0.71	<0.5	<2.0	<3.0	1.1	0.78	<2.0	<0.5
WR-469A	01/11/06	<0.5	1.6	<0.5	0.5	<0.5	2.0	1.4	<0.5	<0.5
WR-469A	07/13/06	<0.5	1.6	<0.5	0.6	<0.5	2.2	1.5	<0.5	<0.5
WR-469A	01/11/07	<0.5	1.4	<0.5	<0.5	<0.5	1.9	1.2	<0.5	<0.5
WR-469A	07/17/07	<0.5	2.0	<0.5	0.8	<0.5	2.9	1.9	<0.5	<0.5
WR-469A	01/17/08	<0.5	1.2	<0.5	<0.5	<0.5	1.6	0.9	<0.5	<0.5
WR-469A	07/15/08	<0.5	1.7	<0.5	0.7	<0.5	2.8	1.7	<0.5	<0.5
WR-469A	01/21/09	<0.5	0.9	<0.5	<0.5	<0.5	1.8	1.2	<0.5	<0.5
WR-469A	07/15/09	<0.5	1.1	<0.5	<0.5	<0.5	1.9	1.2	<0.5	<0.5
WR-469A	07/20/10	<0.5	1.0	<0.5	<0.5	<0.5	1.9	1.2	<0.5	<0.5
WR-469A	07/20/10	<0.5	1.0	<0.5	<0.5	<0.5	1.8	1.1	<0.5	<0.5
WR-469A	01/18/11	<0.5	0.5	<0.5	<0.5	<0.5	1.1	0.7	<0.5	<0.5
WR-469A	07/20/11	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	0.5	<0.5	<0.5
WR-469A	01/17/12	<0.5	0.6	<0.5	<0.5	<0.5	1	0.6	<0.5	<0.5
WR-469A	08/06/12	<0.5	0.6	<0.5	<0.5	<0.5	1	0.6	<0.5	<0.5
WR-469A	01/16/13	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5
WR-469A	07/16/13	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5
WR-469A	01/16/14	0.6	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5
WR-469A	07/15/14	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
WR-469A	01/13/15	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5
WR-469A	07/14/15	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
WR-469A	01/11/16	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
WR-469A	07/13/16	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
WR-469A	02/09/17	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5
WR-469A	08/16/17	<0.5	<0.5	<0.5	<0.5	<0.5	1.3	<0.5	<0.5	<0.5
WR-469A	02/13/18	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
WR-469A	03/19/19	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5
WR-469A	03/19/19	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
WR-469A	05/18/20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-469A	05/18/20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-469A	05/12/21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-469A	03/23/22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-469A	04/12/23	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-470A	11/15/05	<1.0	<0.5	<0.5	3.1	<3.0	**12.0**	2.2	<2.0	<0.5
WR-470A	01/30/06	<0.5	<0.5	<0.5	3.1	<0.5	**15.9**	2.3	<0.5	<0.5
WR-470A	08/02/06	<0.5	<0.5	<0.5	4.7	<0.5	**19**	2.9	0.6	<0.5
WR-470A	01/29/07	<0.5	<0.5	<0.5	3.7	<0.5	**14.2**	2.1	<0.5	<0.5
WR-470A	02/05/08	<0.5	<0.5	<0.5	1.0	<0.5	**5.4**	0.8	<0.5	<0.5
WR-470A	07/17/08	<0.5	<0.5	<0.5	1.4	<0.5	**5.6**	0.9	<0.5	<0.5
WR-470A	01/26/09	<0.5	<0.5	<0.5	<0.5	<0.5	2.9	<0.5	<0.5	<0.5
WR-470A	07/20/09	<0.5	<0.5	<0.5	<0.5	<0.5	3.2	<0.5	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-470A	01/26/10	<0.5	<0.5	<0.5	0.5	<0.5	3.7	0.5	<0.5	<0.5
WR-470A	07/22/10	<0.5	<0.5	<0.5	<0.5	<0.5	1.8	<0.5	<0.5	<0.5
WR-470A	01/20/11	<0.5	<0.5	<0.5	0.6	<0.5	2.5	<0.5	<0.5	<0.5
WR-470A	07/25/11	<0.5	<0.5	<0.5	<0.5	<0.5	2.1	<0.5	<0.5	<0.5
WR-470A	01/19/12	<0.5	<0.5	<0.5	0.5	<0.5	2.3	<0.5	<0.5	<0.5
WR-470A	07/23/12	<0.5	<0.5	<0.5	0.6	<0.5	2.7	<0.5	<0.5	<0.5
WR-470A	01/24/13	<0.5	<0.5	<0.5	0.6	<0.5	2.8	<0.5	<0.5	<0.5
WR-470A	07/22/13	<0.5	<0.5	<0.5	0.6	<0.5	1.7	<0.5	<0.5	<0.5
WR-470A	01/23/14	<0.5	<0.5	<0.5	0.5	<0.5	2.4	<0.5	<0.5	<0.5
WR-470A	07/21/14	<0.5	<0.5	<0.5	<0.5	<0.5	1.9	<0.5	<0.5	<0.5
WR-470A	01/20/15	<0.5	<0.5	<0.5	1.1	<0.5	3.3	<0.5	<0.5	<0.5
WR-470A	07/23/15	<0.5	<0.5	<0.5	0.5	<0.5	2.8	<0.5	<0.5	<0.5
WR-470A	01/21/16	<0.5	<0.5	<0.5	0.5	<0.5	2.7	<0.5	<0.5	<0.5
WR-470A	01/21/16	<0.5	<0.5	<0.5	<0.5	<0.5	2.5	<0.5	<0.5	<0.5
WR-470A	07/20/16	<0.5	<0.5	<0.5	<0.5	<0.5	1.9	<0.5	<0.5	<0.5
WR-470A	02/22/17	<0.5	<0.5	<0.5	<0.5	<0.5	1.8	<0.5	<0.5	<0.5
WR-470A	08/23/17	<0.5	<0.5	<0.5	<0.5	<0.5	1.4	<0.5	<0.5	<0.5
WR-470A	02/22/18	<0.5	<0.5	<0.5	<0.5	<0.5	2.0	<0.5	<0.5	<0.5
WR-470A	03/13/19	<0.5	<0.5	<0.5	<0.5	<0.5	1.8	<0.5	<0.5	<0.5
WR-470A	05/21/20	<0.5	<0.5	<0.5	<0.5	<0.5	1.9	<0.5	<0.5	<0.5
WR-470A	05/17/21	<0.5	<0.5	<0.5	<0.5	<0.5	1.9	<0.5	<0.5	<0.5
WR-470A	03/31/22	<0.5	<0.5	<0.5	<0.5	<0.5	3.51	0.56	<0.5	<0.5
WR-470A	04/19/23	<2.00	<2.00	<2.00	<2.00	<2.00	2.16	<2.00	<2.00	<0.500
WR-471A	09/23/05	<0.5	<0.5	<0.5	<1.0	<2.0	<0.5	<0.5	<1.0	<0.5
WR-471A	11/15/05	<1.0	<0.5	<0.5	<2.0	<3.0	0.57	<0.5	<2.0	<0.5
WR-471A	01/10/06	<0.5	<0.5	<0.5	<0.5	<0.5	1.3	<0.5	<0.5	<0.5
WR-471A	07/13/06	<0.5	<0.5	<0.5	0.6	<0.5	2.2	<0.5	<0.5	<0.5
WR-471A	01/16/07	<0.5	<0.5	<0.5	<0.5	<0.5	1.8	<0.5	<0.5	<0.5
WR-471A	07/17/07	<0.5	<0.5	<0.5	0.5	<0.5	1.7	<0.5	<0.5	<0.5
WR-471A	01/17/08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-471A	07/14/08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-471A	01/20/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-471A	07/13/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-471A	07/15/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-471A	01/12/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-471A	07/14/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-471A	01/11/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-471A	07/11/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-471A	01/14/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-471A	07/10/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-471A	01/09/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-471A	07/09/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-471A	01/07/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-471A	07/08/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-471A	01/07/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-471A	07/07/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-471A	02/07/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
WR-471A	08/09/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-471A	02/07/18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-471A	03/18/19	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-471A	05/12/20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-471A	05/11/21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-471A	03/23/22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WR-471A	04/13/23	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	07/08/99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	01/26/00	<0.5	<0.5	<0.5	<1	<1	<1	<0.5	<1	<1
T & C MHP (432P)	08/10/00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	01/17/01	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	07/23/01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	01/16/02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	08/05/02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	01/28/03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	07/16/03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	01/14/04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	07/06/04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	01/11/05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	07/14/05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	07/14/05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	01/09/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	07/12/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	01/09/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	07/11/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	01/15/08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	07/09/08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	01/15/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	07/08/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	07/08/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	01/13/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	01/13/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	01/12/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	01/09/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	01/14/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	01/13/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	01/07/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
T & C MHP (432P)	02/08/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
JFJ (985)	07/20/06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
JFJ (985)	01/09/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
JFJ (985)	01/15/08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
JFJ (985)	02/11/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
JFJ (985)	01/19/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
JFJ (985)	07/17/12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
JFJ (985)	01/09/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
JFJ (985)	07/15/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
JFJ (985)	01/13/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
JFJ (985)	07/14/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
JFJ (985)	07/13/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
JFJ (985)	01/19/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
JFJ (985)	07/19/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
JFJ (985)	02/16/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
JFJ (985)	08/22/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
JFJ (985)	02/12/18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
JFJ (985)	02/12/18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
JFJ (985)	03/13/19	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
JFJ (985)	05/12/20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
JFJ (985)	05/06/21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
JFJ (985)	04/08/22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
JFJ (985)	04/13/23	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Racetrack Well	03/16/00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
(691)	01/13/11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #1	05/07/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #1	07/30/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #1	01/13/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #1	07/17/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #1	01/12/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #1	01/19/16	<0.5	<0.5	<0.5	<0.5	<0.5	**18.4**	<0.5	<0.5	<0.5
Marble Well #1	03/29/16	<0.5	<0.5	<0.5	<0.5	<0.5	1.3	<0.5	<0.5	<0.5
Marble Well #1	07/13/16	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5
Marble Well #1	10/24/16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #1	02/08/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #1	06/13/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #1	12/13/17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #1	02/12/18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #1	08/14/18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #1	03/13/19	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #1	08/20/19	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #1	05/12/20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #1	11/13/20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #1	05/06/21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #1	10/07/21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #1	04/08/22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #1	08/19/22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #1	04/13/23	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #1	08/21/23	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<0.500
Marble Well #2	05/07/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #2	07/30/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #2	01/13/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #2	07/17/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Marble Well #2	01/12/15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table 3
Historical VOC Concentrations in Groundwater
Los Reales Landfill
Tucson, Arizona

Well ID	Date	1,1-DCA	1,1-DCE	cis-1,2-DCE	DCFA	Methylene Chloride	PCE	TCE	TCFA	VC
	AWQS:	7.0	7.0	70	NE	5.0	5.0	5.0	NE	2.0
Marble Well #2	01/19/16	<0.5	<0.5	<0.5	<0.5	<0.5	**47.8**	<0.5	<0.5	<0.5
Marble Well #2	03/29/16	<0.5	<0.5	<0.5	<0.5	<0.5	**7.3**	<0.5	<0.5	<0.5

Notes:

VOC - volatile organic compound
1,1-DCA - 1,1-dichloroethane
1,1-DCE - 1,1-dichloroethene
cis-1,2- DCE - cis-1,2-dichloroethene
DCFA - dichlorodifluoromethane
PCE - tetrachloroethene
TCE - trichloroethene
TCFA - trichlorofluoromethane
VC - vinyl chloride
AWQS - Arizona Aquifer Water Quality Standard
NE - Not Established
<0.5 - Not Detected above detection limit shown
NS - Not Sampled
JFJ - Junque for Jesus
T&C MHP - Town & Country Mobile Home Park
* - Well abandoned.
All units = µg/L
Values in Bold exceed the AWQS

Table 4
Summary of Monthly Extraction, Injection, and Mass Removal
Los Reales Landfill
Tucson, Arizona

Well ID	Beginning Date	End Date	Number Days Operated[1]	Total Extracted (gal)	Average Pumping Rate [2] (gpm)	Monthly System Summary
January 2023						
Monitoring Wells						
System Influent*	01/01/23	01/31/23	31	**3,611,445**	81.0	Total Extracted Since System Start Up [3] (gal)
LLM-530	01/01/23	01/31/23	30	618,056	14.5	**785,958,379**
LLM-536	01/01/23	01/31/23	6	23,868	3.0	
LLM-537	01/01/23	01/31/23	2	18,722	7.5	
LLM-538	01/01/23	01/31/23	28	351,358	8.8	
LLM-539	01/01/23	01/31/23	12	124,024	7.5	PCE Concentration [4] (µg/L)
LLM-540	01/01/23	01/31/23	31	128,322	2.9	**4.84**
LLM-544	01/01/23	01/31/23	31	48,049	1.1	TCE Concentration [4] (µg/L)
LLM-548	01/01/23	01/31/23	31	34,802	0.8	**1.57**
LLM-549	01/01/23	01/31/23	5	23,640	3.1	PCE Removed (lbs)
LLM-551	01/01/23	01/31/23	31	361,897	8.2	**0.1459**
R-061A	01/01/23	01/31/23	15	242,236	11.2	TCE Removed (lbs)
R-062B	01/01/23	01/31/23	27	265,675	6.8	**0.0473**
R-063A	01/01/23	01/31/23	1	8,783	7.7	Total PCE Removed since 2000 [3] (lbs)
WR-135A	01/01/23	01/31/23	21	183,994	6.0	**39.08**
WR-173A	01/01/23	01/31/23	0	0	0.0	Total TCE Removed since 2000 [3] (lbs)
WR-174A	01/01/23	01/31/23	31	200,226	4.5	**14.58**
WR-355A	01/01/23	01/31/23	21	500,410	16.6	
WR-376A**	01/01/23	01/31/23	0	0	0.0	
WR-379B	01/01/23	01/31/23	31	177,903	4.0	
WR-466A	01/01/23	01/31/23	31	282,882	6.3	
WR-470A	01/01/23	01/31/23	31	307,935	6.9	
Injection Wells						
IJ-01	01/01/23	01/31/23		296,899	N/A	
IJ-02	01/01/23	01/31/23		1,140,823	N/A	
R-105A	01/01/23	01/31/23		672,769	N/A	
February 2023						
Monitoring Wells						
System Influent*	02/01/23	02/28/23	28	**3,341,045**	83.0	Total Extracted Since System Start Up [3] (gal)
LLM-530	02/01/23	02/28/23	28	518,820	13.0	**789,299,424**
LLM-536	02/01/23	02/28/23	5	30,775	4.5	
LLM-537	02/01/23	02/28/23	2	23,277	7.5	
LLM-538	02/01/23	02/28/23	25	296,510	8.3	
LLM-539	02/01/23	02/28/23	10	109,112	7.6	PCE Concentration [4] (µg/L)*
LLM-540	02/01/23	02/28/23	28	107,573	2.7	**3.93**
LLM-544	02/01/23	02/28/23	28	43,875	1.1	TCE Concentration [4] (µg/L)*
LLM-548	02/01/23	02/28/23	28	34,075	0.9	**1.62**
LLM-549	02/01/23	02/28/23	5	25,080	3.8	PCE Removed (lbs)
LLM-551	02/01/23	02/28/23	28	408,162	10.2	**0.1096**
R-061A	02/01/23	02/28/23	13	213,383	11.1	TCE Removed (lbs)
R-062B	02/01/23	02/28/23	25	230,888	6.3	**0.0452**
R-063A	02/01/23	02/28/23	1	7,698	7.4	Total PCE Removed since 2000 [3] (lbs)
WR-135A	02/01/23	02/28/23	20	171,286	6.0	**39.18**
WR-173A	02/01/23	02/28/23	0	0	0.0	Total TCE Removed since 2000 [3] (lbs)
WR-174A	02/01/23	02/28/23	28	179,622	4.5	**14.62**
WR-355A	02/01/23	02/28/23	19	431,176	15.8	
WR-376A**	02/01/23	02/28/23	0	0	0.0	
WR-379B	02/01/23	02/28/23	28	153479.8	3.8	
WR-466A	02/01/23	02/28/23	28	249,309	6.2	
WR-470A	02/01/23	02/28/23	28	292,709	7.3	
Injection Wells						
IJ-01	02/01/23	02/28/23		225,113	N/A	
IJ-02	02/01/23	02/28/23		876,464	N/A	
R-105A	02/01/23	02/28/23		522,615	N/A	

Table 4
Summary of Monthly Extraction, Injection, and Mass Removal
Los Reales Landfill
Tucson, Arizona

Well ID	Beginning Date	End Date	Number Days Operated[1]	Total Extracted (gal)	Average Pumping Rate [2] (gpm)	Monthly System Summary
March 2023						
Monitoring Wells						
System Influent*	03/01/23	03/31/23	30	**3,362,028**	78.6	Total Extracted Since System Start Up [3] (gal)
LLM-530	03/01/23	03/31/23	28	506,085	12.6	**792,661,451**
LLM-536	03/01/23	03/31/23	5	24,041	3.6	
LLM-537	03/01/23	03/31/23	1	10,388	7.5	
LLM-538	03/01/23	03/31/23	28	296,518	7.3	
LLM-539	03/01/23	03/31/23	10	115,731	7.7	PCE Concentration [4] (µg/L)
LLM-540	03/01/23	03/31/23	29	111,753	2.7	**3.69**
LLM-544	03/01/23	03/31/23	28	41,024	1.0	TCE Concentration [4] (µg/L)
LLM-548	03/01/23	03/31/23	28	28,810	0.7	**1.42**
LLM-549	03/01/23	03/31/23	12	14,350	0.8	PCE Removed (lbs)
LLM-551	03/01/23	03/31/23	28	409,487	10.2	**0.1035**
R-061A	03/01/23	03/31/23	14	215,711	11.1	TCE Removed (lbs)
R-062B	03/01/23	03/31/23	25	224,313	6.3	**0.0398**
R-063A	03/01/23	03/31/23	0	1,396	7.3	Total PCE Removed since 2000 [3] (lbs)
WR-135A	03/01/23	03/31/23	15	128,812	6.0	**39.29**
WR-173A	03/01/23	03/31/23	0	0	0.0	Total TCE Removed since 2000 [3] (lbs)
WR-174A	03/01/23	03/31/23	23	150,282	4.6	**14.66**
WR-355A	03/01/23	03/31/23	19	432,699	15.6	
WR-376A**	03/01/23	03/31/23	0	0	0.0	
WR-379B	03/01/23	03/31/23	28	151287	3.8	
WR-466A	03/01/23	03/31/23	30	261,902	6.2	
WR-470A	03/01/23	03/31/23	30	300,693	7.0	
Injection Wells						
IJ-01	03/01/23	03/31/23		143,791	N/A	
IJ-02	03/01/23	03/31/23		662,198	N/A	
R-105A	03/01/23	03/31/23		393,199	N/A	
April 2023						
Monitoring Wells						
System Influent*	04/01/23	04/30/23	27	**2,929,916**	75.2	Total Extracted Since System Start Up [3] (gal)
LLM-530	04/01/23	04/30/23	23	439,644	13.5	**795,591,367**
LLM-536	04/01/23	04/30/23	4	20,199	3.2	
LLM-537	04/01/23	04/30/23	1	8,532	7.5	
LLM-538	04/01/23	04/30/23	23	278,671	8.6	
LLM-539	04/01/23	04/30/23	10	106,453	7.7	PCE Concentration [4] (µg/L)
LLM-540	04/01/23	04/30/23	23	102,544	3.1	**3.81**
LLM-544	04/01/23	04/30/23	22	41,074	1.3	TCE Concentration [4] (µg/L)
LLM-548	04/01/23	04/30/23	24	17,383	0.5	**1.42**
LLM-549	04/01/23	04/30/23	4	53,507	9.3	PCE Removed (lbs)
LLM-551	04/01/23	04/30/23	27	496,150	12.7	**0.0932**
R-061A	04/01/23	04/30/23	12	170,362	9.5	TCE Removed (lbs)
R-062B	04/01/23	04/30/23	21	142,304	4.8	**0.0347**
R-063A	04/01/23	04/30/23	0	0	0.0	Total PCE Removed since 2000 [3] (lbs)
WR-135A	04/01/23	04/30/23	13	111,131	6.0	**39.38**
WR-173A	04/01/23	04/30/23	0	0	0.0	Total TCE Removed since 2000 [3] (lbs)
WR-174A	04/01/23	04/30/23	22	154,524	4.9	**14.70**
WR-355A	04/01/23	04/30/23	16	374,216	16.0	
WR-376A**	04/01/23	04/30/23	0	0	0.0	
WR-379B	04/01/23	04/30/23	23	123,850	3.8	
WR-466A	04/01/23	04/30/23	21	191,787	6.2	
WR-470A	04/01/23	04/30/23	21	217,650	7.3	
Injection Wells						
IJ-01	04/01/23	04/30/23		48,917	N/A	
IJ-02	04/01/23	04/30/23		216,995	N/A	
R-105A	04/01/23	04/30/23		114,077	N/A	

Table 4
Summary of Monthly Extraction, Injection, and Mass Removal
Los Reales Landfill
Tucson, Arizona

Well ID	Beginning Date	End Date	Number Days Operated[1]	Total Extracted (gal)	Average Pumping Rate [2] (gpm)	Monthly System Summary
May 2023						
Monitoring Wells						
System Influent*	05/01/23	05/31/23	31	**2,813,820**	63.6	Total Extracted Since System Start Up [3] (gal)
LLM-530	05/01/23	05/31/23	28	532,160	13.2	**798,405,187**
LLM-536	05/01/23	05/31/23	4	19,580	3.1	
LLM-537	05/01/23	05/31/23	1	11,073	7.5	
LLM-538	05/01/23	05/31/23	13	302,280	16.2	
LLM-539	05/01/23	05/31/23	10	106,456	7.7	PCE Concentration [4] (µg/L)
LLM-540	05/01/23	05/31/23	14	109,295	5.6	**8.65**
LLM-544	05/01/23	05/31/23	16	44,612	1.9	TCE Concentration [4] (µg/L)
LLM-548	05/01/23	05/31/23	20	28,958	1.0	**0.00**
LLM-549	05/01/23	05/31/23	4	51,854	8.8	PCE Removed (lbs)
LLM-551	05/01/23	05/31/23	28	460,545	11.4	**0.2031**
R-061A	05/01/23	05/31/23	9	112,868	8.4	TCE Removed (lbs)
R-062B	05/01/23	05/31/23	12	109,295	6.5	**0.0000**
R-063A	05/01/23	05/31/23	0	0	0.0	Total PCE Removed since 2000 [3] (lbs)
WR-135A	05/01/23	05/31/23	31	126,013	2.8	**39.58**
WR-173A	05/01/23	05/31/23	0	0	0.0	Total TCE Removed since 2000 [3] (lbs)
WR-174A	05/01/23	05/31/23	13	93,857	5.0	**14.70**
WR-355A	05/01/23	05/31/23	14	347,446	16.7	
WR-376A**	05/01/23	05/31/23	0	0	0.0	
WR-379B	05/01/23	05/31/23	8	74863	6.5	
WR-466A	05/01/23	05/31/23	21	254,649	8.4	
WR-470A	05/01/23	05/31/23	18	242,662	9.6	
Injection Wells						
IJ-01	05/01/23	05/31/23		61,268	N/A	
IJ-02	05/01/23	05/31/23		117,651	N/A	
R-105A	05/01/23	05/31/23		55,063	N/A	
June 2023						
Monitoring Wells						
System Influent*	06/01/23	06/30/23	23	**2,750,056**	81.3	Total Extracted Since System Start Up [3] (gal)
LLM-530	06/01/23	06/30/23	23	510,621	15.1	**801,155,243**
LLM-536	06/01/23	06/30/23	4	19,010	3.5	
LLM-537	06/01/23	06/30/23	1	7,534	7.5	
LLM-538	06/01/23	06/30/23	19	257,162	9.5	
LLM-539	06/01/23	06/30/23	8	93,294	7.8	PCE Concentration [4] (µg/L)
LLM-540	06/01/23	06/30/23	19	90,363	3.3	**5.10**
LLM-544	06/01/23	06/30/23	18	38,455	1.5	TCE Concentration [4] µg/L)
LLM-548	06/01/23	06/30/23	23	26,049	0.8	**0.00**
LLM-549	06/01/23	06/30/23	4	48,344	9.6	PCE Removed (lbs)
LLM-551	06/01/23	06/30/23	23	440,143	13.0	**0.1170**
R-061A	06/01/23	06/30/23	11	112,688	7.3	TCE Removed (lbs)
R-062B	06/01/23	06/30/23	18	152,847	6.0	**0.0000**
R-063A	06/01/23	06/30/23	1	7,476	7.3	Total PCE Removed since 2000 [3] (lbs)
WR-135A	06/01/23	06/30/23	12	101,112	6.0	**39.70**
WR-173A	06/01/23	06/30/23	0	0	0.0	Total TCE Removed since 2000 [3] (lbs)
WR-174A	06/01/23	06/30/23	20	165,496	5.7	**14.70**
WR-355A	06/01/23	06/30/23	14	322,593	16.4	
WR-376A**	06/01/23	06/30/23	0	0	0.0	
WR-379B	06/01/23	06/30/23	21	123176	4.0	
WR-466A	06/01/23	06/30/23	20	206,075	7.2	
WR-470A	06/01/23	06/30/23	18	213,750	8.2	
Injection Wells						
IJ-01	06/01/23	06/30/23		23,080	N/A	
IJ-02	06/01/23	06/30/23		53,077	N/A	
R-105A	06/01/23	06/30/23		24,238	N/A	

Table 4
Summary of Monthly Extraction, Injection, and Mass Removal
Los Reales Landfill
Tucson, Arizona

Well ID	Beginning Date	End Date	Number Days Operated[1]	Total Extracted (gal)	Average Pumping Rate [2] (gpm)	Monthly System Summary
July 2023						
Monitoring Wells						
System Influent*	07/01/23	07/31/23	13	**1,383,761**	72.3	Total Extracted Since System Start Up [3] (gal)
LLM-530	07/01/23	07/31/23	10	227,909	16.7	**802,539,004**
LLM-536	07/01/23	07/31/23	2	7,552	3.1	
LLM-537	07/01/23	07/31/23	0	4,458	7.5	
LLM-538	07/01/23	07/31/23	13	147,594	7.8	
LLM-539	07/01/23	07/31/23	5	54,030	7.8	PCE Concentration [4] (µg/L)
LLM-540	07/01/23	07/31/23	13	49,736	2.6	**4.86**
LLM-544	07/01/23	07/31/23	8	17,358	1.5	TCE Concentration [4] (µg/L)
LLM-548	07/01/23	07/31/23	10	10,608	0.8	**0.00**
LLM-549	07/01/23	07/31/23	1	19,244	9.2	PCE Removed (lbs)
LLM-551	07/01/23	07/31/23	10	202,612	14.8	**0.0561**
R-061A	07/01/23	07/31/23	6	51,957	6.1	TCE Removed (lbs)
R-062B	07/01/23	07/31/23	8	72,620	6.1	**0.0000**
R-063A	07/01/23	07/31/23	0	3,078	6.7	Total PCE Removed since 2000 [3] (lbs)
WR-135A	07/01/23	07/31/23	5	42,000	6.0	**39.76**
WR-173A	07/01/23	07/31/23	0	0	0.0	Total TCE Removed since 2000 [3] (lbs)
WR-174A	07/01/23	07/31/23	9	84,669	6.2	**14.70**
WR-355A	07/01/23	07/31/23	8	194,249	16.1	
WR-376A**	07/01/23	07/31/23	0	0	0.0	
WR-379B	07/01/23	07/31/23	10	48,845	3.5	
WR-466A	07/01/23	07/31/23	8	80,405	7.0	
WR-470A	07/01/23	07/31/23	7	84,186	7.9	
Injection Wells						
IJ-01	07/01/23	07/31/23		146,691	N/A	
IJ-02	07/01/23	07/31/23		292,683	N/A	
R-105A	07/01/23	07/31/23		197,515	N/A	
August 2023						
Monitoring Wells						
System Influent*	08/01/23	08/31/23	26	**3,155,759**	85.2	Total Extracted Since System Start Up [3] (gal)
LLM-530	08/01/23	08/31/23	26	613,362	16.7	**805,694,763**
LLM-536	08/01/23	08/31/23	16	18,343	0.8	
LLM-537	08/01/23	08/31/23	1	9,077	7.5	
LLM-538	08/01/23	08/31/23	26	309,801	8.4	
LLM-539	08/01/23	08/31/23	10	106,646	7.1	PCE Concentration [4] (µg/L)
LLM-540	08/01/23	08/31/23	26	98,630	2.7	**3.85**
LLM-544	08/01/23	08/31/23	23	46,925	1.4	TCE Concentration [4] (µg/L)
LLM-548	08/01/23	08/31/23	25	36,803	1.0	**0.00**
LLM-549	08/01/23	08/31/23	14	59,813	2.9	PCE Removed (lbs)
LLM-551	08/01/23	08/31/23	26	535,779	14.6	**0.1014**
R-061A	08/01/23	08/31/23	18	148,386	5.6	TCE Removed (lbs)
R-062B	08/01/23	08/31/23	25	355,667	10.0	**0.0000**
R-063A	08/01/23	08/31/23	1.1	10,799	6.9	Total PCE Removed since 2000 [3] (lbs)
WR-135A	08/01/23	08/31/23	7	63,599	6.0	**39.86**
WR-173A	08/01/23	08/31/23	0	0	0.0	Total TCE Removed since 2000 [3] (lbs)
WR-174A	08/01/23	08/31/23	15	132,758	6.0	**14.70**
WR-355A	08/01/23	08/31/23	12	288,879	16.3	
WR-376A**	08/01/23	08/31/23	0	0	0.0	
WR-379B	08/01/23	08/31/23	24	141,371	4.0	
WR-466A	08/01/23	08/31/23	15	177,551	8.2	
WR-470A	08/01/23	08/31/23	10	103,793	7.5	
Injection Wells						
IJ-01	08/01/23	08/31/23		633,268	N/A	
IJ-02	08/01/23	08/31/23		1,424,737	N/A	
R-105A	08/01/23	08/31/23		862,081	N/A	

Table 4
Summary of Monthly Extraction, Injection, and Mass Removal
Los Reales Landfill
Tucson, Arizona

Well ID	Beginning Date	End Date	Number Days Operated[1]	Total Extracted (gal)	Average Pumping Rate [2] (gpm)	Monthly System Summary
September 2023						
Monitoring Wells						
System Influent*	09/01/23	09/30/23	26	**2,957,225**	79.1	Total Extracted Since System Start Up [3] (gal)
LLM-530	09/01/23	09/30/23	26	573,214	15.3	**808,651,988**
LLM-536	09/01/23	09/30/23	5	22,566	3.0	
LLM-537	09/01/23	09/30/23	0	0	0.0	
LLM-538	09/01/23	09/30/23	26	285,282	7.7	
LLM-539	09/01/23	09/30/23	23	114,821	3.5	PCE Concentration [4] (µg/L)
LLM-540	09/01/23	09/30/23	26	98,313	2.6	**4.29**
LLM-544	09/01/23	09/30/23	22	40,794	1.3	TCE Concentration [4] (µg/L)
LLM-548	09/01/23	09/30/23	26	30,218	0.8	**0.00**
LLM-549	09/01/23	09/30/23	4	58,978	9.2	PCE Removed (lbs)
LLM-551	09/01/23	09/30/23	26	528,290	14.1	**0.1059**
R-061A	09/01/23	09/30/23	15	130,280	6.2	TCE Removed (lbs)
R-062B	09/01/23	09/30/23	13	334,367	17.8	**0.0000**
R-063A	09/01/23	09/30/23	1	12,973	6.8	Total PCE Removed since 2000 [3] (lbs)
WR-135A	09/01/23	09/30/23	21	182,420	6.0	**39.97**
WR-173A	09/01/23	09/30/23	0	0	0.0	Total TCE Removed since 2000 [3] (lbs)
WR-174A	09/01/23	09/30/23	26	98,455	2.6	**14.70**
WR-355A	09/01/23	09/30/23	19	406,262	15.2	
WR-376A**	09/01/23	09/30/23	0	0	0.0	
WR-379B	09/01/23	09/30/23	12	133,856	7.9	
WR-466A	09/01/23	09/30/23	0	0	0.0	
WR-470A	09/01/23	09/30/23	0	0	0.0	
Injection Wells						
IJ-01	09/01/23	09/30/23		585,504	N/A	
IJ-02	09/01/23	09/30/23		1,339,895	N/A	
R-105A	09/01/23	09/30/23		818,682	N/A	
October 2023						
Monitoring Wells						
System Influent*	10/01/23	10/31/23	27	**2,850,185**	73.8	Total Extracted Since System Start Up [3] (gal)
LLM-530	10/01/23	10/31/23	25	544,049	15.3	**811,502,173**
LLM-536	10/01/23	10/31/23	5	18,510	2.7	
LLM-537	10/01/23	10/31/23	0	0	0.0	
LLM-538	10/01/23	10/31/23	13	293,934	15.4	
LLM-539	10/01/23	10/31/23	17	91,101	3.7	PCE Concentration [4] (µg/L)
LLM-540	10/01/23	10/31/23	17	58,391	2.4	**5.34**
LLM-544	10/01/23	10/31/23	23	41,917	1.2	TCE Concentration [4] (µg/L)
LLM-548	10/01/23	10/31/23	27	32,674	0.8	**0.00**
LLM-549	10/01/23	10/31/23	5	65,445	9.8	PCE Removed (lbs)
LLM-551	10/01/23	10/31/23	25	385,858	10.8	**0.1270**
R-061A	10/01/23	10/31/23	15	150,936	7.2	TCE Removed (lbs)
R-062B	10/01/23	10/31/23	16	406,497	17.7	**0.0000**
R-063A	10/01/23	10/31/23	1	12,364	6.8	Total PCE Removed since 2000 [3] (lbs)
WR-135A	10/01/23	10/31/23	17	147,566	6.0	**40.09**
WR-173A	10/01/23	10/31/23	0	0	0.0	Total TCE Removed since 2000 [3] (lbs)
WR-174A	10/01/23	10/31/23	27	237,320	6.1	**14.70**
WR-355A	10/01/23	10/31/23	15	299,516	13.8	
WR-376A**	10/01/23	10/31/23	0	0	0.0	
WR-379B	10/01/23	10/31/23	9	116,985	9.2	
WR-466A	10/01/23	10/31/23	0	0	0.0	
WR-470A	10/01/23	10/31/23	0	0	0.0	
Injection Wells						
IJ-01	10/01/23	10/31/23		651,790	N/A	
IJ-02	10/01/23	10/31/23		1,469,772	N/A	
R-105A	10/01/23	10/31/23		615,508	N/A	

Table 4
Summary of Monthly Extraction, Injection, and Mass Removal
Los Reales Landfill
Tucson, Arizona

Well ID	Beginning Date	End Date	Number Days Operated[1]	Total Extracted (gal)	Average Pumping Rate [2] (gpm)	Monthly System Summary
November 2023						
Monitoring Wells						
System Influent*	11/01/23	11/30/23	30	**3,097,320**	72.6	Total Extracted Since System Start Up [3] (gal)
LLM-530	11/01/23	11/30/23	30	546,751	12.8	**814,599,493**
LLM-536	11/01/23	11/30/23	4	17,134	2.9	
LLM-537	11/01/23	11/30/23	2	5,679	2.6	
LLM-538	11/01/23	11/30/23	21	210,054	6.9	
LLM-539	11/01/23	11/30/23	25	118,641	3.2	PCE Concentration [4] (µg/L)
LLM-540	11/01/23	11/30/23	23	79,471	2.4	**3.82**
LLM-544	11/01/23	11/30/23	17	36,779	1.5	TCE Concentration [4] (µg/L)
LLM-548	11/01/23	11/30/23	22	18,624	0.6	**0.00**
LLM-549	11/01/23	11/30/23	8	60,149	5.0	PCE Removed (lbs)
LLM-551	11/01/23	11/30/23	30	394,243	9.2	**0.0987**
R-061A	11/01/23	11/30/23	29	129,509	3.1	TCE Removed (lbs)
R-062B	11/01/23	11/30/23	29	607,858	14.8	**0.0000**
R-063A	11/01/23	11/30/23	7	8,294	0.8	Total PCE Removed since 2000 [3] (lbs)
WR-135A	11/01/23	11/30/23	19	164,544	6.0	**40.19**
WR-173A	11/01/23	11/30/23	0	0	0.0	Total TCE Removed since 2000 [3] (lbs)
WR-174A	11/01/23	11/30/23	29	214,335	5.0	**14.70**
WR-355A	11/01/23	11/30/23	18	411,340	16.2	
WR-376A**	11/01/23	11/30/23	0	0	0.0	
WR-379B	11/01/23	11/30/23	28	225,487	5.6	
WR-466A	11/01/23	11/30/23	0	0	0.0	
WR-470A	11/01/23	11/30/23	0	0	0.0	
Injection Wells						
IJ-01	11/01/23	11/30/23		424,774	N/A	
IJ-02	11/01/23	11/30/23		1,024,026	N/A	
R-105A	11/01/23	11/30/23		362,306	N/A	
December 2023						
Monitoring Wells						
System Influent*	12/01/23	12/31/23	26	**2,647,989**	71.0	Total Extracted Since System Start Up [3] (gal)
LLM-530	12/01/23	12/31/23	26	628,176	17.0	**817,247,482**
LLM-536	12/01/23	12/31/23	3	17,668	3.8	
LLM-537	12/01/23	12/31/23	2	15,705	4.7	
LLM-538	12/01/23	12/31/23	10	165,835	11.1	
LLM-539	12/01/23	12/31/23	18	71,851	2.8	PCE Concentration [4] (µg/L)
LLM-540	12/01/23	12/31/23	18	36,794	1.4	**4.75**
LLM-544	12/01/23	12/31/23	23	38,555	1.2	TCE Concentration [4] (µg/L)
LLM-548	12/01/23	12/31/23	12	31,676	1.8	**1.90**
LLM-549	12/01/23	12/31/23	6	13,875	1.5	PCE Removed (lbs)
LLM-551	12/01/23	12/31/23	26	491,907	13.3	**0.1050**
R-061A	12/01/23	12/31/23	26	219,203	5.9	TCE Removed (lbs)
R-062B	12/01/23	12/31/23	26	265,901	7.1	**0.0420**
R-063A	12/01/23	12/31/23	1	8,416	8.3	Total PCE Removed since 2000 [3] (lbs)
WR-135A	12/01/23	12/31/23	17	148,095	6.0	**40.30**
WR-173A	12/01/23	12/31/23	0	0	0.0	Total TCE Removed since 2000 [3] (lbs)
WR-174A	12/01/23	12/31/23	19	167,781	6.3	**14.74**
WR-355A	12/01/23	12/31/23	11	261,042	16.9	
WR-376A**	12/01/23	12/31/23	0	0	0.0	
WR-379B	12/01/23	12/31/23	26	210,300	5.6	
WR-466A	12/01/23	12/31/23	0	0	0.0	
WR-470A	12/01/23	12/31/23	0	0	0.0	
Injection Wells						
IJ-01	12/01/23	12/31/23		178,718	N/A	
IJ-02	12/01/23	12/31/23		543,837	N/A	
R-105A	12/01/23	12/31/23		151,667	N/A	

Table 4
Summary of Monthly Extraction, Injection, and Mass Removal
Los Reales Landfill
Tucson, Arizona

Well ID	Beginning Date	End Date	Number Days Operated[1]	Total Extracted (gal)	Average Pumping Rate [2] (gpm)	Monthly System Summary

Notes:

Total volume extracted from each well, number of hours of operation and volume of system effluent is recorded by computer daily.

[1] Many wells do not operate continuously due to slow recharge. The number of days each well operated is used with the total volume extracted to calculate the actual pumping rate during operation. The number of days each well operates is rounded up for presentation but not rounded for calculation.

[2] Average pumping rate during the time that the well was operational.

[3] - System went on-line in February 1999. PCE and TCE totals do not include 1999 data.

[4] - Influent and Effluent samples are collected monthly and analyzed for VOCs

* The System Influent total readings are obtained from the "Main Meter Flow" column for overall accuracy (reconcillation of 1 meter vs.19)

** WR-376A no longer produces sufficient water to operate and is only operated long enough to sample semiannually.

The screen at WR-379A failed in March 2013. The well is used for monitoring, is sampled via hydrasleeve. Replaced in 2015 with extraction well WR-379B.

gal = gallon(s)

gpm = gallons per minute

PCE = Tetrachloroethylene

µg/L = microgames per liter

TCE = Trichloroethylene

lbs = pounds

Table 5

Annual Summary of Extraction and Injection

Los Reales Landfill

Tucson, Arizona

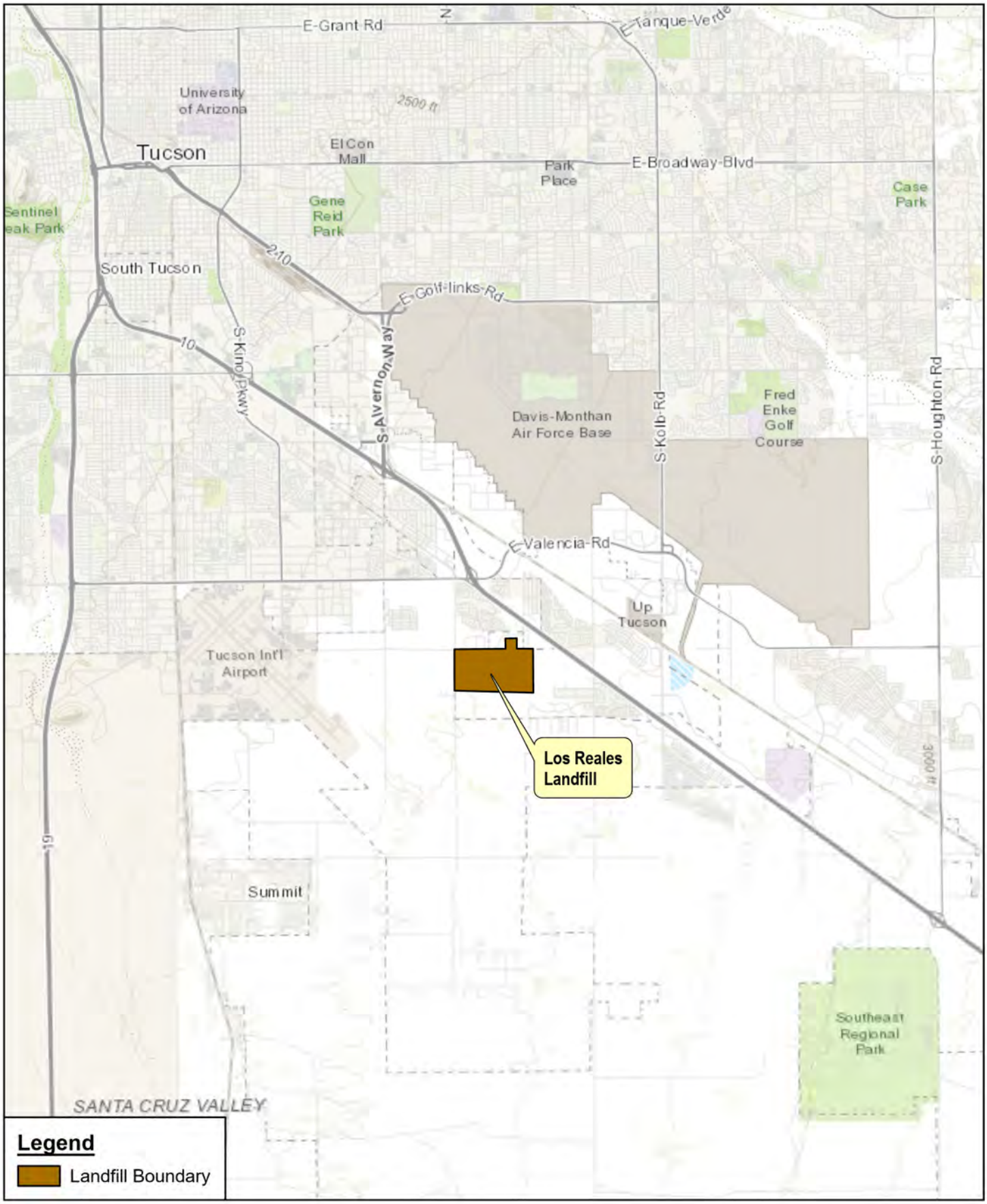
COT WELL ID	ADWR WELL ID	Extraction Wells - Gallons Extracted						1st Half 2023 Total Extracted		Extraction Wells - Gallons Extracted						2nd Half 2023 Total Extracted		Annual Volume Extracted	
	Month:	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Gallons	Acre-Feet	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Gallons	Acre Feet	Gallons	Acre Feet
LLM-530	55-216285	618,056	518,820	506,085	439,644	532,160	510,621	**3,125,386**	**9.59**	227,909	613,362	573,214	544,049	546,751	628,176	**3,133,460**	**9.62**	**6,258,847**	**19.21**
LLM-536	55-218103	23,868	30,775	24,041	20,199	19,580	19,010	**137,473**	**0.42**	7,552	18,343	22,566	18,510	17,134	17,668	**101,774**	**0.31**	**239,247**	**0.73**
LLM-537	55-218102	18,722	23,277	10,388	8,532	11,073	7,534	**79,526**	**0.24**	4,458	9,077	0	0	5,679	15,705	**34,920**	**0.11**	**114,445**	**0.35**
LLM-538	55-910171	351,358	296,510	296,518	278,671	302,280	257,162	**1,782,500**	**5.47**	147,594	309,801	285,282	293,934	210,054	165,835	**1,412,500**	**4.33**	**3,195,000**	**9.81**
LLM-539	55-218252	124,024	109,112	115,731	106,453	106,456	93,294	**655,070**	**2.01**	54,030	106,646	114,821	91,101	118,641	71,851	**557,089**	**1.71**	**1,212,160**	**3.72**
LLM-540	55-218253	128,322	107,573	111,753	102,544	109,295	90,363	**649,850**	**1.99**	49,736	98,630	98,313	58,391	79,471	36,794	**421,336**	**1.29**	**1,071,185**	**3.29**
LLM-544	55-218769	48,049	43,875	41,024	41,074	44,612	38,455	**257,090**	**0.79**	17,358	46,925	40,794	41,917	36,779	38,555	**222,328**	**0.68**	**479,418**	**1.47**
LLM-548	55-220488	34,802	34,075	28,810	17,383	28,958	26,049	**170,077**	**0.52**	10,608	36,803	30,218	32,674	18,624	31,676	**160,603**	**0.49**	**330,680**	**1.01**
LLM-549	55-220489	23,640	25,080	14,350	53,507	51,854	48,344	**216,776**	**0.67**	19,244	59,813	58,978	65,445	60,149	13,875	**277,504**	**0.85**	**494,280**	**1.52**
LLM-551	55-221183	361,897	408,162	409,487	496,150	460,545	440,143	**2,576,382**	**7.91**	202,612	535,779	528,290	385,858	394,243	491,907	**2,538,689**	**7.79**	**5,115,071**	**15.70**
R-061A	55-575179	242,236	213,383	215,711	170,362	112,868	112,688	**1,067,249**	**3.28**	51,957	148,386	130,280	150,936	129,509	219,203	**830,270**	**2.55**	**1,897,519**	**5.82**
R-062B	55-583862	265,675	230,888	224,313	142,304	109,295	152,847	**1,125,323**	**3.45**	72,620	355,667	334,367	406,497	607,858	265,901	**2,042,910**	**6.27**	**3,168,233**	**9.72**
R-063A	55-575181	8,783	7,698	1,396	0	0	7,476	**25,353**	**0.08**	3,078	10,799	12,973	12,364	8,294	8,416	**55,924**	**0.17**	**81,277**	**0.25**
WR-135A	55-517157	183,994	171,286	128,812	111,131	126,013	101,112	**822,347**	**2.52**	42,000	63,599	182,420	147,566	164,544	148,095	**748,224**	**2.30**	**1,570,571**	**4.82**
WR-173A	55-527402	0	0	0	0	0	0	**0**	**0**	0	0	0	0	0	0	**0**	**0**	**0**	**0**
WR-174A	55-527401	200,226	179,622	150,282	154,524	93,857	165,496	**944,007**	**2.90**	84,669	132,758	98,455	237,320	214,335	167,781	**935,318**	**2.87**	**1,879,325**	**5.77**
WR-355A	55-579026	500,410	431,176	432,699	374,216	347,446	322,593	**2,408,540**	**7.39**	194,249	288,879	406,262	299,516	411,340	261,042	**1,861,288**	**5.71**	**4,269,828**	**13.10**
WR-376A	55-583858	0	0	0	0	0	0	**0**	**0**	0	0	0	0	0	0	**0**	**0**	**0**	**0**
WR-379B	55-918190	177,903	153,480	151,287	123,850	74,863	123,176	**804,558**	**2.47**	48,845	141,371	133,856	116,985	225,487	210,300	**876,844**	**2.69**	**1,681,402**	**5.16**
WR-466A	55-902791	282,882	249,309	261,902	191,787	254,649	206,075	**1,446,604**	**4.44**	80,405	177,551	0	0	0	0	**257,955**	**0.79**	**1,704,559**	**5.23**
WR-470A	55-902793	307,935	292,709	300,693	217,650	242,662	213,750	**1,575,397**	**4.83**	84,186	103,793	0	0	0	0	**187,979**	**0.58**	**1,763,376**	**5.41**
	Subtotals	**3,902,782**	**3,526,808**	**3,425,281**	**3,049,981**	**3,028,465**	**2,936,189**	**19,869,507**	**60.98**	**1,403,111**	**3,257,983**	**3,051,090**	**2,903,063**	**3,248,891**	**2,792,779**	**16,656,917**	**51.12**	**36,526,424**	**112.10**

COT WELL ID	ADWR WELL ID	Injection Wells - Gallons Injected						1st Half 2023 Total Injected		Injection Wells - Gallons Injected						2nd Half 2023 Total Injected		Annual Volume Injected	
	Month:	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Gallons	Acre-Feet	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Gallons	Acre Feet	Gallons	Acre Feet
IJ-001	55-566878	296,899	225,113	143,791	48,917	61,268	23,080	**799,068**	**2.45**	146,691	633,268	585,504	651,790	424,774	178,718	**2,620,744**	**8.04**	**3,419,812**	**10.50**
IJ-002	55-566879	1,140,823	876,464	662,198	216,995	117,651	53,077	**3,067,208**	**9.41**	292,683	1,424,737	1,339,895	1,469,772	1,024,026	543,837	**6,094,949**	**18.70**	**9,162,157**	**28.12**
R-105A	55-592316	672,769	522,615	393,199	114,077	55,063	24,238	**1,781,962**	**5.47**	197,515	862,081	818,682	615,508	362,306	151,667	**3,007,758**	**9.23**	**4,789,721**	**14.70**
	Subtotals	**2,110,492**	**1,624,191**	**1,199,189**	**379,989**	**233,982**	**100,396**	**5,648,239**	**17.33**	**636,888**	**2,920,085**	**2,744,080**	**2,737,071**	**1,811,105**	**874,222**	**11,723,451**	**35.98**	**17,371,689**	**53.31**

Notes:

COT = City of Tucson
ADWR = Arizona Department of Water Resources
Acre-feet extracted from WR-173A and WR-174A are reported to Arizona State Land Department monthly.
WR-173A well casing failed, and was abandoned in November 2018.
Total volume extracted and injected at each well and total volume of effluent is recorded by computer daily.
WR-376A no longer produces sufficient water to operate.
The screen at WR-379A failed in March 2013. The well is used as monitoring well and sampled using a hydrasleeve. WR-379A was replaced in 2015 with extraction well WR-379B

Figures



Paper Size ANSI A

0 0.5 1 1.5 2

Miles

Map Projection: Transverse Mercator
Horizontal Datum: North American 1983 HARN
Grid: NAD 1983 HARN StatePlane Arizona Central FIPS 0202

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LOS REALES LANDFILL
2023 GROUNWATER MONITORING, EXTRACTION & REMEDIATION SYSTEM PROGRESS REPORT
TUCSON, ARIZONA

Project No. **12607731**
Revision No. **-**
Date **March 2024**

SITE LOCATION MAP

FIGURE 1

N:\US\Phoenix\Projects\561\12607731\GIS\Maps\Deliverables\12607731_LosRealesGW.aprx - 12607731_001_SiteLocation
Print date: 20 Mar 2024 - 12:21

Data source: World Topographic Map: Bureau of Land Management, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS. Created by: mhargrave

WR-176A
WR-172A
WR-468A
LLM-543
SWAN RD
WR-173C
WR-173A
WR-173B
WR-466A
WR-470A
WR-184A
WR-471A
WR-465A
LLM-556
WR-272A
WR-272B
LLM-555
LLM-554
WR-375A
LLM-537
Marble Well
R-023A
R-015B
LLM-549
WR-379A
WR-379B
R-106A
WR-374A
R-024A
R-107A
R-108A
LOS REALES RD
WR-175A
WR-174A
LLM-501
R-011A
WR-380A
LLM-513
WR-253A
WR-135A
WR-376A
R-105A
WR-378A
IJ-001A
LLM-536
LLM-548
WR-373A
IJ-002A
R-065A
LLM-544
R-025A
R-061A
WR-372A
WR-325A
R-062A
R-062B
R-064A
LLM-530
R-026A
R-063A
WR-136B
Racetrack Well
LLM-551
R-010A
WR-469A
LLM-538
LLM-539
LLM-500
JFJ-985
LLM-540
R-112A
R-112B
WR-355A
WR-049A
WR-361A
WR-048A
WR-185A
R-109A
R-109B
R-111A
R-111B
WR-360A
R-113A
R-113B
R-113C
R-110A
R-110B
WR-047B

Legend

Well Types

- Shallow Aquifer Zone Monitoring Well
- Long Screen Monitor Well
- Deep Aquifer Zone Monitoring Well
- Shallow Remediation Well
- Deep Remediation Well
- Nested Shallow Monitor/SVE Well
- Irrigation Well or Other Supply
- Municipal/Domestic Well
- Abandoned Well
- Landfill Boundary

Paper Size ANSI B

0 200 400 600 800

Feet

N

Map Projection: Transverse Mercator
Horizontal Datum: North American 1983 HARN
Grid: NAD 1983 HARN StatePlane Arizona Central FIPS 0202

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LOS REALES LANDFILL
2023 GROUNDWATER MONITORING, EXTRACTION & REMEDIATION SYSTEM PROGRESS REPORT
TUCSON, ARIZONA

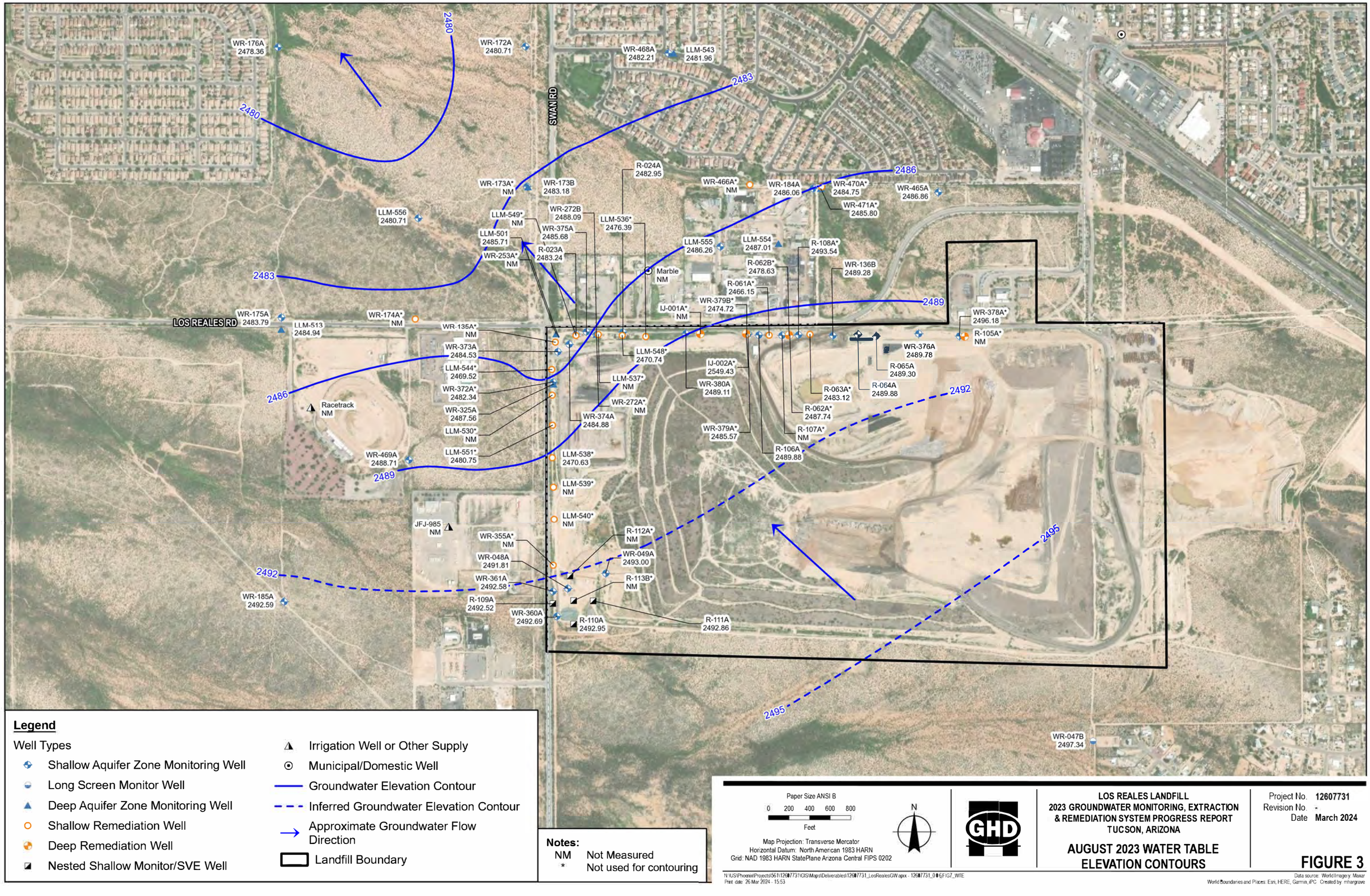
SITE MAP

Project No. **12607731**
Revision No. **-**
Date **March 2024**

FIGURE 2

N:\US\Phoenix\Projects\56\12607731\GIS\Maps\Deliverables\12607731_LosRealesGW.aprx - 12607731_002_SiteMap
Print date: 20 Mar 2024 - 12:22

Data source: World Imagery: Maxar
World Boundaries and Places: Esri, HERE, Garmin, iPC. Created by: mhargrave



Legend

Well Types

- Shallow Aquifer Zone Monitoring Well
- Long Screen Monitor Well
- Deep Aquifer Zone Monitoring Well
- Shallow Remediation Well
- Deep Remediation Well
- Nested Shallow Monitor/SVE Well
- Irrigation Well or Other Supply
- Municipal/Domestic Well
- Groundwater Elevation Contour
- Inferred Groundwater Elevation Contour
- Approximate Groundwater Flow Direction
- Landfill Boundary

Notes:

NM Not Measured

* Not used for contouring

Paper Size ANSI B

0 200 400 600 800

Feet

Map Projection: Transverse Mercator
Horizontal Datum: North American 1983 HARN
Grid: NAD 1983 HARN StatePlane Arizona Central FIPS 0202

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LOS REALES LANDFILL
2023 GROUNDWATER MONITORING, EXTRACTION & REMEDIATION SYSTEM PROGRESS REPORT
TUCSON, ARIZONA

AUGUST 2023 WATER TABLE ELEVATION CONTOURS

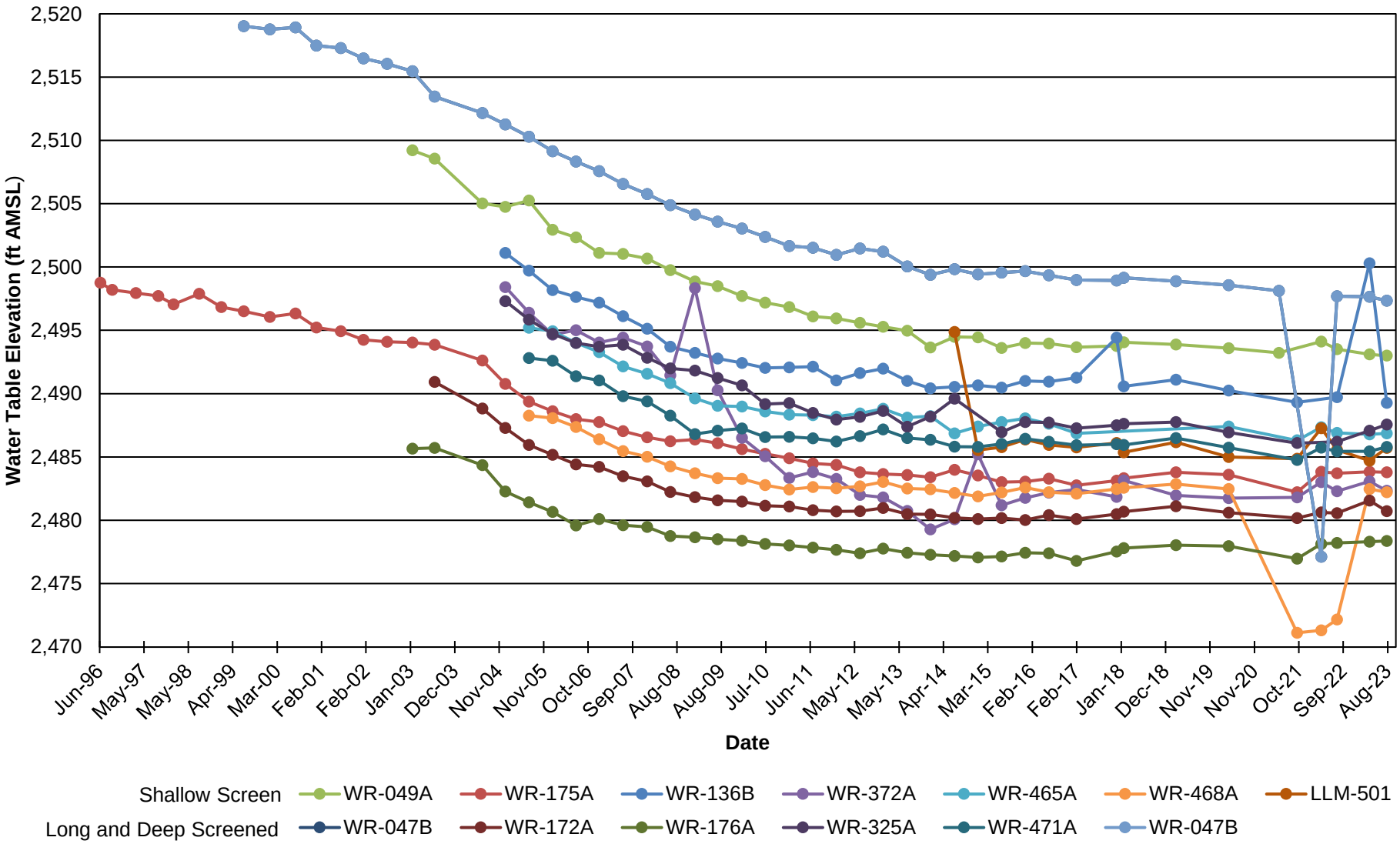
Project No. **12607731**
Revision No. **-**
Date **March 2024**

FIGURE 3

N:\US\Phoenix\Projects\56\12607731\GIS\Maps\Deliverables\12607731_LosReralesGW.aprx - 12607731_016_FIG7_WTE
Print date: 26 Mar 2024 - 15:53

Data source: World Imagery: Maxar
World Boundaries and Places: Esri, HERE, Garmin, iPC Created by: mhargrave

Hydrographs for
Selected Shallow, Long, and Deep Screened Wells



ft AMSL - feet above mean sea level

Figure 4
Los Reales Landfill
2023 Groundwater Monitoring, Extraction Remediation System Progress Report
Tucson, Arizona

WR-176A
April: (<0.50 µg/L)

WR-172A
April: (NS)
August: (<2.00 µg/L)

WR-468A
April: (NS)
August: (<4.00 µg/L)

SWAN RD

WR-184A
April: (**5.24/6.26** µg/L)

WR-466A
April: (2.24 µg/L)
August: (2.24 µg/L)

WR-470A
April: (2.16 µg/L)

WR-465A
April: (<4.00 µg/L)

WR-173B
April: (<0.50 µg/L)

LLM-556
April: (<2.00 µg/L)
August: (<2.00 µg/L)

Marble
April: (<0.50 µg/L)
August: (<2.00 µg/L)

LLM-554
April: (<2.00/<2.00 µg/L)
August: (<2.00 µg/L)

WR-471A
April: (<0.50 µg/L)

LLM-555
April: (<2.00/3.78 µg/L)
August: (<4.00 µg/L)

LLM-537
April: (<2.00 µg/L)

WR-375A
April: (**11.90** µg/L)

WR-380A
April: (<4.00 µg/L)

R-062A
April: (4.51 µg/L)
August: (4.40/4.70 µg/L)

LLM-549
April: (<4.00 µg/L)

LLM-536
April: (<4.00 µg/L)

LOS REALES RD

WR-174A
April: (2.66/2.53 µg/L)

WR-175A
April: (<0.50 µg/L)

WR-135A
April: (NS)

WR-378A
April: (<4.00 µg/L)

R-065A
April: (**12.40/12.20** µg/L)

LLM-544
April: (**5.14** µg/L)

WR-374A
April: (NS)

R-063A
April: (NS)

WR-372A
April: (4.50 µg/L)

LLM-548
April: (2.41 µg/L)

LLM-530
April: (**5.46** µg/L)
August: (4.49 µg/L)

WR-379B
April: (**7.59** µg/L)

R-061A
April: (**20.30** µg/L)

WR-037A
April: (NS)
August: (<4.00 µg/L)

LLM-551
April: (4.45 µg/L)

WR-469A
April: (<0.50 µg/L)

LLM-538
April: (**7.34** µg/L)

LLM-539
April: (NS)

LLM-540
April: (**7.01** µg/L)

JFJ-985
(<0.5 µg/L)

WR-355A
(<2.00 µg/L)

WR-048A
(<2.00 µg/L)

WR-185A
April: (NS)
August: (<2.00 µg/L)

WR-049A
April: (**23.4** µg/L)
August: (**21.70/21.70** µg/L)

WR-047B
April: (<0.50 µg/L)

5

15

Legend

Well Types

- Shallow Aquifer Zone Monitoring Well
- Long Screen Monitor Well
- Deep Aquifer Zone Monitoring Well
- Shallow Remediation Well
- Deep Remediation Well
- Irrigation Well or Other Supply
- Municipal/Domestic Well
- Shallow PCE Concentration Contour
- Contour Dashed Where Inferred
- Landfill Boundary

Notes:

NS	Not Sampled
µg/L	micrograms per liter
PCE	Tetrachloroethylene
5.1	Bolded values exceed Arizona aquifer water quality standards (AWQS) of 5 µg/L
	Contouring based on latest available data

Paper Size ANSI B

0 200 400 600 800

Feet

Map Projection: Transverse Mercator
Horizontal Datum: North American 1983 HARN
Grid: NAD 1983 HARN StatePlane Arizona Central FIPS 0202

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LOS REALES LANDFILL
2023 GROUNDWATER MONITORING, EXTRACTION & REMEDIATION SYSTEM PROGRESS REPORT
TUCSON, ARIZONA

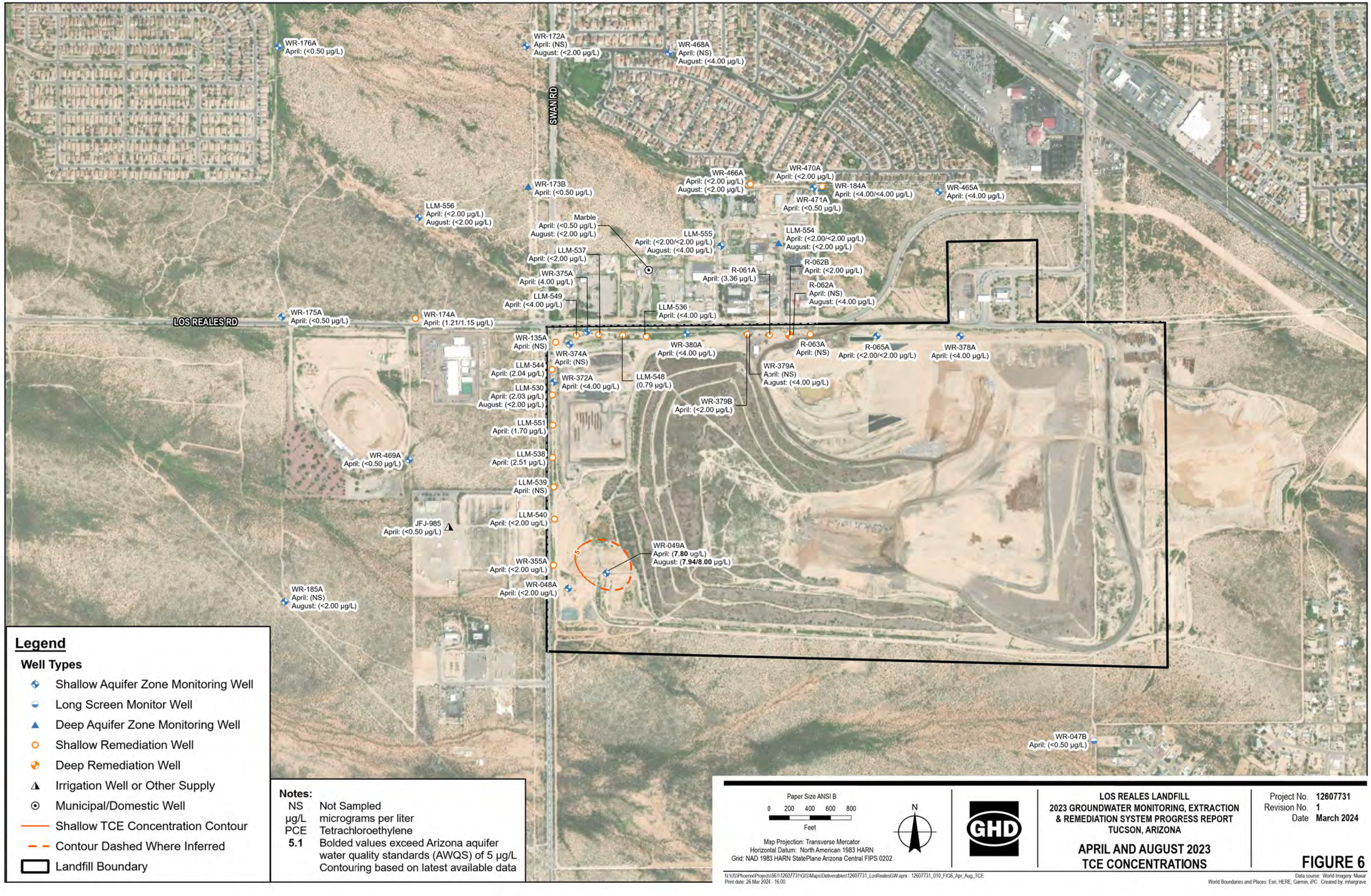
APRIL AND AUGUST 2023 PCE CONCENTRATIONS

Project No. **12607731**
Revision No. **1**
Date **March 2024**

FIGURE 5

N:\US\Phoenix\Projects\56\12607731\GIS\Maps\Deliverables\12607731_LosRealesGW.aprx - 12607731_009_FIG5_Apr_Aug_PCE
Print date: 26 Mar 2024 - 15:57

Data source: World Imagery: Maxar
World Boundaries and Places: Esri, HERE, Garmin, iPC. Created by: mhargrave



Legend

Well Types

- Shallow Aquifer Zone Monitoring Well
- Long Screen Monitor Well
- Deep Aquifer Zone Monitoring Well
- Shallow Remediation Well
- Deep Remediation Well
- Irrigation Well or Other Supply
- Municipal/Domestic Well
- Shallow TCE Concentration Contour
- Contour Dashed Where Inferred
- Landfill Boundary

Notes:

NS	Not Sampled
µg/L	micrograms per liter
PCE	Tetrachloroethylene
5.1	Bolded values exceed Arizona aquifer water quality standards (AWQS) of 5 µg/L
	Contouring based on latest available data

Paper Size ANSI B

0 200 400 600 800

Feet

Map Projection: Transverse Mercator
Horizontal Datum: North American 1983 HARN
Grid: NAD 1983 HARN StatePlane Arizona Central FIPS 0202

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LOS REALES LANDFILL
2023 GROUNDWATER MONITORING, EXTRACTION & REMEDIATION SYSTEM PROGRESS REPORT
TUCSON, ARIZONA

APRIL AND AUGUST 2023 TCE CONCENTRATIONS

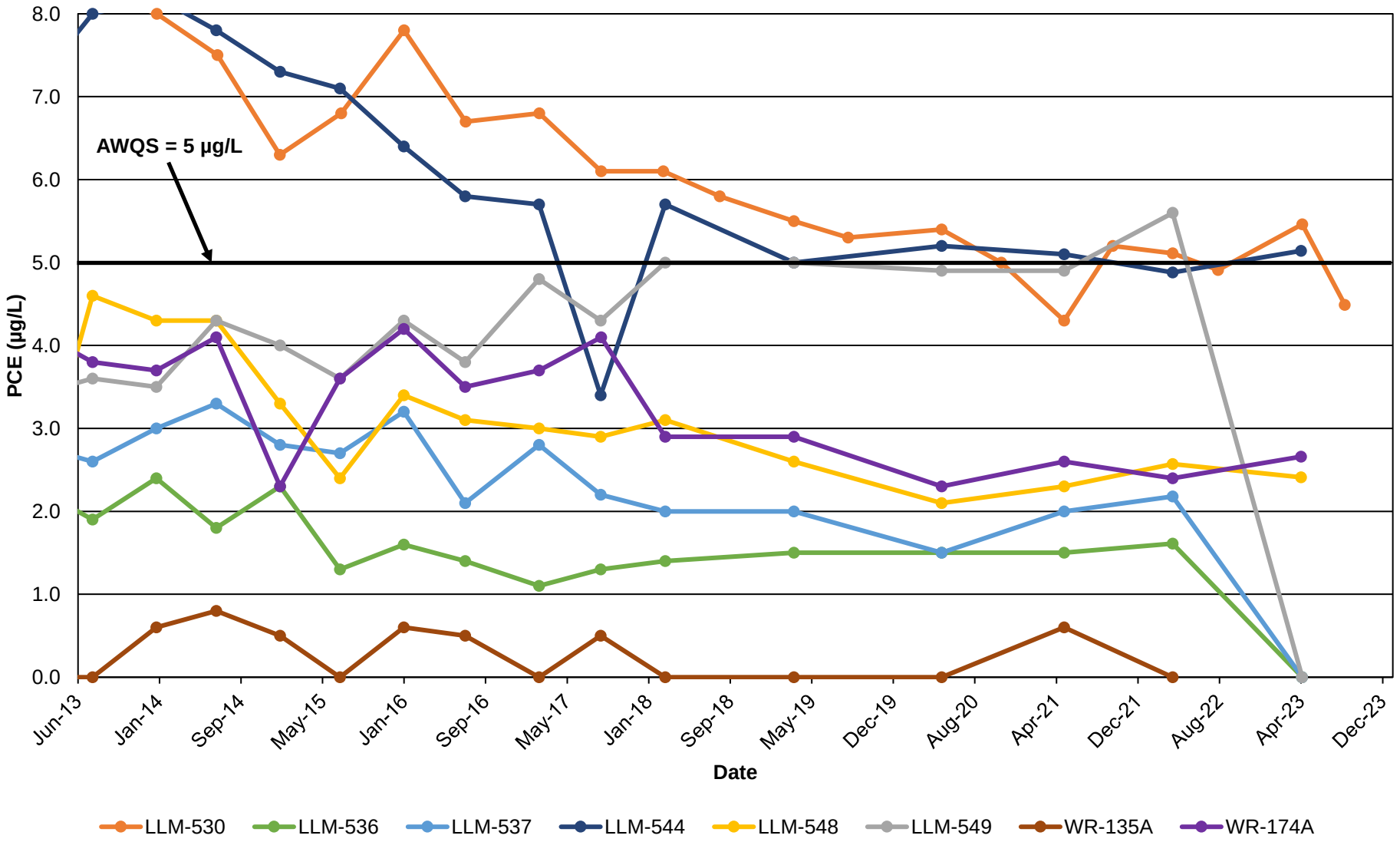
Project No. **12607731**
Revision No. **1**
Date **March 2024**

FIGURE 6

N:\US\Phoenix\Projects\5611\12607731\GIS\Maps\Deliverables\12607731_LosRealesGW.aprx - 12607731_010_FIG6_Apr_Aug_TCE
Print date: 26 Mar 2024 - 16:00

Data source: World Imagery: Maxar
World Boundaries and Places: Esri, HERE, Garmin, iPC. Created by: mhargrave

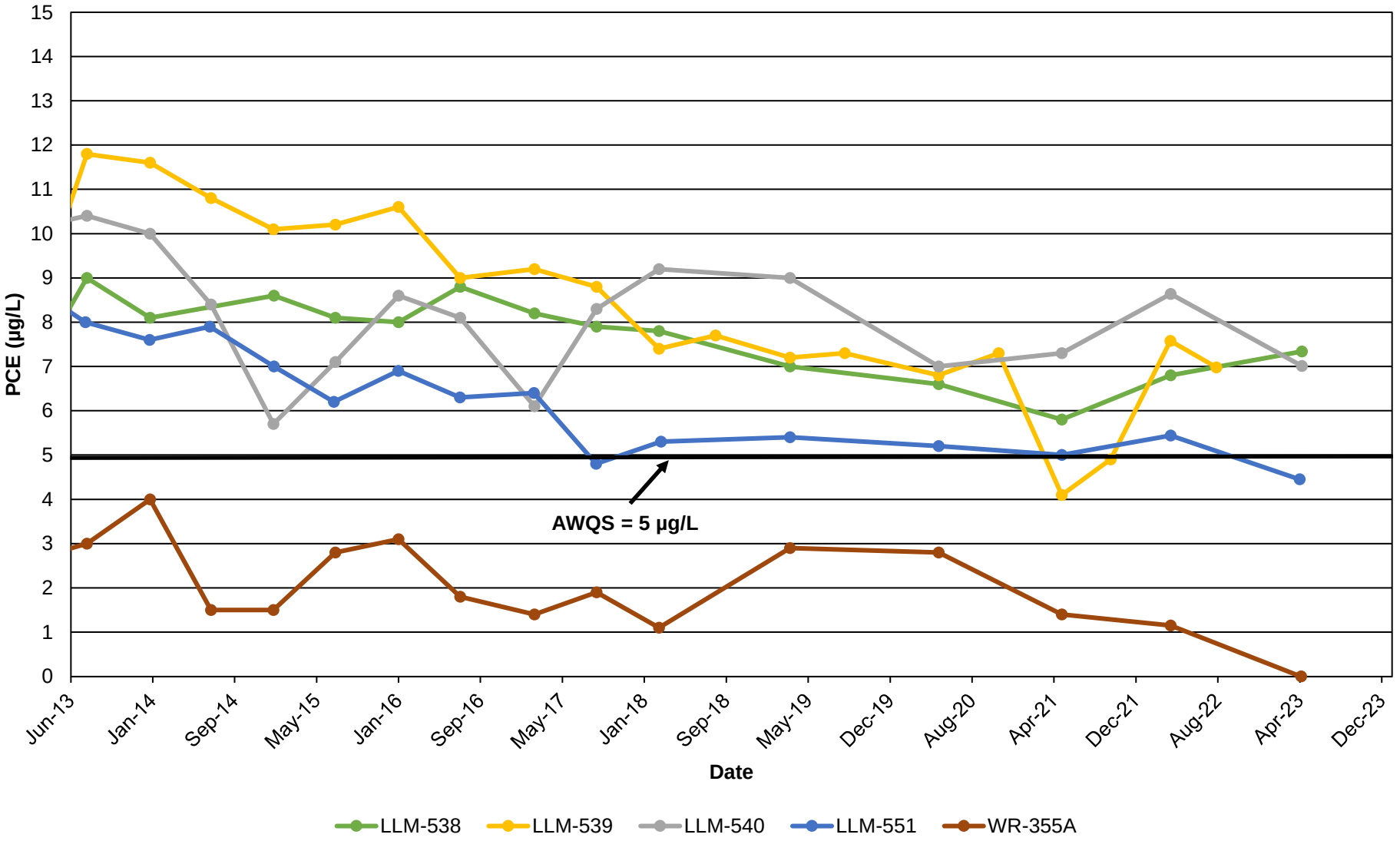
PCE Concentrations in Northwestern Remediation Wells



PCE - tetrachloroethene
µg/L - micrograms per liter
AWQS - Aquifer Water Quality Standard

Figure 7
Los Reales Landfill
2023 Annual Groundwater Monitoring Report
Tucson, Arizona

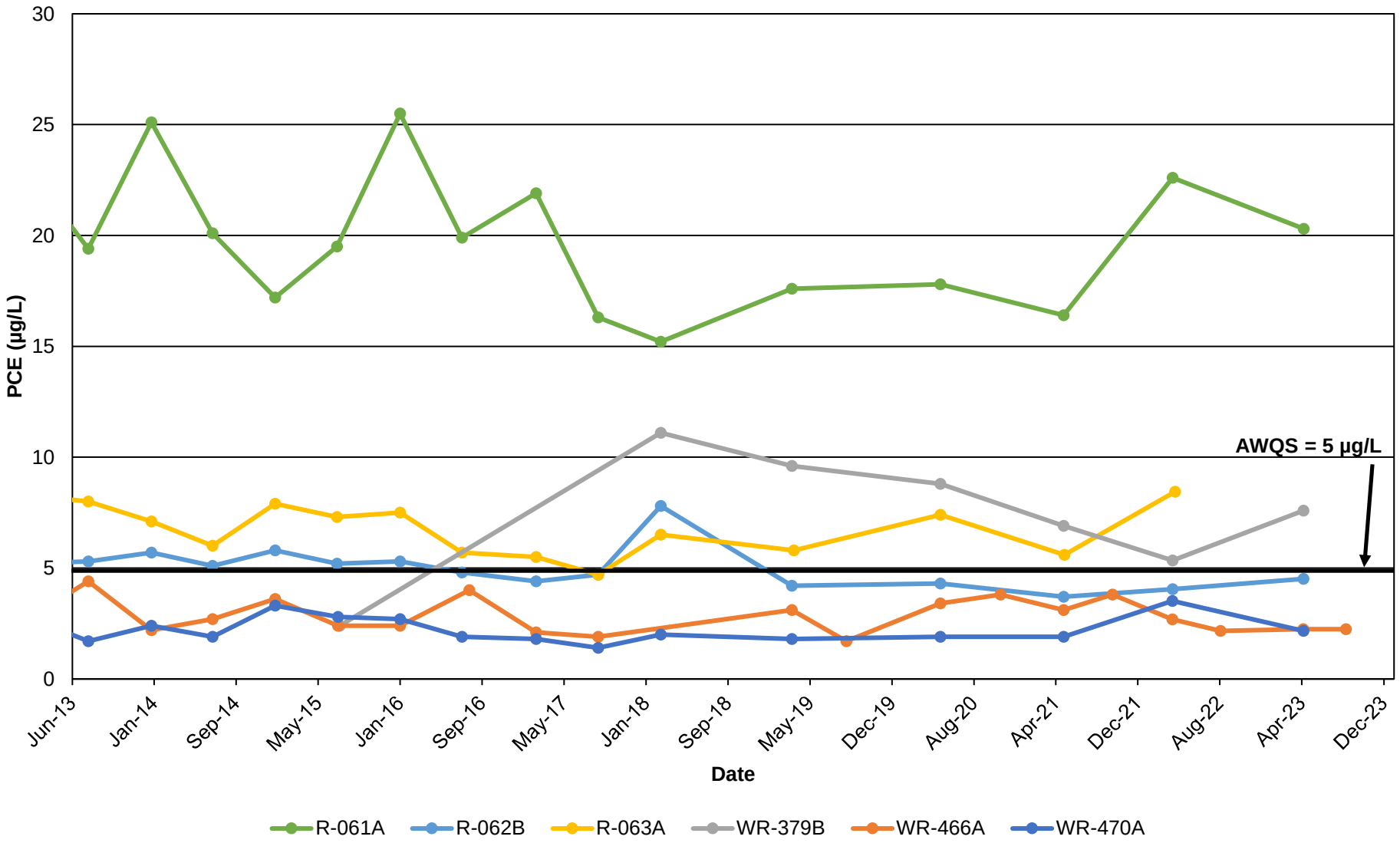
PCE Concentrations in Southwestern Remediation Wells



PCE - tetrachloroethene
µg/L - micrograms per liter
AWQS - Aquifer Water Quality Standard

Figure 8
Los Reales Landfill
2023 Annual Groundwater Monitoring Report
Tucson, Arizona

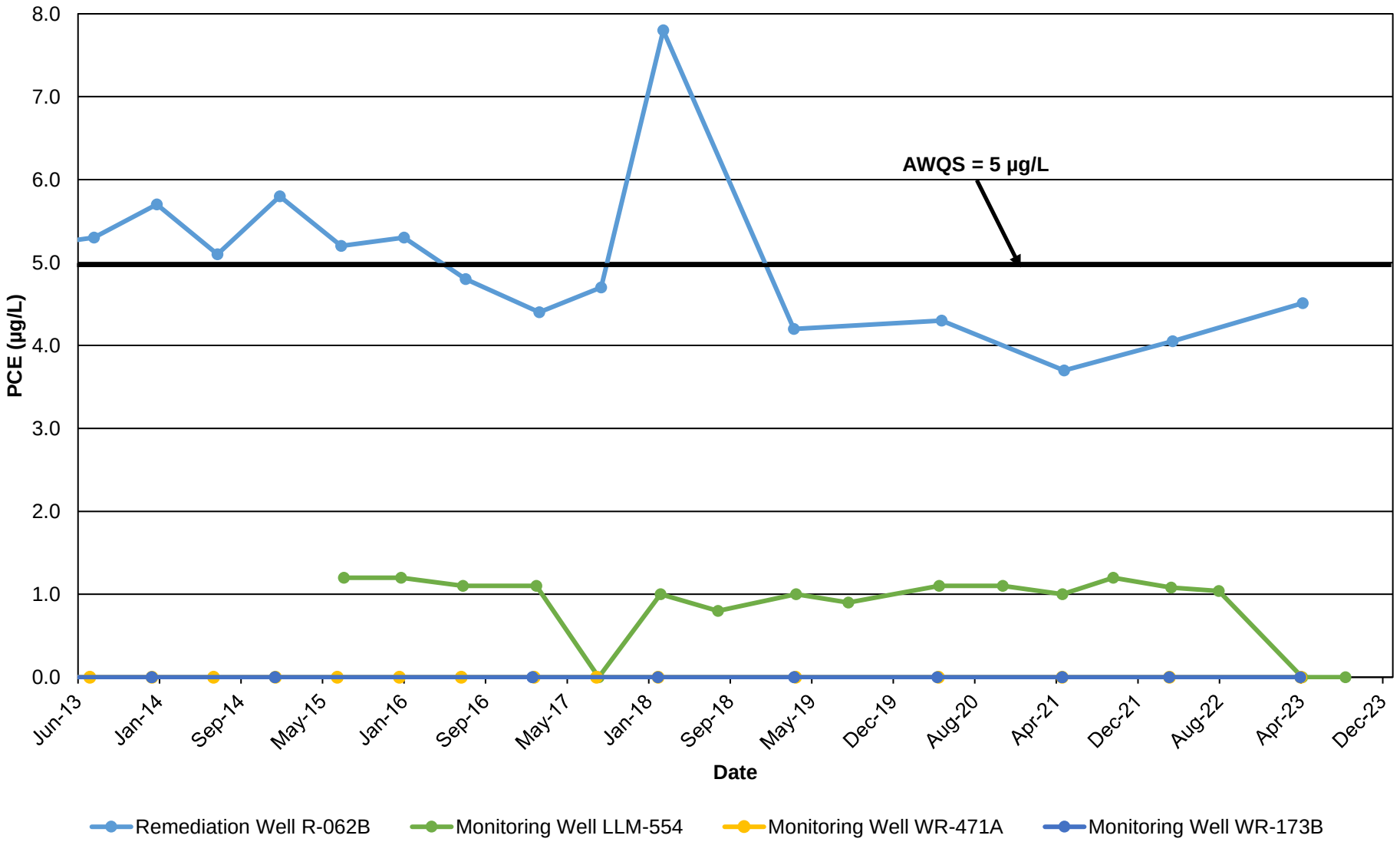
PCE Concentrations in Eastern Remediation Wells



PCE - tetrachloroethene
µg/L - micrograms per liter
AWQS - Aquifer Water Quality Standard

Figure 9
Los Reales Landfill
2023 Annual Groundwater Monitoring Report
Tucson, Arizona

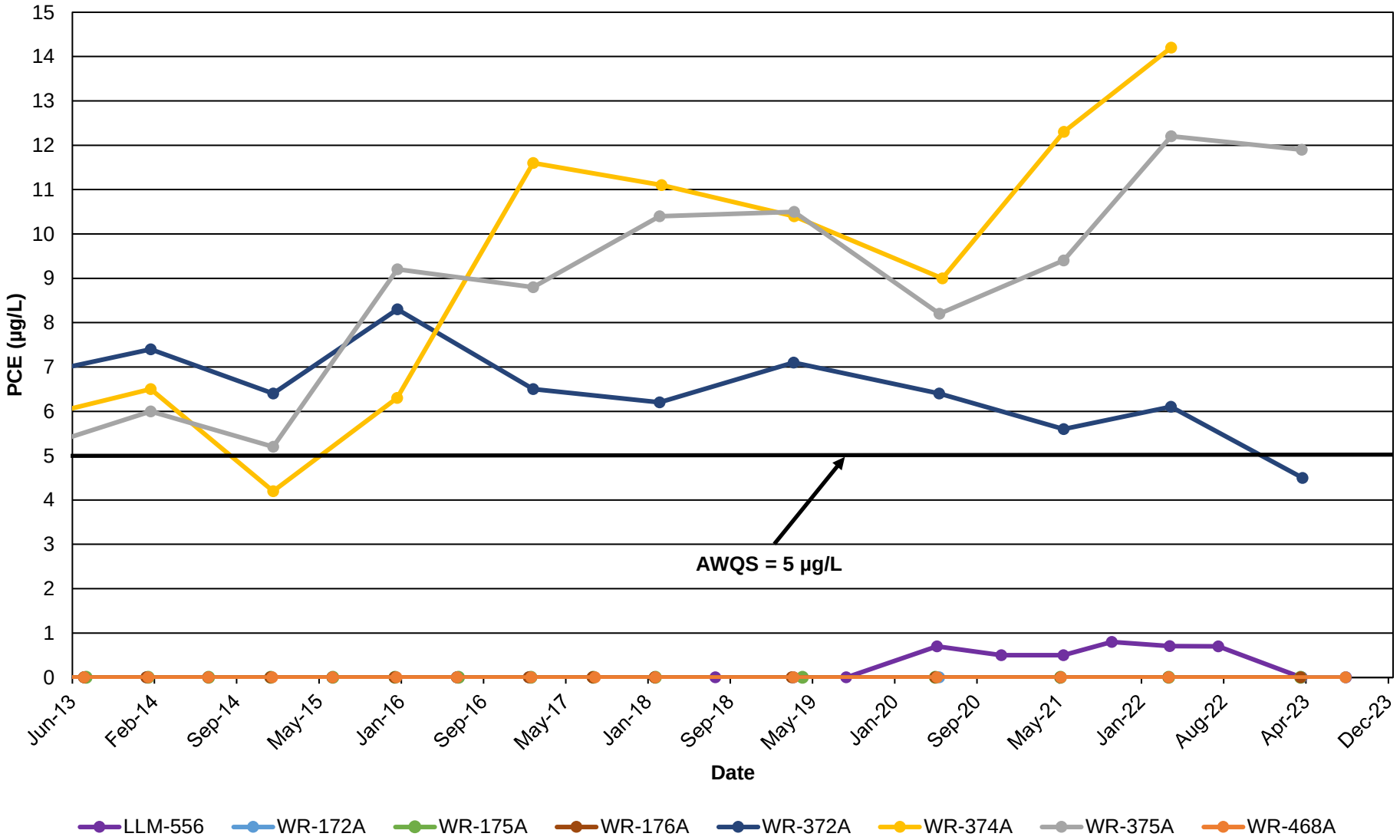
PCE Concentrations in DAZ Monitoring and Remediation Wells



PCE - tetrachloroethene
µg/L - micrograms per liter
AWQS - Aquifer Water Quality Standard

Figure 10
Los Reales Landfill
2023 Annual Groundwater Monitoring Report
Tucson, Arizona

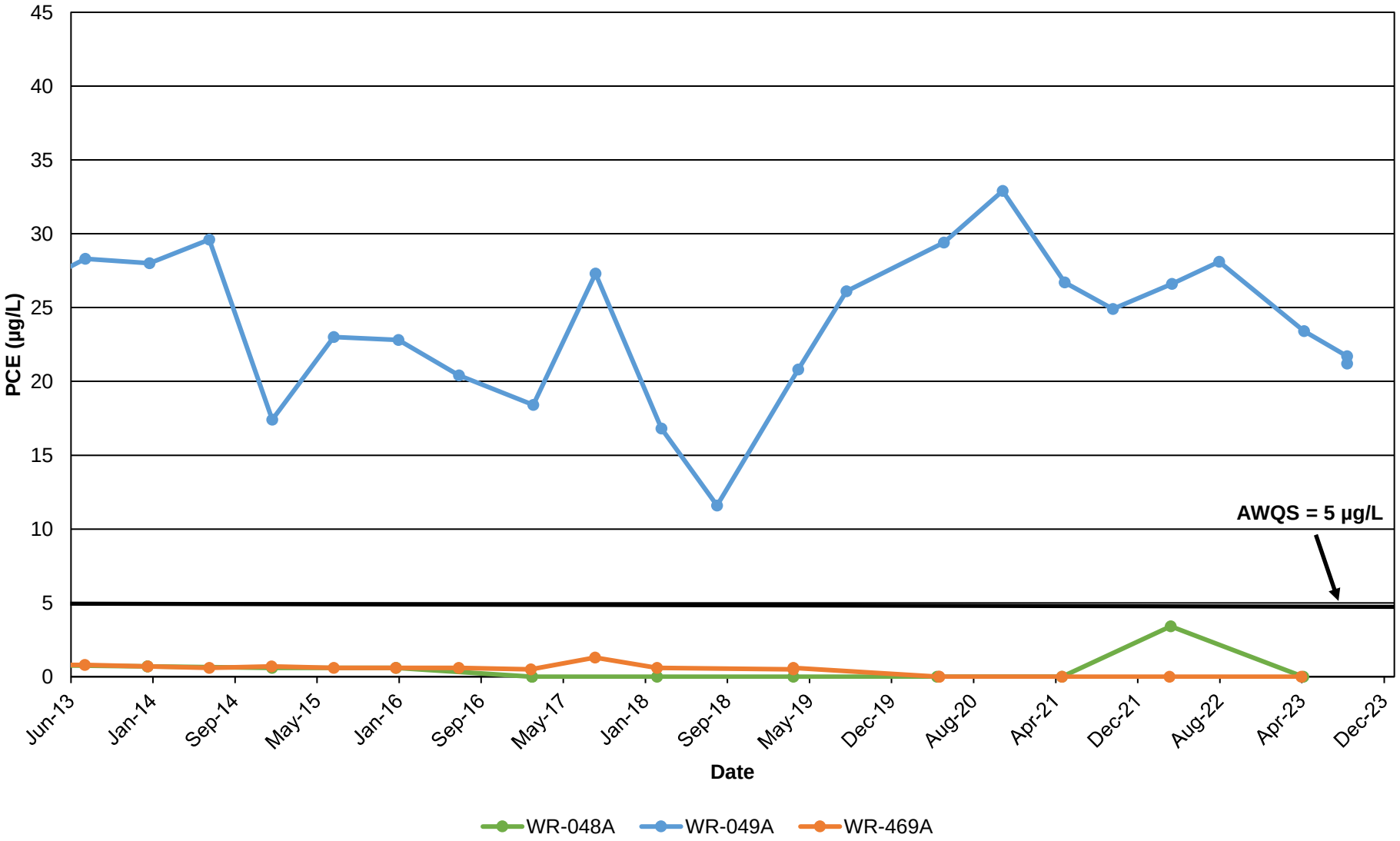
PCE Concentrations in Northwestern SAZ Monitoring Wells



PCE - tetrachloroethene
µg/L - micrograms per liter
AWQS - Aquifer Water Quality Standard

Figure 11
Los Reales Landfill
2023 Annual Groundwater Monitoring Report
Tucson, Arizona

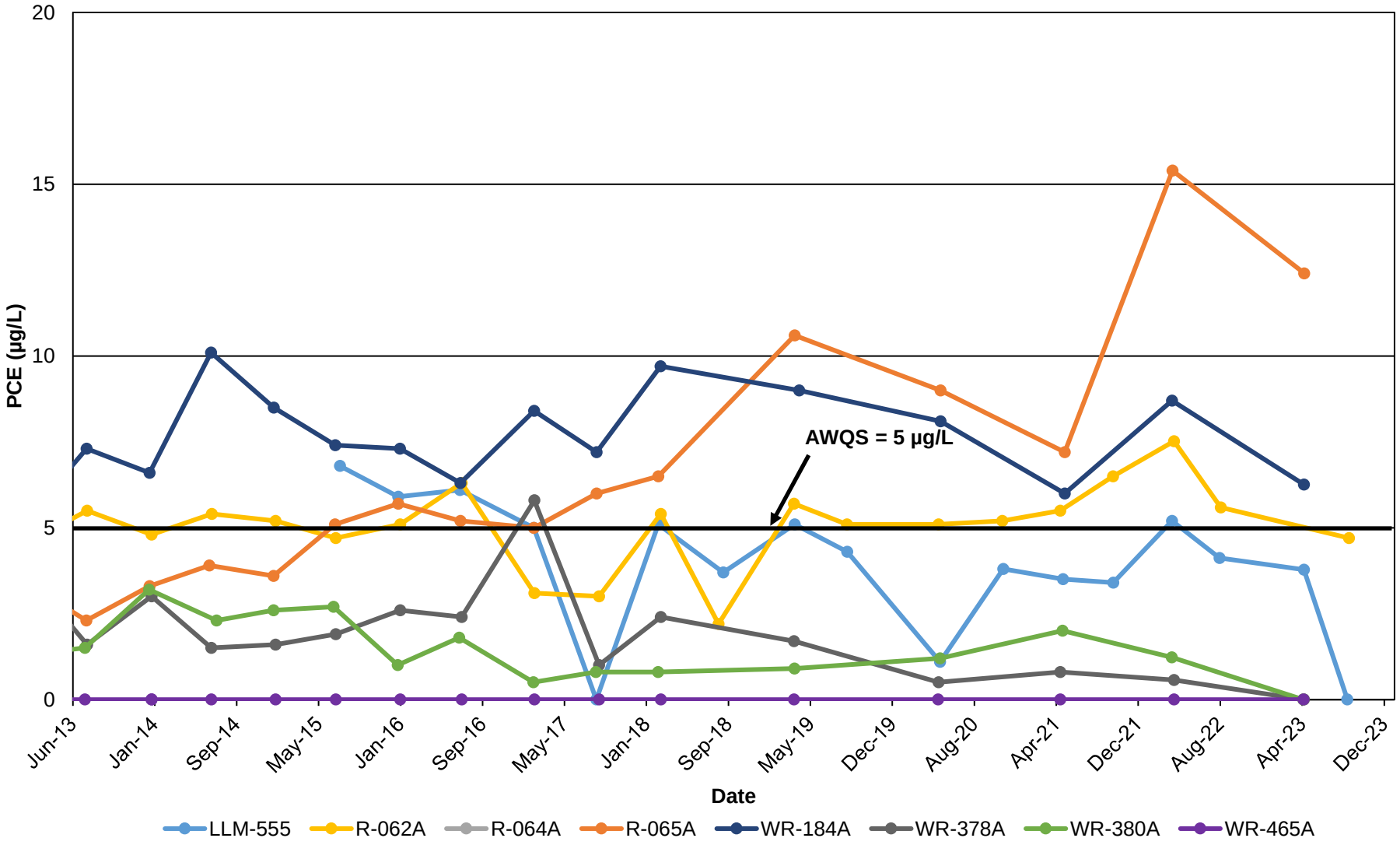
PCE Concentrations in Southwestern SAZ Monitoring Wells



PCE - tetrachloroethene
µg/L - micrograms per liter
AWQS - Aquifer Water Quality Standard

Figure 12
Los Reales Landfill
2023 Annual Groundwater Monitoring Report
Tucson, Arizona

PCE Concentrations in Eastern SAZ Monitoring Wells



PCE - tetrachloroethene
µg/L - micrograms per liter
AWQS - Aquifer Water Quality Standard

Figure 13
Los Reales Landfill
2023 Annual Groundwater Monitoring Report
Tucson, Arizona

Appendices

Appendix A

August 2023 Field Documentation

Field Data Record Form
Multi-Parameter Meter-Horiba

Control number: 07120
Date (mm/dd/yyyy): 08/21/2023
User (print name): Kayla Bainsback

Project number: 12607731
Project name: Los Reales Landfill

Location: Tucson, AZ

Calibration solution(s): AUTO CAL
Lot #(s): 24000044
Supplier(s): PINE
Expiration date(s): APRIL '24

Additional information: 4.01 pH, 4.50 mS/cm, 0.0 NTU, 8.92 mg/L DO

Field procedure before use:

	Check when completed
• Wash the sensors in distilled water.	
• Fill the calibration beaker to line on the beaker with auto-cal solution.	
• Immerse the probe into the beaker, and turn the power on.	
• For the U-10: press the MODE key to put the unit into the MAINT mode, and set the lower cursor to AUTO.	☑
• For the U-22: press the CAL key in one of the measurement modes.	
• Press the ENT key to start the AUTO calibration. When calibration is complete, the readout will show END.	
• Switch to MEAS mode, and check the calibration in AUTO-CAL solution.	☑
• The instrument is ready for use.	
Note: Conductivity measured in mS/cm not µS/cm as commonly measured by pocket meters. Multiply value by 1,000 to convert to µS/cm.	

Filing: Field file

Signature:

Field Data Record Form
Multi-Parameter Meter-Horiba

Control number: 07120
Date (mm/dd/yyyy): 8/22/23
User (print name): E Schaff, K Bansback

Project number: 12607731
Project name: Los Reales Landfill

Location: Tucson, AZ

Calibration solution(s): Auto Cal
Lot #(s): See 8/21
Supplier(s): ↓
Expiration date(s):

Additional information: pH 4.01, 4.49 mS/cm, 0.0 NTU, 8.37 mg/L DO

Field procedure before use:

	Check when completed
• Wash the sensors in distilled water. • Fill the calibration beaker to line on the beaker with auto-cal solution. • Immerse the probe into the beaker, and turn the power on. • For the U-10: press the MODE key to put the unit into the MAINT mode, and set the lower cursor to AUTO. • For the U-22: press the CAL key in one of the measurement modes. • Press the ENT key to start the AUTO calibration. When calibration is complete, the readout will show END. • Switch to MEAS mode, and check the calibration in AUTO-CAL solution. • The instrument is ready for use. **Note:** Conductivity measured in mS/cm not µS/cm as commonly measured by pocket meters. Multiply value by 1,000 to convert to µS/cm.	☐ ☑

Filing: Field file

Signature: Eleanor Schaff

Field Data Record Form
Multi-Parameter Meter-Horiba

Control number: 07120
Date (mm/dd/yyyy): 8/23/23
User (print name): E Schaff / A McCawley

Project number: 126077731
Project name: Los Reales Landfill

Location: Tucson, AZ

Calibration solution(s): Auto Cal
Lot #(s): see 8/21/23
Supplier(s): ↓
Expiration date(s):

Additional information: 4.02 pH, 4.50 mS/cm, 0.3 NTU, 9.33 mg/L DO

Field procedure before use:

	Check when completed
• Wash the sensors in distilled water. • Fill the calibration beaker to line on the beaker with auto-cal solution. • Immerse the probe into the beaker, and turn the power on. • For the U-10: press the MODE key to put the unit into the MAINT mode, and set the lower cursor to AUTO. • For the U-22: press the CAL key in one of the measurement modes. • Press the ENT key to start the AUTO calibration. When calibration is complete, the readout will show END. • Switch to MEAS mode, and check the calibration in AUTO-CAL solution. • The instrument is ready for use. **Note:** Conductivity measured in mS/cm not µS/cm as commonly measured by pocket meters. Multiply value by 1,000 to convert to µS/cm.	☐ ☑

Filing: Field file

Signature:

Field Data Record Form
Multi-Parameter Meter-Horiba

Control number: 07120
Date (mm/dd/yyyy): 8/24/23
User (print name): E Schaff/ A McCawley

Project number: 12607731
Project name: Los Reales Landfill
Location: Tucson, AZ

Calibration solution(s): Auto Cal
Lot #(s): See 8/21/23
Supplier(s): ↓
Expiration date(s): ↓

Additional information: 4.01 pH, 4.49 mS/cm, 0.0 NTU, 8.88 mg/L DO

Field procedure before use:

	Check when completed
• Wash the sensors in distilled water. • Fill the calibration beaker to line on the beaker with auto-cal solution. • Immerse the probe into the beaker, and turn the power on. • For the U-10: press the MODE key to put the unit into the MAINT mode, and set the lower cursor to AUTO. • For the U-22: press the CAL key in one of the measurement modes. • Press the ENT key to start the AUTO calibration. When calibration is complete, the readout will show END. • Switch to MEAS mode, and check the calibration in AUTO-CAL solution. • The instrument is ready for use. **Note:** Conductivity measured in mS/cm not µS/cm as commonly measured by pocket meters. Multiply value by 1,000 to convert to µS/cm.	☐ ☑

Filing: Field file

Signature: E Schaff

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC

Pine Environmental Services, Inc.

Instrument ID R12089
Description Heron WLM
Calibrated 8/21/2023 4:31:35PM

Manufacturer	Heron	**State Certified**	
Model Number	DIPPER-T	**Status**	Pass
Serial Number/ Lot Number	19592	**Temp °C**	28
Location	Arizona	**Humidity %**	63
Department			

Calibration Specifications

Group # 1
Group Name
Test Performed: Yes **As Found Result: Pass** **As Left Result: Pass**

Test Instruments Used During the Calibration **(As Of Cal Entry Date)**

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	Next Cal Date / Last Cal Date/ Expiration Date Opened Date

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated John Brown

All instruments are calibrated by Pine Environmental Services LLC according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services LLC of any defect within 24 hours of receipt of equipment
Please call 800-301-9663 for Technical Assistance

INSTRUMENT QC/ PACKING LIST

Description	Heron Skinny Dipper Water Level Meter
Instrument ID	R12089
Cable length	500
Cable unit of measure	☐ Metric ☑ Imperial
Date Prepared	8-21-23

PINE
www.pine-environmental.com

Standard Items	**Prepared**	**QC check**	**Received by customer**	**Returned to Pine**
9V Alkaline battery, spare	✓	✓		
Optional Items				
Carry case	X	X		
Instructions	X	X		
ProCal Inspection Report	✓	✓		

Prepared by: SB
QC checked by: [signature]
Date: 8-21-23

This packing list is to ensure that every item needed to operate the unit was sent and received. Upon receiving a shipment, please fill out the "Received by customer" column. Call Pine within 24 hours of receiving the equipment if any pieces are missing, damaged, or malfunctioning. Thank you for choosing Pine Environmental Services LLC

Field Data Record Form
Meter, Water Level
(QSF-251D)

Control number: 07118, 07119
Date (mm/dd/yyyy): 08/21/2023
User (print name): Kayla Bansback

Project number: 12607731
Project name: Los Reales Landfill

Location: Tucson, AZ

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check for broken or missing parts.	
• Check battery	☑
• Check operation of buzzer.	☑
• Check operation of signal light.	☑
• Test probe in water to ensure unit operates, both visually and audibly.	☑
• Check cable.	☑

Filing: Field file

Signature: Kayla Bansback

This completed form is a quality record

Field Data Record Form
Meter, Water Level
(QSF-251D)

Control number: 07119
Date (mm/dd/yyyy): 8/22/23
User (print name): E Schaff, K Bansback

Project number: 12607731
Project name: Los Reales Landfill

Location: Tucson, AZ

Additional equipment control numbers and descriptions: 07118.

Field procedure before use:

	Check when completed
• Check for broken or missing parts.	
• Check battery	☑
• Check operation of buzzer.	☑
• Check operation of signal light.	☑
• Test probe in water to ensure unit operates, both visually and audibly.	☑
• Check cable.	☑

Filing: Field file

Signature: Ceron E. Schaff

This completed form is a quality record

Field Data Record Form
Meter, Water Level
(QSF-251D)

Control number: 07119, Rental 500' Solinist
Date (mm/dd/yyyy): 8/23/23
User (print name): E Schaff / A McCawley

Project number: 12607731
Project name: Los Reales Landfill
Location: Tucson, AZ

Additional equipment control numbers and descriptions:
Rental from Pine

Field procedure before use:

	Check when completed
• Check for broken or missing parts.	
• Check battery	☑
• Check operation of buzzer.	☑
• Check operation of signal light.	☑
• Test probe in water to ensure unit operates, both visually and audibly.	☑
• Check cable.	☑

Filing: Field file

Signature:

This completed form is a quality record

Field Data Record Form
Meter, Water Level
(QSF-251D)

Control number: 07119, Pine Rental 500'
Date (mm/dd/yyyy): 8/24/23
User (print name): E Schaff/A McCawley

Project number: 12607731
Project name: Los Reales Landfill
Location: Tucson, AZ

Additional equipment control numbers and descriptions:
Pine rental Solonist 500' standard tape

Field procedure before use:

	Check when completed
• Check for broken or missing parts.	
• Check battery	☑
• Check operation of buzzer.	☑
• Check operation of signal light.	☑
• Test probe in water to ensure unit operates, both visually and audibly.	☑
• Check cable.	☑

Filing: Field file

Signature:

This completed form is a quality record

Field Notes

Date/Proj. #: 8/21/23 12607731

Personnel: E Schaff / K Bansback

Task: Quarterly Groundwater Sampling

Equipment: Water level meter tapes 07119, 07118 Horiba water quality meter 07120, truck 694

Weather: 74°, light rain, H 91°, afternoon showers

0530 - ES mob from Tucson office to Los Reales landfill
0555 - ES onsite, began paperwork
0600 - KB onsite
0605 - Discuss work plan for the day, discuss tailgate safety topics, site hazards.
0630 - Water tapes calibrated
0645 - Sign in at admin building Met with Jose, discussed site conditions and hazards.
0700 - Mob to set hydrasleeves
0710 - Set up on R-062A. Well vault is 3.5' deep, used COT provided step ladder to enter vault. Hydrasleeve tether in vault is 239' long. DTW = 225.11
0735 - Hydrasleeve set at R-062A at 231' (screen 200-240)
0745 - Set up on WR-379A, hydrasleeve tether was 235' DTW = 222.12 screen interval is 199-239 Set ~~hydra~~ ES hydrasleeve at ~~23~~ ES 235'
0805 - Set hydrasleeve at WR-379A
0810 - Call Andre landowner of Marble well. set up apt. to sample well.
0815 - Calibrate and perform maintenance on Horiba meter.
0835 - onsite at marble well to collect sample. No sounding port available to tag DTW. Let Spigot purge for 1 min before sampling.
0845 - Collected Sample at Marble Well water was very aerated, had to top off VOAs.
0900 - Call with PM to discuss revised work plan.
0910 - Mob to purchase ice.
0927 - Mob to WR-466A
0940 - WR-466A had water tape stuck down-hole, left behind by

Field Notes

Date/Proj. #: 8/21/23 12607731

Personnel: E Schaff, K Bansback

Task: Groundwater Sampling

Equipment: See page 1

Weather: 85°, windy

0940 (cont.) - USGS Transducer cable also down-hole, did not want to introduce our tape and potentially tangle with other items in well. Purged spigot for 1-2 minutes

1010 - Collected spigot sample at WR-466A water was very aerated, had to top off VOAs

1027 - Mob to LLM-530

1038 - Begin set up on LLM-530 - unable to tag DTW, probe unable to advance past 217.5'

1050 - Collected sample at LLM-530 from spigot after purging 1-2 minutes.

1105 - Begin set up on LLM-539 No sounding tube present, unable to tag DTW. Turned on spigot at 1108, no water discharged

1115 - Still no water discharged. Called Pine to rent 500' tape

1120 - Mob to admin building to refill decon sprayer bottles, put air in truck tire.

1135 - Mob to begin collecting site wide water levels at wells on the outskirts of the network before the ~~ES~~ thunderstorms this afternoon make access hard.

1145 - Tag WR-~~046A~~ ES-047B

1230 - Contacted Schnitzer properties about getting access to racetrack wells

1415 - Finished tagging water levels for the day, storms approaching, lightning within 10 miles. Mob to admin office

1430 - KB sign out at admin office, ES wrap up ES paperwork, secure equipment

1440 - ES and KB offsite, end of day. Samples kept under ice under ES's custody.

Field Notes

Date/Proj. #: 8/22/23 12607731

Personnel: E Schaff, K Bansback

Task: Groundwater Sampling

Equipment: Water level tapes 07119, 07118, Horiba multimeter 07120, truck 694

Weather: 70°; Clear, Calm, H of 100, 30% chance PM showers

0555 - ES onsite at Los Reales Landfill, begin filling out paperwork.
0600 - KB onsite
0615 - Tailgate safety topics discussed, equipment calibrated.
0630 - refill decon sprayers. Sign in at admin office, met with Jose to discuss site operations, progress update.
0643 - Mob to begin collecting site-wide water levels. Mob to WR-465A
0743 - Passed by LLM-539, opened spigot but pump not on.
0805 - R-109A & B had dead rattlesnake by well vault, black widow inside second vault. Due to tall grass, and partially opened well lids, deemed unsafe due to biologicals observed and potential for more unseen hazards. Well lids need to be cleaned an re-secured. Tall grass needs trimming
0810 - WR-361A well pad was washed out, well pad and vault floating/ suspended on well casing. Potential biological hazards living under well pad. needs maintenance.
0820 - WR-049A. power cable for well's pump was crimped under vault lid May cause issues when pumping
0920 - Mob to admin office to pickup more ice for coolers
0930 - KB offsite for Dr. apt. ES refill sample cooler and drink cooler with ice.
0942 - Mob to R-105A to resume water level monitoring
0955 - Tagged R-105A with two different sounders, getting water at 16'. Possible water intrusion from last night's rain?
1056 - Mob back to admin building to pick up KB, refill decon bottles.
1108 - Mob to resume tagging wells at R-062B
1310 - Mob to admin office to refill decon sprayers
1326 - Mob to meet with Schnitzer Properties to access

Field Notes

Date/Proj. #: 8/22/23 12607731 Equipment: See page 1

Personnel: E Schaff K Bansback

Task: Groundwater Monitoring/ Sampling Weather: 100, Sunny, Clear

1326(cont) - the racetrack well and WR-469A.
1355 - Back onsite at landfill to resume tagging water levels
1403 - Unable to tag LLM-501 sound between 219' and 211'. Will try again with rental tape
1450 - Finished collecting site wide water levels at all wells we could. Mob back to parking lot to wrap up for the day.
1500 - Lightning strikes within 10 miles, KB offsite, ES secure equipment, sign out of admin office. Returned confined space ladder to Jake, picked up delivered rental water tape from Pine.
1520 - ES mob offsite to return to office. Raining.
1600 - Samples and equipment under custody at office. Samples on adequate ice overnight. End of day

8/22/23

Field Notes

Date/Proj. #: 8/23/23 12607731

Personnel: E Schaff, A McCawley

Task: Groundwater Sampling

Equipment: Truck 694, water tape ~~07118~~ E.S. 07119, rental 500' tape from Pine, GHD GW sampling trailer, Horiba U52

Weather: 73°, Mostly Clear, H of 94°. 30% chance showers in afternoon

0630 - ES mob from office to Silverbell Storage to pick up sampling trailer.
0645 - Arrive at storage unit.
0718 - Trailer loaded, battery connected, inspected trailer before trip, ensure all equipment secure. Mob to Los Reales
0745 - Onsite at Los Reales Landfill. Sign in at admin office.
0800 - Mob to WR-172A
0810 - Begin setup on WR-172A to purge ND well. DTW = 201.06
0838 - Began purge at WR-172A
0845 - AM onsite
0905 - Replaced sediment filter due to reduced flow rate. Filter was covered in grease-like substance. Put in new filter. (Old filter was also plugged up with corse and fine sediments)
0955 - Collected sample at WR-172A - after 5 well volumes. Water was cloudy, rust sediments in water
1010 - Mob to admin building to use restroom
1027 - ~~Mob to LLM~~ Jose provided caution cones to use at WR-468A for traffic control.
1055 - Began setup at WR-468A. Attempted to pump well, but not working. Current limit error message displaying
1115 - Checked electrical connections at both well and VFD. found two loose wires. Fixed connections but still getting error message.
1130 - After checking connections and trying different things, finally able to get pump to run after a hard start up (cycled off then back on at max speed)
1136 - Began purge at WR-468A
1200 - Collected sample at WR-468A

Field Notes

Date/Proj. #: 12607731 8/23/23

Personnel: E Schaff / A McCawley

Task: Groundwater Sampling

Equipment:

Weather:

1210 - Mob to park off of Swan and Fairy Duster to QC samples, fill out COC.
1225 - Collected equipment rinse blank sample EB-01 off of stick up pipe after decon of pipe.
1245 - Mob back to admin building to drop AM off at her vehicle to bring samples to the lab.
1300 - AM mob to lab to drop off samples. ES refill decon sprayer
~~H3~~ ES 1313 - ES mob to ~~MW-185A~~ ES LLM-554
1320 - Begin setup on LLM-554 DTW = 216.85
1350 - Began purge at LLM-554
1349 - AM relinquished samples to TWAL
1445 - ~~15~~ ES AM back onsite at LLM-554
1525 - Sampled LLM-554 after 4.5 well volumes.
1545 - All finished sampling for the day. AM mob offsite, ES mob to admin building to sign out.
1610 - ES mob to Silverbell Storage to put away trailer
1640 - Trailer dropped off at Silverbell Storage. ES mob home. Samples will be kept under custody on plenty of ice. End of day.

8/23/23

Field Notes

Date/Proj. #: 8/24/23 12607731
Personnel: E Schaff / A McCawley
Task: Groundwater Sampling
Equipment: Rental 500' water tape, 07119, truck694, Horiba multimeter 07120, COT ladder
Weather: T5, Clear, H of 97°

0618 - ES onsite at Silverbell storage. Load trailer and equipment
0627 - Mob to refuel generator then mob to Los Reales Landfill
~~0825~~ 0634 - ES mob to landfill
0650 - ES onsite at Los Reales landfill, begin calibrating equipment
0707 - AM onsite. Calibrations complete
0714 - Sign in at admin office
0724 - Mob to WR-185A
0740 - Began setup on WR-185A. DTW = 190.20
0747 - Began purge at WR-185A
0840 - Collected sample at WR-185A. Sediment filter coated in grease like substance after purge. Replaced filter.
0855 - Mob to LLM-556
0926 - Began purge at LLM-556
0945 - Collected sample at LLM-556, after purging 5 well volumes
0955 - Mob to admin building to use restroom, pickup extra bag of ice
1015 - Mob to LLM-555
1030 - Began setup on LLM-555. DTW = 215.34
1040 - Began purge at LLM-555, purge was very slow, very little water above pump, ES had to monitor drawdown and adjust pump speed accordingly
1115 - Collected sample at LLM-555
1130 - Mob to attempt to tag LLM-501 again
1142 - LLM-501 successfully tagged with larger 500' tape.
~~1145 - Mob to~~ ES
1145 - Collected rinse blank sample EB-02 off of stick up pipe after decon from use on LLM-555
1155 - Set up on R-062A to collect hydrasleeve sample
1205 - Collected hydrasleeve sample at R-062A
1210 - Collected duplicate sample at R-062A

GHD

Field Notes

Date/Proj. #: 8/24/23 12607731

Personnel: E Schaff / A McCawley

Task: Groundwater Sampling

Equipment: seepage 1

Weather: 95, Sunny, Clear

1220 - Mob to WR-379A

1230 - Set up to sample WR-379A. DTW = ~~ZT~~ ES 222.12

1240 - Collected hydrasleeve sample at WR-379A

1250 - Mob to check if LLM-539 is running

1255 - LLM-539 still not running, mob to ~~to~~ ES WR-049A

1300 - Set up on WR-049A. DTW = 201.16

1311 - Began purge at WR-049A.

1330 - Collected GAC-EFF sample from GAC drum

1430 - Collected sample at WR-049A

1433 ~~1333~~ ES - Collected duplicate sample at WR-049A

1435 ~~1355~~ - Mob back to admin office to wrap up, fill out COC.

1530 - COC updated, AM mob offsite with samples, will keep under custody and drop off at TWQL in the morning.

1540 - ES mob to Silverbell storage to return trailer

1615 - Stop by car wash to power wash ~~off~~ mud from trailer and equipment

1630 - Mob to storage unit.

1655 - Trailer put back into storage. ES mob back to Tucson office. End of day.

8/24/23

CITY OF TUCSON

Environmental Management

Water Level Data Form

Project: Los Reales

Date: 08/21/2023 - 08/22/2023

Field Personnel: Evan Schaff, Kayla Bansback

Well #	Date	Time	DTW	Correction Factor	Sounder ID	Well Inspection & Notes
IJ-001A	**8/22/2023**	1236				
IJ-002A	**8/22/2023**	1149	157.4			Well was actively injecting. Vegitation overgrown
LLM-501	**8/24/2023**	1142	211.64			Possible mold in cap for casing
LLM-513	**8/21/2023**	1315	187.74			
LLM-530	**8/22/2023**	1433				Obstruction at 217.30' unable to tag DTW
LLM-536	**8/22/2023**	1219	222.02			
LLM-537	**8/22/2023**	1251	NA			Transducer tube capped, unable to tag DTW
LLM-538	**8/22/2023**	1450	220.7			Pump running
LLM-539	**NA**					No sounding tube present.
LLM-540	**NA**					No sounding tube present.
LLM-543	**8/21/2023**	1405	210.45			
LLM-544	**8/22/2023**	1422	230.62			
LLM-548	**8/22/2023**	1236	226.63			
LLM-549	**NA**					No sounding tube present.
LLM-551	**8/22/2023**	1442	215.9			
LLM-554	**8/23/2023**	1325	216.85			Water in vault
LLM-555	**8/22/2023**	730	215.25			
LLM-556	**8/21/2023**	1253	196.92			
R-023A	**8/22/2023**	1308	212.6			
R-024A	**8/22/2023**	1230	214.37			
R-061A	**8/22/2023**	1132	230.5			Actively pumping, spigot leaking
R-062A	**8/21/2023**	710	225.11			
R-062B	**8/22/2023**	1115	237.08			
R-063A	**8/22/2023**	1050	232.15			Heavy lid, needs gas strut.
R-064A	**8/22/2023**	1024	230.44			Broken hinges
R-065A	**8/22/2023**	1018	232.7			Broken hinges
R-105A	**8/22/2023**	955				Sounder at 16', posisble rainwater intrusion?
R-106A	**8/22/2023**	1141	224.02			
R-107A	**8/22/2023**	1125			Tape went to 320', no water, well info table says TD is 230'	
R-108A	**8/22/2023**	1055	224.22			
R-109A	**8/22/2023**	805			Unsafe due to biologicals (tall grass, open holes, dead snake)	
R-109B	**8/22/2023**	805			Unsafe due to biologicals (tall grass, open holes, dead snake)	
R-110A	**8/22/2023**	908	193.38			
R-110B	**NA**					Burried
R-111A	**8/22/2023**	900	198.87			
R-111B	**NA**					Burried
R-112A	**NA**					Burried/ abandoned/ damaged
R-112B	**8/22/2023**	832	195.3			
R-113A	**8/22/2023**	850	Dry			Dry at 116'
R-113B	**NA**					Burried
R-113C	**8/22/2023**	850	Dry			Dry at 58'
WR-047B	**8/21/2023**	1145	233.13			Broken vault hinges
WR-048A	**8/22/2023**	841	197.33			
WR-049A	**8/22/2023**	808	201.17			Power cable crimped under vault lid.
WR-135A	**NA**					No sounding tube present.
WR-136B	**8/22/2023**	1030	229.94			Hinges tight/ sticking.
WR-172A	**8/21/2023**	1335	201.04			
WR-173B	**8/21/2023**	1351	209.13			
WR-173C	**8/21/2023**	1354	Dry			
WR-174A	**NA**					No sounding tube present.
WR-175A	**8/21/2023**	1305	192.75			
WR-176A	**8/21/2023**	1240	185.54			
WR-184A	**8/22/2023**	703	219.97			Ants
WR-185A	**8/21/2023**	1210	190.14			

CITY OF TUCSON

Environmental Management
Water Level Data Form

Project: Los Reales

Date: 08/21/2023 - 08/22/2023

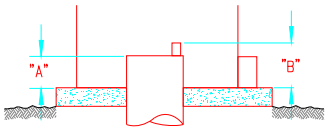
Field Personnel: Evan Schaff, Kayla Bansback

Well #	Date	Time	DTW	Correction Factor	Sounder ID	Well Inspection & Notes
WR-272A	**8/22/2023**	1247	Dry			
WR-272B	**8/22/2023**	1247	210.25			
WR-325A	**8/22/2023**	1425	214.45			
WR-355A	**NA**					No sounding tube present.
WR-360A	**8/22/2023**	757	198.04			
WR-361A	**8/22/2023**	809	198.72			Unsafe. See additional comments
WR-372A	**8/22/2023**	1428	219.4			
WR-373A	**8/22/2023**	1411	214.38			
WR-374A	**8/22/2023**	1416	212.17			
WR-375A	**8/22/2023**	1300	212.59			
WR-376A	**8/22/2023**	1013	228.95			No j-plug present
WR-378A	**8/22/2023**	1000	231.78			Well vault broken and burried
WR-379A	**8/21/2023**	745	222.12			
WR-379B	**8/22/2023**	1155	231.98			No well ID pesent
WR-380A	**8/22/2023**	1207	214.08			
WR-465A	**8/22/2023**	649	234.02			No j-plug present
WR-466A	**NA**		Stuck water level tape left behind by others. Could not remove. Did not want to risk further tangling.			
WR-468A	**8/21/2023**	1415	210.05			
WR-469A	**8/22/2023**	1346	194.42			
WR-470A	**8/22/2023**	715	218.45			
WR-471A	**8/22/2023**	708	220.35			
Marble Well	**NA**					No sounding tube present.
Racetrack Well (691)	**8/22/2023**	1317	196.68			
Junque for Jesus/Erler (JFJ)	**NA**					No sounding tube present.
Town & Country (432P)	**NA**					Not on map.

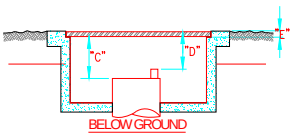
Additional Comments:

WR-361A - Ground under well pad washed out and entire well vault is partially suspended on the well casing. No j-plug present. Unsafe due to biologicals/tall grass/open holes.

Correction Factor Guide



ABOVE GROUND
DISTANCE "A" (TOP OF CASING TO TOP OF SLAB)
DISTANCE "B" (TOP OF SOUNDING TUBE TO TOP OF SLAB)



BELOW GROUND
DISTANCE "C" (TOP OF CASING TO TOP OF FRAME LIP)
DISTANCE "D" (TOP OF SOUNDING TUBE TO TOP OF FRAME LIP)
DISTANCE "E" (TOP OF FRAME TO TOP OF SLAB)

CITY OF TUCSON

Environmental Management

Water Level Data Form

Project: Los Reales

Date: 8/21/23 - 8/22/23 Field Personnel: E Schaff / K Bansback

Well #	Time	DTW	Correction Factor	Correction Factor ID	Sounder ID	Well Inspection & Notes
IJ-001A	8/22 1236	—				
IJ-002A	8/22 1149	157.4				actively injecting. Overgrown
LLM-501	8/24 1142	211.64				mold in cap for casing
LLM-513	8/21 1315	187.74				
LLM-530	8/22 1437					Obstruction @ 217.30'
LLM-536	8/22 1249	222.02				
LLM-537	8/22 1251	NA				Transducer tube capped
LLM-538	8/22 1460	220.7				Pump running
LLM-539	~~8/22 0742~~	~~NA~~				No Sounding
LLM-540	—	—				No sounding
LLM-543	8/21 1405	210.45				
LLM-544	8/22 1422	230.62				
LLM-548	8/22 1236	226.63				
LLM-549	—	—				No sounding tube
LLM-551	8/22 1442	45.90				
LLM-554	8/23 1325	216.85				water in vault
LLM-555	8/22 0730	45.25				
LLM-556	8/21 1253	196.92				
R-023A	8/22 1308	212.60				
R-024A	8/22 1230	214.37				
R-061A	8/22 1132	230.5				Actively pumping. Spigot leaking
R-062A	8/21 0710	225.11				
R-062B	8/22 1115	237.08				
R-063A	8/22 1050	~~232.15~~ ~~232.15~~	232.15			Heavy lid, needs Strut
R-064A	8/22 1024	230.44				Broken hinges
R-065A	8/22 1018	~~238.70~~	232.70			Broken hinges
R-105A	8/22 955	16'				possible water intrusion from rain?
R-106A	8/22 1141	224.02				
R-107A	8/22 1125	—				tape went to 320', TD should be 230'
R-108A	8/22 1055	224.22				
R-109A	8/22 0805	—				unsafe due to biologicals
R-109B	8/22 0805	—				" "
R-110A	8/22 0903	193.38				
R-110B	—	—				Buried
R-111A	8/22 0900	198.87				
~~R-111B~~	—	—				Buried

Project : Los Reales Continued

Well #	Time	DTW	Correction Factor	Correction Factor ID	Sounder ID	Well Inspection & Notes
~~R-112A~~						Buried, abandoned, damaged
R-112B	8/22 0832	195.30				
R-113A	8/22 0850	DRY@116				
~~R-113B~~						Buried
R-113C	8/22 0850	DRY@58				
WR-047B	8/21/23 1145	233.13				Broken vault hinges
WR-048A	8/22 0841	197.37				
WR-049A	8/22 0818	201.17				Power cable crimped under lid
~~WR-135A~~						No sounding tube
WR-136B	8/22 1030	229.94				Hinges tight/sticking
WR-172A	8/21 1335	201.04				
WR-173B	8/21 1351	209.13				
WR-173C	8/21 1354	DRY				
~~WR-174A~~						no sounding tube
WR-175A	8/21 1305	192.75				
WR-176A	8/21 1240	185.54				
WR-184A	8/22 0703	219.97				ants
WR-185A	8/21 1210	190.14				no maintenance
WR-272A	8/22 1247	DRY				
WR-272B	8/22 1247	210.25				
WR-325A	8/22 1425	214.45				
~~WR-355A~~						NO sounding tube
WR-360A	8/22 0757	198.04				
WR-361A	8/22 0809	198.72				Unsafe - Tall grass, hills under pad → maintenance
WR-372A	8/22 1428	219.40				
WR-373A	8/22 1411	24.38				
WR-374A	8/22 1416	212.17				
WR-375A	8/22 1300	212.59				
WR-376A	8/22 1013	228.95				No J-plug
WR-378A	8/22 1000	231.78				vault broken/buried
WR-379A	8/21 0745	222.12				
WR-379B	8/22 1155	231.98				No well-ID marked
WR-380A	8/22 1207	214.08				
WR-465A	8/22 0649	234.02				No J-plug
WR-466A						stuck water tape left behind
WR-468A	8/21 1415	210.05				
WR-469A, ~~WR-469~~	8/22 1317	~~196.68~~ 194.42	194.42			
WR-470A	8/22 0715	218.45				
WR-471A	8/22 0708	220.35				
~~Marble Well~~						no sounding tube
Racetrack Well (691)	8/22 1317	196.68				
~~Junque for~~ Jesus/Erler (JFJ)						no sounding tube
~~Town & Country~~ (432P)						not on map

Additional Comments:
WR-361A - well pad washed out, well vault suspended on casing. No J-plug

DRAFT

GROUNDWATER SAMPLE KEY- LOS REALES LAND FILL
TUCSON, AZ

Sample Location	*Date Collected*	*Sample Number*	*Sample Matrix*	*Analysis*	*Comments*
Trip Blank	8/21/2023	Trip Blank	GW	8260B	
Marble Well	8/21/2023	Marble Well	GW	8260B	
WR-466A	8/21/2023	WR-466A	GW	8260B	
LLM-530	8/23/2023	LLM-530	GW	8260B	
WR-172A	8/23/2023	WR-172A	GW	8260B	
WR-468A	8/23/2023	WR-468A	GW	8260B	
EB-01	8/23/2023	EB-01	GW	8260B	Equipment Rinse Blank
LLM-554	8/23/2023	LLM-554	GW	8260B	
WR-185A	8/24/2023	WR-185A	GW	8260B	
LLM-556	8/24/2023	LLM-556	GW	8260B	
LLM-555	8/24/2023	LLM-555	GW	8260B	
EB-02	8/24/2023	EB-02	GW	8260B	Equipment Rinse Blank
R-062A	8/24/2023	R-062A	GW	8260B	
R-062A	8/24/2023	R-062A	GW	8260B	Duplicate Sample
WR-379A	8/24/2023	WR-379A	GW	8260B	
GAC-EFF	8/24/2023	GAC-EFF	GW	8260B	GAC Drum Effluent Sample
WR-049A	8/24/2023	WR-049A	GW	8260B	
WR-049A	8/24/2023	WR-049A	GW	8260B	Duplicate Sample
Trip Blank	8/23/2023	Trip Blank	GW	8260B	

Laboratory Sample ID

CHAIN OF CUSTODY RECORD

LEGEND Technical Services, Inc.

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☐ 4585 S. Palo Verde Rd, Ste 423 • Tucson, AZ 85714 • (520) 327-1234 • Fax (520) 327-0518

Please Print Clearly

CLIENT INFORMATION

Client Name	Report Mailing Address	City	State	Zip	Phone	Email Address
Tucson Water Quality Lab	4401 S. Tucson Estates Pkwy	Tucson	AZ	85735	520-837-2469	frank.walker@tucsonaz.gov

Project Name	Project Number	Contact Name	Purchase Order No.	
LOS REALES Landfill Quarterly	P01049	Frank Walker	2021181	Fax Results ☐ Email Results ■ ☐ QC Report ■ EDD ■ ☐ Special Detection Limits ☐ ☐

SAMPLE TYPE CODES: DW=Drinking Water; WW=Wastewater; SW=Surface Water; GW=Groundwater; O=Other; S=Soil/Solid; T=Travel Blank; F=Food; G=Sludge/Biosolids

TURN AROUND TIME: Laboratory Authorization Required for Rush — ☐ Standard 7-10 Day ☐ Other

Client's	Sample Date	Sample Time	Sample Location	Composite	Grab	Sample Type	Compliance	No. of Containers	pH (Lab Use Only)	8260 VOC w/o CEVE	LAB NO.
L231094-01	8/21/23	0845	Marble Well		x	GW		4		X	
-02	8/21/23	1010	WR-466A		x	GW		4		X	
-03	8/21/23	1050	LLM-530		x	GW		4		X	
-04	8/23/23	0955	WR-172A		x	GW		4		X	
-05	8/23/23	1200	WR-468A		x	GW		4		X	
-06	8/23/23	1225	EB-01		x	GW		4		X	
					x	GW		4		X	
AM	8/23/23				x	GW		4		X	
					x	GW		4		X	
L231094-07	8/21/23	0845	TRIP BLANK LOT # 070723					2		X	

TO ENSURE COMPLETION OF ANALYSIS, SAMPLES MUST BE RECEIVED AT LEAST 3 HOURS PRIOR TO THE HOLD TIME EXPIRATION

Comments / Special Instructions:

SAMPLE CONDITION UPON RECEIPT (Lab Use)		
No. of Containers		
Temperature		°C
Custody Seals	Y	N
Seals Intact	Y	N
Preserved	Y	N

WHITE-LAB YELLOW-CLIENT

On behalf of the above-named Client, I accept and acknowledge receipt of Legend's General Conditions.

	RELINQUISHED BY		SAMPLES RECEIVED BY	
①	Sampler Signature: A. Mackley / E. Schaft	Date: 8/23/23	Signature: John Pipentacos	Date: 08/23/23
③	Sampler Printed Name: Annie Mackley / Evan Schaft	Time: 1349	Printed Name:	Time: 1350
	Sampler Signature	Date	Signature	Date
⑤	Sampler Printed Name	Time	Printed Name	Time
	Sampler Signature	Date	Signature	Date
	Sampler Printed Name	Time	Printed Name	Time

3.3°C

CHAIN OF CUSTODY RECORD

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Laboratory Sample ID

Please Print Clearly

CLIENT INFORMATION

Client Name	Report Mailing Address	City	State	Zip	Phone	Email Address
Tucson Water Quality Lab	4401 S. Tucson Estates Pkwy	Tucson	AZ	85735	520-837-2469	frank.walker@tucsonaz.gov

Project Name	Project Number	Contact Name	Purchase Order No.		
LOS REALES Landfill Quarterly	P01049	Frank Walker	2021181	Fax Results ☐ / Email Results ■ ☐	QC Report ■ EDD ■☐ / Special Detection Limits ☐☐

SAMPLE TYPE CODES

DW=Drinking Water, WW=Wastewater, SW=Surface Water, GW=Groundwater, ~~O=Other~~, S=Soil/Solid, T=Travel Blank, F=Food, G=Sludge/Biosolids

TURN AROUND TIME

Laboratory Authorization Required for Rush

☐ Standard 7-10 Day
☐ Other ______

REQUESTED ANALYSES

Client's	Sample Date	Sample Time	Sample Location	Composite	Grab	Sample Type	Compliance	No. of Containers	(Lab Use Only)	8260 VOC w/o CEVE
L231105.01	8/23/23	1525	LLM-SS4		x	GW		4		X
-02	8/24/23	0840	WR-185A		x	GW		4		X
-03	8/24/23	0945	LLM-SS6		x	GW		4		X
-04	8/24/23	1115	LLM-SS5		x	GW		4		X
-05	8/24/23	1145	EB-02		x	GW		4		X
-06	8/24/23	1205	R-062A		x	GW		4		X
-07	8/24/23	1210	R-062A		x	GW		4		X
-08	8/24/23	1240	WR-379A		x	GW		4		X
-09	8/24/23	1330	GAC-EFF		x	GW		4		X
-10	8/23/23	1525	TRIP BLANK LOT#070723					2		X

TO ENSURE COMPLETION OF ANALYSIS, SAMPLES MUST BE RECEIVED AT LEAST 3 HOURS PRIOR TO THE HOLD TIME EXPIRATION

Comments / Special Instructions:

SAMPLE CONDITION UPON RECEIPT (Lab Use)

No. of Containers		
Temperature		°C
Custody Seals	Y	N
Seals Intact	Y	N
Preserved	Y	N

WHITE-LAB YELLOW-CLIENT

On behalf of the above-named Client, I accept and acknowledge receipt of Legend's General Conditions.

	RELINQUISHED BY		SAMPLES RECEIVED BY		
①	Sampler Signature [signatures]	Date 8/25/23	Signature [signature]	Date 08/25/23	②
③	Sampler Printed Name Annie McCawley Evan Schaf	Time 1041	Printed Name John Pipentaces	Time 1040	④
	Sampler Signature	Date	Signature	Date	
⑤	Sampler Printed Name	Time	Printed Name	Time	⑥
	Sampler Signature	Date	Signature	Date	
	Sampler Printed Name	Time	Printed Name	Time	

5.0°C

FORM CS-016.3 (09/20)

Laboratory Sample #

CHAIN OF CUSTODY RECORD

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CLIENT INFORMATION

Client Name	Report Mailing Address	City	State	Zip	Phone	Email Address
Tucson Water Quality Lab	4401 S. Tucson Estates Pkwy	Tucson	AZ	85735	520-837-2469	frank.walker@tucsonaz.gov

Project Name	Project Number	Contact Name	Purchase Order No.	
LOS REALES Landfill Quarterly	P01049	Frank Walker	2021181	Fax Results ☐ Email Results ■ ☐ QC Report ■ EDD ■☐ Special Detection Limits ☐☐

SAMPLE TYPE CODES

DW=Drinking Water; WW=Wastewater; SW=Surface Water; GW=Groundwater; S=Soil/Solid; T=Travel Blank; F=Food; G=Sludge/Biosolids; O=Other

TURNAROUND TIME

Laboratory Authorization Required for Rush

☐ Standard 7-10 Day

☐ Other _____

Client's	Sample Date	Sample Time	Sample Location	Composite	Grab	Sample Type	Compliance	No. of Containers	pH** (Lab Use Only)	8260 VOC w/o CEVE	LAB NO.
L231105-11	8/24/23	1430	WR-049A		x	GW		4		X	
↓ -12	8/24/23	1433	WR-049A		x	GW		4		X	
					x	GW		4		X	
					x	GW		4		X	
					x	GW		4		X	
					x	GW		4		X	
					x	GW		4		X	
					x	GW		4		X	
					x	GW		4		X	
					x	GW		4		X	
			TRIP BLANK					2		X	

Chain 8/24/23

TO ENSURE COMPLETION OF ANALYSIS, SAMPLES MUST BE RECEIVED AT LEAST 3 HOURS PRIOR TO THE HOLD TIME EXPIRATION

Comments / Special Instructions:

SAMPLE CONDITION UPON RECEIPT (Lab Use)

No. of Containers		
Temperature		°C
Custody Seals	Y	N
Seals Intact	Y	N
Preserved	Y	N

WHITE-LAB YELLOW-CLIENT

On behalf of the above-named Client, I accept and acknowledge receipt of Legend's General Conditions.

	RELINQUISHED BY			SAMPLES RECEIVED BY		
①	Sampler Signature: Annie McLawley	Date: 8/25/23		Signature: John Pipentacos	Date: 08/25/23	②
③	Sampler Printed Name: Annie McLawley	Time: 1041		Printed Name	Time: 1045	④
	Sampler Signature	Date		Signature	Date	
⑤	Sampler Printed Name	Time		Printed Name	Time	
	Sampler Signature	Date		Signature	Date	
	Sampler Printed Name	Time		Printed Name	Time	

5.0°C

Appendix B

Analytical Laboratory Reports

LEGEND Technical Services, Inc.

4585 S. Palo Verde Rd., Ste. 423 • Tucson, AZ 85714
P (520) 327-1234 • F (520) 327-0518
www.legend-group.com

31 August 2023

Frank Walker
City of Tucson Water Quality Lab
4401 S. Tucson Estates Parkway
Tucson, AZ 85735

RE: Volatile Organic Compounds

Laboratory Work Order No.: 23H3266

Legend Technical Services of Arizona, Inc. is pleased to provide the enclosed analytical results for the aforementioned project. These results relate only to the items tested. This cover letter and the accompanying pages represent the full report for these analyses and should only be reproduced in full. Samples for this project were received by the laboratory on 08/24/23 08:48.

The samples were processed in accordance with the Chain of Custody document and the results presented relate only to the samples tested. The Chain of Custody is considered part of this report.

All samples will be retained by LEGEND for 30 days from the date of this report and then discarded unless other arrangements are made. Due to hold-time and method sample volume requirements, microbiological samples are not retained unless other arrangements are made.

This entire report was reviewed and approved for release by the undersigned. If you have any questions concerning this report, please feel free to contact me.

Sincerely,
LEGEND TECHNICAL SERVICES OF ARIZONA, INC.

Mary Whaley
Client Services Representative
(602) 324-6100

This laboratory report is confidential and is intended for the sole use of LEGEND and it's client.

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Type	Date Sampled	Date Received
L231094-01	23H3266-01	Groundwater	Grab	08/21/23 08:45	08/24/23 08:48
L231094-02	23H3266-02	Groundwater	Grab	08/21/23 10:10	08/24/23 08:48
L231094-03	23H3266-03	Groundwater	Grab	08/21/23 10:50	08/24/23 08:48
L231094-04	23H3266-04	Groundwater	Grab	08/23/23 09:55	08/24/23 08:48
L231094-05	23H3266-05	Groundwater	Grab	08/23/23 12:00	08/24/23 08:48
L231094-06	23H3266-06	Groundwater	Grab	08/23/23 12:25	08/24/23 08:48
Travel Blank L231094-07	23H3266-07	DI Water		08/21/23 08:45	08/24/23 08:48

Sample Condition Upon Receipt:

Temperature: 3.80 C

All samples were received in acceptable condition unless noted otherwise in the case narrative.

Case Narrative:

Holding Times: All holding times were met unless otherwise qualified.

QA/QC Criteria: All analyses met method requirements unless otherwise qualified.

Certifications: AZ(PHX)0004, AZ(TUC)OOO4, AIHA#102982, CDC ELITE Member.

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

Comments: There were no problems encountered during the processing of the samples, unless otherwise noted. All samples were analyzed on a "wet" basis unless designated as "dry weight".

L231094-01 (23H3266-01) Groundwater (Grab) Sampled: 08/21/23 08:45 Received: 08/24/23 08:48

Legend Technical Services of Arizona, Inc.

Volatile Organic Compounds

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-Tetrachloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
1,1,1-Trichloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
1,1,2,2-Tetrachloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
1,1,2-Trichloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
1,1-Dichloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
1,1-Dichloroethene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
1,1-Dichloropropene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
1,2,3-Trichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
1,2,3-Trichloropropane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
1,2,4-Trichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
1,2,4-Trimethylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
1,2-Dibromo-3-chloropropane	<5.00	5.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
1,2-Dibromoethane (EDB)	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
1,2-Dichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
1,2-Dichloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
1,2-Dichloropropane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
1,3,5-Trimethylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
1,3-Dichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
1,3-Dichloropropane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
1,4-Dichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
2,2-Dichloropropane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
2-Butanone	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
2-Chlorotoluene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
2-Hexanone	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
4-Chlorotoluene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
4-Methyl-2-pentanone	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Acetone	<20.0	20.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Benzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Bromobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Bromochloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Bromodichloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Bromoform	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Bromomethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Carbon disulfide	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Carbon tetrachloride	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Chlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Chloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Chloroform	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Chloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
cis-1,2-Dichloroethylene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
cis-1,3-Dichloropropene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Dibromochloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Dibromomethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Dichlorodifluoromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

L231094-01 (23H3266-01) Groundwater (Grab) Sampled: 08/21/23 08:45 Received: 08/24/23 08:48

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Legend Technical Services of Arizona, Inc.						
Volatile Organic Compounds									
Dichloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Ethylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Hexachlorobutadiene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Iodomethane	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Isopropylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
m,p-Xylene	<4.00	4.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Methyl methacrylate	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Methyl-tert-butyl ether	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Naphthalene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
n-Butylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
n-Propylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
o-Xylene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
p-Isopropyltoluene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
sec-Butylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Styrene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
tert-Butylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Tetrachloroethene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Toluene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Total THMs	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
trans-1,2-Dichloroethene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
trans-1,3-Dichloropropene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
trans-1,4-Dichloro-2-butene	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Trichloroethene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Trichlorofluoromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Vinyl chloride	<0.500	0.500	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Xylenes (total)	<6.00	6.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:02	EPA 8260B	
Surrogate: 1,2-Dichlorobenzene-d4		*102 %*		*80-127*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*100 %*		*78-120*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*89 %*		*67-120*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	
Surrogate: Pentafluorobenzene		*98 %*		*77-120*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	

L231094-02 (23H3266-02) Groundwater (Grab) Sampled: 08/21/23 10:10 Received: 08/24/23 08:48

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Legend Technical Services of Arizona, Inc.						
Volatile Organic Compounds									
1,1,1,2-Tetrachloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
1,1,1-Trichloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
1,1,2,2-Tetrachloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
1,1,2-Trichloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
1,1-Dichloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
1,1-Dichloroethene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
1,1-Dichloropropene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
1,2,3-Trichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
1,2,3-Trichloropropane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

L231094-02 (23H3266-02) Groundwater (Grab) Sampled: 08/21/23 10:10 Received: 08/24/23 08:48

Legend Technical Services of Arizona, Inc.

Volatile Organic Compounds

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2,4-Trichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
1,2,4-Trimethylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
1,2-Dibromo-3-chloropropane	<5.00	5.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
1,2-Dibromoethane (EDB)	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
1,2-Dichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
1,2-Dichloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
1,2-Dichloropropane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
1,3,5-Trimethylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
1,3-Dichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
1,3-Dichloropropane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
1,4-Dichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
2,2-Dichloropropane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
2-Butanone	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
2-Chlorotoluene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
2-Hexanone	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
4-Chlorotoluene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
4-Methyl-2-pentanone	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Acetone	<20.0	20.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Benzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Bromobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Bromochloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Bromodichloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Bromoform	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Bromomethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Carbon disulfide	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Carbon tetrachloride	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Chlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Chloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Chloroform	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Chloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
cis-1,2-Dichloroethylene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
cis-1,3-Dichloropropene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Dibromochloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Dibromomethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Dichlorodifluoromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Dichloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Ethylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Hexachlorobutadiene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Iodomethane	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Isopropylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
m,p-Xylene	<4.00	4.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Methyl methacrylate	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Methyl-tert-butyl ether	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Naphthalene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	

L231094-02 (23H3266-02) Groundwater (Grab) Sampled: 08/21/23 10:10 Received: 08/24/23 08:48

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Legend Technical Services of Arizona, Inc.						
Volatile Organic Compounds									
n-Butylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
n-Propylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
o-Xylene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
p-Isopropyltoluene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
sec-Butylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Styrene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
tert-Butylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Tetrachloroethene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Toluene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Total THMs	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
trans-1,2-Dichloroethene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
trans-1,3-Dichloropropene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
trans-1,4-Dichloro-2-butene	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Trichloroethene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Trichlorofluoromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Vinyl chloride	<0.500	0.500	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Xylenes (total)	<6.00	6.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:30	EPA 8260B	
Surrogate: 1,2-Dichlorobenzene-d4		*101 %*		*80-127*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*100 %*		*78-120*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*86 %*		*67-120*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	
Surrogate: Pentafluorobenzene		*98 %*		*77-120*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	

L231094-03 (23H3266-03) Groundwater (Grab) Sampled: 08/21/23 10:50 Received: 08/24/23 08:48

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Legend Technical Services of Arizona, Inc.						
Volatile Organic Compounds									
1,1,1,2-Tetrachloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
1,1,1-Trichloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
1,1,2,2-Tetrachloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
1,1,2-Trichloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
1,1-Dichloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
1,1-Dichloroethene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
1,1-Dichloropropene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
1,2,3-Trichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
1,2,3-Trichloropropane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
1,2,4-Trichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
1,2,4-Trimethylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
1,2-Dibromo-3-chloropropane	<5.00	5.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
1,2-Dibromoethane (EDB)	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
1,2-Dichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
1,2-Dichloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
1,2-Dichloropropane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
1,3,5-Trimethylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

L231094-03 (23H3266-03) Groundwater (Grab) Sampled: 08/21/23 10:50 Received: 08/24/23 08:48

Legend Technical Services of Arizona, Inc.

Volatile Organic Compounds

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,3-Dichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
1,3-Dichloropropane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
1,4-Dichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
2,2-Dichloropropane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
2-Butanone	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
2-Chlorotoluene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
2-Hexanone	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
4-Chlorotoluene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
4-Methyl-2-pentanone	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Acetone	<20.0	20.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Benzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Bromobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Bromochloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Bromodichloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Bromoform	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Bromomethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Carbon disulfide	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Carbon tetrachloride	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Chlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Chloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Chloroform	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Chloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
cis-1,2-Dichloroethylene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
cis-1,3-Dichloropropene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Dibromochloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Dibromomethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Dichlorodifluoromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Dichloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Ethylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Hexachlorobutadiene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Iodomethane	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Isopropylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
m,p-Xylene	<4.00	4.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Methyl methacrylate	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Methyl-tert-butyl ether	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Naphthalene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
n-Butylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
n-Propylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
o-Xylene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
p-Isopropyltoluene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
sec-Butylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Styrene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
tert-Butylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Tetrachloroethene	**4.49**	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Toluene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

L231094-03 (23H3266-03) Groundwater (Grab) Sampled: 08/21/23 10:50 Received: 08/24/23 08:48

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Legend Technical Services of Arizona, Inc.						
Volatile Organic Compounds									
Total THMs	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
trans-1,2-Dichloroethene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
trans-1,3-Dichloropropene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
trans-1,4-Dichloro-2-butene	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Trichloroethene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Trichlorofluoromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Vinyl chloride	<0.500	0.500	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Xylenes (total)	<6.00	6.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 14:07	EPA 8260B	
Surrogate: 1,2-Dichlorobenzene-d4		*97 %*		*80-127*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*98 %*		*78-120*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*90 %*		*67-120*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	
Surrogate: Pentafluorobenzene		*99 %*		*77-120*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	

L231094-04 (23H3266-04) Groundwater (Grab) Sampled: 08/23/23 09:55 Received: 08/24/23 08:48

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Legend Technical Services of Arizona, Inc.						
Volatile Organic Compounds									
1,1,1,2-Tetrachloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
1,1,1-Trichloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
1,1,2,2-Tetrachloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
1,1,2-Trichloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
1,1-Dichloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
1,1-Dichloroethene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
1,1-Dichloropropene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
1,2,3-Trichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
1,2,3-Trichloropropane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
1,2,4-Trichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
1,2,4-Trimethylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
1,2-Dibromo-3-chloropropane	<5.00	5.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
1,2-Dibromoethane (EDB)	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
1,2-Dichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
1,2-Dichloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
1,2-Dichloropropane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
1,3,5-Trimethylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
1,3-Dichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
1,3-Dichloropropane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
1,4-Dichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
2,2-Dichloropropane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
2-Butanone	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
2-Chlorotoluene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
2-Hexanone	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
4-Chlorotoluene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
4-Methyl-2-pentanone	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	

L231094-04 (23H3266-04) Groundwater (Grab) Sampled: 08/23/23 09:55 Received: 08/24/23 08:48

Legend Technical Services of Arizona, Inc.

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds									
Acetone	<20.0	20.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Benzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Bromobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Bromochloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Bromodichloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Bromoform	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Bromomethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Carbon disulfide	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Carbon tetrachloride	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Chlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Chloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Chloroform	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Chloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
cis-1,2-Dichloroethylene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
cis-1,3-Dichloropropene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Dibromochloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Dibromomethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Dichlorodifluoromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Dichloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Ethylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Hexachlorobutadiene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Iodomethane	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Isopropylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
m,p-Xylene	<4.00	4.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Methyl methacrylate	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Methyl-tert-butyl ether	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Naphthalene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
n-Butylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
n-Propylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
o-Xylene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
p-Isopropyltoluene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
sec-Butylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Styrene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
tert-Butylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Tetrachloroethene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Toluene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Total THMs	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
trans-1,2-Dichloroethene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
trans-1,3-Dichloropropene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
trans-1,4-Dichloro-2-butene	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Trichloroethene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Trichlorofluoromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Vinyl chloride	<0.500	0.500	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Xylenes (total)	<6.00	6.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 15:57	EPA 8260B	
Surrogate: 1,2-Dichlorobenzene-d4		*99 %*		*80-127*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

L231094-04 (23H3266-04) Groundwater (Grab) Sampled: 08/23/23 09:55 Received: 08/24/23 08:48

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Legend Technical Services of Arizona, Inc.						
Volatile Organic Compounds									
Surrogate: 1,2-Dichloroethane-d4	*100 %*		*78-120*		*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene	*85 %*		*67-120*		*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	
Surrogate: Pentafluorobenzene	*98 %*		*77-120*		*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	

L231094-05 (23H3266-05) Groundwater (Grab) Sampled: 08/23/23 12:00 Received: 08/24/23 08:48

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Legend Technical Services of Arizona, Inc.						
Volatile Organic Compounds									**D1**
1,1,1,2-Tetrachloroethane	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
1,1,1-Trichloroethane	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
1,1,2,2-Tetrachloroethane	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
1,1,2-Trichloroethane	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
1,1-Dichloroethane	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
1,1-Dichloroethene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
1,1-Dichloropropene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
1,2,3-Trichlorobenzene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
1,2,3-Trichloropropane	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
1,2,4-Trichlorobenzene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
1,2,4-Trimethylbenzene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
1,2-Dibromo-3-chloropropane	<10.0	10.0	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
1,2-Dibromoethane (EDB)	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
1,2-Dichlorobenzene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
1,2-Dichloroethane	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
1,2-Dichloropropane	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
1,3,5-Trimethylbenzene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
1,3-Dichlorobenzene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
1,3-Dichloropropane	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
1,4-Dichlorobenzene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
2,2-Dichloropropane	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
2-Butanone	<20.0	20.0	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
2-Chlorotoluene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
2-Hexanone	<20.0	20.0	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
4-Chlorotoluene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
4-Methyl-2-pentanone	<20.0	20.0	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Acetone	<40.0	40.0	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Benzene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Bromobenzene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Bromochloromethane	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Bromodichloromethane	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Bromoform	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Bromomethane	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Carbon disulfide	<20.0	20.0	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Carbon tetrachloride	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	

L231094-05 (23H3266-05) Groundwater (Grab) Sampled: 08/23/23 12:00 Received: 08/24/23 08:48

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Legend Technical Services of Arizona, Inc.						
Volatile Organic Compounds									**D1**
Chlorobenzene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Chloroethane	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Chloroform	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Chloromethane	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
cis-1,2-Dichloroethylene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
cis-1,3-Dichloropropene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Dibromochloromethane	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Dibromomethane	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Dichlorodifluoromethane	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Dichloromethane	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Ethylbenzene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Hexachlorobutadiene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Iodomethane	<20.0	20.0	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Isopropylbenzene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
m,p-Xylene	<8.00	8.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Methyl methacrylate	<20.0	20.0	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Methyl-tert-butyl ether	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Naphthalene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
n-Butylbenzene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
n-Propylbenzene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
o-Xylene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
p-Isopropyltoluene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
sec-Butylbenzene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Styrene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
tert-Butylbenzene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Tetrachloroethene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Toluene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Total THMs	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
trans-1,2-Dichloroethene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
trans-1,3-Dichloropropene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
trans-1,4-Dichloro-2-butene	<20.0	20.0	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Trichloroethene	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Trichlorofluoromethane	<4.00	4.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Vinyl chloride	<1.00	1.00	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Xylenes (total)	<12.0	12.0	ug/L	2	B3H0902	08/25/23 11:00	08/25/23 16:25	EPA 8260B	
Surrogate: 1,2-Dichlorobenzene-d4		*104 %*		*80-127*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*101 %*		*78-120*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*88 %*		*67-120*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	
Surrogate: Pentafluorobenzene		*94 %*		*77-120*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	

L231094-06 (23H3266-06) Groundwater (Grab) Sampled: 08/23/23 12:25 Received: 08/24/23 08:48

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Legend Technical Services of Arizona, Inc.						
Volatile Organic Compounds									

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

L231094-06 (23H3266-06) Groundwater (Grab) Sampled: 08/23/23 12:25 Received: 08/24/23 08:48

Legend Technical Services of Arizona, Inc.

Volatile Organic Compounds

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-Tetrachloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
1,1,1-Trichloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
1,1,2,2-Tetrachloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
1,1,2-Trichloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
1,1-Dichloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
1,1-Dichloroethene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
1,1-Dichloropropene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
1,2,3-Trichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
1,2,3-Trichloropropane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
1,2,4-Trichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
1,2,4-Trimethylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
1,2-Dibromo-3-chloropropane	<5.00	5.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
1,2-Dibromoethane (EDB)	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
1,2-Dichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
1,2-Dichloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
1,2-Dichloropropane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
1,3,5-Trimethylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
1,3-Dichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
1,3-Dichloropropane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
1,4-Dichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
2,2-Dichloropropane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
2-Butanone	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
2-Chlorotoluene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
2-Hexanone	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
4-Chlorotoluene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
4-Methyl-2-pentanone	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Acetone	<20.0	20.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Benzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Bromobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Bromochloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Bromodichloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Bromoform	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Bromomethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Carbon disulfide	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Carbon tetrachloride	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Chlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Chloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Chloroform	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Chloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
cis-1,2-Dichloroethylene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
cis-1,3-Dichloropropene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Dibromochloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Dibromomethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Dichlorodifluoromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

L231094-06 (23H3266-06) Groundwater (Grab) Sampled: 08/23/23 12:25 Received: 08/24/23 08:48

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Legend Technical Services of Arizona, Inc.						
Volatile Organic Compounds									
Dichloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Ethylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Hexachlorobutadiene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Iodomethane	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Isopropylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
m,p-Xylene	<4.00	4.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Methyl methacrylate	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Methyl-tert-butyl ether	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Naphthalene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
n-Butylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
n-Propylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
o-Xylene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
p-Isopropyltoluene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
sec-Butylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Styrene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
tert-Butylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Tetrachloroethene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Toluene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Total THMs	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
trans-1,2-Dichloroethene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
trans-1,3-Dichloropropene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
trans-1,4-Dichloro-2-butene	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Trichloroethene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Trichlorofluoromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Vinyl chloride	<0.500	0.500	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Xylenes (total)	<6.00	6.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 16:52	EPA 8260B	
Surrogate: 1,2-Dichlorobenzene-d4		*100 %*		*80-127*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*95 %*		*78-120*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*84 %*		*67-120*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	
Surrogate: Pentafluorobenzene		*93 %*		*77-120*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	

Travel Blank L231094-07 (23H3266-07) DI Water () Sampled: 08/21/23 08:45 Received: 08/24/23 08:48

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			Legend Technical Services of Arizona, Inc.						
Volatile Organic Compounds									
1,1,1,2-Tetrachloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
1,1,1-Trichloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
1,1,2,2-Tetrachloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
1,1,2-Trichloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
1,1-Dichloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
1,1-Dichloroethene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
1,1-Dichloropropene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
1,2,3-Trichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
1,2,3-Trichloropropane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Travel Blank L231094-07 (23H3266-07) DI Water () Sampled: 08/21/23 08:45 Received: 08/24/23 08:48

Legend Technical Services of Arizona, Inc.

Volatile Organic Compounds

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,2,4-Trichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
1,2,4-Trimethylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
1,2-Dibromo-3-chloropropane	<5.00	5.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
1,2-Dibromoethane (EDB)	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
1,2-Dichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
1,2-Dichloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
1,2-Dichloropropane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
1,3,5-Trimethylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
1,3-Dichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
1,3-Dichloropropane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
1,4-Dichlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
2,2-Dichloropropane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
2-Butanone	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
2-Chlorotoluene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
2-Hexanone	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
4-Chlorotoluene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
4-Methyl-2-pentanone	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Acetone	<20.0	20.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Benzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Bromobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Bromochloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Bromodichloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Bromoform	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Bromomethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Carbon disulfide	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Carbon tetrachloride	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Chlorobenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Chloroethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Chloroform	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Chloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
cis-1,2-Dichloroethylene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
cis-1,3-Dichloropropene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Dibromochloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Dibromomethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Dichlorodifluoromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Dichloromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Ethylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Hexachlorobutadiene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Iodomethane	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Isopropylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
m,p-Xylene	<4.00	4.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Methyl methacrylate	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Methyl-tert-butyl ether	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Naphthalene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	

Travel Blank L231094-07 (23H3266-07) DI Water () Sampled: 08/21/23 08:45 Received: 08/24/23 08:48

Legend Technical Services of Arizona, Inc.

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds									
n-Butylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
n-Propylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
o-Xylene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
p-Isopropyltoluene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
sec-Butylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Styrene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
tert-Butylbenzene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Tetrachloroethene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Toluene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Total THMs	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
trans-1,2-Dichloroethene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
trans-1,3-Dichloropropene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
trans-1,4-Dichloro-2-butene	<10.0	10.0	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Trichloroethene	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Trichlorofluoromethane	<2.00	2.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Vinyl chloride	<0.500	0.500	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Xylenes (total)	<6.00	6.00	ug/L	1	B3H0902	08/25/23 11:00	08/25/23 17:48	EPA 8260B	
Surrogate: 1,2-Dichlorobenzene-d4		*104 %*		*80-127*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*96 %*		*78-120*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*86 %*		*67-120*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	
Surrogate: Pentafluorobenzene		*94 %*		*77-120*	*B3H0902*	*08/25/23*	*08/25/23*	*EPA 8260B*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H0902 - Default Prep VOC										
Blank (B3H0902-BLK1)				*Prepared & Analyzed: 08/25/23*						
1,1,1,2-Tetrachloroethane	<2.00	2.00	ug/L							
1,1,1,2-Tetrachloroethane	<2.00	2.00	ug/L							
1,1,1-Trichloroethane	<2.00	2.00	ug/L							
1,1,1-Trichloroethane	<2.00	2.00	ug/L							
1,1,2,2-Tetrachloroethane	<2.00	2.00	ug/L							
1,1,2,2-Tetrachloroethane	<2.00	2.00	ug/L							
1,1,2-Trichloroethane	<2.00	2.00	ug/L							
1,1,2-Trichloroethane	<2.00	2.00	ug/L							
1,1-Dichloroethane	<2.00	2.00	ug/L							
1,1-Dichloroethane	<2.00	2.00	ug/L							
1,1-Dichloroethene	<2.00	2.00	ug/L							
1,1-Dichloroethene	<2.00	2.00	ug/L							
1,1-Dichloropropene	<2.00	2.00	ug/L							
1,1-Dichloropropene	<2.00	2.00	ug/L							
1,2,3-Trichlorobenzene	<2.00	2.00	ug/L							
1,2,3-Trichlorobenzene	<2.00	2.00	ug/L							
1,2,3-Trichloropropane	<2.00	2.00	ug/L							
1,2,3-Trichloropropane	<2.00	2.00	ug/L							
1,2,4-Trichlorobenzene	<2.00	2.00	ug/L							
1,2,4-Trichlorobenzene	<2.00	2.00	ug/L							
1,2,4-Trimethylbenzene	<2.00	2.00	ug/L							
1,2,4-Trimethylbenzene	<2.00	2.00	ug/L							
1,2-Dibromo-3-chloropropane	<5.00	5.00	ug/L							
1,2-Dibromo-3-chloropropane	<5.00	5.00	ug/L							
1,2-Dibromoethane (EDB)	<2.00	2.00	ug/L							
1,2-Dibromoethane (EDB)	<2.00	2.00	ug/L							
1,2-Dichlorobenzene	<2.00	2.00	ug/L							
1,2-Dichlorobenzene	<2.00	2.00	ug/L							
1,2-Dichloroethane	<2.00	2.00	ug/L							
1,2-Dichloroethane	<2.00	2.00	ug/L							
1,2-Dichloropropane	<2.00	2.00	ug/L							
1,2-Dichloropropane	<2.00	2.00	ug/L							
1,3,5-Trimethylbenzene	<2.00	2.00	ug/L							
1,3,5-Trimethylbenzene	<2.00	2.00	ug/L							
1,3-Dichlorobenzene	<2.00	2.00	ug/L							
1,3-Dichlorobenzene	<2.00	2.00	ug/L							
1,3-Dichloropropane	<2.00	2.00	ug/L							
1,3-Dichloropropane	<2.00	2.00	ug/L							
1,4-Dichlorobenzene	<2.00	2.00	ug/L							
1,4-Dichlorobenzene	<2.00	2.00	ug/L							
2,2-Dichloropropane	<2.00	2.00	ug/L							
2,2-Dichloropropane	<2.00	2.00	ug/L							
2-Butanone	<10.0	10.0	ug/L							
2-Butanone	<10.0	10.0	ug/L							
2-Chlorotoluene	<2.00	2.00	ug/L							
2-Chlorotoluene	<2.00	2.00	ug/L							
2-Hexanone	<10.0	10.0	ug/L							
2-Hexanone	<10.0	10.0	ug/L							

Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H0902 - Default Prep VOC										
Blank (B3H0902-BLK1)				*Prepared & Analyzed: 08/25/23*						
4-Chlorotoluene	<2.00	2.00	ug/L							
4-Chlorotoluene	<2.00	2.00	ug/L							
4-Methyl-2-pentanone	<10.0	10.0	ug/L							
4-Methyl-2-pentanone	<10.0	10.0	ug/L							
Acetone	<20.0	20.0	ug/L							
Acetone	<20.0	20.0	ug/L							
Benzene	<2.00	2.00	ug/L							
Benzene	<2.00	2.00	ug/L							
Bromobenzene	<2.00	2.00	ug/L							
Bromobenzene	<2.00	2.00	ug/L							
Bromochloromethane	<2.00	2.00	ug/L							
Bromochloromethane	<2.00	2.00	ug/L							
Bromodichloromethane	<2.00	2.00	ug/L							
Bromodichloromethane	<2.00	2.00	ug/L							
Bromoform	<2.00	2.00	ug/L							
Bromoform	<2.00	2.00	ug/L							
Bromomethane	<2.00	2.00	ug/L							
Bromomethane	<2.00	2.00	ug/L							
Carbon disulfide	<10.0	10.0	ug/L							
Carbon disulfide	<10.0	10.0	ug/L							
Carbon tetrachloride	<2.00	2.00	ug/L							
Carbon tetrachloride	<2.00	2.00	ug/L							
Chlorobenzene	<2.00	2.00	ug/L							
Chlorobenzene	<2.00	2.00	ug/L							
Chloroethane	<2.00	2.00	ug/L							
Chloroethane	<2.00	2.00	ug/L							
Chloroform	<2.00	2.00	ug/L							
Chloroform	<2.00	2.00	ug/L							
Chloromethane	<2.00	2.00	ug/L							
Chloromethane	<2.00	2.00	ug/L							
cis-1,2-Dichloroethylene	<2.00	2.00	ug/L							
cis-1,2-Dichloroethylene	<2.00	2.00	ug/L							
cis-1,3-Dichloropropene	<2.00	2.00	ug/L							
cis-1,3-Dichloropropene	<2.00	2.00	ug/L							
Dibromochloromethane	<2.00	2.00	ug/L							
Dibromochloromethane	<2.00	2.00	ug/L							
Dibromomethane	<2.00	2.00	ug/L							
Dibromomethane	<2.00	2.00	ug/L							
Dichlorodifluoromethane	<2.00	2.00	ug/L							
Dichlorodifluoromethane	<2.00	2.00	ug/L							
Dichloromethane	<2.00	2.00	ug/L							
Dichloromethane	<2.00	2.00	ug/L							
Ethylbenzene	<2.00	2.00	ug/L							
Ethylbenzene	<2.00	2.00	ug/L							
Hexachlorobutadiene	<2.00	2.00	ug/L							
Hexachlorobutadiene	<2.00	2.00	ug/L							
Iodomethane	<10.0	10.0	ug/L							
Iodomethane	<10.0	10.0	ug/L							

Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H0902 - Default Prep VOC										
Blank (B3H0902-BLK1)				*Prepared & Analyzed: 08/25/23*						
Isopropylbenzene	<2.00	2.00	ug/L							
Isopropylbenzene	<2.00	2.00	ug/L							
m,p-Xylene	<4.00	4.00	ug/L							
m,p-Xylene	<4.00	4.00	ug/L							
Methyl methacrylate	<10.0	10.0	ug/L							
Methyl methacrylate	<10.0	10.0	ug/L							
Methyl-tert-butyl ether	<2.00	2.00	ug/L							
Methyl-tert-butyl ether	<2.00	2.00	ug/L							
Naphthalene	<2.00	2.00	ug/L							
Naphthalene	<2.00	2.00	ug/L							
n-Butylbenzene	<2.00	2.00	ug/L							
n-Butylbenzene	<2.00	2.00	ug/L							
n-Propylbenzene	<2.00	2.00	ug/L							
n-Propylbenzene	<2.00	2.00	ug/L							
o-Xylene	<2.00	2.00	ug/L							
o-Xylene	<2.00	2.00	ug/L							
p-Isopropyltoluene	<2.00	2.00	ug/L							
p-Isopropyltoluene	<2.00	2.00	ug/L							
sec-Butylbenzene	<2.00	2.00	ug/L							
sec-Butylbenzene	<2.00	2.00	ug/L							
Styrene	<2.00	2.00	ug/L							
Styrene	<2.00	2.00	ug/L							
tert-Butylbenzene	<2.00	2.00	ug/L							
tert-Butylbenzene	<2.00	2.00	ug/L							
Tetrachloroethene	<2.00	2.00	ug/L							
Tetrachloroethene	<2.00	2.00	ug/L							
Toluene	<2.00	2.00	ug/L							
Toluene	<2.00	2.00	ug/L							
Total THMs	<2.00	2.00	ug/L							
Total THMs	<2.00	2.00	ug/L							
trans-1,2-Dichloroethene	<2.00	2.00	ug/L							
trans-1,2-Dichloroethene	<2.00	2.00	ug/L							
trans-1,3-Dichloropropene	<2.00	2.00	ug/L							
trans-1,3-Dichloropropene	<2.00	2.00	ug/L							
trans-1,4-Dichloro-2-butene	<10.0	10.0	ug/L							
trans-1,4-Dichloro-2-butene	<10.0	10.0	ug/L							
Trichloroethene	<2.00	2.00	ug/L							
Trichloroethene	<2.00	2.00	ug/L							
Trichlorofluoromethane	<2.00	2.00	ug/L							
Trichlorofluoromethane	<2.00	2.00	ug/L							
Vinyl chloride	<0.500	0.500	ug/L							
Vinyl chloride	<0.500	0.500	ug/L							
Xylenes (total)	<6.00	6.00	ug/L							
Xylenes (total)	<6.00	6.00	ug/L							

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H0902 - Default Prep VOC										
LCS (B3H0902-BS1)				*Prepared & Analyzed: 08/25/23*						
1,1,1,2-Tetrachloroethane	11.2	2.00	ug/L	10.0		112	80-124			
1,1,1,2-Tetrachloroethane	11.2	2.00	ug/L	10.0		112	80-124			
1,1,1-Trichloroethane	11.1	2.00	ug/L	10.0		111	78-123			
1,1,1-Trichloroethane	11.1	2.00	ug/L	10.0		111	78-123			
1,1,2,2-Tetrachloroethane	10.8	2.00	ug/L	10.0		108	80-120			
1,1,2,2-Tetrachloroethane	10.8	2.00	ug/L	10.0		108	80-120			
1,1,2-Trichloroethane	10.3	2.00	ug/L	10.0		103	80-120			
1,1,2-Trichloroethane	10.3	2.00	ug/L	10.0		103	80-120			
1,1-Dichloroethane	11.1	2.00	ug/L	10.0		111	80-120			
1,1-Dichloroethane	11.1	2.00	ug/L	10.0		111	80-120			
1,1-Dichloroethene	10.8	2.00	ug/L	10.0		108	79-122			
1,1-Dichloroethene	10.8	2.00	ug/L	10.0		108	79-122			
1,1-Dichloropropene	10.7	2.00	ug/L	10.0		107	80-120			
1,1-Dichloropropene	10.7	2.00	ug/L	10.0		107	80-120			
1,2,3-Trichlorobenzene	10.8	2.00	ug/L	10.0		108	80-121			
1,2,3-Trichlorobenzene	10.8	2.00	ug/L	10.0		108	80-121			
1,2,3-Trichloropropane	10.3	2.00	ug/L	10.0		103	80-120			
1,2,3-Trichloropropane	10.3	2.00	ug/L	10.0		103	80-120			
1,2,4-Trichlorobenzene	10.8	2.00	ug/L	10.0		108	80-120			
1,2,4-Trichlorobenzene	10.8	2.00	ug/L	10.0		108	80-120			
1,2,4-Trimethylbenzene	10.7	2.00	ug/L	10.0		107	80-130			
1,2,4-Trimethylbenzene	10.7	2.00	ug/L	10.0		107	80-130			
1,2-Dibromo-3-chloropropane	10.8	5.00	ug/L	10.0		108	80-120			
1,2-Dibromo-3-chloropropane	10.8	5.00	ug/L	10.0		108	80-120			
1,2-Dibromoethane (EDB)	9.99	2.00	ug/L	10.0		100	80-121			
1,2-Dibromoethane (EDB)	9.99	2.00	ug/L	10.0		100	80-121			
1,2-Dichlorobenzene	10.5	2.00	ug/L	10.0		105	80-120			
1,2-Dichlorobenzene	10.5	2.00	ug/L	10.0		105	80-120			
1,2-Dichloroethane	10.7	2.00	ug/L	10.0		107	80-120			
1,2-Dichloroethane	10.7	2.00	ug/L	10.0		107	80-120			
1,2-Dichloropropane	10.5	2.00	ug/L	10.0		105	80-120			
1,2-Dichloropropane	10.5	2.00	ug/L	10.0		105	80-120			
1,3,5-Trimethylbenzene	10.7	2.00	ug/L	10.0		107	80-131			
1,3,5-Trimethylbenzene	10.7	2.00	ug/L	10.0		107	80-131			
1,3-Dichlorobenzene	10.5	2.00	ug/L	10.0		105	80-120			
1,3-Dichlorobenzene	10.5	2.00	ug/L	10.0		105	80-120			
1,3-Dichloropropane	10.0	2.00	ug/L	10.0		100	80-120			
1,3-Dichloropropane	10.0	2.00	ug/L	10.0		100	80-120			
1,4-Dichlorobenzene	10.4	2.00	ug/L	10.0		104	80-120			
1,4-Dichlorobenzene	10.4	2.00	ug/L	10.0		104	80-120			
2,2-Dichloropropane	12.5	2.00	ug/L	10.0		125	77-141			
2,2-Dichloropropane	12.5	2.00	ug/L	10.0		125	77-141			
2-Butanone	41.0	10.0	ug/L				80-120			
2-Butanone	41.0	10.0	ug/L				80-120			
2-Chlorotoluene	10.6	2.00	ug/L	10.0		106	80-122			
2-Chlorotoluene	10.6	2.00	ug/L	10.0		106	80-122			
2-Hexanone	36.3	10.0	ug/L				76-124			
2-Hexanone	36.3	10.0	ug/L				76-124			

Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H0902 - Default Prep VOC										
LCS (B3H0902-BS1)				*Prepared & Analyzed: 08/25/23*						
4-Chlorotoluene	10.3	2.00	ug/L	10.0		103	80-124			
4-Chlorotoluene	10.3	2.00	ug/L	10.0		103	80-124			
4-Methyl-2-pentanone	38.4	10.0	ug/L				72-130			
4-Methyl-2-pentanone	38.4	10.0	ug/L				72-130			
Acetone	40.4	20.0	ug/L				74-123			
Acetone	40.4	20.0	ug/L				74-123			
Benzene	10.6	2.00	ug/L	10.0		106	80-120			
Benzene	10.6	2.00	ug/L	10.0		106	80-120			
Bromobenzene	10.1	2.00	ug/L	10.0		101	80-120			
Bromobenzene	10.1	2.00	ug/L	10.0		101	80-120			
Bromochloromethane	10.4	2.00	ug/L	10.0		104	80-120			
Bromochloromethane	10.4	2.00	ug/L	10.0		104	80-120			
Bromodichloromethane	11.7	2.00	ug/L	10.0		117	80-120			
Bromodichloromethane	11.7	2.00	ug/L	10.0		117	80-120			
Bromoform	11.4	2.00	ug/L	10.0		114	80-133			
Bromoform	11.4	2.00	ug/L	10.0		114	80-133			
Bromomethane	9.74	2.00	ug/L	10.0		97	80-120			
Bromomethane	9.74	2.00	ug/L	10.0		97	80-120			
Carbon disulfide	45.5	10.0	ug/L				79-126			
Carbon disulfide	45.5	10.0	ug/L				79-126			
Carbon tetrachloride	11.3	2.00	ug/L	10.0		113	77-126			
Carbon tetrachloride	11.3	2.00	ug/L	10.0		113	77-126			
Chlorobenzene	10.1	2.00	ug/L	10.0		101	80-120			
Chlorobenzene	10.1	2.00	ug/L	10.0		101	80-120			
Chloroethane	10.1	2.00	ug/L	10.0		101	80-120			
Chloroethane	10.1	2.00	ug/L	10.0		101	80-120			
Chloroform	11.0	2.00	ug/L	10.0		110	80-120			
Chloroform	11.0	2.00	ug/L	10.0		110	80-120			
Chloromethane	10.2	2.00	ug/L	10.0		102	74-124			
Chloromethane	10.2	2.00	ug/L	10.0		102	74-124			
cis-1,2-Dichloroethylene	10.7	2.00	ug/L	10.0		107	80-120			
cis-1,2-Dichloroethylene	10.7	2.00	ug/L	10.0		107	80-120			
cis-1,3-Dichloropropene	10.2	2.00	ug/L	10.0		102	70-137			
cis-1,3-Dichloropropene	10.2	2.00	ug/L	10.0		102	70-137			
Dibromochloromethane	11.1	2.00	ug/L	10.0		111	80-127			
Dibromochloromethane	11.1	2.00	ug/L	10.0		111	80-127			
Dibromomethane	10.3	2.00	ug/L	10.0		103	80-120			
Dibromomethane	10.3	2.00	ug/L	10.0		103	80-120			
Dichlorodifluoromethane	9.75	2.00	ug/L	10.0		98	67-134			
Dichlorodifluoromethane	9.75	2.00	ug/L	10.0		98	67-134			
Dichloromethane	11.0	2.00	ug/L	10.0		110	80-120			
Dichloromethane	11.0	2.00	ug/L	10.0		110	80-120			
Ethylbenzene	10.2	2.00	ug/L	10.0		102	80-126			
Ethylbenzene	10.2	2.00	ug/L	10.0		102	80-126			
Hexachlorobutadiene	10.9	2.00	ug/L	10.0		109	78-126			
Hexachlorobutadiene	10.9	2.00	ug/L	10.0		109	78-126			
Iodomethane	42.9	10.0	ug/L				80-120			
Iodomethane	42.9	10.0	ug/L				80-120			

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Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H0902 - Default Prep VOC										
LCS (B3H0902-BS1)				*Prepared & Analyzed: 08/25/23*						
Isopropylbenzene	10.4	2.00	ug/L	10.0		104	80-124			
Isopropylbenzene	10.4	2.00	ug/L	10.0		104	80-124			
m,p-Xylene	10.1	4.00	ug/L	10.0		101	80-127			
m,p-Xylene	10.1	4.00	ug/L	10.0		101	80-127			
Methyl methacrylate	38.4	10.0	ug/L				80-120			
Methyl methacrylate	38.4	10.0	ug/L				80-120			
Methyl-tert-butyl ether	10.1	2.00	ug/L	10.0		101	80-120			
Methyl-tert-butyl ether	10.1	2.00	ug/L	10.0		101	80-120			
Naphthalene	10.4	2.00	ug/L	10.0		104	77-120			
Naphthalene	10.4	2.00	ug/L	10.0		104	77-120			
n-Butylbenzene	10.7	2.00	ug/L	10.0		107	80-131			
n-Butylbenzene	10.7	2.00	ug/L	10.0		107	80-131			
n-Propylbenzene	10.5	2.00	ug/L	10.0		105	80-130			
n-Propylbenzene	10.5	2.00	ug/L	10.0		105	80-130			
o-Xylene	10.2	2.00	ug/L	10.0		102	80-125			
o-Xylene	10.2	2.00	ug/L	10.0		102	80-125			
p-Isopropyltoluene	10.7	2.00	ug/L	10.0		107	80-131			
p-Isopropyltoluene	10.7	2.00	ug/L	10.0		107	80-131			
sec-Butylbenzene	10.7	2.00	ug/L	10.0		107	80-130			
sec-Butylbenzene	10.7	2.00	ug/L	10.0		107	80-130			
Styrene	10.1	2.00	ug/L	10.0		101	80-129			
Styrene	10.1	2.00	ug/L	10.0		101	80-129			
tert-Butylbenzene	10.6	2.00	ug/L	10.0		106	79-127			
tert-Butylbenzene	10.6	2.00	ug/L	10.0		106	79-127			
Tetrachloroethene	10.6	2.00	ug/L	10.0		106	78-125			
Tetrachloroethene	10.6	2.00	ug/L	10.0		106	78-125			
Toluene	10.3	2.00	ug/L	10.0		103	80-123			
Toluene	10.3	2.00	ug/L	10.0		103	80-123			
Total THMs	45.2	2.00	ug/L	40.0		113	0-200			
Total THMs	45.2	2.00	ug/L	40.0		113	0-200			
trans-1,2-Dichloroethene	10.8	2.00	ug/L	10.0		108	80-120			
trans-1,2-Dichloroethene	10.8	2.00	ug/L	10.0		108	80-120			
trans-1,3-Dichloropropene	10.2	2.00	ug/L	10.0		102	80-123			
trans-1,3-Dichloropropene	10.2	2.00	ug/L	10.0		102	80-123			
trans-1,4-Dichloro-2-butene	39.8	10.0	ug/L				69-143			
trans-1,4-Dichloro-2-butene	39.8	10.0	ug/L				69-143			
Trichloroethene	10.4	2.00	ug/L	10.0		104	80-120			
Trichloroethene	10.4	2.00	ug/L	10.0		104	80-120			
Trichlorofluoromethane	10.6	2.00	ug/L	10.0		106	80-121			
Trichlorofluoromethane	10.6	2.00	ug/L	10.0		106	80-121			
Vinyl chloride	9.93	0.500	ug/L	10.0		99	78-123			
Vinyl chloride	9.93	0.500	ug/L	10.0		99	78-123			
Xylenes (total)	20.3	6.00	ug/L	20.0		102	0-200			
Xylenes (total)	20.3	6.00	ug/L	20.0		102	0-200			

Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H0902 - Default Prep VOC										
LCS Dup (B3H0902-BSD1)				*Prepared & Analyzed: 08/25/23*						
1,1,1,2-Tetrachloroethane	10.7	2.00	ug/L	10.0		107	80-124	4	20	
1,1,1,2-Tetrachloroethane	10.7	2.00	ug/L	10.0		107	80-124	4	20	
1,1,1-Trichloroethane	11.1	2.00	ug/L	10.0		111	78-123	0.09	20	
1,1,1-Trichloroethane	11.1	2.00	ug/L	10.0		111	78-123	0.09	20	
1,1,2,2-Tetrachloroethane	10.9	2.00	ug/L	10.0		109	80-120	0.6	20	
1,1,2,2-Tetrachloroethane	10.9	2.00	ug/L	10.0		109	80-120	0.6	20	
1,1,2-Trichloroethane	10.4	2.00	ug/L	10.0		104	80-120	0.3	20	
1,1,2-Trichloroethane	10.4	2.00	ug/L	10.0		104	80-120	0.3	20	
1,1-Dichloroethane	11.0	2.00	ug/L	10.0		110	80-120	1	20	
1,1-Dichloroethane	11.0	2.00	ug/L	10.0		110	80-120	1	20	
1,1-Dichloroethene	10.7	2.00	ug/L	10.0		107	79-122	2	20	
1,1-Dichloroethene	10.7	2.00	ug/L	10.0		107	79-122	2	20	
1,1-Dichloropropene	10.6	2.00	ug/L	10.0		106	80-120	0.9	20	
1,1-Dichloropropene	10.6	2.00	ug/L	10.0		106	80-120	0.9	20	
1,2,3-Trichlorobenzene	10.5	2.00	ug/L	10.0		105	80-121	3	20	
1,2,3-Trichlorobenzene	10.5	2.00	ug/L	10.0		105	80-121	3	20	
1,2,3-Trichloropropane	10.7	2.00	ug/L	10.0		107	80-120	4	20	
1,2,3-Trichloropropane	10.7	2.00	ug/L	10.0		107	80-120	4	20	
1,2,4-Trichlorobenzene	10.5	2.00	ug/L	10.0		105	80-120	3	20	
1,2,4-Trichlorobenzene	10.5	2.00	ug/L	10.0		105	80-120	3	20	
1,2,4-Trimethylbenzene	10.6	2.00	ug/L	10.0		106	80-130	1	20	
1,2,4-Trimethylbenzene	10.6	2.00	ug/L	10.0		106	80-130	1	20	
1,2-Dibromo-3-chloropropane	10.6	5.00	ug/L	10.0		106	80-120	1	20	
1,2-Dibromo-3-chloropropane	10.6	5.00	ug/L	10.0		106	80-120	1	20	
1,2-Dibromoethane (EDB)	10.0	2.00	ug/L	10.0		100	80-121	0.5	20	
1,2-Dibromoethane (EDB)	10.0	2.00	ug/L	10.0		100	80-121	0.5	20	
1,2-Dichlorobenzene	10.5	2.00	ug/L	10.0		105	80-120	0.2	20	
1,2-Dichlorobenzene	10.5	2.00	ug/L	10.0		105	80-120	0.2	20	
1,2-Dichloroethane	10.8	2.00	ug/L	10.0		108	80-120	1	20	
1,2-Dichloroethane	10.8	2.00	ug/L	10.0		108	80-120	1	20	
1,2-Dichloropropane	10.7	2.00	ug/L	10.0		107	80-120	1	20	
1,2-Dichloropropane	10.7	2.00	ug/L	10.0		107	80-120	1	20	
1,3,5-Trimethylbenzene	10.5	2.00	ug/L	10.0		105	80-131	2	20	
1,3,5-Trimethylbenzene	10.5	2.00	ug/L	10.0		105	80-131	2	20	
1,3-Dichlorobenzene	10.4	2.00	ug/L	10.0		104	80-120	1	20	
1,3-Dichlorobenzene	10.4	2.00	ug/L	10.0		104	80-120	1	20	
1,3-Dichloropropane	10.2	2.00	ug/L	10.0		102	80-120	2	20	
1,3-Dichloropropane	10.2	2.00	ug/L	10.0		102	80-120	2	20	
1,4-Dichlorobenzene	10.4	2.00	ug/L	10.0		104	80-120	0.1	20	
1,4-Dichlorobenzene	10.4	2.00	ug/L	10.0		104	80-120	0.1	20	
2,2-Dichloropropane	12.6	2.00	ug/L	10.0		126	77-141	0.9	20	
2,2-Dichloropropane	12.6	2.00	ug/L	10.0		126	77-141	0.9	20	
2-Butanone	41.6	10.0	ug/L				80-120	1	20	
2-Butanone	41.6	10.0	ug/L				80-120	1	20	
2-Chlorotoluene	10.5	2.00	ug/L	10.0		105	80-122	2	20	
2-Chlorotoluene	10.5	2.00	ug/L	10.0		105	80-122	2	20	
2-Hexanone	39.0	10.0	ug/L				76-124	7	20	
2-Hexanone	39.0	10.0	ug/L				76-124	7	20	

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Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H0902 - Default Prep VOC										
LCS Dup (B3H0902-BSD1)				*Prepared & Analyzed: 08/25/23*						
4-Chlorotoluene	10.4	2.00	ug/L	10.0		104	80-124	1	20	
4-Chlorotoluene	10.4	2.00	ug/L	10.0		104	80-124	1	20	
4-Methyl-2-pentanone	39.6	10.0	ug/L				72-130	3	20	
4-Methyl-2-pentanone	39.6	10.0	ug/L				72-130	3	20	
Acetone	38.9	20.0	ug/L				74-123	4	20	
Acetone	38.9	20.0	ug/L				74-123	4	20	
Benzene	10.7	2.00	ug/L	10.0		107	80-120	0.7	20	
Benzene	10.7	2.00	ug/L	10.0		107	80-120	0.7	20	
Bromobenzene	10.3	2.00	ug/L	10.0		103	80-120	1	20	
Bromobenzene	10.3	2.00	ug/L	10.0		103	80-120	1	20	
Bromochloromethane	10.6	2.00	ug/L	10.0		106	80-120	2	20	
Bromochloromethane	10.6	2.00	ug/L	10.0		106	80-120	2	20	
Bromodichloromethane	11.9	2.00	ug/L	10.0		119	80-120	1	20	
Bromodichloromethane	11.9	2.00	ug/L	10.0		119	80-120	1	20	
Bromoform	11.4	2.00	ug/L	10.0		114	80-133	0.4	20	
Bromoform	11.4	2.00	ug/L	10.0		114	80-133	0.4	20	
Bromomethane	9.70	2.00	ug/L	10.0		97	80-120	0.4	20	
Bromomethane	9.70	2.00	ug/L	10.0		97	80-120	0.4	20	
Carbon disulfide	44.7	10.0	ug/L				79-126	2	20	
Carbon disulfide	44.7	10.0	ug/L				79-126	2	20	
Carbon tetrachloride	11.2	2.00	ug/L	10.0		112	77-126	1	20	
Carbon tetrachloride	11.2	2.00	ug/L	10.0		112	77-126	1	20	
Chlorobenzene	10.0	2.00	ug/L	10.0		100	80-120	0.3	20	
Chlorobenzene	10.0	2.00	ug/L	10.0		100	80-120	0.3	20	
Chloroethane	10.3	2.00	ug/L	10.0		103	80-120	1	20	
Chloroethane	10.3	2.00	ug/L	10.0		103	80-120	1	20	
Chloroform	10.8	2.00	ug/L	10.0		108	80-120	2	20	
Chloroform	10.8	2.00	ug/L	10.0		108	80-120	2	20	
Chloromethane	10.8	2.00	ug/L	10.0		108	74-124	5	20	
Chloromethane	10.8	2.00	ug/L	10.0		108	74-124	5	20	
cis-1,2-Dichloroethylene	10.5	2.00	ug/L	10.0		105	80-120	2	20	
cis-1,2-Dichloroethylene	10.5	2.00	ug/L	10.0		105	80-120	2	20	
cis-1,3-Dichloropropene	10.5	2.00	ug/L	10.0		105	70-137	3	20	
cis-1,3-Dichloropropene	10.5	2.00	ug/L	10.0		105	70-137	3	20	
Dibromochloromethane	11.2	2.00	ug/L	10.0		112	80-127	0.8	20	
Dibromochloromethane	11.2	2.00	ug/L	10.0		112	80-127	0.8	20	
Dibromomethane	10.7	2.00	ug/L	10.0		107	80-120	4	20	
Dibromomethane	10.7	2.00	ug/L	10.0		107	80-120	4	20	
Dichlorodifluoromethane	10.1	2.00	ug/L	10.0		101	67-134	4	20	
Dichlorodifluoromethane	10.1	2.00	ug/L	10.0		101	67-134	4	20	
Dichloromethane	10.8	2.00	ug/L	10.0		108	80-120	2	20	
Dichloromethane	10.8	2.00	ug/L	10.0		108	80-120	2	20	
Ethylbenzene	10.0	2.00	ug/L	10.0		100	80-126	2	20	
Ethylbenzene	10.0	2.00	ug/L	10.0		100	80-126	2	20	
Hexachlorobutadiene	10.7	2.00	ug/L	10.0		107	78-126	2	20	
Hexachlorobutadiene	10.7	2.00	ug/L	10.0		107	78-126	2	20	
Iodomethane	42.3	10.0	ug/L				80-120	1	20	
Iodomethane	42.3	10.0	ug/L				80-120	1	20	

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Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H0902 - Default Prep VOC										
LCS Dup (B3H0902-BSD1)				*Prepared & Analyzed: 08/25/23*						
Isopropylbenzene	10.2	2.00	ug/L	10.0		102	80-124	2	20	
Isopropylbenzene	10.2	2.00	ug/L	10.0		102	80-124	2	20	
m,p-Xylene	10.1	4.00	ug/L	10.0		101	80-127	0.6	20	
m,p-Xylene	10.1	4.00	ug/L	10.0		101	80-127	0.6	20	
Methyl methacrylate	41.1	10.0	ug/L				80-120	7	20	
Methyl methacrylate	41.1	10.0	ug/L				80-120	7	20	
Methyl-tert-butyl ether	10.4	2.00	ug/L	10.0		104	80-120	2	20	
Methyl-tert-butyl ether	10.4	2.00	ug/L	10.0		104	80-120	2	20	
Naphthalene	10.3	2.00	ug/L	10.0		103	77-120	2	20	
Naphthalene	10.3	2.00	ug/L	10.0		103	77-120	2	20	
n-Butylbenzene	10.4	2.00	ug/L	10.0		104	80-131	2	20	
n-Butylbenzene	10.4	2.00	ug/L	10.0		104	80-131	2	20	
n-Propylbenzene	10.5	2.00	ug/L	10.0		105	80-130	0	20	
n-Propylbenzene	10.5	2.00	ug/L	10.0		105	80-130	0	20	
o-Xylene	10.0	2.00	ug/L	10.0		100	80-125	2	20	
o-Xylene	10.0	2.00	ug/L	10.0		100	80-125	2	20	
p-Isopropyltoluene	10.6	2.00	ug/L	10.0		106	80-131	2	20	
p-Isopropyltoluene	10.6	2.00	ug/L	10.0		106	80-131	2	20	
sec-Butylbenzene	10.6	2.00	ug/L	10.0		106	80-130	1	20	
sec-Butylbenzene	10.6	2.00	ug/L	10.0		106	80-130	1	20	
Styrene	10.2	2.00	ug/L	10.0		102	80-129	0.6	20	
Styrene	10.2	2.00	ug/L	10.0		102	80-129	0.6	20	
tert-Butylbenzene	10.5	2.00	ug/L	10.0		105	79-127	0.6	20	
tert-Butylbenzene	10.5	2.00	ug/L	10.0		105	79-127	0.6	20	
Tetrachloroethene	10.3	2.00	ug/L	10.0		103	78-125	2	20	
Tetrachloroethene	10.3	2.00	ug/L	10.0		103	78-125	2	20	
Toluene	10.0	2.00	ug/L	10.0		100	80-123	3	20	
Toluene	10.0	2.00	ug/L	10.0		100	80-123	3	20	
Total THMs	45.3	2.00	ug/L	40.0		113	0-200	0.3	20	
Total THMs	45.3	2.00	ug/L	40.0		113	0-200	0.3	20	
trans-1,2-Dichloroethene	10.7	2.00	ug/L	10.0		107	80-120	1	20	
trans-1,2-Dichloroethene	10.7	2.00	ug/L	10.0		107	80-120	1	20	
trans-1,3-Dichloropropene	10.3	2.00	ug/L	10.0		103	80-123	1	20	
trans-1,3-Dichloropropene	10.3	2.00	ug/L	10.0		103	80-123	1	20	
trans-1,4-Dichloro-2-butene	40.6	10.0	ug/L				69-143	2	20	
trans-1,4-Dichloro-2-butene	40.6	10.0	ug/L				69-143	2	20	
Trichloroethene	10.5	2.00	ug/L	10.0		105	80-120	1	20	
Trichloroethene	10.5	2.00	ug/L	10.0		105	80-120	1	20	
Trichlorofluoromethane	10.6	2.00	ug/L	10.0		106	80-121	0.7	20	
Trichlorofluoromethane	10.6	2.00	ug/L	10.0		106	80-121	0.7	20	
Vinyl chloride	9.90	0.500	ug/L	10.0		99	78-123	0.3	20	
Vinyl chloride	9.90	0.500	ug/L	10.0		99	78-123	0.3	20	
Xylenes (total)	20.2	6.00	ug/L	20.0		101	0-200	0.7	20	
Xylenes (total)	20.2	6.00	ug/L	20.0		101	0-200	0.7	20	

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Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H0902 - Default Prep VOC										
Matrix Spike (B3H0902-MS1)	**Source: 23H2533-02**			*Prepared & Analyzed: 08/25/23*						
1,1,1,2-Tetrachloroethane	10.7	2.00	ug/L	10.0	<2.00	107	80-123			
1,1,1-Trichloroethane	10.8	2.00	ug/L	10.0	<2.00	108	80-120			
1,1,2,2-Tetrachloroethane	11.4	2.00	ug/L	10.0	<2.00	114	78-120			
1,1,2-Trichloroethane	10.6	2.00	ug/L	10.0	<2.00	106	80-120			
1,1-Dichloroethane	10.7	2.00	ug/L	10.0	<2.00	107	80-120			
1,1-Dichloroethene	10.4	2.00	ug/L	10.0	<2.00	104	80-121			
1,1-Dichloropropene	10.3	2.00	ug/L	10.0	<2.00	103	80-120			
1,2,3-Trichlorobenzene	10.8	2.00	ug/L	10.0	<2.00	108	80-126			
1,2,3-Trichloropropane	11.0	2.00	ug/L	10.0	<2.00	110	76-120			
1,2,4-Trichlorobenzene	10.6	2.00	ug/L	10.0	<2.00	106	79-123			
1,2,4-Trimethylbenzene	10.7	2.00	ug/L	10.0	<2.00	107	25-178			
1,2-Dibromo-3-chloropropane	10.8	5.00	ug/L	10.0	<5.00	108	72-121			
1,2-Dibromoethane (EDB)	10.2	2.00	ug/L	10.0	<2.00	102	80-120			
1,2-Dichlorobenzene	10.6	2.00	ug/L	10.0	<2.00	106	80-120			
1,2-Dichloroethane	10.6	2.00	ug/L	10.0	<2.00	106	80-120			
1,2-Dichloropropane	10.7	2.00	ug/L	10.0	<2.00	107	80-120			
1,3,5-Trimethylbenzene	10.6	2.00	ug/L	10.0	<2.00	106	75-135			
1,3-Dichlorobenzene	10.6	2.00	ug/L	10.0	<2.00	106	80-121			
1,3-Dichloropropane	10.5	2.00	ug/L	10.0	<2.00	105	80-120			
1,4-Dichlorobenzene	10.7	2.00	ug/L	10.0	<2.00	107	80-120			
2,2-Dichloropropane	12.3	2.00	ug/L	10.0	<2.00	123	78-138			
2-Butanone	43.5	10.0	ug/L		<10.0		76-120			
2-Chlorotoluene	10.6	2.00	ug/L	10.0	<2.00	106	80-125			
2-Hexanone	40.6	10.0	ug/L		<10.0		68-126			
4-Chlorotoluene	10.6	2.00	ug/L	10.0	<2.00	106	80-126			
4-Methyl-2-pentanone	39.3	10.0	ug/L		<10.0		68-125			
Acetone	75.2	20.0	ug/L		38.2		74-122			
Benzene	10.5	2.00	ug/L	10.0	<2.00	105	80-120			
Bromobenzene	10.3	2.00	ug/L	10.0	<2.00	103	80-120			
Bromochloromethane	10.2	2.00	ug/L	10.0	<2.00	102	80-120			
Bromodichloromethane	10.5	2.00	ug/L	10.0	<2.00	105	74-128			
Bromoform	11.3	2.00	ug/L	10.0	<2.00	113	54-157			
Bromomethane	9.84	2.00	ug/L	10.0	<2.00	98	80-120			
Carbon disulfide	42.4	10.0	ug/L		<10.0		77-122			
Carbon tetrachloride	10.8	2.00	ug/L	10.0	<2.00	108	80-121			
Chlorobenzene	10.2	2.00	ug/L	10.0	<2.00	102	80-120			
Chloroethane	10.7	2.00	ug/L	10.0	<2.00	107	80-122			
Chloroform	10.6	2.00	ug/L	10.0	<2.00	106	75-125			
Chloromethane	10.8	2.00	ug/L	10.0	<2.00	108	32-181			
cis-1,2-Dichloroethylene	10.3	2.00	ug/L	10.0	<2.00	103	80-120			
cis-1,3-Dichloropropene	10.2	2.00	ug/L	10.0	<2.00	102	66-128			
Dibromochloromethane	11.0	2.00	ug/L	10.0	<2.00	110	42-178			
Dibromomethane	10.4	2.00	ug/L	10.0	<2.00	104	78-120			
Dichlorodifluoromethane	9.42	2.00	ug/L	10.0	<2.00	94	63-143			
Dichloromethane	10.4	2.00	ug/L	10.0	<2.00	104	80-120			
Ethylbenzene	10.3	2.00	ug/L	10.0	<2.00	103	80-125			
Hexachlorobutadiene	10.5	2.00	ug/L	10.0	<2.00	105	79-130			
Iodomethane	40.3	10.0	ug/L		<10.0		80-120			

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Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H0902 - Default Prep VOC										
Matrix Spike (B3H0902-MS1)	**Source: 23H2533-02**			*Prepared & Analyzed: 08/25/23*						
Isopropylbenzene	10.3	2.00	ug/L	10.0	<2.00	103	80-125			
m,p-Xylene	10.2	4.00	ug/L	10.0	<4.00	102	68-138			
Methyl methacrylate	42.4	10.0	ug/L		<10.0		68-125			
Methyl-tert-butyl ether	10.0	2.00	ug/L	10.0	<2.00	100	79-120			
Naphthalene	10.5	2.00	ug/L	10.0	<2.00	105	66-130			
n-Butylbenzene	10.9	2.00	ug/L	10.0	<2.00	109	80-137			
n-Propylbenzene	10.7	2.00	ug/L	10.0	<2.00	107	80-132			
o-Xylene	10.1	2.00	ug/L	10.0	<2.00	101	79-126			
p-Isopropyltoluene	10.8	2.00	ug/L	10.0	<2.00	108	80-136			
sec-Butylbenzene	10.7	2.00	ug/L	10.0	<2.00	107	80-134			
Styrene	10.2	2.00	ug/L	10.0	<2.00	102	76-130			
tert-Butylbenzene	10.4	2.00	ug/L	10.0	<2.00	104	80-131			
Tetrachloroethene	10.5	2.00	ug/L	10.0	<2.00	105	80-126			
Toluene	10.4	2.00	ug/L	10.0	<2.00	104	86-122			
Total THMs	43.4	2.00	ug/L	40.0	<2.00	109	0-200			
trans-1,2-Dichloroethene	10.4	2.00	ug/L	10.0	<2.00	104	80-120			
trans-1,3-Dichloropropene	10.4	2.00	ug/L	10.0	<2.00	104	79-120			
trans-1,4-Dichloro-2-butene	42.9	10.0	ug/L		<10.0		43-145			
Trichloroethene	10.3	2.00	ug/L	10.0	<2.00	103	80-120			
Trichlorofluoromethane	11.0	2.00	ug/L	10.0	<2.00	110	80-124			
Vinyl chloride	9.95	0.500	ug/L	10.0	<0.500	100	76-129			
Xylenes (total)	20.3	6.00	ug/L	20.0	<6.00	101	0-200			
Matrix Spike Dup (B3H0902-MSD1)	**Source: 23H2533-02**			*Prepared & Analyzed: 08/25/23*						
1,1,1,2-Tetrachloroethane	10.7	2.00	ug/L	10.0	<2.00	107	80-123	0.4	20	
1,1,1-Trichloroethane	11.0	2.00	ug/L	10.0	<2.00	110	80-120	1	20	
1,1,2,2-Tetrachloroethane	11.1	2.00	ug/L	10.0	<2.00	111	78-120	3	20	
1,1,2-Trichloroethane	10.5	2.00	ug/L	10.0	<2.00	105	80-120	1	20	
1,1-Dichloroethane	10.9	2.00	ug/L	10.0	<2.00	109	80-120	2	20	
1,1-Dichloroethene	10.5	2.00	ug/L	10.0	<2.00	105	80-121	1	20	
1,1-Dichloropropene	10.6	2.00	ug/L	10.0	<2.00	106	80-120	2	20	
1,2,3-Trichlorobenzene	10.4	2.00	ug/L	10.0	<2.00	104	80-126	4	20	
1,2,3-Trichloropropane	10.7	2.00	ug/L	10.0	<2.00	107	76-120	2	20	
1,2,4-Trichlorobenzene	10.3	2.00	ug/L	10.0	<2.00	103	79-123	3	20	
1,2,4-Trimethylbenzene	10.4	2.00	ug/L	10.0	<2.00	104	25-178	3	20	
1,2-Dibromo-3-chloropropane	10.3	5.00	ug/L	10.0	<5.00	103	72-121	5	20	
1,2-Dibromoethane (EDB)	10.2	2.00	ug/L	10.0	<2.00	102	80-120	0.4	20	
1,2-Dichlorobenzene	10.5	2.00	ug/L	10.0	<2.00	105	80-120	1	20	
1,2-Dichloroethane	10.8	2.00	ug/L	10.0	<2.00	108	80-120	2	20	
1,2-Dichloropropane	10.7	2.00	ug/L	10.0	<2.00	107	80-120	0.3	20	
1,3,5-Trimethylbenzene	10.4	2.00	ug/L	10.0	<2.00	104	75-135	2	20	
1,3-Dichlorobenzene	10.4	2.00	ug/L	10.0	<2.00	104	80-121	2	20	
1,3-Dichloropropane	10.5	2.00	ug/L	10.0	<2.00	105	80-120	0.4	20	
1,4-Dichlorobenzene	10.5	2.00	ug/L	10.0	<2.00	105	80-120	2	20	
2,2-Dichloropropane	12.0	2.00	ug/L	10.0	<2.00	120	78-138	2	20	
2-Butanone	41.9	10.0	ug/L		<10.0		76-120	4	20	
2-Chlorotoluene	10.4	2.00	ug/L	10.0	<2.00	104	80-125	2	20	
2-Hexanone	39.4	10.0	ug/L		<10.0		68-126	3	20	

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Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3H0902 - Default Prep VOC										
Matrix Spike Dup (B3H0902-MSD1)	**Source: 23H2533-02**			*Prepared & Analyzed: 08/25/23*						
4-Chlorotoluene	10.2	2.00	ug/L	10.0	<2.00	102	80-126	4	20	
4-Methyl-2-pentanone	38.9	10.0	ug/L		<10.0		68-125	1	20	
Acetone	77.8	20.0	ug/L		38.2		74-122	3	20	
Benzene	10.6	2.00	ug/L	10.0	<2.00	106	80-120	1	20	
Bromobenzene	10.3	2.00	ug/L	10.0	<2.00	103	80-120	0.5	20	
Bromochloromethane	10.6	2.00	ug/L	10.0	<2.00	106	80-120	4	20	
Bromodichloromethane	10.8	2.00	ug/L	10.0	<2.00	108	74-128	3	20	
Bromoform	11.4	2.00	ug/L	10.0	<2.00	114	54-157	1	20	
Bromomethane	9.49	2.00	ug/L	10.0	<2.00	95	80-120	4	20	
Carbon disulfide	42.7	10.0	ug/L		<10.0		77-122	0.6	20	
Carbon tetrachloride	11.2	2.00	ug/L	10.0	<2.00	112	80-121	3	20	
Chlorobenzene	10.1	2.00	ug/L	10.0	<2.00	101	80-120	1	20	
Chloroethane	10.0	2.00	ug/L	10.0	<2.00	100	80-122	7	20	
Chloroform	10.9	2.00	ug/L	10.0	<2.00	109	75-125	2	20	
Chloromethane	10.0	2.00	ug/L	10.0	<2.00	100	32-181	7	20	
cis-1,2-Dichloroethylene	10.6	2.00	ug/L	10.0	<2.00	106	80-120	3	20	
cis-1,3-Dichloropropene	10.6	2.00	ug/L	10.0	<2.00	106	66-128	4	20	
Dibromochloromethane	11.2	2.00	ug/L	10.0	<2.00	112	42-178	1	20	
Dibromomethane	10.5	2.00	ug/L	10.0	<2.00	105	78-120	1	20	
Dichlorodifluoromethane	9.49	2.00	ug/L	10.0	<2.00	95	63-143	0.7	20	
Dichloromethane	10.8	2.00	ug/L	10.0	<2.00	108	80-120	3	20	
Ethylbenzene	10.1	2.00	ug/L	10.0	<2.00	101	80-125	2	20	
Hexachlorobutadiene	9.89	2.00	ug/L	10.0	<2.00	99	79-130	6	20	
Iodomethane	40.4	10.0	ug/L		<10.0		80-120	0.2	20	
Isopropylbenzene	10.1	2.00	ug/L	10.0	<2.00	101	80-125	2	20	
m,p-Xylene	10.1	4.00	ug/L	10.0	<4.00	101	68-138	1	20	
Methyl methacrylate	42.1	10.0	ug/L		<10.0		68-125	0.7	20	
Methyl-tert-butyl ether	10.4	2.00	ug/L	10.0	<2.00	104	79-120	3	20	
Naphthalene	10.0	2.00	ug/L	10.0	<2.00	100	66-130	4	20	
n-Butylbenzene	10.3	2.00	ug/L	10.0	<2.00	103	80-137	6	20	
n-Propylbenzene	10.4	2.00	ug/L	10.0	<2.00	104	80-132	3	20	
o-Xylene	9.96	2.00	ug/L	10.0	<2.00	100	79-126	1	20	
p-Isopropyltoluene	10.3	2.00	ug/L	10.0	<2.00	103	80-136	5	20	
sec-Butylbenzene	10.3	2.00	ug/L	10.0	<2.00	103	80-134	4	20	
Styrene	10.2	2.00	ug/L	10.0	<2.00	102	76-130	0	20	
tert-Butylbenzene	10.0	2.00	ug/L	10.0	<2.00	100	80-131	4	20	
Tetrachloroethene	10.3	2.00	ug/L	10.0	<2.00	103	80-126	2	20	
Toluene	10.1	2.00	ug/L	10.0	<2.00	101	86-122	3	20	
Total THMs	44.2	2.00	ug/L	40.0	<2.00	111	0-200	2	20	
trans-1,2-Dichloroethene	10.7	2.00	ug/L	10.0	<2.00	107	80-120	3	20	
trans-1,3-Dichloropropene	10.4	2.00	ug/L	10.0	<2.00	104	79-120	0.3	20	
trans-1,4-Dichloro-2-butene	41.2	10.0	ug/L		<10.0		43-145	4	20	
Trichloroethene	10.4	2.00	ug/L	10.0	<2.00	104	80-120	0.6	20	
Trichlorofluoromethane	10.5	2.00	ug/L	10.0	<2.00	105	80-124	5	20	
Vinyl chloride	9.59	0.500	ug/L	10.0	<0.500	96	76-129	4	20	
Xylenes (total)	20.1	6.00	ug/L	20.0	<6.00	100	0-200	1	20	

Notes and Definitions

D1	Sample required dilution due to matrix.
BLK	Method Blank
LCS/Dup	Laboratory Control Sample/Laboratory Fortified Blank/Duplicate
MS/Dup	Matrix Spike/Duplicate
Dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Laborato

23H3266

PM: Mary Whaley

CHAIN OF CUSTODY RECORD

LEGEND Technical Services, Inc.

☐ 17631 N. 25th Avenue • Phoenix, AZ 85023 • (602) 324-6100 • Fax (602) 324-6101

☐ 4585 S. Palo Verde Rd, Ste 423 • Tucson, AZ 85714 • (520) 327-1234 • Fax (520) 327-0518

Please Pri

CLIENT

Client Name	Report Mailing Address	City	State	Zip	Phone	Email Address
Tucson Water Quality Lab	4401 S. Tucson Estates Pkwy	Tucson	AZ	85735	520-837-2469	frank.walker@tucsonaz.gov

Project Name	Project Number	Contact Name	Purchase Order No.		
LOS REALES Landfill Quarterly	P01049	Frank Walker	2021181	Fax Results ☐ Email Results ■ ☐	QC Report ■ EDD ■☐ Special Detection Limits ☐☐

SAMPLE TYPE CODES

DW=Drinking Water; WW=Wastewater; SW=Surface Water; GW=Groundwater; S=Soil/Solid; T=Travel Blank; F=Food; G=Sludge/Biosolids; ~~O=Other~~

TURN AROUND TIME

Laboratory Authorization Required for Rush

☐ Standard 7-10 Day

☐ Other _____

Client's	Sample Date	Sample Time	Sample Location	Composite	Grab	Sample Type	Compliance	No. of Containers	pH ✓ (Lab Use Only!)	8260 VOC w/o CEVE	LAB NO.
* L231094-01	8/21/23	0845	Marble Well		x	GW		4		X	-01
-02	8/21/23	1010	WR-466A		x	GW		4		X	-02
-03	8/21/23	1050	LLM-530		x	GW		4		X	-03
-04	8/23/23	0955	WR-172A		x	GW		4		X	-04
-05	8/23/23	1200	WR-468A		x	GW		4		X	-05
-06	8/23/23	1225	EB-01		x	GW		4		X	-06
					x	GW		4		X	
AM 8/23/23					x	GW		4		X	
					x	GW		4		X	
L231094-07	8/21/23	0845	TRIP BLANK LOT # 070223					2		X	-07

CORRECTION MADE BY CLIENT OR COURIER PRIOR TO SAMPLE RECEIPT AT LEGEND VS 8-24-23

TO ENSURE COMPLETION OF ANALYSIS, SAMPLES MUST BE RECEIVED AT LEAST 3 HOURS PRIOR TO THE HOLD TIME EXPIRATION

Comments / Special Instructions: *1 of 4 vials broken upon arrival to phx lab for 01 sample 8/25/23 AR

*8/25/23 AR

SAMPLE CONDITION UPON RECEIPT (Lab Use)		
No. of Containers	26	
Temperature	3.8 °C	
Custody Seals	Y	(N)
Seals Intact	Y	N
Preserved	(Y)	N

WHITE-LAB YELLOW-CLIENT

On behalf of the above-named Client, I accept and acknowledge receipt of Legend's General Conditions.

	RELINQUISHED BY		SAMPLES RECEIVED BY	
①	Sampler Signature A. Mosby / Annie McCauley	Date 8/23/23 Time 1349	Signature	Date 8/23/23 Time 1350 ②
③	Sampler Printed Name Annie McCauley / Evan Schaft		Printed Name John Lipentaces *	④ 1349
⑤	Sampler Signature	Date 8/24/23 Time 0848	Signature	Date 8-24-23 Time 0848 ⑥
	Sampler Printed Name Alex Mug		Printed Name Krista Sevinsky	
	Sampler Signature	Date 8-24-23 Time 1700	Signature	Date 8-24-23 Time 1700
	Sampler Printed Name Krista Sevinsky		Printed Name Courier	

3.3°C

Courier/AR A Rothe 8/25/23 0700

FORM CS-016.3 (09/20)

4401 S. Tucson Estates Parkway
Tucson, Arizona 85735
520.837.2469 Phone
520.791.5260 Fax

11 September 2023

Valerie Herman

Environmental Services

-

Tucson, AZ 85726

RE: Los Reales Landfill

Enclosed are the results for Work Order L231105, received by the laboratory on 08/25/2023 10:46. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Frank Walker

Frank Walker
Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Secondary ID/Location	Date Sampled	Date Received
L231105-01	LLM-554		08/23/2023 15:25	08/25/2023 10:46
L231105-02	WR-185A		08/24/2023 08:40	08/25/2023 10:46
L231105-03	LLM-556		08/24/2023 09:45	08/25/2023 10:46
L231105-04	LLM-555		08/24/2023 11:15	08/25/2023 10:46
L231105-05	EB-02		08/24/2023 11:45	08/25/2023 10:46
L231105-06	R-062A		08/24/2023 12:05	08/25/2023 10:46
L231105-07	R-062A		08/24/2023 12:10	08/25/2023 10:46
L231105-08	WR-379A		08/24/2023 12:40	08/25/2023 10:46
L231105-09	GAC EFF		08/24/2023 13:30	08/25/2023 10:46
L231105-10	TRIP BLANK		08/23/2023 15:25	08/25/2023 10:46
L231105-11	WR-049A		08/24/2023 14:30	08/25/2023 10:46
L231105-12	WR-049A		08/24/2023 14:33	08/25/2023 10:46

Tucson Water Quality Laboratory

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Frank Walker

Frank Walker, Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

Case narrative for L231105

D1: Sample required dilution due to matrix.

L231105-04	LLM-555	VOA (S)8260	(ALL COMPOUNDS)
L231105-06	R-062A	VOA (S)8260	(ALL COMPOUNDS)
L231105-07	R-062A	VOA (S)8260	(ALL COMPOUNDS)
L231105-08	WR-379A	VOA (S)8260	(ALL COMPOUNDS)
L231105-11	WR-049A	VOA (S)8260	(ALL COMPOUNDS)
L231105-12	WR-049A	VOA (S)8260	(ALL COMPOUNDS)

All QC results were within QC limits with the following exceptions:

L1: Associated blank spike recovery was above laboratory acceptance limits.

L231105-01	LLM-554	VOA (S)8260	BROMODICHLOROMETHANE
L231105-02	WR-185A	VOA (S)8260	BROMODICHLOROMETHANE
L231105-03	LLM-556	VOA (S)8260	BROMODICHLOROMETHANE
L231105-05	EB-02	VOA (S)8260	BROMODICHLOROMETHANE
L231105-09	GAC EFF	VOA (S)8260	BROMODICHLOROMETHANE
L231105-10	TRIP BLANK	VOA (S)8260	BROMODICHLOROMETHANE

V1: CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.

L231105-01	LLM-554	VOA (S)8260	2,2-DICHLOROPROPANE
L231105-02	WR-185A	VOA (S)8260	2,2-DICHLOROPROPANE
L231105-03	LLM-556	VOA (S)8260	2,2-DICHLOROPROPANE
L231105-05	EB-02	VOA (S)8260	2,2-DICHLOROPROPANE
L231105-09	GAC EFF	VOA (S)8260	2,2-DICHLOROPROPANE
L231105-10	TRIP BLANK	VOA (S)8260	2,2-DICHLOROPROPANE

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

LLM-554
L231105-01

Sampled:
08/23/2023 15:25

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
Subcontracted Analyses: Volatile Organic Compounds by GC									
EPA 8260B									
1,1,1,2-TETRACHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1,1-TRICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1,2-TRICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1-DICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1-DICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1-DICHLOROPROPENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2,3-TRICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2,3-TRICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2,4-TRICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	<5.00	5	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2-DICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2-DICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2-DICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,3-DICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,3-DICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,4-DICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
2,2-DICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	V1
2-CHLOROTOLUENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
2-HEXANONE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
4-CHLOROTOLUENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
4-ISOPROPYLTOLUENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ACETONE	<20.0	20	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BROMOBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BROMOCHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BROMODICHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	L1
BROMOFORM	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BROMOMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CARBON DISULFIDE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

LLM-554
L231105-01

Sampled:
08/23/2023 15:25

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
CARBON TETRACHLORIDE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CHLOROFORM	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CIS-1,2-DICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
DIBROMOCHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
DIBROMOMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
DICHLORODIFLUOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
DICHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ETHYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ETHYLENE DIBROMIDE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
HEXACHLOROBUTADIENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
IODOMETHANE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ISOPROPYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
M/P-XYLENES	<4.00	4	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
METHYL ETHYL KETONE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
METHYL ISOBUTYL KETONE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
METHYL-TERT-BUTYL ETHER	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
NAPHTHALENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
N-BUTYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
N-PROPYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ORTHO-XYLENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
SEC-BUTYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
STYRENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TERT-BUTYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TETRACHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TOLUENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TOTAL TRIHALOMETHANES	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TRICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TRICHLOROFLUOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

LLM-554
L231105-01

Sampled:
08/23/2023 15:25

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
VINYL CHLORIDE	<0.500	0.5	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
XYLENES (TOTAL)	<6.00	6	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

WR-185A
L231105-02

Sampled:
08/24/2023 8:40

Legend Technical Services, Inc (AZ0004)

Subcontracted Analyses: Volatile Organic Compounds by GC

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1,1-TRICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1,2-TRICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1-DICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1-DICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1-DICHLOROPROPENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2,3-TRICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2,3-TRICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2,4-TRICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	<5.00	5	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2-DICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2-DICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2-DICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,3-DICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,3-DICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,4-DICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
2,2-DICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	V1
2-CHLOROTOLUENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
2-HEXANONE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
4-CHLOROTOLUENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
4-ISOPROPYLTOLUENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ACETONE	<20.0	20	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BROMOBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BROMOCHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BROMODICHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	L1
BROMOFORM	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BROMOMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CARBON DISULFIDE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

WR-185A
L231105-02

Sampled:
08/24/2023 8:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
CARBON TETRACHLORIDE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CHLOROFORM	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CIS-1,2-DICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
DIBROMOCHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
DIBROMOMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
DICHLORODIFLUOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
DICHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ETHYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ETHYLENE DIBROMIDE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
HEXACHLOROBUTADIENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
IODOMETHANE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ISOPROPYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
M/P-XYLENES	<4.00	4	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
METHYL ETHYL KETONE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
METHYL ISOBUTYL KETONE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
METHYL-TERT-BUTYL ETHER	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
NAPHTHALENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
N-BUTYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
N-PROPYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ORTHO-XYLENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
SEC-BUTYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
STYRENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TERT-BUTYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TETRACHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TOLUENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TOTAL TRIHALOMETHANES	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TRICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TRICHLOROFLUOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

WR-185A
L231105-02

Sampled: 08/24/2023 8:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
VINYL CHLORIDE	<0.500	0.5	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
XYLENES (TOTAL)	<6.00	6	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

LLM-556
L231105-03

Sampled:
08/24/2023 9:45

Legend Technical Services, Inc (AZ0004)

Subcontracted Analyses: Volatile Organic Compounds by GC

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1,1-TRICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1,2-TRICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1-DICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1-DICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1-DICHLOROPROPENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2,3-TRICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2,3-TRICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2,4-TRICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	<5.00	5	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2-DICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2-DICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2-DICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,3-DICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,3-DICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,4-DICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
2,2-DICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	V1
2-CHLOROTOLUENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
2-HEXANONE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
4-CHLOROTOLUENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
4-ISOPROPYLTOLUENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ACETONE	<20.0	20	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BROMOBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BROMOCHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BROMODICHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	L1
BROMOFORM	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BROMOMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CARBON DISULFIDE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

LLM-556
L231105-03

Sampled:
08/24/2023 9:45

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
CARBON TETRACHLORIDE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CHLOROFORM	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CIS-1,2-DICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
DIBROMOCHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
DIBROMOMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
DICHLORODIFLUOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
DICHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ETHYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ETHYLENE DIBROMIDE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
HEXACHLOROBUTADIENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
IODOMETHANE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ISOPROPYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
M/P-XYLENES	<4.00	4	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
METHYL ETHYL KETONE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
METHYL ISOBUTYL KETONE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
METHYL-TERT-BUTYL ETHER	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
NAPHTHALENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
N-BUTYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
N-PROPYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ORTHO-XYLENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
SEC-BUTYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
STYRENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TERT-BUTYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TETRACHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TOLUENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TOTAL TRIHALOMETHANES	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TRICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TRICHLOROFLUOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

LLM-556
L231105-03

Sampled: 08/24/2023 9:45

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
VINYL CHLORIDE	<0.500	0.5	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
XYLENES (TOTAL)	<6.00	6	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

LLM-555
L231105-04

Sampled: 08/24/2023 11:15

Legend Technical Services, Inc (AZ0004)

Subcontracted Analyses: Volatile Organic Compounds by GC

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1,1-TRICHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1,2,2-TETRACHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1,2-TRICHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1-DICHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1-DICHLOROETHENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1-DICHLOROPROPENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2,3-TRICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2,3-TRICHLOROPROPANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2,4-TRICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2,4-TRIMETHYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2-DIBROMO-3-CHLOROPROPANE	<10.0	10	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2-DICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2-DICHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2-DICHLOROPROPANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,3,5-TRIMETHYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,3-DICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,3-DICHLOROPROPANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,4-DICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
2,2-DICHLOROPROPANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1V1
2-CHLOROTOLUENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
2-HEXANONE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
4-CHLOROTOLUENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
4-ISOPROPYLTOLUENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ACETONE	<40.0	40	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BROMOBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BROMOCHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BROMODICHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1L1
BROMOFORM	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BROMOMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CARBON DISULFIDE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

LLM-555
L231105-04

Sampled:
08/24/2023 11:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
CARBON TETRACHLORIDE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CHLOROFORM	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CIS-1,2-DICHLOROETHENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CIS-1,3-DICHLOROPROPENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
DIBROMOCHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
DIBROMOMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
DICHLORODIFLUOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
DICHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ETHYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ETHYLENE DIBROMIDE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
HEXACHLOROBUTADIENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
IODOMETHANE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ISOPROPYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
M/P-XYLENES	<8.00	8	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
METHYL ETHYL KETONE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
METHYL ISOBUTYL KETONE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
METHYL-TERT-BUTYL ETHER	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
NAPHTHALENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
N-BUTYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
N-PROPYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ORTHO-XYLENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
SEC-BUTYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
STYRENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TERT-BUTYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TETRACHLOROETHENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TOLUENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TOTAL TRIHALOMETHANES	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TRANS-1,2-DICHLOROETHENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TRANS-1,3-DICHLOROPROPENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TRICHLOROETHENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TRICHLOROFLUOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

LLM-555
L231105-04

Sampled:
08/24/2023 11:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
VINYL CHLORIDE	<1.00	1	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
XYLENES (TOTAL)	<12.0	12	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

EB-02
L231105-05

Sampled:
08/24/2023 11:45

Legend Technical Services, Inc (AZ0004)

Subcontracted Analyses: Volatile Organic Compounds by GC

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1,1-TRICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1,2-TRICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1-DICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1-DICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1-DICHLOROPROPENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2,3-TRICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2,3-TRICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2,4-TRICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	<5.00	5	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2-DICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2-DICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2-DICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,3-DICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,3-DICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,4-DICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
2,2-DICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	V1
2-CHLOROTOLUENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
2-HEXANONE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
4-CHLOROTOLUENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
4-ISOPROPYLTOLUENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ACETONE	<20.0	20	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BROMOBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BROMOCHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BROMODICHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	L1
BROMOFORM	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BROMOMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CARBON DISULFIDE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

EB-02
L231105-05

Sampled:
08/24/2023 11:45

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
CARBON TETRACHLORIDE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CHLOROFORM	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CIS-1,2-DICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
DIBROMOCHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
DIBROMOMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
DICHLORODIFLUOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
DICHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ETHYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ETHYLENE DIBROMIDE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
HEXACHLOROBUTADIENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
IODOMETHANE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ISOPROPYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
M/P-XYLENES	<4.00	4	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
METHYL ETHYL KETONE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
METHYL ISOBUTYL KETONE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
METHYL-TERT-BUTYL ETHER	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
NAPHTHALENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
N-BUTYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
N-PROPYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ORTHO-XYLENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
SEC-BUTYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
STYRENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TERT-BUTYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TETRACHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TOLUENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TOTAL TRIHALOMETHANES	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TRICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TRICHLOROFLUOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

EB-02
L231105-05

Sampled:
08/24/2023 11:45

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
VINYL CHLORIDE	<0.500	0.5	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
XYLENES (TOTAL)	<6.00	6	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

R-062A
L231105-06

Sampled:
08/24/2023 12:05

Legend Technical Services, Inc (AZ0004)

Subcontracted Analyses: Volatile Organic Compounds by GC

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1,1-TRICHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1,2,2-TETRACHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1,2-TRICHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1-DICHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1-DICHLOROETHENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1-DICHLOROPROPENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2,3-TRICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2,3-TRICHLOROPROPANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2,4-TRICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2,4-TRIMETHYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2-DIBROMO-3-CHLOROPROPANE	<10.0	10	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2-DICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2-DICHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2-DICHLOROPROPANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,3,5-TRIMETHYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,3-DICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,3-DICHLOROPROPANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,4-DICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
2,2-DICHLOROPROPANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1V1
2-CHLOROTOLUENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
2-HEXANONE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
4-CHLOROTOLUENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
4-ISOPROPYLTOLUENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ACETONE	<40.0	40	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BROMOBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BROMOCHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BROMODICHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1L1
BROMOFORM	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BROMOMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CARBON DISULFIDE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

R-062A
L231105-06

Sampled:
08/24/2023 12:05

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
CARBON TETRACHLORIDE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CHLOROFORM	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CIS-1,2-DICHLOROETHENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CIS-1,3-DICHLOROPROPENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
DIBROMOCHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
DIBROMOMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
DICHLORODIFLUOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
DICHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ETHYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ETHYLENE DIBROMIDE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
HEXACHLOROBUTADIENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
IODOMETHANE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ISOPROPYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
M/P-XYLENES	<8.00	8	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
METHYL ETHYL KETONE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
METHYL ISOBUTYL KETONE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
METHYL-TERT-BUTYL ETHER	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
NAPHTHALENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
N-BUTYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
N-PROPYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ORTHO-XYLENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
SEC-BUTYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
STYRENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TERT-BUTYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TETRACHLOROETHENE	**4.40**	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TOLUENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TOTAL TRIHALOMETHANES	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TRANS-1,2-DICHLOROETHENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TRANS-1,3-DICHLOROPROPENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TRICHLOROETHENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TRICHLOROFLUOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

R-062A
L231105-06

Sampled:
08/24/2023 12:05

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
VINYL CHLORIDE	<1.00	1	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
XYLENES (TOTAL)	<12.0	12	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

R-062A
L231105-07

Sampled: 08/24/2023 12:10

Legend Technical Services, Inc (AZ0004)

Subcontracted Analyses: Volatile Organic Compounds by GC

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1,1-TRICHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1,2,2-TETRACHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1,2-TRICHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1-DICHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1-DICHLOROETHENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1-DICHLOROPROPENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2,3-TRICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2,3-TRICHLOROPROPANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2,4-TRICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2,4-TRIMETHYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2-DIBROMO-3-CHLOROPROPANE	<10.0	10	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2-DICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2-DICHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2-DICHLOROPROPANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,3,5-TRIMETHYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,3-DICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,3-DICHLOROPROPANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,4-DICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
2,2-DICHLOROPROPANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1V1
2-CHLOROTOLUENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
2-HEXANONE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
4-CHLOROTOLUENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
4-ISOPROPYLTOLUENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ACETONE	<40.0	40	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BROMOBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BROMOCHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BROMODICHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1L1
BROMOFORM	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BROMOMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CARBON DISULFIDE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

R-062A
L231105-07

Sampled:
08/24/2023 12:10

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
CARBON TETRACHLORIDE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CHLOROFORM	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CIS-1,2-DICHLOROETHENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CIS-1,3-DICHLOROPROPENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
DIBROMOCHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
DIBROMOMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
DICHLORODIFLUOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
DICHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ETHYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ETHYLENE DIBROMIDE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
HEXACHLOROBUTADIENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
IODOMETHANE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ISOPROPYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
M/P-XYLENES	<8.00	8	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
METHYL ETHYL KETONE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
METHYL ISOBUTYL KETONE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
METHYL-TERT-BUTYL ETHER	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
NAPHTHALENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
N-BUTYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
N-PROPYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ORTHO-XYLENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
SEC-BUTYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
STYRENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TERT-BUTYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TETRACHLOROETHENE	**4.70**	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TOLUENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TOTAL TRIHALOMETHANES	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TRANS-1,2-DICHLOROETHENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TRANS-1,3-DICHLOROPROPENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TRICHLOROETHENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TRICHLOROFLUOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

R-062A
L231105-07

Sampled:
08/24/2023 12:10

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
VINYL CHLORIDE	<1.00	1	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
XYLENES (TOTAL)	<12.0	12	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

WR-379A
L231105-08

Sampled:
08/24/2023 12:40

Legend Technical Services, Inc (AZ0004)

Subcontracted Analyses: Volatile Organic Compounds by GC

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1,1-TRICHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1,2,2-TETRACHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1,2-TRICHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1-DICHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1-DICHLOROETHENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1-DICHLOROPROPENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2,3-TRICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2,3-TRICHLOROPROPANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2,4-TRICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2,4-TRIMETHYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2-DIBROMO-3-CHLOROPROPANE	<10.0	10	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2-DICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2-DICHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2-DICHLOROPROPANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,3,5-TRIMETHYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,3-DICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,3-DICHLOROPROPANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,4-DICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
2,2-DICHLOROPROPANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1V1
2-CHLOROTOLUENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
2-HEXANONE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
4-CHLOROTOLUENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
4-ISOPROPYLTOLUENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ACETONE	<40.0	40	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BROMOBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BROMOCHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BROMODICHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1L1
BROMOFORM	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BROMOMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CARBON DISULFIDE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

WR-379A
L231105-08

Sampled:
08/24/2023 12:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
CARBON TETRACHLORIDE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CHLOROFORM	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CIS-1,2-DICHLOROETHENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CIS-1,3-DICHLOROPROPENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
DIBROMOCHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
DIBROMOMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
DICHLORODIFLUOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
DICHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ETHYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ETHYLENE DIBROMIDE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
HEXACHLOROBUTADIENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
IODOMETHANE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ISOPROPYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
M/P-XYLENES	<8.00	8	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
METHYL ETHYL KETONE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
METHYL ISOBUTYL KETONE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
METHYL-TERT-BUTYL ETHER	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
NAPHTHALENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
N-BUTYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
N-PROPYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ORTHO-XYLENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
SEC-BUTYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
STYRENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TERT-BUTYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TETRACHLOROETHENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TOLUENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TOTAL TRIHALOMETHANES	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TRANS-1,2-DICHLOROETHENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TRANS-1,3-DICHLOROPROPENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TRICHLOROETHENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TRICHLOROFLUOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

WR-379A
L231105-08

Sampled:
08/24/2023 12:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
VINYL CHLORIDE	<1.00	1	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
XYLENES (TOTAL)	<12.0	12	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

GAC EFF
L231105-09

Sampled:
08/24/2023 13:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
Subcontracted Analyses: Volatile Organic Compounds by GC									
EPA 8260B									
1,1,1,2-TETRACHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1,1-TRICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1,2-TRICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1-DICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1-DICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1-DICHLOROPROPENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2,3-TRICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2,3-TRICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2,4-TRICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	<5.00	5	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2-DICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2-DICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2-DICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,3-DICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,3-DICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,4-DICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
2,2-DICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	V1
2-CHLOROTOLUENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
2-HEXANONE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
4-CHLOROTOLUENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
4-ISOPROPYLTOLUENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ACETONE	<20.0	20	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BROMOBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BROMOCHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BROMODICHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	L1
BROMOFORM	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BROMOMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CARBON DISULFIDE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

GAC EFF
L231105-09

Sampled: 08/24/2023 13:30

Legend Technical Services, Inc (AZ0004)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CARBON TETRACHLORIDE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CHLOROFORM	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CIS-1,2-DICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
DIBROMOCHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
DIBROMOMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
DICHLORODIFLUOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
DICHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ETHYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ETHYLENE DIBROMIDE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
HEXACHLOROBUTADIENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
IODOMETHANE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ISOPROPYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
M/P-XYLENES	<4.00	4	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
METHYL ETHYL KETONE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
METHYL ISOBUTYL KETONE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
METHYL-TERT-BUTYL ETHER	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
NAPHTHALENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
N-BUTYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
N-PROPYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ORTHO-XYLENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
SEC-BUTYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
STYRENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TERT-BUTYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TETRACHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TOLUENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TOTAL TRIHALOMETHANES	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TRICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TRICHLOROFLUOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	

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Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

GAC EFF
L231105-09

Sampled: 08/24/2023 13:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
VINYL CHLORIDE	<0.500	0.5	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
XYLENES (TOTAL)	<6.00	6	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

TRIP BLANK
L231105-10

Sampled:
08/23/2023 15:25

Legend Technical Services, Inc (AZ0004)

Subcontracted Analyses: Volatile Organic Compounds by GC

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1,1-TRICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1,2-TRICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1-DICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1-DICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,1-DICHLOROPROPENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2,3-TRICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2,3-TRICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2,4-TRICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	<5.00	5	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2-DICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2-DICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,2-DICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,3-DICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,3-DICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
1,4-DICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
2,2-DICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	V1
2-CHLOROTOLUENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
2-HEXANONE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
4-CHLOROTOLUENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
4-ISOPROPYLTOLUENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ACETONE	<20.0	20	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BROMOBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BROMOCHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BROMODICHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	L1
BROMOFORM	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
BROMOMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CARBON DISULFIDE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

TRIP BLANK
L231105-10

Sampled: 08/23/2023 15:25

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
CARBON TETRACHLORIDE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CHLOROETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CHLOROFORM	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CIS-1,2-DICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
DIBROMOCHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
DIBROMOMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
DICHLORODIFLUOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
DICHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ETHYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ETHYLENE DIBROMIDE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
HEXACHLOROBUTADIENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
IODOMETHANE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ISOPROPYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
M/P-XYLENES	<4.00	4	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
METHYL ETHYL KETONE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
METHYL ISOBUTYL KETONE	<10.0	10	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
METHYL-TERT-BUTYL ETHER	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
NAPHTHALENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
N-BUTYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
N-PROPYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
ORTHO-XYLENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
SEC-BUTYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
STYRENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TERT-BUTYLBENZENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TETRACHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TOLUENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TOTAL TRIHALOMETHANES	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TRICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
TRICHLOROFLUOROMETHANE	<2.00	2	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

TRIP BLANK
L231105-10

Sampled: 08/23/2023 15:25

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
VINYL CHLORIDE	<0.500	0.5	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	
XYLENES (TOTAL)	<6.00	6	ug/L	1	'[none]'	08/29/2023	08/29/2023	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

WR-049A
L231105-11

Sampled:
08/24/2023 14:30

Legend Technical Services, Inc (AZ0004)

Subcontracted Analyses: Volatile Organic Compounds by GC

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1,1-TRICHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1,2,2-TETRACHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1,2-TRICHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1-DICHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1-DICHLOROETHENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1-DICHLOROPROPENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2,3-TRICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2,3-TRICHLOROPROPANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2,4-TRICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2,4-TRIMETHYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2-DIBROMO-3-CHLOROPROPANE	<10.0	10	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2-DICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2-DICHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2-DICHLOROPROPANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,3,5-TRIMETHYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,3-DICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,3-DICHLOROPROPANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,4-DICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
2,2-DICHLOROPROPANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1V1
2-CHLOROTOLUENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
2-HEXANONE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
4-CHLOROTOLUENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
4-ISOPROPYLTOLUENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ACETONE	<40.0	40	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BROMOBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BROMOCHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BROMODICHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1L1
BROMOFORM	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BROMOMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CARBON DISULFIDE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

WR-049A
L231105-11

Sampled:
08/24/2023 14:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
CARBON TETRACHLORIDE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CHLOROFORM	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CIS-1,2-DICHLOROETHENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CIS-1,3-DICHLOROPROPENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
DIBROMOCHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
DIBROMOMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
DICHLORODIFLUOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
DICHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ETHYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ETHYLENE DIBROMIDE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
HEXACHLOROBUTADIENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
IODOMETHANE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ISOPROPYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
M/P-XYLENES	<8.00	8	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
METHYL ETHYL KETONE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
METHYL ISOBUTYL KETONE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
METHYL-TERT-BUTYL ETHER	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
NAPHTHALENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
N-BUTYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
N-PROPYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ORTHO-XYLENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
SEC-BUTYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
STYRENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TERT-BUTYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TETRACHLOROETHENE	**21.7**	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TOLUENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TOTAL TRIHALOMETHANES	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TRANS-1,2-DICHLOROETHENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TRANS-1,3-DICHLOROPROPENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TRICHLOROETHENE	**7.94**	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TRICHLOROFLUOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

WR-049A
L231105-11

Sampled:
08/24/2023 14:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
VINYL CHLORIDE	<1.00	1	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
XYLENES (TOTAL)	<12.0	12	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

WR-049A
L231105-12

Sampled:
08/24/2023 14:33

Legend Technical Services, Inc (AZ0004)

Subcontracted Analyses: Volatile Organic Compounds by GC

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1,1-TRICHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1,2,2-TETRACHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1,2-TRICHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1-DICHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1-DICHLOROETHENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,1-DICHLOROPROPENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2,3-TRICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2,3-TRICHLOROPROPANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2,4-TRICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2,4-TRIMETHYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2-DIBROMO-3-CHLOROPROPANE	<10.0	10	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2-DICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2-DICHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,2-DICHLOROPROPANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,3,5-TRIMETHYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,3-DICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,3-DICHLOROPROPANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
1,4-DICHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
2,2-DICHLOROPROPANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1V1
2-CHLOROTOLUENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
2-HEXANONE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
4-CHLOROTOLUENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
4-ISOPROPYLTOLUENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ACETONE	<40.0	40	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BROMOBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BROMOCHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BROMODICHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1L1
BROMOFORM	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
BROMOMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CARBON DISULFIDE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

WR-049A
L231105-12

Sampled:
08/24/2023 14:33

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
CARBON TETRACHLORIDE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CHLOROBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CHLOROETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CHLOROFORM	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CIS-1,2-DICHLOROETHENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
CIS-1,3-DICHLOROPROPENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
DIBROMOCHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
DIBROMOMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
DICHLORODIFLUOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
DICHLOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ETHYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ETHYLENE DIBROMIDE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
HEXACHLOROBUTADIENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
IODOMETHANE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ISOPROPYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
M/P-XYLENES	<8.00	8	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
METHYL ETHYL KETONE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
METHYL ISOBUTYL KETONE	<20.0	20	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
METHYL-TERT-BUTYL ETHER	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
NAPHTHALENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
N-BUTYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
N-PROPYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
ORTHO-XYLENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
SEC-BUTYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
STYRENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TERT-BUTYLBENZENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TETRACHLOROETHENE	**21.2**	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TOLUENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TOTAL TRIHALOMETHANES	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TRANS-1,2-DICHLOROETHENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TRANS-1,3-DICHLOROPROPENE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TRICHLOROETHENE	**8.00**	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
TRICHLOROFLUOROMETHANE	<4.00	4	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

WR-049A
L231105-12

Sampled:
08/24/2023 14:33

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
VINYL CHLORIDE	<1.00	1	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1
XYLENES (TOTAL)	<12.0	12	ug/L	2	'[none]'	08/29/2023	08/29/2023	EPA 8260B	D1

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	09/11/2023 11:22

Notes and Definitions

V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.
L1	Associated blank spike recovery was above laboratory acceptance limits.
D1V1	Sample required dilution due to matrix. Associated blank spike recovery was above laboratory acceptance limits.
D1L1	Sample required dilution due to matrix. Associated blank spike recovery was above laboratory acceptance limits.
D1	Sample required dilution due to matrix.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

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Laboratory Sample ID:

CHAIN OF CUSTODY RECORD

LEGEND Technical Services, Inc.
☐ 17631 N. 25th Avenue • Phoenix, AZ 85023 • (602) 324-6100 • Fax (602) 324-6101
☐ 4585 S. Palo Verde Rd, Ste 423 • Tucson, AZ 85714 • (520) 327-1234 • Fax (520) 327-0518

Page 1 of 2

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CLIENT INFORMATION

Client Name	Report Mailing Address	City	State	Zip	Phone	Email Address
Tucson Water Quality Lab	4401 S. Tucson Estates Pkwy	Tucson	AZ	85735	520-837-2469	frank.walker@tucsonaz.gov

Project Name	Project Number	Contact Name	Purchase Order No.	
LOS REALES Landfill Quarterly	P01049	Frank Walker	2021181	Fax Results ☐ Email Results ■ ☐ QC Report ■ EDD ■☐ Special Detection Limits ☐☐

SAMPLE TYPE CODES

DW=Drinking Water; WW=Wastewater; SW=Surface Water; GW=Groundwater; O=Other; S=Soil/Solid; T=Travel Blank; F=Food; G=Sludge/Biosolids

TURN AROUND TIME

Laboratory Authorization Required for Rush

☐ Standard 7-10 Day

☐ Other _____

Client's	Sample Date	Sample Time	Sample Location	Composite	Grab	Sample Type	Compliance	No. of Containers	pH ✓ (Lab Use Only)	8260 VOC w/o CEVE	LAB NO.
L231105-01	8/23/23	1525	LLM-SS4		x	GW		4		X	-01
-02	8/24/23	0840	WR-185A		x	GW		4		X	-02
-03	8/24/23	0945	LLM-SS6		x	GW		4		X	-03
-04	8/24/23	1115	LLM-SS5		x	GW		4		X	-04
-05	8/24/23	1145	EB-02		x	GW		4		X	-05
-06	8/24/23	1205	R-062A		x	GW		4		X	-06
-07	8/24/23	1210	R-062A		x	GW		4		X	-07
-08	8/24/23	1240	WR-379A		x	GW		4		X	-08
-09	8/24/23	1330	GAC-EFF		x	GW		4		X	-09
-10	8/23/23	1525	TRIP BLANK LOT#070723					2		X	-10

TO ENSURE COMPLETION OF ANALYSIS, SAMPLES MUST BE RECEIVED AT LEAST 3 HOURS PRIOR TO THE HOLD TIME EXPIRATION

Comments / Special Instructions:

SAMPLE CONDITION UPON RECEIPT (Lab Use)

No. of Containers	46	
Temperature	0.9 °C	
Custody Seals	Y	N
Seals Intact	Y	N
Preserved	Y	N

On behalf of the above-named Client, I accept and acknowledge receipt of Legend's General Conditions.

	RELINQUISHED BY		SAMPLES RECEIVED BY	
①	Sampler Signature	Date 8/25/23	Signature	Date 08/25/23 ②
③	Sampler Printed Name Annie McCarthy Evan Schaf	Time 1041	Printed Name	Time 1040 ④
	Sampler Signature	Date 8.28.23	Signature	Date 8/28/23
⑤	Sampler Printed Name Adam Allen	Time 0814	Printed Name	Time 0841 ⑥
	Sampler Signature	Date	Signature	Date
	Sampler Printed Name	Time	Printed Name	Time

5.0°C

WHITE-LAB YELLOW-CLIENT

FORM CS-016.3 (09/20)

Laboratory Sample ID:

CHAIN OF CUSTODY RECORD

LEGEND Technical Services, Inc.
☐ 17631 N. 25th Avenue • Phoenix, AZ 85023 • (602) 324-6100 • Fax (602) 324-6101
☐ 4585 S. Palo Verde Rd, Ste 423 • Tucson, AZ 85714 • (520) 327-1234 • Fax (520) 327-0518

Page 2 of 2

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CLIENT INFORMATION

Client Name	Report Mailing Address	City	State	Zip	Phone	Email Address
Tucson Water Quality Lab	4401 S. Tucson Estates Pkwy	Tucson	AZ	85735	520-837-2469	frank.walker@tucsonaz.gov

Project Name	Project Number	Contact Name	Purchase Order No.	
LOS REALES Landfill Quarterly	P01049	Frank Walker	2021181	Fax Results ☐ Email Results ■ ☐ QC Report ■ EDD ■☐ Special Detection Limits ☐☐

SAMPLE TYPE CODES

DW=Drinking Water; WW=Wastewater; SW=Surface Water; GW=Groundwater; O=Other; S=Soil/Solid; T=Travel Blank; F=Food; G=Sludge/Biosolids

TURN AROUND TIME

Laboratory Authorization Required for Rush

☐ Standard 7-10 Day

☐ Other

Client's	Sample Date	Sample Time	Sample Location	Composite	Grab	Sample Type	Compliance	No. of Containers	pH ✓ (Lab Use Only)	8260 VOC w/o CEVE	LAB NO.
L231105-11	8/24/23	1430	WR-049A		x	GW		4		X	-11
↓ -12	8/24/23	1433	WR-049A		x	GW		4		X	-12
					x	GW		4		X	
					x	GW		4		X	
					x	GW		4		X	
					x	GW		4		X	
					x	GW		4		X	
					x	GW		4		X	
					x	GW		4		X	
			TRIP BLANK					2		X	

Client Sampler Signature 8/24/23

TO ENSURE COMPLETION OF ANALYSIS, SAMPLES MUST BE RECEIVED AT LEAST 3 HOURS PRIOR TO THE HOLD TIME EXPIRATION

Comments / Special Instructions:

SAMPLE CONDITION UPON RECEIPT (Lab Use)		
No. of Containers	46	
Temperature	0.9 °C	
Custody Seals	Y	(N)
Seals Intact	Y	N
Preserved	(Y)	N

On behalf of the above-named Client, I accept and acknowledge receipt of Legend's General Conditions.

	RELINQUISHED BY		SAMPLES RECEIVED BY	
①	Sampler Signature: Annie McLawley Cem Sclaff	Date: 8/25/23	Signature:	Date: 8/25/23
③	Sampler Printed Name: Annie McLawley Env Sclst	Time: 1041	Printed Name: Tisha Pierantozzi	Time: 1041 ④
⑤	Sampler Signature:	Date: 8-28-23	Signature:	Date: 8/28/23
	Sampler Printed Name: Adam Hale	Time: 0814	Printed Name: Veronica Murrell	Time: 0819 ⑥
	Sampler Signature:	Date:	Signature:	Date:
	Sampler Printed Name:	Time:	Printed Name:	Time:

② ④ ⑥

5.0°C

WHITE-LAB YELLOW-CLIENT

FORM CS-016.3 (09/20)

4401 S. Tucson Estates Parkway
Tucson, Arizona 85735
520.837.2469 Phone
520.791.5260 Fax

09 January 2024

Valerie Herman

Environmental Services

-

Tucson, AZ 85726

RE: Los Reales Landfill Monthly

Enclosed are the results for Work Order L231496, received by the laboratory on 11/27/2023 14:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Frank Walker

Frank Walker
Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/09/2024 17:51

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Secondary ID/Location	Date Sampled	Date Received
L231496-01	LR GW INF	Spigot	11/27/2023 13:02	11/27/2023 14:20
L231496-02	LR GW EFF	Spigot	11/27/2023 13:07	11/27/2023 14:20
L231496-03	FIELD BLANK	LRLF	11/27/2023 13:02	11/27/2023 14:20

Tucson Water Quality Laboratory

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Frank Walker

Frank Walker, Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/09/2024 17:51

Case Narative / Items for Project Manager Review

All QC results were within QC limits with the following exceptions:

L231496-01 LR GW INF 1,3,5-TRIMETHYLBENZENE VOA (S)8260
N1: Associated Matrix spike recovery outside acceptance limits. Associated spiked sample not from this sample set.

L231496-01 LR GW INF ACETONE VOA (S)8260
N1: Associated Matrix spike recovery outside acceptance limits. Associated spiked sample not from this sample set.

L231496-01 LR GW INF IODOMETHANE VOA (S)8260
N1: Associated Matrix spike recovery outside acceptance limits. Associated spiked sample not from this sample set.

L231496-01 LR GW INF STYRENE VOA (S)8260
N1: Associated Matrix spike recovery outside acceptance limits. Associated spiked sample not from this sample set.

L231496-02 LR GW EFF 1,3,5-TRIMETHYLBENZENE VOA (S)8260
N1: Associated Matrix spike recovery outside acceptance limits. Associated spiked sample not from this sample set.

L231496-02 LR GW EFF ACETONE VOA (S)8260
N1: Associated Matrix spike recovery outside acceptance limits. Associated spiked sample not from this sample set.

L231496-02 LR GW EFF IODOMETHANE VOA (S)8260
N1: Associated Matrix spike recovery outside acceptance limits. Associated spiked sample not from this sample set.

L231496-02 LR GW EFF STYRENE VOA (S)8260
N1: Associated Matrix spike recovery outside acceptance limits. Associated spiked sample not from this sample set.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/09/2024 17:51

LR GW INF (Spigot)
L231496-01

Sampled: 11/27/2023 13:02

Legend Technical Services, Inc (AZ0004)

Subcontracted Analyses: Volatile Organic Compounds by GC

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,1,1-TRICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,1,2-TRICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,1-DICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,1-DICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,1-DICHLOROPROPENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,2,3-TRICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,2,3-TRICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,2,4-TRICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	<5.00	5	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,2-DICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,2-DICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,2-DICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	N1
1,3-DICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,3-DICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,4-DICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
2,2-DICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
2-CHLOROTOLUENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
2-HEXANONE	<10.0	10	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
4-CHLOROTOLUENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
4-ISOPROPYLTOLUENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
ACETONE	<20.0	20	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	N1
BENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
BROMOBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
BROMOCHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
BROMODICHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
BROMOFORM	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
BROMOMETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/09/2024 17:51

LR GW INF (Spigot)
L231496-01

Sampled: 11/27/2023 13:02

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
CARBON DISULFIDE	<10.0	10	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
CARBON TETRACHLORIDE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
CHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
CHLOROETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
CHLOROFORM	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
CHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
CIS-1,2-DICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
DIBROMOCHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
DIBROMOMETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
DICHLORODIFLUOROMETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
DICHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
ETHYLBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
ETHYLENE DIBROMIDE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
HEXACHLOROBUTADIENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
IODOMETHANE	<10.0	10	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	N1
ISOPROPYLBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
M/P-XYLENES	<4.00	4	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
METHYL ETHYL KETONE	<10.0	10	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
METHYL ISOBUTYL KETONE	<10.0	10	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
METHYL-TERT-BUTYL ETHER	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
NAPHTHALENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
N-BUTYLBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
N-PROPYLBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
ORTHO-XYLENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
SEC-BUTYLBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
STYRENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	N1
TERT-BUTYLBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
TETRACHLOROETHENE	**3.82**	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
TOLUENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
TOTAL TRIHALOMETHANES	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/09/2024 17:51

LR GW INF (Spigot)
L231496-01

Sampled: 11/27/2023 13:02

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
TRICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
TRICHLOROFLUOROMETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
VINYL CHLORIDE	<0.500	0.5	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
XYLENES (TOTAL)	<6.00	6	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
Tucson Water Quality Laboratory (AZ0038)									
PFAS by LC/MS/MS									
EPA 533									
11-CHLOROEICOSAFLUORO-3-OXAUNDECANE-1-SULFONIC ACI	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
1H,1H, 2H, 2H-PERFLUORODECANE SULFONIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
1H,1H, 2H, 2H-PERFLUOROHEXANE SULFONIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
1H,1H, 2H, 2H-PERFLUOROOCTANE SULFONIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
4,8-DIOXA-3H-PERFLUORONONANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
9-CHLOROHEXADECAFLUORO-3-OXANONANE-1-SULFONIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
HEXAFLUOROPROPYLENE OXIDE DIMER ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
NONAFLUORO-3,6-DIOXAHEPTANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUORO BUTANOIC ACID - PFBA	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUORO OCTANESULFONIC ACID - PFOS	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUORO OCTANOIC ACID - PFOA	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUORO(2-ETHOXYETHANE)SULFONIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUORO-1-BUTANESULFONIC ACID - PFBS	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUORO-1-HEXANESULFONIC ACID - PFHxS	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUORO-3-METHOXYPROPANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUORO-4-METHOXYBUTANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUORODODECANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/09/2024 17:51

LR GW INF (Spigot)
L231496-01

Sampled: 11/27/2023 13:02

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Tucson Water Quality Laboratory (AZ0038)									
PERFLUOROHEPTANESULFONIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUOROHEPTANOIC ACID - PFHpA	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUORO-N-DECANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUORO-N-HEXANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUORO-N-NONANOIC ACID - PFNA	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUOROPENTANESULFONIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUOROPENTANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUOROUNDECANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
Surrogate: 13C2-4:2FTS-IDA		*75 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C2-6:2FTS-IDA		*73 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C2-8:2FTS-IDA		*67 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C2-PFDoA-IDA		*71 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C3-HFPO-DA-IDA		*89 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C3-PFBS-IDA		*89 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C3-PFHxS-IDA		*87 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C4-PFBA-IDA		*74 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C4-PFHpA-IDA		*80 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C5-PFHxA-IDA		*81 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C5-PFPeA-IDA		*82 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C6-PFDA-IDA		*81 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C7-PFUnA-IDA		*76 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C8-PFOA-IDA		*84 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C8-PFOS-IDA		*85 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C9-PFNA-IDA		*86 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	

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4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/09/2024 17:51

LR GW EFF (Spigot)
L231496-02

Sampled: 11/27/2023 13:07

Legend Technical Services, Inc (AZ0004)

Subcontracted Analyses: Volatile Organic Compounds by GC

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,1,1-TRICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,1,2-TRICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,1-DICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,1-DICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,1-DICHLOROPROPENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,2,3-TRICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,2,3-TRICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,2,4-TRICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	<5.00	5	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,2-DICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,2-DICHLOROETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,2-DICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	N1
1,3-DICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,3-DICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
1,4-DICHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
2,2-DICHLOROPROPANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
2-CHLOROTOLUENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
2-HEXANONE	<10.0	10	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
4-CHLOROTOLUENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
4-ISOPROPYLTOLUENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
ACETONE	<20.0	20	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	N1
BENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
BROMOBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
BROMOCHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
BROMODICHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
BROMOFORM	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
BROMOMETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/09/2024 17:51

LR GW EFF (Spigot)
L231496-02

Sampled: 11/27/2023 13:07

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
CARBON DISULFIDE	<10.0	10	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
CARBON TETRACHLORIDE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
CHLOROBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
CHLOROETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
CHLOROFORM	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
CHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
CIS-1,2-DICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
DIBROMOCHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
DIBROMOMETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
DICHLORODIFLUOROMETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
DICHLOROMETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
ETHYLBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
ETHYLENE DIBROMIDE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
HEXACHLOROBUTADIENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
IODOMETHANE	<10.0	10	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	N1
ISOPROPYLBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
M/P-XYLENES	<4.00	4	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
METHYL ETHYL KETONE	<10.0	10	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
METHYL ISOBUTYL KETONE	<10.0	10	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
METHYL-TERT-BUTYL ETHER	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
NAPHTHALENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
N-BUTYLBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
N-PROPYLBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
ORTHO-XYLENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
SEC-BUTYLBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
STYRENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	N1
TERT-BUTYLBENZENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
TETRACHLOROETHENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
TOLUENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
TOTAL TRIHALOMETHANES	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/09/2024 17:51

LR GW EFF (Spigot)
L231496-02

Sampled: 11/27/2023 13:07

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services, Inc (AZ0004)									
TRICHLOROETHENE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
TRICHLOROFLUOROMETHANE	<2.00	2	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
VINYL CHLORIDE	<0.500	0.5	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
XYLENES (TOTAL)	<6.00	6	ug/L	1	'[none]'	12/01/2023	12/01/2023	EPA 8260B	
Tucson Water Quality Laboratory (AZ0038)									
PFAS by LC/MS/MS									
EPA 533									
11-CHLOROEICOSAFLUORO-3-OXAUNDECANE-1-SULFONIC ACI	ND	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	
1H,1H, 2H, 2H-PERFLUORODECANE SULFONIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	
1H,1H, 2H, 2H-PERFLUOROHEXANE SULFONIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	
1H,1H, 2H, 2H-PERFLUOROOCTANE SULFONIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	
4,8-DIOXA-3H-PERFLUORONONANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	
9-CHLOROHEXADECAFLUORO-3-OXANONANE-1-SULFONIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	
HEXAFLUOROPROPYLENE OXIDE DIMER ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	
NONAFLUORO-3,6-DIOXAHEPTANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	
PERFLUORO BUTANOIC ACID - PFBA	ND	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	
PERFLUORO OCTANESULFONIC ACID - PFOS	ND	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	
PERFLUORO OCTANOIC ACID - PFOA	ND	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	
PERFLUORO(2-ETHOXYETHANE)SULFONIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	
PERFLUORO-1-BUTANESULFONIC ACID - PFBS	ND	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	
PERFLUORO-1-HEXANESULFONIC ACID - PFHxS	ND	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	
PERFLUORO-3-METHOXYPROPANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	
PERFLUORO-4-METHOXYBUTANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	
PERFLUORODODECANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/09/2024 17:51

LR GW EFF (Spigot)
L231496-02

Sampled: 11/27/2023 13:07

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Tucson Water Quality Laboratory (AZ0038)									
PERFLUOROHEPTANESULFONIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	
PERFLUOROHEPTANOIC ACID - PFHpA	ND	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	
PERFLUORO-N-DECANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	
PERFLUORO-N-HEXANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	
PERFLUORO-N-NONANOIC ACID - PFNA	ND	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	
PERFLUOROPENTANESULFONIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	
PERFLUOROPENTANOIC ACID	**0.00258**	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	
PERFLUOROUNDECANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	12/01/2023	EPA 533	
Surrogate: 13C2-4:2FTS-IDA		*78 %*		*50-200*	*BK32803*	*11/28/2023*	*12/01/2023*	*EPA 533*	
Surrogate: 13C2-6:2FTS-IDA		*77 %*		*50-200*	*BK32803*	*11/28/2023*	*12/01/2023*	*EPA 533*	
Surrogate: 13C2-8:2FTS-IDA		*73 %*		*50-200*	*BK32803*	*11/28/2023*	*12/01/2023*	*EPA 533*	
Surrogate: 13C2-PFDoA-IDA		*76 %*		*50-200*	*BK32803*	*11/28/2023*	*12/01/2023*	*EPA 533*	
Surrogate: 13C3-HFPO-DA-IDA		*93 %*		*50-200*	*BK32803*	*11/28/2023*	*12/01/2023*	*EPA 533*	
Surrogate: 13C3-PFBS-IDA		*93 %*		*50-200*	*BK32803*	*11/28/2023*	*12/01/2023*	*EPA 533*	
Surrogate: 13C3-PFHxS-IDA		*90 %*		*50-200*	*BK32803*	*11/28/2023*	*12/01/2023*	*EPA 533*	
Surrogate: 13C4-PFBA-IDA		*81 %*		*50-200*	*BK32803*	*11/28/2023*	*12/01/2023*	*EPA 533*	
Surrogate: 13C4-PFHpA-IDA		*86 %*		*50-200*	*BK32803*	*11/28/2023*	*12/01/2023*	*EPA 533*	
Surrogate: 13C5-PFHxA-IDA		*85 %*		*50-200*	*BK32803*	*11/28/2023*	*12/01/2023*	*EPA 533*	
Surrogate: 13C5-PFPeA-IDA		*91 %*		*50-200*	*BK32803*	*11/28/2023*	*12/01/2023*	*EPA 533*	
Surrogate: 13C6-PFDA-IDA		*86 %*		*50-200*	*BK32803*	*11/28/2023*	*12/01/2023*	*EPA 533*	
Surrogate: 13C7-PFUnA-IDA		*81 %*		*50-200*	*BK32803*	*11/28/2023*	*12/01/2023*	*EPA 533*	
Surrogate: 13C8-PFOA-IDA		*89 %*		*50-200*	*BK32803*	*11/28/2023*	*12/01/2023*	*EPA 533*	
Surrogate: 13C8-PFOS-IDA		*90 %*		*50-200*	*BK32803*	*11/28/2023*	*12/01/2023*	*EPA 533*	
Surrogate: 13C9-PFNA-IDA		*90 %*		*50-200*	*BK32803*	*11/28/2023*	*12/01/2023*	*EPA 533*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/09/2024 17:51

FIELD BLANK (LRLF)

L231496-03

Sampled: 11/27/2023 13:02

Tucson Water Quality Laboratory (AZ0038)

PFAS by LC/MS/MS

EPA 533

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
11-CHLOROEICOSAFLUORO-3-OXAUNDECANE-1-SULFONIC ACI	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
1H,1H, 2H, 2H-PERFLUORODECANE SULFONIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
1H,1H, 2H, 2H-PERFLUOROHEXANE SULFONIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
1H,1H, 2H, 2H-PERFLUOROOCTANE SULFONIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
4,8-DIOXA-3H-PERFLUORONONANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
9-CHLOROHEXADECAFLUORO-3-OXANONANE-1-SULFONIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
HEXAFLUOROPROPYLENE OXIDE DIMER ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
NONAFLUORO-3,6-DIOXAHEPTANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUORO BUTANOIC ACID - PFBA	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUORO OCTANESULFONIC ACID - PFOS	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUORO OCTANOIC ACID - PFOA	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUORO(2-ETHOXYETHANE)SULFONIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUORO-1-BUTANESULFONIC ACID - PFBS	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUORO-1-HEXANESULFONIC ACID - PFHxS	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUORO-3-METHOXYPROPANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUORO-4-METHOXYBUTANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUORODODECANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUOROHEPTANESULFONIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUOROHEPTANOIC ACID - PFHpA	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUORO-N-DECANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUORO-N-HEXANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/09/2024 17:51

FIELD BLANK (LRLF)

L231496-03

Sampled: 11/27/2023 13:02

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Tucson Water Quality Laboratory (AZ0038)									
PERFLUORO-N-NONANOIC ACID - PFNA	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUOROPENTANESULFONIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUOROPENTANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
PERFLUOROUNDECANOIC ACID	ND	0.002	ug/L	1	BK32803	11/28/2023	11/30/2023	EPA 533	
Surrogate: 13C2-4:2FTS-IDA		*76 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C2-6:2FTS-IDA		*77 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C2-8:2FTS-IDA		*71 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C2-PFDoA-IDA		*76 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C3-HFPO-DA-IDA		*94 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C3-PFBS-IDA		*92 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C3-PFHxS-IDA		*89 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C4-PFBA-IDA		*85 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C4-PFHpA-IDA		*85 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C5-PFHxA-IDA		*87 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C5-PFPeA-IDA		*89 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C6-PFDA-IDA		*87 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C7-PFUnA-IDA		*81 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C8-PFOA-IDA		*89 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C8-PFOS-IDA		*88 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	
Surrogate: 13C9-PFNA-IDA		*89 %*		*50-200*	*BK32803*	*11/28/2023*	*11/30/2023*	*EPA 533*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/09/2024 17:51

PFAS by LC/MS/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 533										
Blank (BK32803-BLK1)				Prepared: 11/28/2023 Analyzed: 11/30/2023						
Batch BK32803 - DEFAULT ORGANIC PREP										
11-CHLOROEICOSAFLUORO-3-OXAUNDECANE-1-SULFONIC ACI	ND	0.00200	ug/L							
1H,1H, 2H, 2H-PERFLUORODECANE SULFONIC ACID	ND	0.00200	ug/L							
1H,1H, 2H, 2H-PERFLUOROHEXANE SULFONIC ACID	ND	0.00200	ug/L							
1H,1H, 2H, 2H-PERFLUOROOCTANE SULFONIC ACID	ND	0.00200	ug/L							
4,8-DIOXA-3H-PERFLUORONONANOIC ACID	ND	0.00200	ug/L							
9-CHLOROHEXADECAFLUORO-3-OXANONANE-1-SULFONIC ACID	ND	0.00200	ug/L							
HEXAFLUOROPROPYLENE OXIDE DIMER ACID	ND	0.00200	ug/L							
NONAFLUORO-3,6-DIOXAHEPTANOIC ACID	ND	0.00200	ug/L							
PERFLUORO BUTANOIC ACID - PFBA	ND	0.00200	ug/L							
PERFLUORO OCTANESULFONIC ACID - PFOS	ND	0.00200	ug/L							
PERFLUORO OCTANOIC ACID - PFOA	ND	0.00200	ug/L							
PERFLUORO(2-ETHOXYETHANE)SULFONIC ACID	ND	0.00200	ug/L							
PERFLUORO-1-BUTANESULFONIC ACID - PFBS	ND	0.00200	ug/L							
PERFLUORO-1-HEXANESULFONIC ACID - PFHxS	ND	0.00200	ug/L							
PERFLUORO-3-METHOXYPROPANOIC ACID	ND	0.00200	ug/L							
PERFLUORO-4-METHOXYBUTANOIC ACID	ND	0.00200	ug/L							
PERFLUORODODECANOIC ACID	ND	0.00200	ug/L							
PERFLUOROHEPTANESULFONIC ACID	ND	0.00200	ug/L							
PERFLUOROHEPTANOIC ACID - PFHpA	ND	0.00200	ug/L							
PERFLUORO-N-DECANOIC ACID	ND	0.00200	ug/L							
PERFLUORO-N-HEXANOIC ACID	ND	0.00200	ug/L							

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/09/2024 17:51

PFAS by LC/MS/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 533										
Blank (BK32803-BLK1)					Prepared: 11/28/2023 Analyzed: 11/30/2023					
Batch BK32803 - DEFAULT ORGANIC PREP										
PERFLUORO-N-NONANOIC ACID - PFNA	ND	0.00200	ug/L							
PERFLUOROPENTANESULFONIC ACID	ND	0.00200	ug/L							
PERFLUOROPENTANOIC ACID	ND	0.00200	ug/L							
PERFLUOROUNDECANOIC ACID	ND	0.00200	ug/L							
Surrogate: 13C2-4:2FTS-IDA	*0.0298*		ug/L	*0.0400*		*75*	*50-200*			
Surrogate: 13C2-6:2FTS-IDA	*0.0302*		ug/L	*0.0400*		*76*	*50-200*			
Surrogate: 13C2-8:2FTS-IDA	*0.0279*		ug/L	*0.0400*		*70*	*50-200*			
Surrogate: 13C2-PFDoA-IDA	*0.00727*		ug/L	*0.0100*		*73*	*50-200*			
Surrogate: 13C3-HFPO-DA-IDA	*0.00846*		ug/L	*0.0100*		*85*	*50-200*			
Surrogate: 13C3-PFBS-IDA	*0.00869*		ug/L	*0.0100*		*87*	*50-200*			
Surrogate: 13C3-PFHxS-IDA	*0.00864*		ug/L	*0.0100*		*86*	*50-200*			
Surrogate: 13C4-PFBA-IDA	*0.00822*		ug/L	*0.0100*		*82*	*50-200*			
Surrogate: 13C4-PFHpA-IDA	*0.00823*		ug/L	*0.0100*		*82*	*50-200*			
Surrogate: 13C5-PFHxA-IDA	*0.00828*		ug/L	*0.0100*		*83*	*50-200*			
Surrogate: 13C5-PFPeA-IDA	*0.00843*		ug/L	*0.0100*		*84*	*50-200*			
Surrogate: 13C6-PFDA-IDA	*0.00816*		ug/L	*0.0100*		*82*	*50-200*			
Surrogate: 13C7-PFUnA-IDA	*0.00791*		ug/L	*0.0100*		*79*	*50-200*			
Surrogate: 13C8-PFOA-IDA	*0.00854*		ug/L	*0.0100*		*85*	*50-200*			
Surrogate: 13C8-PFOS-IDA	*0.00834*		ug/L	*0.0100*		*83*	*50-200*			
Surrogate: 13C9-PFNA-IDA	*0.00865*		ug/L	*0.0100*		*86*	*50-200*			
LCS (BK32803-BS1)					Prepared: 11/28/2023 Analyzed: 11/30/2023					
Batch BK32803 - DEFAULT ORGANIC PREP										

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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/09/2024 17:51

PFAS by LC/MS/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 533										
LCS (BK32803-BS1)					Prepared: 11/28/2023 Analyzed: 11/30/2023					
Batch BK32803 - DEFAULT ORGANIC PREP										
11-CHLOROEICOSAFLUORO-3-OXAUNDECANE-1-SULFONIC ACI	0.0180	0.00200	ug/L	0.0200		90	70-130			
1H,1H, 2H, 2H-PERFLUORODECANE SULFONIC ACID	0.0211	0.00200	ug/L	0.0200		105	70-130			
1H,1H, 2H, 2H-PERFLUOROHEXANE SULFONIC ACID	0.0211	0.00200	ug/L	0.0200		106	70-130			
1H,1H, 2H, 2H-PERFLUOROOCTANE SULFONIC ACID	0.0214	0.00200	ug/L	0.0200		107	70-130			
4,8-DIOXA-3H-PERFLUORONONANOIC ACID	0.0186	0.00200	ug/L	0.0200		93	70-130			
9-CHLOROHEXADECAFLUORO-3-OXANONANE-1-SULFONIC ACID	0.0192	0.00200	ug/L	0.0200		96	70-130			
HEXAFLUOROPROPYLENE OXIDE DIMER ACID	0.0185	0.00200	ug/L	0.0200		93	70-130			
NONAFLUORO-3,6-DIOXAHEPTANOIC ACID	0.0182	0.00200	ug/L	0.0200		91	70-130			
PERFLUORO BUTANOIC ACID - PFBA	0.0195	0.00200	ug/L	0.0200		97	70-130			
PERFLUORO OCTANESULFONIC ACID - PFOS	0.0191	0.00200	ug/L	0.0200		96	70-130			
PERFLUORO OCTANOIC ACID - PFOA	0.0199	0.00200	ug/L	0.0200		100	70-130			
PERFLUORO(2-ETHOXYETHANE)SULFONIC ACID	0.0213	0.00200	ug/L	0.0200		107	70-130			
PERFLUORO-1-BUTANESULFONIC ACID - PFBS	0.0205	0.00200	ug/L	0.0200		102	70-130			
PERFLUORO-1-HEXANESULFONIC ACID - PFHxS	0.0198	0.00200	ug/L	0.0200		99	70-130			
PERFLUORO-3-METHOXYPROPANOIC ACID	0.0194	0.00200	ug/L	0.0200		97	70-130			
PERFLUORO-4-METHOXYBUTANOIC ACID	0.0193	0.00200	ug/L	0.0200		96	70-130			
PERFLUORODODECANOIC ACID	0.0200	0.00200	ug/L	0.0200		100	70-130			
PERFLUOROHEPTANESULFONIC ACID	0.0201	0.00200	ug/L	0.0200		100	70-130			
PERFLUOROHEPTANOIC ACID - PFHpA	0.0190	0.00200	ug/L	0.0200		95	70-130			
PERFLUORO-N-DECANOIC ACID	0.0197	0.00200	ug/L	0.0200		98	70-130			
PERFLUORO-N-HEXANOIC ACID	0.0197	0.00200	ug/L	0.0200		99	70-130			

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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/09/2024 17:51

PFAS by LC/MS/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 533										
LCS (BK32803-BS1)					Prepared: 11/28/2023 Analyzed: 11/30/2023					
Batch BK32803 - DEFAULT ORGANIC PREP										
PERFLUORO-N-NONANOIC ACID - PFNA	0.0203	0.00200	ug/L	0.0200		101	70-130			
PERFLUOROPENTANESULFONIC ACID	0.0198	0.00200	ug/L	0.0200		99	70-130			
PERFLUOROPENTANOIC ACID	0.0195	0.00200	ug/L	0.0200		98	70-130			
PERFLUOROUNDECANOIC ACID	0.0199	0.00200	ug/L	0.0200		99	70-130			
Surrogate: 13C2-4:2FTS-IDA	*0.0308*		ug/L	*0.0400*		*77*	*50-200*			
Surrogate: 13C2-6:2FTS-IDA	*0.0310*		ug/L	*0.0400*		*77*	*50-200*			
Surrogate: 13C2-8:2FTS-IDA	*0.0290*		ug/L	*0.0400*		*72*	*50-200*			
Surrogate: 13C2-PFDoA-IDA	*0.00752*		ug/L	*0.0100*		*75*	*50-200*			
Surrogate: 13C3-HFPO-DA-IDA	*0.00881*		ug/L	*0.0100*		*88*	*50-200*			
Surrogate: 13C3-PFBS-IDA	*0.00904*		ug/L	*0.0100*		*90*	*50-200*			
Surrogate: 13C3-PFHxS-IDA	*0.00895*		ug/L	*0.0100*		*90*	*50-200*			
Surrogate: 13C4-PFBA-IDA	*0.00764*		ug/L	*0.0100*		*76*	*50-200*			
Surrogate: 13C4-PFHpA-IDA	*0.00802*		ug/L	*0.0100*		*80*	*50-200*			
Surrogate: 13C5-PFHxA-IDA	*0.00796*		ug/L	*0.0100*		*80*	*50-200*			
Surrogate: 13C5-PFPeA-IDA	*0.00782*		ug/L	*0.0100*		*78*	*50-200*			
Surrogate: 13C6-PFDA-IDA	*0.00824*		ug/L	*0.0100*		*82*	*50-200*			
Surrogate: 13C7-PFUnA-IDA	*0.00811*		ug/L	*0.0100*		*81*	*50-200*			
Surrogate: 13C8-PFOA-IDA	*0.00837*		ug/L	*0.0100*		*84*	*50-200*			
Surrogate: 13C8-PFOS-IDA	*0.00873*		ug/L	*0.0100*		*87*	*50-200*			
Surrogate: 13C9-PFNA-IDA	*0.00855*		ug/L	*0.0100*		*85*	*50-200*			
Matrix Spike (BK32803-MS1)					**Source: L231487-01** Prepared: 11/28/2023 Analyzed: 11/30/2023					
Batch BK32803 - DEFAULT ORGANIC PREP										

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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/09/2024 17:51

PFAS by LC/MS/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 533										
Matrix Spike (BK32803-MS1)		**Source: L231487-01**			Prepared: 11/28/2023 Analyzed: 11/30/2023					
Batch BK32803 - DEFAULT ORGANIC PREP										
11-CHLOROEICOSAFLUORO-3-OXAUNDECANE-1-SULFONIC ACI	0.0183	0.00200	ug/L	0.0200	9.00E-6	91	70-130			
1H,1H, 2H, 2H-PERFLUORODECANE SULFONIC ACID	0.0215	0.00200	ug/L	0.0200	1.70E-5	108	70-130			
1H,1H, 2H, 2H-PERFLUOROHEXANE SULFONIC ACID	0.0214	0.00200	ug/L	0.0200	ND	107	70-130			
1H,1H, 2H, 2H-PERFLUOROOCTANE SULFONIC ACID	0.0218	0.00200	ug/L	0.0200	1.40E-5	109	70-130			
4,8-DIOXA-3H-PERFLUORONONANOIC ACID	0.0192	0.00200	ug/L	0.0200	3.00E-6	96	70-130			
9-CHLOROHEXADECAFLUORO-3-OXANONANE-1-SULFONIC ACID	0.0196	0.00200	ug/L	0.0200	8.00E-6	98	70-130			
HEXAFLUOROPROPYLENE OXIDE DIMER ACID	0.0198	0.00200	ug/L	0.0200	5.30E-5	99	70-130			
NONAFLUORO-3,6-DIOXAHEPTANOIC ACID	0.0201	0.00200	ug/L	0.0200	3.10E-5	100	70-130			
PERFLUORO BUTANOIC ACID - PFBA	0.0215	0.00200	ug/L	0.0200	0.00137	100	70-130			
PERFLUORO OCTANESULFONIC ACID - PFOS	0.0215	0.00200	ug/L	0.0200	0.00187	98	70-130			
PERFLUORO OCTANOIC ACID - PFOA	0.0214	0.00200	ug/L	0.0200	0.00119	101	70-130			
PERFLUORO(2-ETHOXYETHANE)SULFONIC ACID	0.0216	0.00200	ug/L	0.0200	3.00E-6	108	70-130			
PERFLUORO-1-BUTANESULFONIC ACID - PFBS	0.0227	0.00200	ug/L	0.0200	0.00154	106	70-130			
PERFLUORO-1-HEXANESULFONIC ACID - PFHxS	0.0212	0.00200	ug/L	0.0200	0.00116	100	70-130			
PERFLUORO-3-METHOXYPROPANOIC ACID	0.0238	0.00200	ug/L	0.0200	6.00E-6	119	70-130			
PERFLUORO-4-METHOXYBUTANOIC ACID	0.0195	0.00200	ug/L	0.0200	3.00E-6	98	70-130			
PERFLUORODODECANOIC ACID	0.0205	0.00200	ug/L	0.0200	3.00E-5	102	70-130			
PERFLUOROHEPTANESULFONIC ACID	0.0204	0.00200	ug/L	0.0200	5.30E-5	102	70-130			
PERFLUOROHEPTANOIC ACID - PFHpA	0.0197	0.00200	ug/L	0.0200	0.000349	97	70-130			
PERFLUORO-N-DECANOIC ACID	0.0199	0.00200	ug/L	0.0200	2.10E-5	99	70-130			
PERFLUORO-N-HEXANOIC ACID	0.0209	0.00200	ug/L	0.0200	0.000688	101	70-130			

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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/09/2024 17:51

PFAS by LC/MS/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 533										
Matrix Spike (BK32803-MS1)		**Source: L231487-01**			Prepared: 11/28/2023 Analyzed: 11/30/2023					
Batch BK32803 - DEFAULT ORGANIC PREP										
PERFLUORO-N-NONANOIC ACID - PFNA	0.0207	0.00200	ug/L	0.0200	0.000280	102	70-130			
PERFLUOROPENTANESULFONIC ACID	0.0204	0.00200	ug/L	0.0200	0.000164	101	70-130			
PERFLUOROPENTANOIC ACID	0.0207	0.00200	ug/L	0.0200	0.000787	100	70-130			
PERFLUOROUNDECANOIC ACID	0.0203	0.00200	ug/L	0.0200	1.90E-5	101	70-130			
Surrogate: 13C2-4:2FTS-IDA	*0.0300*		ug/L	*0.0400*		*75*	*50-200*			
Surrogate: 13C2-6:2FTS-IDA	*0.0293*		ug/L	*0.0400*		*73*	*50-200*			
Surrogate: 13C2-8:2FTS-IDA	*0.0276*		ug/L	*0.0400*		*69*	*50-200*			
Surrogate: 13C2-PFDoA-IDA	*0.00728*		ug/L	*0.0100*		*73*	*50-200*			
Surrogate: 13C3-HFPO-DA-IDA	*0.00851*		ug/L	*0.0100*		*85*	*50-200*			
Surrogate: 13C3-PFBS-IDA	*0.00879*		ug/L	*0.0100*		*88*	*50-200*			
Surrogate: 13C3-PFHxS-IDA	*0.00858*		ug/L	*0.0100*		*86*	*50-200*			
Surrogate: 13C4-PFBA-IDA	*0.00767*		ug/L	*0.0100*		*77*	*50-200*			
Surrogate: 13C4-PFHpA-IDA	*0.00790*		ug/L	*0.0100*		*79*	*50-200*			
Surrogate: 13C5-PFHxA-IDA	*0.00805*		ug/L	*0.0100*		*80*	*50-200*			
Surrogate: 13C5-PFPeA-IDA	*0.00997*		ug/L	*0.0100*		*100*	*50-200*			
Surrogate: 13C6-PFDA-IDA	*0.00822*		ug/L	*0.0100*		*82*	*50-200*			
Surrogate: 13C7-PFUnA-IDA	*0.00791*		ug/L	*0.0100*		*79*	*50-200*			
Surrogate: 13C8-PFOA-IDA	*0.00824*		ug/L	*0.0100*		*82*	*50-200*			
Surrogate: 13C8-PFOS-IDA	*0.00847*		ug/L	*0.0100*		*85*	*50-200*			
Surrogate: 13C9-PFNA-IDA	*0.00841*		ug/L	*0.0100*		*84*	*50-200*			
Matrix Spike Dup (BK32803-MSD1) (for RPD QC only)		**Source: L231487-01**			Prepared: 11/28/2023 Analyzed: 11/30/2023					
Batch BK32803 - DEFAULT ORGANIC PREP										

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Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 533										
Matrix Spike Dup (BK32803-MSD1) (for RPD QC only)				**Source: L231487-01**		Prepared: 11/28/2023 Analyzed: 11/30/2023				
Batch BK32803 - DEFAULT ORGANIC PREP										
11-CHLOROEICOSAFLUORO-3-OXAUNDECANE-1-SULFONIC ACI	0.0187	0.00200	ug/L	0.0200	9.00E-6	94		2	30	
1H,1H, 2H, 2H-PERFLUORODECANE SULFONIC ACID	0.0213	0.00200	ug/L	0.0200	1.70E-5	107		0.8	30	
1H,1H, 2H, 2H-PERFLUOROHEXANE SULFONIC ACID	0.0217	0.00200	ug/L	0.0200	ND	109		1	30	
1H,1H, 2H, 2H-PERFLUOROOCTANE SULFONIC ACID	0.0223	0.00200	ug/L	0.0200	1.40E-5	112		3	30	
4,8-DIOXA-3H-PERFLUORONONANOIC ACID	0.0199	0.00200	ug/L	0.0200	3.00E-6	100		4	30	
9-CHLOROHEXADECAFLUORO-3-OXANONANE-1-SULFONIC ACID	0.0201	0.00200	ug/L	0.0200	8.00E-6	100		2	30	
HEXAFLUOROPROPYLENE OXIDE DIMER ACID	0.0208	0.00200	ug/L	0.0200	5.30E-5	104		5	30	
NONAFLUORO-3,6-DIOXAHEPTANOIC ACID	0.0197	0.00200	ug/L	0.0200	3.10E-5	98		2	30	
PERFLUORO BUTANOIC ACID - PFBA	0.0216	0.00200	ug/L	0.0200	0.00137	101		0.5	30	
PERFLUORO OCTANESULFONIC ACID - PFOS	0.0218	0.00200	ug/L	0.0200	0.00187	99		1	30	
PERFLUORO OCTANOIC ACID - PFOA	0.0215	0.00200	ug/L	0.0200	0.00119	102		0.7	30	
PERFLUORO(2-ETHOXYETHANE)SULFONIC ACID	0.0218	0.00200	ug/L	0.0200	3.00E-6	109		1	30	
PERFLUORO-1-BUTANESULFONIC ACID - PFBS	0.0230	0.00200	ug/L	0.0200	0.00154	107		2	30	
PERFLUORO-1-HEXANESULFONIC ACID - PFHxS	0.0216	0.00200	ug/L	0.0200	0.00116	102		2	30	
PERFLUORO-3-METHOXYPROPANOIC ACID	0.0247	0.00200	ug/L	0.0200	6.00E-6	123		4	30	
PERFLUORO-4-METHOXYBUTANOIC ACID	0.0202	0.00200	ug/L	0.0200	3.00E-6	101		3	30	
PERFLUORODODECANOIC ACID	0.0207	0.00200	ug/L	0.0200	3.00E-5	103		0.9	30	
PERFLUOROHEPTANESULFONIC ACID	0.0206	0.00200	ug/L	0.0200	5.30E-5	103		1	30	
PERFLUOROHEPTANOIC ACID - PFHpA	0.0200	0.00200	ug/L	0.0200	0.000349	98		2	30	
PERFLUORO-N-DECANOIC ACID	0.0202	0.00200	ug/L	0.0200	2.10E-5	101		2	30	
PERFLUORO-N-HEXANOIC ACID	0.0211	0.00200	ug/L	0.0200	0.000688	102		1	30	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/09/2024 17:51

PFAS by LC/MS/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 533										
Matrix Spike Dup (BK32803-MSD1) (for RPD QC only)				**Source: L231487-01**		Prepared: 11/28/2023 Analyzed: 11/30/2023				
Batch BK32803 - DEFAULT ORGANIC PREP										
PERFLUORO-N-NONANOIC ACID - PFNA	0.0208	0.00200	ug/L	0.0200	0.000280	103		0.7	30	
PERFLUOROPENTANESULFONIC ACID	0.0208	0.00200	ug/L	0.0200	0.000164	103		2	30	
PERFLUOROPENTANOIC ACID	0.0213	0.00200	ug/L	0.0200	0.000787	102		3	30	
PERFLUOROUNDECANOIC ACID	0.0205	0.00200	ug/L	0.0200	1.90E-5	102		1	30	
Surrogate: 13C2-4:2FTS-IDA	*0.0318*		ug/L	*0.0400*		*79*	*50-200*			
Surrogate: 13C2-6:2FTS-IDA	*0.0307*		ug/L	*0.0400*		*77*	*50-200*			
Surrogate: 13C2-8:2FTS-IDA	*0.0295*		ug/L	*0.0400*		*74*	*50-200*			
Surrogate: 13C2-PFDoA-IDA	*0.00787*		ug/L	*0.0100*		*79*	*50-200*			
Surrogate: 13C3-HFPO-DA-IDA	*0.00965*		ug/L	*0.0100*		*97*	*50-200*			
Surrogate: 13C3-PFBS-IDA	*0.00939*		ug/L	*0.0100*		*94*	*50-200*			
Surrogate: 13C3-PFHxS-IDA	*0.00905*		ug/L	*0.0100*		*91*	*50-200*			
Surrogate: 13C4-PFBA-IDA	*0.00877*		ug/L	*0.0100*		*88*	*50-200*			
Surrogate: 13C4-PFHpA-IDA	*0.00888*		ug/L	*0.0100*		*89*	*50-200*			
Surrogate: 13C5-PFHxA-IDA	*0.00917*		ug/L	*0.0100*		*92*	*50-200*			
Surrogate: 13C5-PFPeA-IDA	*0.0113*		ug/L	*0.0100*		*113*	*50-200*			
Surrogate: 13C6-PFDA-IDA	*0.00889*		ug/L	*0.0100*		*89*	*50-200*			
Surrogate: 13C7-PFUnA-IDA	*0.00849*		ug/L	*0.0100*		*85*	*50-200*			
Surrogate: 13C8-PFOA-IDA	*0.00910*		ug/L	*0.0100*		*91*	*50-200*			
Surrogate: 13C8-PFOS-IDA	*0.00889*		ug/L	*0.0100*		*89*	*50-200*			
Surrogate: 13C9-PFNA-IDA	*0.00915*		ug/L	*0.0100*		*91*	*50-200*			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/09/2024 17:51

Notes and Definitions

N1	Associated Matrix spike recovery outside acceptance limits. Associated spiked sample not from this sample set.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

TUCSON WATER CHAIN OF CUSTODY

LOGIN ID: L231496

CLIENT: ES

PROJECT NAME/FREQUENCY:
LOS REALES Landfill
Monthly

PROJECT #: P01049

SAMPLING DATE:
11/27/2023

SAMPLED BY:
print full name
Chad Hancock
signature
Chad Hancock

SAMPLE #	TIME	LOCATION	SITE	NUMBER OF CONTAINERS	PRESERVATIVE	(Na2S2O3)	(Unpreserved)	(HNO3)	(H2SO4)	(NaS2O3/H2SO4)	(Unpreserved)	(NaS2O3/H2SO4)	(NH4 Ace)	(H2SO4)	(Ascorbic Acid)	(Na2S2O3)	(Unpreserved)	(H2SO4)	(NaOH)	(NaOH/Zinc Acetate)	COMMENTS
								ICP ICP ICP ICP ICP ICPMS ICPMS					PFAS 533	8260 (LEGEND)		EEA EEA EEA	EEA EEA EEA EEA EEA EEA EEA	EEA EEA	EEA	EEA	
-01	1302	LR GW INF	LRLF	4									X	X							TBs declined
-02	1307	LR GW EFF	LRLF	4									X	X							by ES for this
-03	1312	FIELD BLANK	LRLF	4									X								Lot# ~~090123~~ 233119 JP 11/30/23

COMMENTS: Sample on the fourth Monday of the month.

SPECIAL TURNAROUND TIME:

	SIGNATURE	DATE/TIME		SIGNATURE	DATE/TIME
RELINQUISHED BY:	Chad S. Hancock	1415 11/27/23	RECEIVED BY:		
RELINQUISHED BY:			RECEIVED BY:		11/27/23 1420

RECEIVING TEMPERATURE= 2.6 °C

Corrected COC

TUCSON WATER CHAIN OF CUSTODY

LOGIN ID: L231496

CLIENT: ES

PROJECT NAME/FREQUENCY:
LOS REALES Landfill
Monthly

PROJECT #: P01049

SAMPLING DATE:
11/27/2023

SAMPLED BY:
print full name
Chad Hancock
signature
Chad Hancock

SAMPLE #	TIME	LOCATION	SITE	NUMBER OF CONTAINERS	PRESERVATIVE	(Na2S2O3)	(Unpreserved)	(HNO3)	(H2SO4)	(NaS2O3/H2SO4)	(Unpreserved)	(NaS2O3/H2SO4)	(NH4 Ace)	(H2SO4)	(Ascorbic Acid)	(Na2S2O3)	(Unpreserved)	(H2SO4)	(NaOH)	(NaOH/Zinc Acetate)	COMMENTS
								ICP ICP ICP ICP ICP ICPMS ICPMS					PFAS 533	8260 (LEGEND)		EEA EEA EEA	EEA EEA EEA EEA EEA EEA EEA	EEA EEA	EEA EEA EEA	EEA		
-01	1302	LR GW INF	LRIF	4									X	X							TBs declined
-02	1307	LR GW EFF	LREF	4									X	X							by ES for this
-03	~~1312~~ 1302 11/27/23	FIELD BLANK	LRLB	4									X								Lot# JP 1/31/23 ~~230123~~ 233110

COMMENTS: Sample on the fourth Monday of the month.

SPECIAL TURNAROUND TIME:

	SIGNATURE	DATE/TIME		SIGNATURE	DATE/TIME
RELINQUISHED BY:	Chad S. Hancock	1415 11/27/23	RECEIVED BY:		
RELINQUISHED BY:			RECEIVED BY:		11/27/23 1420

RECEIVING TEMPERATURE= 2.6 °C

Laboratory Sample ID:

CHAIN OF CUSTODY RECORD

LEGEND Technical Services, Inc.
☐ 17631 N. 25th Avenue • Phoenix, AZ 85023 • (602) 324-6100 • Fax (602) 324-6101
☐ 4585 S. Palo Verde Rd, Ste 423 • Tucson, AZ 85714 • (520) 327-1234 • Fax (520) 327-0518

Page 1 of 1

Please Print Clearly

CLIENT INFORMATION

Client Name	Report Mailing Address	City	State	Zip	Phone	Email Address
Tucson Water Quality Lab	4401 S. Tucson Estates Pkwy	Tucson	AZ	85735	520-837-2469	frank.walker@tucsonaz.gov

Project Name	Project Number	Contact Name	Purchase Order No.	
LOS REALES Landfill Monthly	P01049	Frank Walker	2021181	Fax Results ☐ Email Results ■ ☐ QC Report ■ EDD ■☐ Special Detection Limits ☐☐

SAMPLE TYPE CODES

DW=Drinking Water; WW=Wastewater; SW=Surface Water; GW=Groundwater; S=Soil/Solid; T=Travel Blank; F=Food; G=Sludge/Biosolids; O=Other _____

TURN AROUND TIME

Laboratory Authorization Required for Rush

☐ Standard 7-10 Day

☐ Other _____

Client's	Sample Date	Sample Time	Sample Location	Composite	Grab	Sample Type	Compliance	No. of Containers	pH ✓ (Lab Use Only)	8260 VOC w/o CEVE	LAB NO.
L231496-01	11/27/23	1302	LR GW INF		x	GW		4	X		-01
L231496-02	11/27/23	1307	LR GW EFF		x	GW		4	X		-02

REQUESTED ANALYSES

TO ENSURE COMPLETION OF ANALYSIS, SAMPLES MUST BE RECEIVED AT LEAST 3 HOURS PRIOR TO THE HOLD TIME EXPIRATION

Comments / Special Instructions:

TB declined by client

SAMPLE CONDITION UPON RECEIPT (Lab Use)

No. of Containers	8	
Temperature °C	2.0.1 °C	
Custody Seals	Y	N
Seals Intact	Y	N
Preserved	Y	N

On behalf of the above-named Client, I accept and acknowledge receipt of Legend's General Conditions.

	RELINQUISHED BY			SAMPLES RECEIVED BY		
①	Sampler Signature	Date 11/27/23	②	Signature	Date 11/27/23	
③	Sampler Printed Name Chad Hayhack	Time 1415		Printed Name John Pipentacos	Time 1420	
④	Sampler Signature Tom Rohr	Date 11/28/23		Signature	Date 11/28/23	
⑤	Sampler Printed Name Tom Rohr	Time 1045		Printed Name Veronica Murrell	Time 1045	⑥
	Sampler Signature	Date		Signature	Date	
	Sampler Printed Name	Time		Printed Name	Time	

2.6°C

WHITE-LAB YELLOW-CLIENT

FORM CS-016.3 (09/20)

4401 S. Tucson Estates Parkway
Tucson, Arizona 85735
520.837.2469 Phone
520.791.5260 Fax

08 March 2022

Gira Patel

Environmental Services

-

Tucson, AZ 85726

RE: Los Reales Landfill Monthly

Enclosed are the results for Work Order L220117, received by the laboratory on 01/24/2022 09:46. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Frank Walker

Frank Walker
Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	03/08/2022 16:00

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Secondary ID/Location	Date Sampled	Date Received
L220117-01	LR GW INF	LRLF	01/24/2022 08:57	01/24/2022 09:46
L220117-02	LR GW EFF	LRLF	01/24/2022 09:01	01/24/2022 09:46

Tucson Water Quality Laboratory

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Frank Walker

Frank Walker, Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	03/08/2022 16:00

Case Narative / Items for Project Manager Review

All QC results were within QC limits with the following exceptions:

L220117-02	LR GW EFF	STYRENE	VOA (I)8260

R5: MS/MSD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.

BA22605-MSD	STYRENE	VOA (I)8260

R5: MS/MSD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	03/08/2022 16:00

LR GW INF (LRLF)
L220117-01

Sampled: 01/24/2022 8:57

Tucson Water Quality Laboratory (AZ0038)

Volatile Organic Compounds by GC/MS

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
2-CHLOROTOLUENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
4-CHLOROTOLUENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
BENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
BROMOBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
BROMOFORM	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
BROMOMETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
CHLOROBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
CHLOROETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	03/08/2022 16:00

LR GW INF (LRLF)
L220117-01

Sampled: 01/24/2022 8:57

Tucson Water Quality Laboratory (AZ0038)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CHLOROFORM	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
CHLOROMETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
DIBROMOMETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
DICHLORODIFLUOROMETHANE	**0.00127**	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
DICHLOROMETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
ETHYLBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
ISOPROPYLBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
M/P-XYLENES	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
NAPHTHALENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
N-BUTYLBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
N-PROPYLBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
ORTHO-XYLENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
STYRENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
TETRACHLOROETHENE	**0.00643**	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
TOLUENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
TRICHLOROETHENE	**0.00250**	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
TRICHLOROFLUOROMETHANE	**0.000500**	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
VINYL CHLORIDE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
XYLENES (TOTAL)	ND	0.00150	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		*91 %*	*70-130*		*BA22605*	*01/26/2022*	*01/26/2022*	*EPA 8260B*	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		*98 %*	*70-130*		*BA22605*	*01/26/2022*	*01/26/2022*	*EPA 8260B*	
Surrogate: TOLUENE-D8 (SURR.)		*99 %*	*70-130*		*BA22605*	*01/26/2022*	*01/26/2022*	*EPA 8260B*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	03/08/2022 16:00

LR GW EFF (LRLF)
L220117-02

Sampled:
01/24/2022 9:01

Tucson Water Quality Laboratory (AZ0038)

Volatile Organic Compounds by GC/MS

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
2-CHLOROTOLUENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
4-CHLOROTOLUENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
BENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
BROMOBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
BROMOFORM	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
BROMOMETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
CHLOROBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
CHLOROETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	03/08/2022 16:00

LR GW EFF (LRLF)
L220117-02

Sampled: 01/24/2022 9:01

Tucson Water Quality Laboratory (AZ0038)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CHLOROFORM	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
CHLOROMETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
DIBROMOMETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
DICHLORODIFLUOROMETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
DICHLOROMETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
ETHYLBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
ISOPROPYLBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
M/P-XYLENES	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
NAPHTHALENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
N-BUTYLBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
N-PROPYLBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
ORTHO-XYLENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
STYRENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	R5
TERT-BUTYLBENZENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
TETRACHLOROETHENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
TOLUENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
TRICHLOROETHENE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
TRICHLOROFLUOROMETHANE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
VINYL CHLORIDE	ND	0.000500	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
XYLENES (TOTAL)	ND	0.00150	mg/L	1	BA22605	01/26/2022	01/26/2022	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		*94 %*		*70-130*	*BA22605*	*01/26/2022*	*01/26/2022*	*EPA 8260B*	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		*98 %*		*70-130*	*BA22605*	*01/26/2022*	*01/26/2022*	*EPA 8260B*	
Surrogate: TOLUENE-D8 (SURR.)		*98 %*		*70-130*	*BA22605*	*01/26/2022*	*01/26/2022*	*EPA 8260B*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	03/08/2022 16:00

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BA22605-BLK1)				Prepared & Analyzed: 01/26/2022						
Batch BA22605 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	ND	0.000500	mg/L							
1,1,1-TRICHLOROETHANE	ND	0.000500	mg/L							
1,1,2,2-TETRACHLOROETHANE	ND	0.000500	mg/L							
1,1,2-TRICHLOROETHANE	ND	0.000500	mg/L							
1,1-DICHLOROETHANE	ND	0.000500	mg/L							
1,1-DICHLOROETHENE	ND	0.000500	mg/L							
1,1-DICHLOROPROPENE	ND	0.000500	mg/L							
1,2,3-TRICHLOROBENZENE	ND	0.000500	mg/L							
1,2,3-TRICHLOROPROPANE	ND	0.000500	mg/L							
1,2,4-TRICHLOROBENZENE	ND	0.000500	mg/L							
1,2,4-TRIMETHYLBENZENE	ND	0.000500	mg/L							
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.000500	mg/L							
1,2-DICHLOROBENZENE	ND	0.000500	mg/L							
1,2-DICHLOROETHANE	ND	0.000500	mg/L							
1,2-DICHLOROPROPANE	ND	0.000500	mg/L							
1,3,5-TRIMETHYLBENZENE	ND	0.000500	mg/L							
1,3-DICHLOROBENZENE	ND	0.000500	mg/L							
1,3-DICHLOROPROPANE	ND	0.000500	mg/L							
1,4-DICHLOROBENZENE	ND	0.000500	mg/L							
2,2-DICHLOROPROPANE	ND	0.000500	mg/L							
2-CHLOROTOLUENE	ND	0.000500	mg/L							
4-CHLOROTOLUENE	ND	0.000500	mg/L							
4-ISOPROPYLTOLUENE	ND	0.000500	mg/L							
BENZENE	ND	0.000500	mg/L							
BROMOBENZENE	ND	0.000500	mg/L							
BROMOCHLOROMETHANE	ND	0.000500	mg/L							
BROMODICHLOROMETHANE	ND	0.000500	mg/L							
BROMOFORM	ND	0.000500	mg/L							
BROMOMETHANE	ND	0.000500	mg/L							
CARBON TETRACHLORIDE	ND	0.000500	mg/L							

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	03/08/2022 16:00

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BA22605-BLK1)					Prepared & Analyzed: 01/26/2022					
Batch BA22605 - DEFAULT ORGANIC PREP										
CHLOROBENZENE	ND	0.000500	mg/L							
CHLOROETHANE	ND	0.000500	mg/L							
CHLOROFORM	ND	0.000500	mg/L							
CHLOROMETHANE	ND	0.000500	mg/L							
CIS-1,2-DICHLOROETHENE	ND	0.000500	mg/L							
CIS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L							
DIBROMOCHLOROMETHANE	ND	0.000500	mg/L							
DIBROMOMETHANE	ND	0.000500	mg/L							
DICHLORODIFLUOROMETHANE	ND	0.000500	mg/L							
DICHLOROMETHANE	ND	0.000500	mg/L							
ETHYLBENZENE	ND	0.000500	mg/L							
ETHYLENE DIBROMIDE	ND	0.000500	mg/L							
HEXACHLOROBUTADIENE	ND	0.000500	mg/L							
ISOPROPYLBENZENE	ND	0.000500	mg/L							
M/P-XYLENES	ND	0.000500	mg/L							
METHYL-TERT-BUTYL ETHER	ND	0.000500	mg/L							
NAPHTHALENE	ND	0.000500	mg/L							
N-BUTYLBENZENE	ND	0.000500	mg/L							
N-PROPYLBENZENE	ND	0.000500	mg/L							
ORTHO-XYLENE	ND	0.000500	mg/L							
SEC-BUTYLBENZENE	ND	0.000500	mg/L							
STYRENE	ND	0.000500	mg/L							
TERT-BUTYLBENZENE	ND	0.000500	mg/L							
TETRACHLOROETHENE	ND	0.000500	mg/L							
TOLUENE	ND	0.000500	mg/L							
TRANS-1,2-DICHLOROETHENE	ND	0.000500	mg/L							
TRANS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L							
TRICHLOROETHENE	ND	0.000500	mg/L							
TRICHLOROFLUOROMETHANE	ND	0.000500	mg/L							
VINYL CHLORIDE	ND	0.000500	mg/L							

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	03/08/2022 16:00

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BA22605-BLK1)					Prepared & Analyzed: 01/26/2022					
Batch BA22605 - DEFAULT ORGANIC PREP										
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.83*		ug/L	*5.00*		*97*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.86*		ug/L	*5.00*		*97*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.01*		ug/L	*5.00*		*100*	*70-130*			
LCS (BA22605-BS1)					Prepared & Analyzed: 01/26/2022					
Batch BA22605 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	5.36		ug/L	5.00		107	70-130			
1,1,1-TRICHLOROETHANE	4.77		ug/L	5.00		95	70-130			
1,1,2,2-TETRACHLOROETHANE	5.13		ug/L	5.00		103	70-130			
1,1,2-TRICHLOROETHANE	5.33		ug/L	5.00		107	70-130			
1,1-DICHLOROETHANE	4.77		ug/L	5.00		95	70-130			
1,1-DICHLOROETHENE	4.76		ug/L	5.00		95	70-130			
1,1-DICHLOROPROPENE	4.70		ug/L	5.00		94	70-130			
1,2,3-TRICHLOROBENZENE	5.00		ug/L	5.00		100	70-130			
1,2,3-TRICHLOROPROPANE	4.80		ug/L	5.00		96	70-130			
1,2,4-TRICHLOROBENZENE	4.98		ug/L	5.00		100	70-130			
1,2,4-TRIMETHYLBENZENE	4.81		ug/L	5.00		96	70-130			
1,2-DIBROMO-3-CHLOROPROPANE	5.00		ug/L	5.00		100	70-130			
1,2-DICHLOROBENZENE	4.89		ug/L	5.00		98	70-130			
1,2-DICHLOROETHANE	4.74		ug/L	5.00		95	70-130			
1,2-DICHLOROPROPANE	5.24		ug/L	5.00		105	70-130			
1,3,5-TRIMETHYLBENZENE	4.84		ug/L	5.00		97	70-130			
1,3-DICHLOROBENZENE	5.16		ug/L	5.00		103	70-130			
1,3-DICHLOROPROPANE	5.12		ug/L	5.00		102	70-130			
1,4-DICHLOROBENZENE	4.77		ug/L	5.00		95	70-130			
2,2-DICHLOROPROPANE	5.07		ug/L	5.00		101	70-130			
2-CHLOROTOLUENE	5.09		ug/L	5.00		102	70-130			
4-CHLOROTOLUENE	4.90		ug/L	5.00		98	70-130			
4-ISOPROPYLTOLUENE	4.94		ug/L	5.00		99	70-130			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	03/08/2022 16:00

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
LCS (BA22605-BS1)				Prepared & Analyzed: 01/26/2022						
Batch BA22605 - DEFAULT ORGANIC PREP										
BENZENE	4.73		ug/L	5.00		95	70-130			
BROMOBENZENE	5.25		ug/L	5.00		105	70-130			
BROMOCHLOROMETHANE	4.66		ug/L	5.00		93	70-130			
BROMODICHLOROMETHANE	5.15		ug/L	5.00		103	70-130			
BROMOFORM	5.44		ug/L	5.00		109	70-130			
BROMOMETHANE	5.27		ug/L	5.00		105	70-130			
CARBON TETRACHLORIDE	4.86		ug/L	5.00		97	70-130			
CHLOROBENZENE	5.02		ug/L	5.00		100	70-130			
CHLOROETHANE	4.20		ug/L	5.00		84	70-130			
CHLOROFORM	4.75		ug/L	5.00		95	70-130			
CHLOROMETHANE	4.23		ug/L	5.00		85	70-130			
CIS-1,2-DICHLOROETHENE	4.68		ug/L	5.00		94	70-130			
CIS-1,3-DICHLOROPROPENE	5.11		ug/L	5.00		102	70-130			
DIBROMOCHLOROMETHANE	5.10		ug/L	5.00		102	70-130			
DIBROMOMETHANE	5.02		ug/L	5.00		100	70-130			
DICHLORODIFLUOROMETHANE	4.40		ug/L	5.00		88	70-130			
DICHLOROMETHANE	4.50		ug/L	5.00		90	70-130			
ETHYLBENZENE	4.78		ug/L	5.00		96	70-130			
ETHYLENE DIBROMIDE	5.47		ug/L	5.00		109	70-130			
HEXACHLOROBUTADIENE	5.68		ug/L	5.00		114	70-130			
ISOPROPYLBENZENE	4.80		ug/L	5.00		96	70-130			
M/P-XYLENES	9.74		ug/L	10.0		97	70-130			
METHYL-TERT-BUTYL ETHER	4.34		ug/L	5.00		87	70-130			
NAPHTHALENE	4.59		ug/L	5.00		92	70-130			
N-BUTYLBENZENE	4.56		ug/L	5.00		91	70-130			
N-PROPYLBENZENE	4.84		ug/L	5.00		97	70-130			
ORTHO-XYLENE	4.79		ug/L	5.00		96	70-130			
SEC-BUTYLBENZENE	5.11		ug/L	5.00		102	70-130			
STYRENE	4.71		ug/L	5.00		94	70-130			
TERT-BUTYLBENZENE	4.92		ug/L	5.00		98	70-130			
TETRACHLOROETHENE	5.78		ug/L	5.00		116	70-130			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	03/08/2022 16:00

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
LCS (BA22605-BS1)					Prepared & Analyzed: 01/26/2022					
Batch BA22605 - DEFAULT ORGANIC PREP										
TOLUENE	5.07		ug/L	5.00		101	70-130			
TRANS-1,2-DICHLOROETHENE	4.74		ug/L	5.00		95	70-130			
TRANS-1,3-DICHLOROPROPENE	5.34		ug/L	5.00		107	70-130			
TRICHLOROETHENE	5.05		ug/L	5.00		101	70-130			
TRICHLOROFLUOROMETHANE	4.50		ug/L	5.00		90	70-130			
VINYL CHLORIDE	4.25		ug/L	5.00		85	70-130			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.76*		ug/L	*5.00*		*95*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.79*		ug/L	*5.00*		*96*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*4.96*		ug/L	*5.00*		*99*	*70-130*			
Matrix Spike (BA22605-MS1)			**Source: L220117-02**		Prepared & Analyzed: 01/26/2022					
Batch BA22605 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	5.70		ug/L	5.00	0.00	114	70-130			
1,1,1-TRICHLOROETHANE	5.22		ug/L	5.00	0.00	104	70-130			
1,1,2,2-TETRACHLOROETHANE	5.76		ug/L	5.00	0.00	115	70-130			
1,1,2-TRICHLOROETHANE	5.59		ug/L	5.00	0.00	112	70-130			
1,1-DICHLOROETHANE	5.24		ug/L	5.00	0.00	105	70-130			
1,1-DICHLOROETHENE	5.10		ug/L	5.00	0.00	102	70-130			
1,1-DICHLOROPROPENE	5.05		ug/L	5.00	0.00	101	70-130			
1,2,3-TRICHLOROBENZENE	5.48		ug/L	5.00	0.00	110	70-130			
1,2,3-TRICHLOROPROPANE	5.72		ug/L	5.00	0.00	114	70-130			
1,2,4-TRICHLOROBENZENE	5.50		ug/L	5.00	0.00	110	70-130			
1,2,4-TRIMETHYLBENZENE	5.04		ug/L	5.00	0.00	101	70-130			
1,2-DIBROMO-3-CHLOROPROPANE	5.23		ug/L	5.00	0.00	105	70-130			
1,2-DICHLOROBENZENE	5.42		ug/L	5.00	0.00	108	70-130			
1,2-DICHLOROETHANE	5.19		ug/L	5.00	0.00	104	70-130			
1,2-DICHLOROPROPANE	5.44		ug/L	5.00	0.00	109	70-130			
1,3,5-TRIMETHYLBENZENE	5.05		ug/L	5.00	0.00	101	70-130			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	03/08/2022 16:00

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike (BA22605-MS1)		**Source: L220117-02**			Prepared & Analyzed: 01/26/2022					
Batch BA22605 - DEFAULT ORGANIC PREP										
1,3-DICHLOROBENZENE	5.42		ug/L	5.00	0.00	108	70-130			
1,3-DICHLOROPROPANE	5.57		ug/L	5.00	0.00	111	70-130			
1,4-DICHLOROBENZENE	5.54		ug/L	5.00	0.00	111	70-130			
2,2-DICHLOROPROPANE	5.64		ug/L	5.00	0.00	113	70-130			
2-CHLOROTOLUENE	5.12		ug/L	5.00	0.00	102	70-130			
4-CHLOROTOLUENE	5.16		ug/L	5.00	0.00	103	70-130			
4-ISOPROPYLTOLUENE	5.25		ug/L	5.00	0.00	105	70-130			
BENZENE	5.23		ug/L	5.00	0.00	105	70-130			
BROMOBENZENE	5.62		ug/L	5.00	0.00	112	70-130			
BROMOCHLOROMETHANE	4.94		ug/L	5.00	0.00	99	70-130			
BROMODICHLOROMETHANE	5.50		ug/L	5.00	0.00	110	70-130			
BROMOFORM	5.85		ug/L	5.00	0.00	117	70-130			
BROMOMETHANE	5.34		ug/L	5.00	0.00	107	70-130			
CARBON TETRACHLORIDE	5.48		ug/L	5.00	0.00	110	70-130			
CHLOROBENZENE	5.39		ug/L	5.00	0.00	108	70-130			
CHLOROETHANE	4.46		ug/L	5.00	0.00	89	70-130			
CHLOROFORM	5.18		ug/L	5.00	0.00	104	70-130			
CHLOROMETHANE	4.48		ug/L	5.00	0.00	90	70-130			
CIS-1,2-DICHLOROETHENE	5.22		ug/L	5.00	0.00	104	70-130			
CIS-1,3-DICHLOROPROPENE	5.47		ug/L	5.00	0.00	109	70-130			
DIBROMOCHLOROMETHANE	5.63		ug/L	5.00	0.00	113	70-130			
DIBROMOMETHANE	5.66		ug/L	5.00	0.00	113	70-130			
DICHLORODIFLUOROMETHANE	4.45		ug/L	5.00	0.00	89	70-130			
DICHLOROMETHANE	4.85		ug/L	5.00	0.00	97	70-130			
ETHYLBENZENE	5.22		ug/L	5.00	0.00	104	70-130			
ETHYLENE DIBROMIDE	5.80		ug/L	5.00	0.00	116	70-130			
HEXACHLOROBUTADIENE	6.21		ug/L	5.00	0.00	124	70-130			
ISOPROPYLBENZENE	5.15		ug/L	5.00	0.00	103	70-130			
M/P-XYLENES	10.3		ug/L	10.0	0.00	103	70-130			
METHYL-TERT-BUTYL ETHER	4.73		ug/L	5.00	0.00	95	70-130			
NAPHTHALENE	5.14		ug/L	5.00	0.00	103	70-130			

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Tucson Water Quality Lab
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Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	03/08/2022 16:00

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike (BA22605-MS1)		**Source: L220117-02**			Prepared & Analyzed: 01/26/2022					
Batch BA22605 - DEFAULT ORGANIC PREP										
N-BUTYLBENZENE	4.90		ug/L	5.00	0.00	98	70-130			
N-PROPYLBENZENE	5.09		ug/L	5.00	0.00	102	70-130			
ORTHO-XYLENE	5.03		ug/L	5.00	0.00	101	70-130			
SEC-BUTYLBENZENE	5.31		ug/L	5.00	0.00	106	70-130			
STYRENE	4.93		ug/L	5.00	0.00	99	70-130			
TERT-BUTYLBENZENE	4.98		ug/L	5.00	0.00	100	70-130			
TETRACHLOROETHENE	6.18		ug/L	5.00	0.00	124	70-130			
TOLUENE	5.34		ug/L	5.00	0.00	107	70-130			
TRANS-1,2-DICHLOROETHENE	4.99		ug/L	5.00	0.00	100	70-130			
TRANS-1,3-DICHLOROPROPENE	5.57		ug/L	5.00	0.00	111	70-130			
TRICHLOROETHENE	5.60		ug/L	5.00	0.00	112	70-130			
TRICHLOROFLUOROMETHANE	4.74		ug/L	5.00	0.00	95	70-130			
VINYL CHLORIDE	4.70		ug/L	5.00	0.00	94	70-130			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.69*		ug/L	*5.00*		*94*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.93*		ug/L	*5.00*		*99*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*4.93*		ug/L	*5.00*		*99*	*70-130*			
Matrix Spike Dup (BA22605-MSD1) (for RPD QC only)		**Source: L220117-02**			Prepared & Analyzed: 01/26/2022					
Batch BA22605 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	5.38		ug/L	5.00	0.00	108		6	20	
1,1,1-TRICHLOROETHANE	4.82		ug/L	5.00	0.00	96		8	20	
1,1,2,2-TETRACHLOROETHANE	5.37		ug/L	5.00	0.00	107		7	20	
1,1,2-TRICHLOROETHANE	5.46		ug/L	5.00	0.00	109		2	20	
1,1-DICHLOROETHANE	4.78		ug/L	5.00	0.00	96		9	20	
1,1-DICHLOROETHENE	4.62		ug/L	5.00	0.00	92		10	20	
1,1-DICHLOROPROPENE	4.63		ug/L	5.00	0.00	93		9	20	
1,2,3-TRICHLOROBENZENE	5.04		ug/L	5.00	0.00	101		8	20	
1,2,3-TRICHLOROPROPANE	4.99		ug/L	5.00	0.00	100		14	20	

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Tucson Water Quality Lab
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Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	03/08/2022 16:00

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike Dup (BA22605-MSD1) (for RPD QC only)				**Source: L220117-02**		Prepared & Analyzed: 01/26/2022				
Batch BA22605 - DEFAULT ORGANIC PREP										
1,2,4-TRICHLOROBENZENE	5.25		ug/L	5.00	0.00	105		5	20	
1,2,4-TRIMETHYLBENZENE	4.87		ug/L	5.00	0.00	97		3	20	
1,2-DIBROMO-3-CHLOROPROPANE	5.09		ug/L	5.00	0.00	102		3	20	
1,2-DICHLOROBENZENE	5.16		ug/L	5.00	0.00	103		5	20	
1,2-DICHLOROETHANE	4.85		ug/L	5.00	0.00	97		7	20	
1,2-DICHLOROPROPANE	5.11		ug/L	5.00	0.00	102		6	20	
1,3,5-TRIMETHYLBENZENE	4.81		ug/L	5.00	0.00	96		5	20	
1,3-DICHLOROBENZENE	5.21		ug/L	5.00	0.00	104		4	20	
1,3-DICHLOROPROPANE	5.15		ug/L	5.00	0.00	103		8	20	
1,4-DICHLOROBENZENE	5.03		ug/L	5.00	0.00	101		10	20	
2,2-DICHLOROPROPANE	5.19		ug/L	5.00	0.00	104		8	20	
2-CHLOROTOLUENE	4.89		ug/L	5.00	0.00	98		5	20	
4-CHLOROTOLUENE	4.86		ug/L	5.00	0.00	97		6	20	
4-ISOPROPYLTOLUENE	5.00		ug/L	5.00	0.00	100		5	20	
BENZENE	4.80		ug/L	5.00	0.00	96		9	20	
BROMOBENZENE	5.26		ug/L	5.00	0.00	105		7	20	
BROMOCHLOROMETHANE	4.59		ug/L	5.00	0.00	92		7	20	
BROMODICHLOROMETHANE	5.25		ug/L	5.00	0.00	105		5	20	
BROMOFORM	5.45		ug/L	5.00	0.00	109		7	20	
BROMOMETHANE	5.37		ug/L	5.00	0.00	107		0.6	20	
CARBON TETRACHLORIDE	5.06		ug/L	5.00	0.00	101		8	20	
CHLOROBENZENE	5.03		ug/L	5.00	0.00	101		7	20	
CHLOROETHANE	4.18		ug/L	5.00	0.00	84		6	20	
CHLOROFORM	4.89		ug/L	5.00	0.00	98		6	20	
CHLOROMETHANE	4.04		ug/L	5.00	0.00	81		10	20	
CIS-1,2-DICHLOROETHENE	4.83		ug/L	5.00	0.00	97		8	20	
CIS-1,3-DICHLOROPROPENE	5.06		ug/L	5.00	0.00	101		8	20	
DIBROMOCHLOROMETHANE	5.04		ug/L	5.00	0.00	101		11	20	
DIBROMOMETHANE	5.21		ug/L	5.00	0.00	104		8	20	
DICHLORODIFLUOROMETHANE	4.10		ug/L	5.00	0.00	82		8	20	
DICHLOROMETHANE	4.60		ug/L	5.00	0.00	92		5	20	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	03/08/2022 16:00

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike Dup (BA22605-MSD1) (for RPD QC only)			**Source: L220117-02**		Prepared & Analyzed: 01/26/2022					
Batch BA22605 - DEFAULT ORGANIC PREP										
ETHYLBENZENE	4.78		ug/L	5.00	0.00	96		9	20	
ETHYLENE DIBROMIDE	5.36		ug/L	5.00	0.00	107		8	20	
HEXACHLOROBUTADIENE	5.69		ug/L	5.00	0.00	114		9	20	
ISOPROPYLBENZENE	4.68		ug/L	5.00	0.00	94		10	20	
M/P-XYLENES	9.51		ug/L	10.0	0.00	95		8	20	
METHYL-TERT-BUTYL ETHER	4.49		ug/L	5.00	0.00	90		5	20	
NAPHTHALENE	4.68		ug/L	5.00	0.00	94		9	20	
N-BUTYLBENZENE	4.50		ug/L	5.00	0.00	90		9	20	
N-PROPYLBENZENE	4.81		ug/L	5.00	0.00	96		6	20	
ORTHO-XYLENE	4.82		ug/L	5.00	0.00	96		4	20	
SEC-BUTYLBENZENE	4.96		ug/L	5.00	0.00	99		7	20	
STYRENE	3.75		ug/L	5.00	0.00	75		27	20	R5
TERT-BUTYLBENZENE	4.73		ug/L	5.00	0.00	95		5	20	
TETRACHLOROETHENE	5.67		ug/L	5.00	0.00	113		9	20	
TOLUENE	4.97		ug/L	5.00	0.00	99		7	20	
TRANS-1,2-DICHLOROETHENE	4.62		ug/L	5.00	0.00	92		8	20	
TRANS-1,3-DICHLOROPROPENE	5.23		ug/L	5.00	0.00	105		6	20	
TRICHLOROETHENE	5.00		ug/L	5.00	0.00	100		11	20	
TRICHLOROFLUOROMETHANE	4.37		ug/L	5.00	0.00	87		8	20	
VINYL CHLORIDE	4.36		ug/L	5.00	0.00	87		8	20	
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.87*		ug/L	*5.00*		*97*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.08*		ug/L	*5.00*		*102*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*4.81*		ug/L	*5.00*		*96*	*70-130*			
Reference (BA22605-SRM1)					Prepared & Analyzed: 01/26/2022					
Batch BA22605 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	5.61		ug/L	5.00		112	80-120			
1,1,1-TRICHLOROETHANE	5.19		ug/L	5.00		104	80-120			

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Environmental Services	Project: Los Reales Landfill Monthly	
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Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BA22605-SRM1)					Prepared & Analyzed: 01/26/2022					
Batch BA22605 - DEFAULT ORGANIC PREP										
1,1,2,2-TETRACHLOROETHANE	5.51		ug/L	5.00		110	80-120			
1,1,2-TRICHLOROETHANE	5.48		ug/L	5.00		110	80-120			
1,1-DICHLOROETHANE	5.17		ug/L	5.00		103	80-120			
1,1-DICHLOROETHENE	5.10		ug/L	5.00		102	80-120			
1,1-DICHLOROPROPENE	4.84		ug/L	5.00		97	80-120			
1,2,3-TRICHLOROBENZENE	5.43		ug/L	5.00		109	80-120			
1,2,3-TRICHLOROPROPANE	5.41		ug/L	5.00		108	80-120			
1,2,4-TRICHLOROBENZENE	5.32		ug/L	5.00		106	80-120			
1,2,4-TRIMETHYLBENZENE	5.09		ug/L	5.00		102	80-120			
1,2-DIBROMO-3-CHLOROPROPANE	5.09		ug/L	5.00		102	69-122			
1,2-DICHLOROBENZENE	5.18		ug/L	5.00		104	80-120			
1,2-DICHLOROETHANE	5.10		ug/L	5.00		102	80-120			
1,2-DICHLOROPROPANE	5.41		ug/L	5.00		108	80-120			
1,3,5-TRIMETHYLBENZENE	5.05		ug/L	5.00		101	80-120			
1,3-DICHLOROBENZENE	5.48		ug/L	5.00		110	80-120			
1,3-DICHLOROPROPANE	5.32		ug/L	5.00		106	80-120			
1,4-DICHLOROBENZENE	5.06		ug/L	5.00		101	80-120			
2,2-DICHLOROPROPANE	5.43		ug/L	5.00		109	74-130			
2-CHLOROTOLUENE	5.19		ug/L	5.00		104	80-120			
4-CHLOROTOLUENE	5.16		ug/L	5.00		103	80-120			
4-ISOPROPYLTOLUENE	5.10		ug/L	5.00		102	80-120			
BENZENE	5.14		ug/L	5.00		103	80-120			
BROMOBENZENE	5.34		ug/L	5.00		107	80-120			
BROMOCHLOROMETHANE	4.98		ug/L	5.00		100	77-121			
BROMODICHLOROMETHANE	5.18		ug/L	5.00		104	80-120			
BROMOFORM	5.73		ug/L	5.00		115	66-130			
BROMOMETHANE	5.08		ug/L	5.00		102	65-131			
CARBON TETRACHLORIDE	5.25		ug/L	5.00		105	76-127			
CHLOROBENZENE	5.15		ug/L	5.00		103	80-120			
CHLOROETHANE	4.47		ug/L	5.00		89	72-128			
CHLOROFORM	5.32		ug/L	5.00		106	80-120			

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Tucson Water Quality Lab
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Tucson, AZ 85735
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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	03/08/2022 16:00

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BA22605-SRM1)					Prepared & Analyzed: 01/26/2022					
Batch BA22605 - DEFAULT ORGANIC PREP										
CHLOROMETHANE	4.56		ug/L	5.00		91	62-122			
CIS-1,2-DICHLOROETHENE	5.18		ug/L	5.00		104	80-120			
CIS-1,3-DICHLOROPROPENE	5.24		ug/L	5.00		105	75-113			
DIBROMOCHLOROMETHANE	5.24		ug/L	5.00		105	74-120			
DIBROMOMETHANE	5.41		ug/L	5.00		108	80-120			
DICHLORODIFLUOROMETHANE	4.48		ug/L	5.00		90	59-137			
DICHLOROMETHANE	4.83		ug/L	5.00		97	78-123			
ETHYLBENZENE	5.11		ug/L	5.00		102	80-120			
ETHYLENE DIBROMIDE	5.51		ug/L	5.00		110	80-120			
HEXACHLOROBUTADIENE	5.71		ug/L	5.00		114	79-124			
ISOPROPYLBENZENE	5.09		ug/L	5.00		102	80-120			
M/P-XYLENES	10.2		ug/L	10.0		102	80-120			
METHYL-TERT-BUTYL ETHER	4.64		ug/L	5.00		93	80-120			
NAPHTHALENE	5.06		ug/L	5.00		101	77-114			
N-BUTYLBENZENE	4.69		ug/L	5.00		94	74-118			
N-PROPYLBENZENE	4.96		ug/L	5.00		99	80-120			
ORTHO-XYLENE	4.95		ug/L	5.00		99	80-120			
SEC-BUTYLBENZENE	5.44		ug/L	5.00		109	80-120			
STYRENE	5.00		ug/L	5.00		100	80-120			
TERT-BUTYLBENZENE	4.89		ug/L	5.00		98	80-120			
TETRACHLOROETHENE	5.55		ug/L	5.00		111	80-120			
TOLUENE	5.16		ug/L	5.00		103	80-120			
TRANS-1,2-DICHLOROETHENE	4.90		ug/L	5.00		98	78-123			
TRANS-1,3-DICHLOROPROPENE	5.61		ug/L	5.00		112	71-120			
TRICHLOROETHENE	5.32		ug/L	5.00		106	80-120			
TRICHLOROFLUOROMETHANE	4.74		ug/L	5.00		95	72-116			
VINYL CHLORIDE	4.66		ug/L	5.00		93	68-115			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*5.00*		ug/L	*5.00*		*100*	*70-130*			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	03/08/2022 16:00

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BA22605-SRM1)					Prepared & Analyzed: 01/26/2022					
Batch BA22605 - DEFAULT ORGANIC PREP										
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.93*		ug/L	*5.00*		*99*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*4.89*		ug/L	*5.00*		*98*	*70-130*			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	03/08/2022 16:00

Notes and Definitions

R5	MS/MSD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

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TUCSON WATER CHAIN OF CUSTODY

LOGIN ID: 220117

CLIENT: ES

PROJECT NAME/FREQUENCY:
LOS REALES Landfill
Monthly

PROJECT #: P01049

SAMPLING DATE: 4/20/2022

SAMPLED BY:
print full name
Chad Hancock
signature
Chad S. Hancock

SAMPLE #	TIME	LOCATION	SITE	NUMBER OF CONTAINERS	ICP	ICP	ICP	ICP	ICP	ICPMS	ICPMS	8260	COMMENTS
PRESERVATIVE								(HNO3)				(HCl)	
-01	08:57	LR GW INF	LRLF	4								X	TBs declined
-02	09:01	LR GW EFF	LRLF	4								X	by ES for this project

COMMENTS: Sample on the fourth Monday of the month.

SPECIAL TURNAROUND TIME:

	SIGNATURE	DATE/TIME		SIGNATURE	DATE/TIME
RELINQUISHED BY:	Chad S. Hancock	4/24/22 0940	RECEIVED BY:		4-24-22 0940
RELINQUISHED BY:			RECEIVED BY:		

RECEIVING TEMPERATURE= 0.7 °C

4401 S. Tucson Estates Parkway
Tucson, Arizona 85735
520.837.2469 Phone
520.791.5260 Fax

06 April 2022

Gira Patel

Environmental Services

-

Tucson, AZ 85726

RE: Los Reales Landfill Monthly

Enclosed are the results for Work Order L220298, received by the laboratory on 02/28/2022 09:57. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Frank Walker

Frank Walker
Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/06/2022 10:48

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Secondary ID/Location	Date Sampled	Date Received
L220298-01	LR GW INF	Spigot	02/28/2022 08:59	02/28/2022 09:57
L220298-02	LR GW EFF	Spigot	02/28/2022 09:02	02/28/2022 09:57

Tucson Water Quality Laboratory

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Frank Walker

Frank Walker, Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/06/2022 10:48

Case Narative / Items for Project Manager Review

All QC results were within QC limits.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/06/2022 10:48

LR GW INF (Spigot)
L220298-01

Sampled: 02/28/2022 8:59

Tucson Water Quality Laboratory (AZ0038)

Volatile Organic Compounds by GC/MS

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/06/2022 10:48

LR GW INF (Spigot)
L220298-01

Sampled: 02/28/2022 8:59

Tucson Water Quality Laboratory (AZ0038)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CHLOROFORM	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
DICHLORODIFLUOROMETHANE	**0.00126**	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
NAPHTHALENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
TETRACHLOROETHENE	**0.00521**	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
TRICHLOROETHENE	**0.00214**	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
TRICHLOROFLUOROMETHANE	**0.000500**	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
XYLENES (TOTAL)	ND	0.0015	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		*92 %*	*70-130*		*BC20901*	*03/08/2022*	*03/08/2022*	*EPA 8260B*	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		*100 %*	*70-130*		*BC20901*	*03/08/2022*	*03/08/2022*	*EPA 8260B*	
Surrogate: TOLUENE-D8 (SURR.)		*99 %*	*70-130*		*BC20901*	*03/08/2022*	*03/08/2022*	*EPA 8260B*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/06/2022 10:48

LR GW EFF (Spigot)
L220298-02

Sampled:
02/28/2022 9:02

Tucson Water Quality Laboratory (AZ0038)

Volatile Organic Compounds by GC/MS

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/06/2022 10:48

LR GW EFF (Spigot)
L220298-02

Sampled: 02/28/2022 9:02

Tucson Water Quality Laboratory (AZ0038)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CHLOROFORM	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
DICHLORODIFLUOROMETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
NAPHTHALENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
TETRACHLOROETHENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
TRICHLOROETHENE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
TRICHLOROFLUOROMETHANE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
XYLENES (TOTAL)	ND	0.0015	mg/L	1	BC20901	03/08/2022	03/08/2022	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		*97 %*		*70-130*	*BC20901*	*03/08/2022*	*03/08/2022*	*EPA 8260B*	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		*101 %*		*70-130*	*BC20901*	*03/08/2022*	*03/08/2022*	*EPA 8260B*	
Surrogate: TOLUENE-D8 (SURR.)		*96 %*		*70-130*	*BC20901*	*03/08/2022*	*03/08/2022*	*EPA 8260B*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/06/2022 10:48

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BC20901-BLK1)				Prepared & Analyzed: 03/08/2022						
Batch BC20901 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	ND	0.000500	mg/L							
1,1,1-TRICHLOROETHANE	ND	0.000500	mg/L							
1,1,2,2-TETRACHLOROETHANE	ND	0.000500	mg/L							
1,1,2-TRICHLOROETHANE	ND	0.000500	mg/L							
1,1-DICHLOROETHANE	ND	0.000500	mg/L							
1,1-DICHLOROETHENE	ND	0.000500	mg/L							
1,1-DICHLOROPROPENE	ND	0.000500	mg/L							
1,2,3-TRICHLOROBENZENE	ND	0.000500	mg/L							
1,2,3-TRICHLOROPROPANE	ND	0.000500	mg/L							
1,2,4-TRICHLOROBENZENE	ND	0.000500	mg/L							
1,2,4-TRIMETHYLBENZENE	ND	0.000500	mg/L							
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.000500	mg/L							
1,2-DICHLOROBENZENE	ND	0.000500	mg/L							
1,2-DICHLOROETHANE	ND	0.000500	mg/L							
1,2-DICHLOROPROPANE	ND	0.000500	mg/L							
1,3,5-TRIMETHYLBENZENE	ND	0.000500	mg/L							
1,3-DICHLOROBENZENE	ND	0.000500	mg/L							
1,3-DICHLOROPROPANE	ND	0.000500	mg/L							
1,4-DICHLOROBENZENE	ND	0.000500	mg/L							
2,2-DICHLOROPROPANE	ND	0.000500	mg/L							
2-CHLOROTOLUENE	ND	0.000500	mg/L							
4-CHLOROTOLUENE	ND	0.000500	mg/L							
4-ISOPROPYLTOLUENE	ND	0.000500	mg/L							
BENZENE	ND	0.000500	mg/L							
BROMOBENZENE	ND	0.000500	mg/L							
BROMOCHLOROMETHANE	ND	0.000500	mg/L							
BROMODICHLOROMETHANE	ND	0.000500	mg/L							
BROMOFORM	ND	0.000500	mg/L							
BROMOMETHANE	ND	0.000500	mg/L							
CARBON TETRACHLORIDE	ND	0.000500	mg/L							

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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/06/2022 10:48

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BC20901-BLK1)					Prepared & Analyzed: 03/08/2022					
Batch BC20901 - DEFAULT ORGANIC PREP										
CHLOROBENZENE	ND	0.000500	mg/L							
CHLOROETHANE	ND	0.000500	mg/L							
CHLOROFORM	ND	0.000500	mg/L							
CHLOROMETHANE	ND	0.000500	mg/L							
CIS-1,2-DICHLOROETHENE	ND	0.000500	mg/L							
CIS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L							
DIBROMOCHLOROMETHANE	ND	0.000500	mg/L							
DIBROMOMETHANE	ND	0.000500	mg/L							
DICHLORODIFLUOROMETHANE	ND	0.000500	mg/L							
DICHLOROMETHANE	ND	0.000500	mg/L							
ETHYLBENZENE	ND	0.000500	mg/L							
ETHYLENE DIBROMIDE	ND	0.000500	mg/L							
HEXACHLOROBUTADIENE	ND	0.000500	mg/L							
ISOPROPYLBENZENE	ND	0.000500	mg/L							
M/P-XYLENES	ND	0.000500	mg/L							
METHYL-TERT-BUTYL ETHER	ND	0.000500	mg/L							
NAPHTHALENE	ND	0.000500	mg/L							
N-BUTYLBENZENE	ND	0.000500	mg/L							
N-PROPYLBENZENE	ND	0.000500	mg/L							
ORTHO-XYLENE	ND	0.000500	mg/L							
SEC-BUTYLBENZENE	ND	0.000500	mg/L							
STYRENE	ND	0.000500	mg/L							
TERT-BUTYLBENZENE	ND	0.000500	mg/L							
TETRACHLOROETHENE	ND	0.000500	mg/L							
TOLUENE	ND	0.000500	mg/L							
TRANS-1,2-DICHLOROETHENE	ND	0.000500	mg/L							
TRANS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L							
TRICHLOROETHENE	ND	0.000500	mg/L							
TRICHLOROFLUOROMETHANE	ND	0.000500	mg/L							
VINYL CHLORIDE	ND	0.000500	mg/L							

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Tucson, AZ 85735
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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/06/2022 10:48

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BC20901-BLK1)				Prepared & Analyzed: 03/08/2022						
Batch BC20901 - DEFAULT ORGANIC PREP										
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.63*		ug/L	*5.00*		*93*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.05*		ug/L	*5.00*		*101*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.01*		ug/L	*5.00*		*100*	*70-130*			
Matrix Spike (BC20901-MS1)			**Source: L220298-02**	Prepared & Analyzed: 03/08/2022						
Batch BC20901 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	5.55		ug/L	5.00	0.00	111	70-130			
1,1,1-TRICHLOROETHANE	5.53		ug/L	5.00	0.00	111	70-130			
1,1,2,2-TETRACHLOROETHANE	5.28		ug/L	5.00	0.00	106	70-130			
1,1,2-TRICHLOROETHANE	5.36		ug/L	5.00	0.00	107	70-130			
1,1-DICHLOROETHANE	5.38		ug/L	5.00	0.00	108	70-130			
1,1-DICHLOROETHENE	5.53		ug/L	5.00	0.00	111	70-130			
1,1-DICHLOROPROPENE	5.43		ug/L	5.00	0.00	109	70-130			
1,2,3-TRICHLOROBENZENE	5.40		ug/L	5.00	0.00	108	70-130			
1,2,3-TRICHLOROPROPANE	4.94		ug/L	5.00	0.00	99	70-130			
1,2,4-TRICHLOROBENZENE	5.74		ug/L	5.00	0.00	115	70-130			
1,2,4-TRIMETHYLBENZENE	5.31		ug/L	5.00	0.00	106	70-130			
1,2-DIBROMO-3-CHLOROPROPANE	5.34		ug/L	5.00	0.00	107	70-130			
1,2-DICHLOROBENZENE	5.52		ug/L	5.00	0.00	110	70-130			
1,2-DICHLOROETHANE	5.32		ug/L	5.00	0.00	106	70-130			
1,2-DICHLOROPROPANE	5.25		ug/L	5.00	0.00	105	70-130			
1,3,5-TRIMETHYLBENZENE	5.26		ug/L	5.00	0.00	105	70-130			
1,3-DICHLOROBENZENE	5.48		ug/L	5.00	0.00	110	70-130			
1,3-DICHLOROPROPANE	5.49		ug/L	5.00	0.00	110	70-130			
1,4-DICHLOROBENZENE	5.53		ug/L	5.00	0.00	111	70-130			
2,2-DICHLOROPROPANE	6.19		ug/L	5.00	0.00	124	70-130			
2-CHLOROTOLUENE	5.34		ug/L	5.00	0.00	107	70-130			
4-CHLOROTOLUENE	5.51		ug/L	5.00	0.00	110	70-130			
4-ISOPROPYLTOLUENE	5.60		ug/L	5.00	0.00	112	70-130			

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Tucson Water Quality Lab
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Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/06/2022 10:48

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike (BC20901-MS1)		**Source: L220298-02**			Prepared & Analyzed: 03/08/2022					
Batch BC20901 - DEFAULT ORGANIC PREP										
BENZENE	5.55		ug/L	5.00	0.00	111	70-130			
BROMOBENZENE	5.37		ug/L	5.00	0.00	107	70-130			
BROMOCHLOROMETHANE	5.16		ug/L	5.00	0.00	103	70-130			
BROMODICHLOROMETHANE	5.23		ug/L	5.00	0.00	105	70-130			
BROMOFORM	5.33		ug/L	5.00	0.00	107	70-130			
BROMOMETHANE	5.60		ug/L	5.00	0.00	112	70-130			
CARBON TETRACHLORIDE	5.55		ug/L	5.00	0.00	111	70-130			
CHLOROBENZENE	5.45		ug/L	5.00	0.00	109	70-130			
CHLOROETHANE	5.61		ug/L	5.00	0.00	112	70-130			
CHLOROFORM	5.43		ug/L	5.00	0.00	109	70-130			
CHLOROMETHANE	5.29		ug/L	5.00	0.00	106	70-130			
CIS-1,2-DICHLOROETHENE	5.45		ug/L	5.00	0.00	109	70-130			
CIS-1,3-DICHLOROPROPENE	5.31		ug/L	5.00	0.00	106	70-130			
DIBROMOCHLOROMETHANE	5.26		ug/L	5.00	0.00	105	70-130			
DIBROMOMETHANE	5.39		ug/L	5.00	0.00	108	70-130			
DICHLORODIFLUOROMETHANE	5.32		ug/L	5.00	0.00	106	70-130			
DICHLOROMETHANE	5.45		ug/L	5.00	0.00	109	70-130			
ETHYLBENZENE	5.32		ug/L	5.00	0.00	106	70-130			
ETHYLENE DIBROMIDE	5.56		ug/L	5.00	0.00	111	70-130			
HEXACHLOROBUTADIENE	5.98		ug/L	5.00	0.00	120	70-130			
ISOPROPYLBENZENE	5.32		ug/L	5.00	0.00	106	70-130			
M/P-XYLENES	10.5		ug/L	10.0	0.00	105	70-130			
METHYL-TERT-BUTYL ETHER	5.45		ug/L	5.00	0.00	109	70-130			
NAPHTHALENE	5.43		ug/L	5.00	0.00	109	70-130			
N-BUTYLBENZENE	5.68		ug/L	5.00	0.00	114	70-130			
N-PROPYLBENZENE	5.35		ug/L	5.00	0.00	107	70-130			
ORTHO-XYLENE	5.38		ug/L	5.00	0.00	108	70-130			
SEC-BUTYLBENZENE	5.47		ug/L	5.00	0.00	109	70-130			
STYRENE	4.98		ug/L	5.00	0.00	100	70-130			
TERT-BUTYLBENZENE	5.28		ug/L	5.00	0.00	106	70-130			
TETRACHLOROETHENE	5.73		ug/L	5.00	0.00	115	70-130			

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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/06/2022 10:48

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike (BC20901-MS1)		**Source: L220298-02**		Prepared & Analyzed: 03/08/2022						
Batch BC20901 - DEFAULT ORGANIC PREP										
TOLUENE	5.47		ug/L	5.00	0.00	109	70-130			
TRANS-1,2-DICHLOROETHENE	5.49		ug/L	5.00	0.00	110	70-130			
TRANS-1,3-DICHLOROPROPENE	5.31		ug/L	5.00	0.00	106	70-130			
TRICHLOROETHENE	5.58		ug/L	5.00	0.00	112	70-130			
TRICHLOROFLUOROMETHANE	5.62		ug/L	5.00	0.00	112	70-130			
VINYL CHLORIDE	5.53		ug/L	5.00	0.00	111	70-130			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.86*		ug/L	*5.00*		*97*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.36*		ug/L	*5.00*		*107*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.06*		ug/L	*5.00*		*101*	*70-130*			
Matrix Spike Dup (BC20901-MSD1) (for RPD QC only)		**Source: L220298-02**		Prepared & Analyzed: 03/08/2022						
Batch BC20901 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	5.32		ug/L	5.00	0.00	106		4	20	
1,1,1-TRICHLOROETHANE	5.41		ug/L	5.00	0.00	108		2	20	
1,1,2,2-TETRACHLOROETHANE	5.18		ug/L	5.00	0.00	104		2	20	
1,1,2-TRICHLOROETHANE	5.05		ug/L	5.00	0.00	101		6	20	
1,1-DICHLOROETHANE	5.48		ug/L	5.00	0.00	110		2	20	
1,1-DICHLOROETHENE	5.45		ug/L	5.00	0.00	109		1	20	
1,1-DICHLOROPROPENE	5.34		ug/L	5.00	0.00	107		2	20	
1,2,3-TRICHLOROBENZENE	5.26		ug/L	5.00	0.00	105		3	20	
1,2,3-TRICHLOROPROPANE	5.23		ug/L	5.00	0.00	105		6	20	
1,2,4-TRICHLOROBENZENE	5.42		ug/L	5.00	0.00	108		6	20	
1,2,4-TRIMETHYLBENZENE	5.44		ug/L	5.00	0.00	109		2	20	
1,2-DIBROMO-3-CHLOROPROPANE	5.06		ug/L	5.00	0.00	101		5	20	
1,2-DICHLOROBENZENE	5.31		ug/L	5.00	0.00	106		4	20	
1,2-DICHLOROETHANE	5.38		ug/L	5.00	0.00	108		1	20	
1,2-DICHLOROPROPANE	5.25		ug/L	5.00	0.00	105		0	20	
1,3,5-TRIMETHYLBENZENE	5.42		ug/L	5.00	0.00	108		3	20	

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Tucson, AZ 85735
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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/06/2022 10:48

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike Dup (BC20901-MSD1) (for RPD QC only)			**Source: L220298-02**		Prepared & Analyzed: 03/08/2022					
Batch BC20901 - DEFAULT ORGANIC PREP										
1,3-DICHLOROBENZENE	5.23		ug/L	5.00	0.00	105		5	20	
1,3-DICHLOROPROPANE	5.29		ug/L	5.00	0.00	106		4	20	
1,4-DICHLOROBENZENE	5.35		ug/L	5.00	0.00	107		3	20	
2,2-DICHLOROPROPANE	5.92		ug/L	5.00	0.00	118		4	20	
2-CHLOROTOLUENE	5.26		ug/L	5.00	0.00	105		2	20	
4-CHLOROTOLUENE	5.28		ug/L	5.00	0.00	106		4	20	
4-ISOPROPYLTOLUENE	5.37		ug/L	5.00	0.00	107		4	20	
BENZENE	5.48		ug/L	5.00	0.00	110		1	20	
BROMOBENZENE	5.37		ug/L	5.00	0.00	107		0	20	
BROMOCHLOROMETHANE	5.04		ug/L	5.00	0.00	101		2	20	
BROMODICHLOROMETHANE	5.11		ug/L	5.00	0.00	102		2	20	
BROMOFORM	5.02		ug/L	5.00	0.00	100		6	20	
BROMOMETHANE	5.51		ug/L	5.00	0.00	110		2	20	
CARBON TETRACHLORIDE	5.44		ug/L	5.00	0.00	109		2	20	
CHLOROBENZENE	5.37		ug/L	5.00	0.00	107		1	20	
CHLOROETHANE	5.48		ug/L	5.00	0.00	110		2	20	
CHLOROFORM	5.40		ug/L	5.00	0.00	108		0.6	20	
CHLOROMETHANE	5.26		ug/L	5.00	0.00	105		0.6	20	
CIS-1,2-DICHLOROETHENE	5.39		ug/L	5.00	0.00	108		1	20	
CIS-1,3-DICHLOROPROPENE	5.30		ug/L	5.00	0.00	106		0.2	20	
DIBROMOCHLOROMETHANE	5.01		ug/L	5.00	0.00	100		5	20	
DIBROMOMETHANE	5.10		ug/L	5.00	0.00	102		6	20	
DICHLORODIFLUOROMETHANE	5.29		ug/L	5.00	0.00	106		0.6	20	
DICHLOROMETHANE	5.30		ug/L	5.00	0.00	106		3	20	
ETHYLBENZENE	5.37		ug/L	5.00	0.00	107		0.9	20	
ETHYLENE DIBROMIDE	5.37		ug/L	5.00	0.00	107		3	20	
HEXACHLOROBUTADIENE	5.34		ug/L	5.00	0.00	107		11	20	
ISOPROPYLBENZENE	5.32		ug/L	5.00	0.00	106		0	20	
M/P-XYLENES	10.7		ug/L	10.0	0.00	107		2	20	
METHYL-TERT-BUTYL ETHER	5.27		ug/L	5.00	0.00	105		3	20	
NAPHTHALENE	5.23		ug/L	5.00	0.00	105		4	20	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/06/2022 10:48

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike Dup (BC20901-MSD1) (for RPD QC only)				**Source: L220298-02**		Prepared & Analyzed: 03/08/2022				
Batch BC20901 - DEFAULT ORGANIC PREP										
N-BUTYLBENZENE	5.38		ug/L	5.00	0.00	108		5	20	
N-PROPYLBENZENE	5.45		ug/L	5.00	0.00	109		2	20	
ORTHO-XYLENE	5.38		ug/L	5.00	0.00	108		0	20	
SEC-BUTYLBENZENE	5.45		ug/L	5.00	0.00	109		0.4	20	
STYRENE	5.38		ug/L	5.00	0.00	108		8	20	
TERT-BUTYLBENZENE	5.33		ug/L	5.00	0.00	107		0.9	20	
TETRACHLOROETHENE	5.54		ug/L	5.00	0.00	111		3	20	
TOLUENE	5.34		ug/L	5.00	0.00	107		2	20	
TRANS-1,2-DICHLOROETHENE	5.51		ug/L	5.00	0.00	110		0.4	20	
TRANS-1,3-DICHLOROPROPENE	5.35		ug/L	5.00	0.00	107		0.8	20	
TRICHLOROETHENE	5.53		ug/L	5.00	0.00	111		0.9	20	
TRICHLOROFLUOROMETHANE	5.57		ug/L	5.00	0.00	111		0.9	20	
VINYL CHLORIDE	5.40		ug/L	5.00	0.00	108		2	20	
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.88*		ug/L	*5.00*		*98*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.18*		ug/L	*5.00*		*104*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.13*		ug/L	*5.00*		*103*	*70-130*			
Reference (BC20901-SRM1)						Prepared & Analyzed: 03/08/2022				
Batch BC20901 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	5.58		ug/L	5.00		112	80-120			
1,1,1-TRICHLOROETHANE	5.24		ug/L	5.00		105	80-120			
1,1,2,2-TETRACHLOROETHANE	5.26		ug/L	5.00		105	80-120			
1,1,2-TRICHLOROETHANE	5.40		ug/L	5.00		108	80-120			
1,1-DICHLOROETHANE	5.27		ug/L	5.00		105	80-120			
1,1-DICHLOROETHENE	4.73		ug/L	5.00		95	80-120			
1,1-DICHLOROPROPENE	5.10		ug/L	5.00		102	80-120			
1,2,3-TRICHLOROBENZENE	5.27		ug/L	5.00		105	80-120			
1,2,3-TRICHLOROPROPANE	4.91		ug/L	5.00		98	80-120			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/06/2022 10:48

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BC20901-SRM1)					Prepared & Analyzed: 03/08/2022					
Batch BC20901 - DEFAULT ORGANIC PREP										
1,2,4-TRICHLOROBENZENE	5.42		ug/L	5.00		108	80-120			
1,2,4-TRIMETHYLBENZENE	5.18		ug/L	5.00		104	80-120			
1,2-DIBROMO-3-CHLOROPROPANE	5.26		ug/L	5.00		105	72-115			
1,2-DICHLOROBENZENE	5.43		ug/L	5.00		109	80-120			
1,2-DICHLOROETHANE	5.24		ug/L	5.00		105	80-120			
1,2-DICHLOROPROPANE	5.16		ug/L	5.00		103	80-120			
1,3,5-TRIMETHYLBENZENE	5.25		ug/L	5.00		105	80-120			
1,3-DICHLOROBENZENE	5.11		ug/L	5.00		102	80-120			
1,3-DICHLOROPROPANE	5.12		ug/L	5.00		102	80-120			
1,4-DICHLOROBENZENE	5.26		ug/L	5.00		105	80-120			
2,2-DICHLOROPROPANE	5.91		ug/L	5.00		118	86-136			
2-CHLOROTOLUENE	5.17		ug/L	5.00		103	80-120			
4-CHLOROTOLUENE	5.45		ug/L	5.00		109	80-120			
4-ISOPROPYLTOLUENE	5.45		ug/L	5.00		109	80-120			
BENZENE	5.16		ug/L	5.00		103	80-120			
BROMOBENZENE	5.13		ug/L	5.00		103	80-120			
BROMOCHLOROMETHANE	4.85		ug/L	5.00		97	81-124			
BROMODICHLOROMETHANE	5.33		ug/L	5.00		107	80-120			
BROMOFORM	5.29		ug/L	5.00		106	74-118			
BROMOMETHANE	4.79		ug/L	5.00		96	66-136			
CARBON TETRACHLORIDE	5.33		ug/L	5.00		107	77-118			
CHLOROBENZENE	5.19		ug/L	5.00		104	80-120			
CHLOROETHANE	4.19		ug/L	5.00		84	80-120			
CHLOROFORM	5.12		ug/L	5.00		102	80-120			
CHLOROMETHANE	4.24		ug/L	5.00		85	69-115			
CIS-1,2-DICHLOROETHENE	5.25		ug/L	5.00		105	80-120			
CIS-1,3-DICHLOROPROPENE	5.66		ug/L	5.00		113	80-120			
DIBROMOCHLOROMETHANE	5.21		ug/L	5.00		104	80-120			
DIBROMOMETHANE	5.32		ug/L	5.00		106	80-120			
DICHLORODIFLUOROMETHANE	3.16		ug/L	5.00		63	59-125			
DICHLOROMETHANE	4.99		ug/L	5.00		100	80-120			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/06/2022 10:48

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BC20901-SRM1)					Prepared & Analyzed: 03/08/2022					
Batch BC20901 - DEFAULT ORGANIC PREP										
ETHYLBENZENE	5.26		ug/L	5.00		105	80-120			
ETHYLENE DIBROMIDE	5.31		ug/L	5.00		106	80-120			
HEXACHLOROBUTADIENE	5.55		ug/L	5.00		111	80-120			
ISOPROPYLBENZENE	5.21		ug/L	5.00		104	80-120			
M/P-XYLENES	9.97		ug/L	10.0		100	80-120			
METHYL-TERT-BUTYL ETHER	4.86		ug/L	5.00		97	80-120			
NAPHTHALENE	5.09		ug/L	5.00		102	75-119			
N-BUTYLBENZENE	5.11		ug/L	5.00		102	80-120			
N-PROPYLBENZENE	5.09		ug/L	5.00		102	80-120			
ORTHO-XYLENE	5.28		ug/L	5.00		106	80-120			
SEC-BUTYLBENZENE	5.43		ug/L	5.00		109	80-120			
STYRENE	5.18		ug/L	5.00		104	80-120			
TERT-BUTYLBENZENE	5.25		ug/L	5.00		105	80-120			
TETRACHLOROETHENE	5.35		ug/L	5.00		107	80-120			
TOLUENE	5.18		ug/L	5.00		104	80-120			
TRANS-1,2-DICHLOROETHENE	4.88		ug/L	5.00		98	80-120			
TRANS-1,3-DICHLOROPROPENE	5.95		ug/L	5.00		119	81-122			
TRICHLOROETHENE	5.29		ug/L	5.00		106	80-120			
TRICHLOROFLUOROMETHANE	4.95		ug/L	5.00		99	80-120			
VINYL CHLORIDE	4.32		ug/L	5.00		86	80-120			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.93*		ug/L	*5.00*		*99*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.08*		ug/L	*5.00*		*102*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.10*		ug/L	*5.00*		*102*	*70-130*			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/06/2022 10:48

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

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TUCSON WATER CHAIN OF CUSTODY

LOGIN ID: L220298

CLIENT: ES

PROJECT NAME/FREQUENCY:
LOS REALES Landfill
Monthly

PROJECT #: P01049

SAMPLING DATE:
2/28/2022

SAMPLED BY:
print full name
Chad Hanifen
signature
Chad S. Hanifen

SAMPLE #	TIME	LOCATION	SITE	NUMBER OF CONTAINERS	ICP	ICP	ICP	ICP	ICP	ICPMS	ICPMS	8260	COMMENTS
PRESERVATIVE					(HNO3)					(H2SO4)	(HNO3)	(HCl)	
-01	0859	LR GW INF	LRLF	4								X	TBs declined
-02	0902	LR GW EFF	LRLF	4								X	by ES for this
													project

PRESERVATIVE	(Na2S2O3)	(Unpreserved)	(HNO3)	(H2SO4)	(NaS2O3/H2SO4)	(Unpreserved)	(NaS2O3/H2SO4)	(H2SO4)	(HCl)	(Ascorbic Acid)	(Na2S2O3)	(Unpreserved)	(H2SO4)	(NaOH)	(NaOH/Zinc Acetate)
											EEA	EEA EEA EEA EEA EEA EEA EEA EEA EEA	EEA	EEA	EEA

COMMENTS: Sample on the fourth Monday of the month.

SPECIAL TURNAROUND TIME:

	SIGNATURE	DATE/TIME		SIGNATURE	DATE/TIME
RELINQUISHED BY:	Chad S. Hanifen	2/28/22 0953	RECEIVED BY:		02/28/22 0957
RELINQUISHED BY:			RECEIVED BY:		

RECEIVING TEMPERATURE= 3.3 °C

4401 S. Tucson Estates Parkway
Tucson, Arizona 85735
520.837.2469 Phone
520.791.5260 Fax

26 April 2022

Gira Patel

Environmental Services

-

Tucson, AZ 85726

RE: Los Reales Landfill

Enclosed are the results for Work Order L220450, received by the laboratory on 03/29/2022 09:24. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Frank Walker

Frank Walker

Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/26/2022 17:17

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Secondary ID/Location	Date Sampled	Date Received
L220450-01	LR GW INF	LRLF	03/29/2022 08:30	03/29/2022 09:24
L220450-02	LR GW EFF	LRLF	03/29/2022 08:34	03/29/2022 09:24

Tucson Water Quality Laboratory

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Frank Walker

Frank Walker, Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/26/2022 17:17

Case Narative / Items for Project Manager Review

All QC results were within QC limits.

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/26/2022 17:17

LR GW INF (LRLF)
L220450-01

Sampled: 03/29/2022 8:30

Tucson Water Quality Laboratory (AZ0038)

Volatile Organic Compounds by GC/MS

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/26/2022 17:17

LR GW INF (LRLF)
L220450-01

Sampled: 03/29/2022 8:30

Tucson Water Quality Laboratory (AZ0038)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CHLOROFORM	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
DICHLORODIFLUOROMETHANE	**0.00113**	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
NAPHTHALENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
TETRACHLOROETHENE	**0.00492**	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
TRICHLOROETHENE	**0.00212**	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
TRICHLOROFLUOROMETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
XYLENES (TOTAL)	ND	0.0015	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		*93 %*		*70-130*	*BD20511*	*03/30/2022*	*03/30/2022*	*EPA 8260B*	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		*97 %*		*70-130*	*BD20511*	*03/30/2022*	*03/30/2022*	*EPA 8260B*	
Surrogate: TOLUENE-D8 (SURR.)		*101 %*		*70-130*	*BD20511*	*03/30/2022*	*03/30/2022*	*EPA 8260B*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/26/2022 17:17

LR GW EFF (LRLF)
L220450-02

Sampled:
03/29/2022 8:34

Tucson Water Quality Laboratory (AZ0038)

Volatile Organic Compounds by GC/MS

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/26/2022 17:17

LR GW EFF (LRLF)
L220450-02

Sampled: 03/29/2022 8:34

Tucson Water Quality Laboratory (AZ0038)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CHLOROFORM	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
DICHLORODIFLUOROMETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
NAPHTHALENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
TETRACHLOROETHENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
TRICHLOROETHENE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
TRICHLOROFLUOROMETHANE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
XYLENES (TOTAL)	ND	0.0015	mg/L	1	BD20511	03/30/2022	03/30/2022	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		*93 %*		*70-130*	*BD20511*	*03/30/2022*	*03/30/2022*	*EPA 8260B*	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		*100 %*		*70-130*	*BD20511*	*03/30/2022*	*03/30/2022*	*EPA 8260B*	
Surrogate: TOLUENE-D8 (SURR.)		*102 %*		*70-130*	*BD20511*	*03/30/2022*	*03/30/2022*	*EPA 8260B*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/26/2022 17:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BD20511-BLK1)				Prepared & Analyzed: 03/30/2022						
Batch BD20511 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	ND	0.000500	mg/L							
1,1,1-TRICHLOROETHANE	ND	0.000500	mg/L							
1,1,2,2-TETRACHLOROETHANE	ND	0.000500	mg/L							
1,1,2-TRICHLOROETHANE	ND	0.000500	mg/L							
1,1-DICHLOROETHANE	ND	0.000500	mg/L							
1,1-DICHLOROETHENE	ND	0.000500	mg/L							
1,1-DICHLOROPROPENE	ND	0.000500	mg/L							
1,2,3-TRICHLOROBENZENE	ND	0.000500	mg/L							
1,2,3-TRICHLOROPROPANE	ND	0.000500	mg/L							
1,2,4-TRICHLOROBENZENE	ND	0.000500	mg/L							
1,2,4-TRIMETHYLBENZENE	ND	0.000500	mg/L							
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.000500	mg/L							
1,2-DICHLOROBENZENE	ND	0.000500	mg/L							
1,2-DICHLOROETHANE	ND	0.000500	mg/L							
1,2-DICHLOROPROPANE	ND	0.000500	mg/L							
1,3,5-TRIMETHYLBENZENE	ND	0.000500	mg/L							
1,3-DICHLOROBENZENE	ND	0.000500	mg/L							
1,3-DICHLOROPROPANE	ND	0.000500	mg/L							
1,4-DICHLOROBENZENE	ND	0.000500	mg/L							
2,2-DICHLOROPROPANE	ND	0.000500	mg/L							
2-CHLOROTOLUENE	ND	0.000500	mg/L							
4-CHLOROTOLUENE	ND	0.000500	mg/L							
4-ISOPROPYLTOLUENE	ND	0.000500	mg/L							
BENZENE	ND	0.000500	mg/L							
BROMOBENZENE	ND	0.000500	mg/L							
BROMOCHLOROMETHANE	ND	0.000500	mg/L							
BROMODICHLOROMETHANE	ND	0.000500	mg/L							
BROMOFORM	ND	0.000500	mg/L							
BROMOMETHANE	ND	0.000500	mg/L							
CARBON TETRACHLORIDE	ND	0.000500	mg/L							

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/26/2022 17:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BD20511-BLK1)				Prepared & Analyzed: 03/30/2022						
Batch BD20511 - DEFAULT ORGANIC PREP										
CHLOROBENZENE	ND	0.000500	mg/L							
CHLOROETHANE	ND	0.000500	mg/L							
CHLOROFORM	ND	0.000500	mg/L							
CHLOROMETHANE	ND	0.000500	mg/L							
CIS-1,2-DICHLOROETHENE	ND	0.000500	mg/L							
CIS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L							
DIBROMOCHLOROMETHANE	ND	0.000500	mg/L							
DIBROMOMETHANE	ND	0.000500	mg/L							
DICHLORODIFLUOROMETHANE	ND	0.000500	mg/L							
DICHLOROMETHANE	ND	0.000500	mg/L							
ETHYLBENZENE	ND	0.000500	mg/L							
ETHYLENE DIBROMIDE	ND	0.000500	mg/L							
HEXACHLOROBUTADIENE	ND	0.000500	mg/L							
ISOPROPYLBENZENE	ND	0.000500	mg/L							
M/P-XYLENES	ND	0.000500	mg/L							
METHYL-TERT-BUTYL ETHER	ND	0.000500	mg/L							
NAPHTHALENE	ND	0.000500	mg/L							
N-BUTYLBENZENE	ND	0.000500	mg/L							
N-PROPYLBENZENE	ND	0.000500	mg/L							
ORTHO-XYLENE	ND	0.000500	mg/L							
SEC-BUTYLBENZENE	ND	0.000500	mg/L							
STYRENE	ND	0.000500	mg/L							
TERT-BUTYLBENZENE	ND	0.000500	mg/L							
TETRACHLOROETHENE	ND	0.000500	mg/L							
TOLUENE	ND	0.000500	mg/L							
TRANS-1,2-DICHLOROETHENE	ND	0.000500	mg/L							
TRANS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L							
TRICHLOROETHENE	ND	0.000500	mg/L							
TRICHLOROFLUOROMETHANE	ND	0.000500	mg/L							
VINYL CHLORIDE	ND	0.000500	mg/L							

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/26/2022 17:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BD20511-BLK1)				Prepared & Analyzed: 03/30/2022						
Batch BD20511 - DEFAULT ORGANIC PREP										
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.45*		ug/L	*5.00*		*89*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.86*		ug/L	*5.00*		*97*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*4.94*		ug/L	*5.00*		*99*	*70-130*			
Matrix Spike (BD20511-MS1)			**Source: L220450-02**	Prepared & Analyzed: 03/30/2022						
Batch BD20511 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	5.39		ug/L	5.00	0.00	108	70-130			
1,1,1-TRICHLOROETHANE	5.16		ug/L	5.00	0.00	103	70-130			
1,1,2,2-TETRACHLOROETHANE	5.35		ug/L	5.00	0.00	107	70-130			
1,1,2-TRICHLOROETHANE	5.52		ug/L	5.00	0.00	110	70-130			
1,1-DICHLOROETHANE	5.54		ug/L	5.00	0.00	111	70-130			
1,1-DICHLOROETHENE	5.45		ug/L	5.00	0.00	109	70-130			
1,1-DICHLOROPROPENE	5.30		ug/L	5.00	0.00	106	70-130			
1,2,3-TRICHLOROBENZENE	4.90		ug/L	5.00	0.00	98	70-130			
1,2,3-TRICHLOROPROPANE	5.03		ug/L	5.00	0.00	101	70-130			
1,2,4-TRICHLOROBENZENE	5.16		ug/L	5.00	0.00	103	70-130			
1,2,4-TRIMETHYLBENZENE	5.06		ug/L	5.00	0.00	101	70-130			
1,2-DIBROMO-3-CHLOROPROPANE	4.97		ug/L	5.00	0.00	99	70-130			
1,2-DICHLOROBENZENE	5.36		ug/L	5.00	0.00	107	70-130			
1,2-DICHLOROETHANE	5.61		ug/L	5.00	0.00	112	70-130			
1,2-DICHLOROPROPANE	5.34		ug/L	5.00	0.00	107	70-130			
1,3,5-TRIMETHYLBENZENE	5.18		ug/L	5.00	0.00	104	70-130			
1,3-DICHLOROBENZENE	5.13		ug/L	5.00	0.00	103	70-130			
1,3-DICHLOROPROPANE	5.36		ug/L	5.00	0.00	107	70-130			
1,4-DICHLOROBENZENE	5.29		ug/L	5.00	0.00	106	70-130			
2,2-DICHLOROPROPANE	5.69		ug/L	5.00	0.00	114	70-130			
2-CHLOROTOLUENE	5.11		ug/L	5.00	0.00	102	70-130			
4-CHLOROTOLUENE	5.08		ug/L	5.00	0.00	102	70-130			
4-ISOPROPYLTOLUENE	5.40		ug/L	5.00	0.00	108	70-130			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/26/2022 17:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike (BD20511-MS1)		**Source: L220450-02**		Prepared & Analyzed: 03/30/2022						
Batch BD20511 - DEFAULT ORGANIC PREP										
BENZENE	5.36		ug/L	5.00	0.00	107	70-130			
BROMOBENZENE	5.06		ug/L	5.00	0.00	101	70-130			
BROMOCHLOROMETHANE	5.50		ug/L	5.00	0.00	110	70-130			
BROMODICHLOROMETHANE	5.10		ug/L	5.00	0.00	102	70-130			
BROMOFORM	4.65		ug/L	5.00	0.00	93	70-130			
BROMOMETHANE	5.75		ug/L	5.00	0.00	115	70-130			
CARBON TETRACHLORIDE	5.07		ug/L	5.00	0.00	101	70-130			
CHLOROBENZENE	5.18		ug/L	5.00	0.00	104	70-130			
CHLOROETHANE	4.92		ug/L	5.00	0.00	98	70-130			
CHLOROFORM	5.31		ug/L	5.00	0.00	106	70-130			
CHLOROMETHANE	5.24		ug/L	5.00	0.270	99	70-130			
CIS-1,2-DICHLOROETHENE	5.30		ug/L	5.00	0.00	106	70-130			
CIS-1,3-DICHLOROPROPENE	5.43		ug/L	5.00	0.00	109	70-130			
DIBROMOCHLOROMETHANE	5.04		ug/L	5.00	0.00	101	70-130			
DIBROMOMETHANE	5.18		ug/L	5.00	0.00	104	70-130			
DICHLORODIFLUOROMETHANE	4.80		ug/L	5.00	0.00	96	70-130			
DICHLOROMETHANE	5.48		ug/L	5.00	0.00	110	70-130			
ETHYLBENZENE	5.16		ug/L	5.00	0.00	103	70-130			
ETHYLENE DIBROMIDE	5.57		ug/L	5.00	0.00	111	70-130			
HEXACHLOROBUTADIENE	5.36		ug/L	5.00	0.00	107	70-130			
ISOPROPYLBENZENE	5.21		ug/L	5.00	0.00	104	70-130			
M/P-XYLENES	10.1		ug/L	10.0	0.00	101	70-130			
METHYL-TERT-BUTYL ETHER	4.88		ug/L	5.00	0.00	98	70-130			
NAPHTHALENE	4.93		ug/L	5.00	0.00	99	70-130			
N-BUTYLBENZENE	5.16		ug/L	5.00	0.00	103	70-130			
N-PROPYLBENZENE	5.15		ug/L	5.00	0.00	103	70-130			
ORTHO-XYLENE	5.22		ug/L	5.00	0.00	104	70-130			
SEC-BUTYLBENZENE	5.43		ug/L	5.00	0.00	109	70-130			
STYRENE	5.08		ug/L	5.00	0.00	102	70-130			
TERT-BUTYLBENZENE	5.03		ug/L	5.00	0.00	101	70-130			
TETRACHLOROETHENE	5.51		ug/L	5.00	0.00	110	70-130			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/26/2022 17:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike (BD20511-MS1)		**Source: L220450-02**			Prepared & Analyzed: 03/30/2022					
Batch BD20511 - DEFAULT ORGANIC PREP										
TOLUENE	5.26		ug/L	5.00	0.00	105	70-130			
TRANS-1,2-DICHLOROETHENE	5.44		ug/L	5.00	0.00	109	70-130			
TRANS-1,3-DICHLOROPROPENE	5.64		ug/L	5.00	0.00	113	70-130			
TRICHLOROETHENE	5.53		ug/L	5.00	0.00	111	70-130			
TRICHLOROFLUOROMETHANE	5.21		ug/L	5.00	0.00	104	70-130			
VINYL CHLORIDE	5.01		ug/L	5.00	0.00	100	70-130			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.92*		ug/L	*5.00*		*98*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.72*		ug/L	*5.00*		*94*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.02*		ug/L	*5.00*		*100*	*70-130*			
Matrix Spike Dup (BD20511-MSD1) (for RPD QC only)		**Source: L220450-02**			Prepared & Analyzed: 03/30/2022					
Batch BD20511 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	4.78		ug/L	5.00	0.00	96		12	20	
1,1,1-TRICHLOROETHANE	5.00		ug/L	5.00	0.00	100		3	20	
1,1,2,2-TETRACHLOROETHANE	5.18		ug/L	5.00	0.00	104		3	20	
1,1,2-TRICHLOROETHANE	5.42		ug/L	5.00	0.00	108		2	20	
1,1-DICHLOROETHANE	5.53		ug/L	5.00	0.00	111		0.3	20	
1,1-DICHLOROETHENE	5.43		ug/L	5.00	0.00	109		0.5	20	
1,1-DICHLOROPROPENE	5.28		ug/L	5.00	0.00	106		0.5	20	
1,2,3-TRICHLOROBENZENE	5.16		ug/L	5.00	0.00	103		5	20	
1,2,3-TRICHLOROPROPANE	4.89		ug/L	5.00	0.00	98		3	20	
1,2,4-TRICHLOROBENZENE	4.85		ug/L	5.00	0.00	97		6	20	
1,2,4-TRIMETHYLBENZENE	4.85		ug/L	5.00	0.00	97		4	20	
1,2-DIBROMO-3-CHLOROPROPANE	4.72		ug/L	5.00	0.00	94		5	20	
1,2-DICHLOROBENZENE	5.05		ug/L	5.00	0.00	101		6	20	
1,2-DICHLOROETHANE	5.37		ug/L	5.00	0.00	107		4	20	
1,2-DICHLOROPROPANE	5.38		ug/L	5.00	0.00	108		0.7	20	
1,3,5-TRIMETHYLBENZENE	4.85		ug/L	5.00	0.00	97		7	20	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/26/2022 17:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike Dup (BD20511-MSD1) (for RPD QC only)				**Source: L220450-02**		Prepared & Analyzed: 03/30/2022				
Batch BD20511 - DEFAULT ORGANIC PREP										
1,3-DICHLOROBENZENE	4.76		ug/L	5.00	0.00	95		8	20	
1,3-DICHLOROPROPANE	5.21		ug/L	5.00	0.00	104		3	20	
1,4-DICHLOROBENZENE	4.86		ug/L	5.00	0.00	97		8	20	
2,2-DICHLOROPROPANE	5.60		ug/L	5.00	0.00	112		2	20	
2-CHLOROTOLUENE	4.91		ug/L	5.00	0.00	98		4	20	
4-CHLOROTOLUENE	4.94		ug/L	5.00	0.00	99		3	20	
4-ISOPROPYLTOLUENE	5.24		ug/L	5.00	0.00	105		3	20	
BENZENE	5.26		ug/L	5.00	0.00	105		2	20	
BROMOBENZENE	4.70		ug/L	5.00	0.00	94		7	20	
BROMOCHLOROMETHANE	5.41		ug/L	5.00	0.00	108		2	20	
BROMODICHLOROMETHANE	5.08		ug/L	5.00	0.00	102		0.5	20	
BROMOFORM	4.52		ug/L	5.00	0.00	90		3	20	
BROMOMETHANE	5.05		ug/L	5.00	0.00	101		13	20	
CARBON TETRACHLORIDE	4.86		ug/L	5.00	0.00	97		4	20	
CHLOROBENZENE	4.98		ug/L	5.00	0.00	100		4	20	
CHLOROETHANE	4.80		ug/L	5.00	0.00	96		2	20	
CHLOROFORM	5.20		ug/L	5.00	0.00	104		2	20	
CHLOROMETHANE	4.80		ug/L	5.00	0.270	90		9	20	
CIS-1,2-DICHLOROETHENE	5.27		ug/L	5.00	0.00	105		0.6	20	
CIS-1,3-DICHLOROPROPENE	5.24		ug/L	5.00	0.00	105		3	20	
DIBROMOCHLOROMETHANE	4.68		ug/L	5.00	0.00	94		7	20	
DIBROMOMETHANE	5.34		ug/L	5.00	0.00	107		3	20	
DICHLORODIFLUOROMETHANE	4.61		ug/L	5.00	0.00	92		4	20	
DICHLOROMETHANE	5.13		ug/L	5.00	0.00	103		7	20	
ETHYLBENZENE	4.92		ug/L	5.00	0.00	98		5	20	
ETHYLENE DIBROMIDE	5.32		ug/L	5.00	0.00	106		4	20	
HEXACHLOROBUTADIENE	5.31		ug/L	5.00	0.00	106		0.8	20	
ISOPROPYLBENZENE	4.92		ug/L	5.00	0.00	98		6	20	
M/P-XYLENES	9.68		ug/L	10.0	0.00	97		5	20	
METHYL-TERT-BUTYL ETHER	4.75		ug/L	5.00	0.00	95		3	20	
NAPHTHALENE	4.89		ug/L	5.00	0.00	98		0.9	20	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/26/2022 17:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike Dup (BD20511-MSD1) (for RPD QC only)				**Source: L220450-02**		Prepared & Analyzed: 03/30/2022				
Batch BD20511 - DEFAULT ORGANIC PREP										
N-BUTYLBENZENE	5.08		ug/L	5.00	0.00	102		1	20	
N-PROPYLBENZENE	4.88		ug/L	5.00	0.00	98		5	20	
ORTHO-XYLENE	4.92		ug/L	5.00	0.00	98		6	20	
SEC-BUTYLBENZENE	5.24		ug/L	5.00	0.00	105		3	20	
STYRENE	4.81		ug/L	5.00	0.00	96		5	20	
TERT-BUTYLBENZENE	4.95		ug/L	5.00	0.00	99		2	20	
TETRACHLOROETHENE	5.31		ug/L	5.00	0.00	106		4	20	
TOLUENE	5.01		ug/L	5.00	0.00	100		5	20	
TRANS-1,2-DICHLOROETHENE	5.22		ug/L	5.00	0.00	104		4	20	
TRANS-1,3-DICHLOROPROPENE	5.19		ug/L	5.00	0.00	104		8	20	
TRICHLOROETHENE	5.42		ug/L	5.00	0.00	108		2	20	
TRICHLOROFLUOROMETHANE	4.95		ug/L	5.00	0.00	99		5	20	
VINYL CHLORIDE	4.89		ug/L	5.00	0.00	98		2	20	
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.79*		ug/L	*5.00*		*96*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.97*		ug/L	*5.00*		*99*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.01*		ug/L	*5.00*		*100*	*70-130*			
Reference (BD20511-SRM1)						Prepared & Analyzed: 03/30/2022				
Batch BD20511 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	5.14		ug/L	5.00		103	80-120			
1,1,1-TRICHLOROETHANE	4.64		ug/L	5.00		93	80-120			
1,1,2,2-TETRACHLOROETHANE	4.95		ug/L	5.00		99	80-120			
1,1,2-TRICHLOROETHANE	4.93		ug/L	5.00		99	80-120			
1,1-DICHLOROETHANE	5.04		ug/L	5.00		101	80-120			
1,1-DICHLOROETHENE	4.78		ug/L	5.00		96	80-120			
1,1-DICHLOROPROPENE	4.95		ug/L	5.00		99	80-120			
1,2,3-TRICHLOROBENZENE	4.66		ug/L	5.00		93	80-120			
1,2,3-TRICHLOROPROPANE	4.89		ug/L	5.00		98	80-120			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/26/2022 17:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BD20511-SRM1)					Prepared & Analyzed: 03/30/2022					
Batch BD20511 - DEFAULT ORGANIC PREP										
1,2,4-TRICHLOROBENZENE	4.96		ug/L	5.00		99	80-120			
1,2,4-TRIMETHYLBENZENE	4.65		ug/L	5.00		93	80-120			
1,2-DIBROMO-3-CHLOROPROPANE	4.91		ug/L	5.00		98	72-115			
1,2-DICHLOROBENZENE	4.83		ug/L	5.00		97	80-120			
1,2-DICHLOROETHANE	4.86		ug/L	5.00		97	80-120			
1,2-DICHLOROPROPANE	5.11		ug/L	5.00		102	80-120			
1,3,5-TRIMETHYLBENZENE	4.86		ug/L	5.00		97	80-120			
1,3-DICHLOROBENZENE	4.78		ug/L	5.00		96	80-120			
1,3-DICHLOROPROPANE	5.01		ug/L	5.00		100	80-120			
1,4-DICHLOROBENZENE	4.81		ug/L	5.00		96	80-120			
2,2-DICHLOROPROPANE	5.19		ug/L	5.00		104	86-136			
2-CHLOROTOLUENE	4.78		ug/L	5.00		96	80-120			
4-CHLOROTOLUENE	4.66		ug/L	5.00		93	80-120			
4-ISOPROPYLTOLUENE	5.00		ug/L	5.00		100	80-120			
BENZENE	4.93		ug/L	5.00		99	80-120			
BROMOBENZENE	4.70		ug/L	5.00		94	80-120			
BROMOCHLOROMETHANE	4.73		ug/L	5.00		95	81-124			
BROMODICHLOROMETHANE	4.82		ug/L	5.00		96	80-120			
BROMOFORM	4.83		ug/L	5.00		97	74-118			
BROMOMETHANE	4.83		ug/L	5.00		97	66-136			
CARBON TETRACHLORIDE	4.62		ug/L	5.00		92	77-118			
CHLOROBENZENE	4.76		ug/L	5.00		95	80-120			
CHLOROETHANE	4.36		ug/L	5.00		87	80-120			
CHLOROFORM	4.91		ug/L	5.00		98	80-120			
CHLOROMETHANE	4.58		ug/L	5.00		92	69-115			
CIS-1,2-DICHLOROETHENE	4.83		ug/L	5.00		97	80-120			
CIS-1,3-DICHLOROPROPENE	4.99		ug/L	5.00		100	80-120			
DIBROMOCHLOROMETHANE	4.46		ug/L	5.00		89	80-120			
DIBROMOMETHANE	4.77		ug/L	5.00		95	80-120			
DICHLORODIFLUOROMETHANE	4.34		ug/L	5.00		87	59-125			
DICHLOROMETHANE	4.94		ug/L	5.00		99	80-120			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/26/2022 17:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BD20511-SRM1)					Prepared & Analyzed: 03/30/2022					
Batch BD20511 - DEFAULT ORGANIC PREP										
ETHYLBENZENE	4.77		ug/L	5.00		95	80-120			
ETHYLENE DIBROMIDE	5.05		ug/L	5.00		101	80-120			
HEXACHLOROBUTADIENE	5.10		ug/L	5.00		102	80-120			
ISOPROPYLBENZENE	4.81		ug/L	5.00		96	80-120			
M/P-XYLENES	9.33		ug/L	10.0		93	80-120			
METHYL-TERT-BUTYL ETHER	4.33		ug/L	5.00		87	80-120			
NAPHTHALENE	4.63		ug/L	5.00		93	75-119			
N-BUTYLBENZENE	4.79		ug/L	5.00		96	80-120			
N-PROPYLBENZENE	4.70		ug/L	5.00		94	80-120			
ORTHO-XYLENE	4.96		ug/L	5.00		99	80-120			
SEC-BUTYLBENZENE	5.00		ug/L	5.00		100	80-120			
STYRENE	4.78		ug/L	5.00		96	80-120			
TERT-BUTYLBENZENE	4.88		ug/L	5.00		98	80-120			
TETRACHLOROETHENE	5.08		ug/L	5.00		102	80-120			
TOLUENE	4.88		ug/L	5.00		98	80-120			
TRANS-1,2-DICHLOROETHENE	4.88		ug/L	5.00		98	80-120			
TRANS-1,3-DICHLOROPROPENE	5.23		ug/L	5.00		105	81-122			
TRICHLOROETHENE	4.94		ug/L	5.00		99	80-120			
TRICHLOROFLUOROMETHANE	4.51		ug/L	5.00		90	80-120			
VINYL CHLORIDE	4.55		ug/L	5.00		91	80-120			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.84*		ug/L	*5.00*		*97*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.92*		ug/L	*5.00*		*98*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.04*		ug/L	*5.00*		*101*	*70-130*			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	04/26/2022 17:17

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

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TUCSON WATER CHAIN OF CUSTODY

LOGIN ID: L220450

CLIENT: ES

PROJECT NAME/FREQUENCY:
LOS REALES Landfill
Monthly

PROJECT #: P01049

SAMPLING DATE:
3/29/2022

SAMPLED BY:
print full name
Chad Hancock

signature
Chad Hancock

SAMPLE #	TIME	LOCATION	SITE	NUMBER OF CONTAINERS	PRESERVATIVE	(Na2S2O3)		(Unpreserved)		(HNO3)						(H2SO4)	(NaS2O3/H2SO4)	(Unpreserved)	(NaS2O3/H2SO4)	(H2SO4)	(HCl)	(Ascorbic Acid)	(Na2S2O3)			(Unpreserved)							(H2SO4)	(NaOH)	(NaOH/Zinc Acetate)	COMMENTS
																					8260															
										ICP	ICP	ICP	ICP	ICP	ICPMS	ICPMS																				
-01	0830	LR GW INF	LRLF	4																	X														TBs declined
-02	0834	LR GW EFF	LRLF	4																	X														by ES for this
																																			project

COMMENTS: Sample on the fourth Monday of the month.

SPECIAL TURNAROUND TIME:

	SIGNATURE	DATE/TIME		SIGNATURE	DATE/TIME
RELINQUISHED BY:	Chad S. Hancock	3/29/22 9:19	RECEIVED BY:	Kimb C Hancock	3-29-22 0924
RELINQUISHED BY:			RECEIVED BY:		

RECEIVING TEMPERATURE= 2.8 °C

4401 S. Tucson Estates Parkway
Tucson, Arizona 85735
520.837.2469 Phone
520.791.5260 Fax

01 June 2022

Gira Patel

Environmental Services

-

Tucson, AZ 85726

RE: Los Reales Landfill Monthly

Enclosed are the results for Work Order L220596, received by the laboratory on 04/25/2022 11:51. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Frank Walker

Frank Walker
Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	06/01/2022 10:47

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Secondary ID/Location	Date Sampled	Date Received
L220596-01	LR GW INF	Spigot / LRLF	04/25/2022 10:55	04/25/2022 11:51
L220596-02	LR GW EFF	Spigot / LRLF	04/25/2022 10:59	04/25/2022 11:51

Tucson Water Quality Laboratory

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Frank Walker

Frank Walker, Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	06/01/2022 10:47

Case Narative / Items for Project Manager Review

All QC results were within QC limits.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	06/01/2022 10:47

LR GW INF (Spigot / LRLF)
L220596-01

Sampled: 04/25/2022 10:55

Tucson Water Quality Laboratory (AZ0038)

Volatile Organic Compounds by GC/MS

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	06/01/2022 10:47

LR GW INF (Spigot / LRLF)
L220596-01

Sampled: 04/25/2022 10:55

Tucson Water Quality Laboratory (AZ0038)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CHLOROFORM	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
DICHLORODIFLUOROMETHANE	**0.00106**	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
NAPHTHALENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
TETRACHLOROETHENE	**0.00472**	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
TRICHLOROETHENE	**0.00224**	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
TRICHLOROFLUOROMETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
XYLENES (TOTAL)	ND	0.0015	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		*90 %*	*70-130*		*BD22708*	*04/26/2022*	*04/26/2022*	*EPA 8260B*	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		*100 %*	*70-130*		*BD22708*	*04/26/2022*	*04/26/2022*	*EPA 8260B*	
Surrogate: TOLUENE-D8 (SURR.)		*100 %*	*70-130*		*BD22708*	*04/26/2022*	*04/26/2022*	*EPA 8260B*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	06/01/2022 10:47

LR GW EFF (Spigot / LRLF)
L220596-02

Sampled:
04/25/2022 10:59

Tucson Water Quality Laboratory (AZ0038)

Volatile Organic Compounds by GC/MS

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	06/01/2022 10:47

LR GW EFF (Spigot / LRLF)
L220596-02

Sampled: 04/25/2022 10:59

Tucson Water Quality Laboratory (AZ0038)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CHLOROFORM	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
DICHLORODIFLUOROMETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
NAPHTHALENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
TETRACHLOROETHENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
TRICHLOROETHENE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
TRICHLOROFLUOROMETHANE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
XYLENES (TOTAL)	ND	0.0015	mg/L	1	BD22708	04/26/2022	04/26/2022	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		*92 %*		*70-130*	*BD22708*	*04/26/2022*	*04/26/2022*	*EPA 8260B*	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		*102 %*		*70-130*	*BD22708*	*04/26/2022*	*04/26/2022*	*EPA 8260B*	
Surrogate: TOLUENE-D8 (SURR.)		*101 %*		*70-130*	*BD22708*	*04/26/2022*	*04/26/2022*	*EPA 8260B*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	06/01/2022 10:47

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BD22708-BLK1)				Prepared & Analyzed: 04/26/2022						
Batch BD22708 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	ND	0.000500	mg/L							
1,1,1-TRICHLOROETHANE	ND	0.000500	mg/L							
1,1,2,2-TETRACHLOROETHANE	ND	0.000500	mg/L							
1,1,2-TRICHLOROETHANE	ND	0.000500	mg/L							
1,1-DICHLOROETHANE	ND	0.000500	mg/L							
1,1-DICHLOROETHENE	ND	0.000500	mg/L							
1,1-DICHLOROPROPENE	ND	0.000500	mg/L							
1,2,3-TRICHLOROBENZENE	ND	0.000500	mg/L							
1,2,3-TRICHLOROPROPANE	ND	0.000500	mg/L							
1,2,4-TRICHLOROBENZENE	ND	0.000500	mg/L							
1,2,4-TRIMETHYLBENZENE	ND	0.000500	mg/L							
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.000500	mg/L							
1,2-DICHLOROBENZENE	ND	0.000500	mg/L							
1,2-DICHLOROETHANE	ND	0.000500	mg/L							
1,2-DICHLOROPROPANE	ND	0.000500	mg/L							
1,3,5-TRIMETHYLBENZENE	ND	0.000500	mg/L							
1,3-DICHLOROBENZENE	ND	0.000500	mg/L							
1,3-DICHLOROPROPANE	ND	0.000500	mg/L							
1,4-DICHLOROBENZENE	ND	0.000500	mg/L							
2,2-DICHLOROPROPANE	ND	0.000500	mg/L							
2-CHLOROTOLUENE	ND	0.000500	mg/L							
4-CHLOROTOLUENE	ND	0.000500	mg/L							
4-ISOPROPYLTOLUENE	ND	0.000500	mg/L							
BENZENE	ND	0.000500	mg/L							
BROMOBENZENE	ND	0.000500	mg/L							
BROMOCHLOROMETHANE	ND	0.000500	mg/L							
BROMODICHLOROMETHANE	ND	0.000500	mg/L							
BROMOFORM	ND	0.000500	mg/L							
BROMOMETHANE	ND	0.000500	mg/L							
CARBON TETRACHLORIDE	ND	0.000500	mg/L							

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	06/01/2022 10:47

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BD22708-BLK1)				Prepared & Analyzed: 04/26/2022						
Batch BD22708 - DEFAULT ORGANIC PREP										
CHLOROBENZENE	ND	0.000500	mg/L							
CHLOROETHANE	ND	0.000500	mg/L							
CHLOROFORM	ND	0.000500	mg/L							
CHLOROMETHANE	ND	0.000500	mg/L							
CIS-1,2-DICHLOROETHENE	ND	0.000500	mg/L							
CIS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L							
DIBROMOCHLOROMETHANE	ND	0.000500	mg/L							
DIBROMOMETHANE	ND	0.000500	mg/L							
DICHLORODIFLUOROMETHANE	ND	0.000500	mg/L							
DICHLOROMETHANE	ND	0.000500	mg/L							
ETHYLBENZENE	ND	0.000500	mg/L							
ETHYLENE DIBROMIDE	ND	0.000500	mg/L							
HEXACHLOROBUTADIENE	ND	0.000500	mg/L							
ISOPROPYLBENZENE	ND	0.000500	mg/L							
M/P-XYLENES	ND	0.000500	mg/L							
METHYL-TERT-BUTYL ETHER	ND	0.000500	mg/L							
NAPHTHALENE	ND	0.000500	mg/L							
N-BUTYLBENZENE	ND	0.000500	mg/L							
N-PROPYLBENZENE	ND	0.000500	mg/L							
ORTHO-XYLENE	ND	0.000500	mg/L							
SEC-BUTYLBENZENE	ND	0.000500	mg/L							
STYRENE	ND	0.000500	mg/L							
TERT-BUTYLBENZENE	ND	0.000500	mg/L							
TETRACHLOROETHENE	ND	0.000500	mg/L							
TOLUENE	ND	0.000500	mg/L							
TRANS-1,2-DICHLOROETHENE	ND	0.000500	mg/L							
TRANS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L							
TRICHLOROETHENE	ND	0.000500	mg/L							
TRICHLOROFLUOROMETHANE	ND	0.000500	mg/L							
VINYL CHLORIDE	ND	0.000500	mg/L							

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	06/01/2022 10:47

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BD22708-BLK1)					Prepared & Analyzed: 04/26/2022					
Batch BD22708 - DEFAULT ORGANIC PREP										
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.56*		ug/L	*5.00*		*91*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.88*		ug/L	*5.00*		*98*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*4.85*		ug/L	*5.00*		*97*	*70-130*			
Matrix Spike (BD22708-MS1)			**Source: L220596-02**		Prepared & Analyzed: 04/26/2022					
Batch BD22708 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	5.16		ug/L	5.00	0.00	103	70-130			
1,1,1-TRICHLOROETHANE	4.85		ug/L	5.00	0.00	97	70-130			
1,1,2,2-TETRACHLOROETHANE	5.74		ug/L	5.00	0.00	115	70-130			
1,1,2-TRICHLOROETHANE	5.35		ug/L	5.00	0.00	107	70-130			
1,1-DICHLOROETHANE	5.36		ug/L	5.00	0.00	107	70-130			
1,1-DICHLOROETHENE	5.44		ug/L	5.00	0.00	109	70-130			
1,1-DICHLOROPROPENE	4.96		ug/L	5.00	0.00	99	70-130			
1,2,3-TRICHLOROBENZENE	5.93		ug/L	5.00	0.00	119	70-130			
1,2,3-TRICHLOROPROPANE	5.62		ug/L	5.00	0.00	112	70-130			
1,2,4-TRICHLOROBENZENE	5.77		ug/L	5.00	0.00	115	70-130			
1,2,4-TRIMETHYLBENZENE	5.26		ug/L	5.00	0.00	105	70-130			
1,2-DIBROMO-3-CHLOROPROPANE	5.13		ug/L	5.00	0.00	103	70-130			
1,2-DICHLOROBENZENE	5.79		ug/L	5.00	0.00	116	70-130			
1,2-DICHLOROETHANE	5.38		ug/L	5.00	0.00	108	70-130			
1,2-DICHLOROPROPANE	5.69		ug/L	5.00	0.00	114	70-130			
1,3,5-TRIMETHYLBENZENE	5.32		ug/L	5.00	0.00	106	70-130			
1,3-DICHLOROBENZENE	5.39		ug/L	5.00	0.00	108	70-130			
1,3-DICHLOROPROPANE	5.61		ug/L	5.00	0.00	112	70-130			
1,4-DICHLOROBENZENE	5.87		ug/L	5.00	0.00	117	70-130			
2,2-DICHLOROPROPANE	4.96		ug/L	5.00	0.00	99	70-130			
2-CHLOROTOLUENE	5.55		ug/L	5.00	0.00	111	70-130			
4-CHLOROTOLUENE	5.46		ug/L	5.00	0.00	109	70-130			
4-ISOPROPYLTOLUENE	5.86		ug/L	5.00	0.00	117	70-130			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	06/01/2022 10:47

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike (BD22708-MS1)		**Source: L220596-02**			Prepared & Analyzed: 04/26/2022					
Batch BD22708 - DEFAULT ORGANIC PREP										
BENZENE	5.37		ug/L	5.00	0.00	107	70-130			
BROMOBENZENE	5.33		ug/L	5.00	0.00	107	70-130			
BROMOCHLOROMETHANE	5.80		ug/L	5.00	0.00	116	70-130			
BROMODICHLOROMETHANE	5.12		ug/L	5.00	0.00	102	70-130			
BROMOFORM	4.89		ug/L	5.00	0.00	98	70-130			
BROMOMETHANE	5.18		ug/L	5.00	0.00	104	70-130			
CARBON TETRACHLORIDE	4.75		ug/L	5.00	0.00	95	70-130			
CHLOROBENZENE	5.61		ug/L	5.00	0.00	112	70-130			
CHLOROETHANE	5.69		ug/L	5.00	0.00	114	70-130			
CHLOROFORM	5.24		ug/L	5.00	0.00	105	70-130			
CHLOROMETHANE	5.72		ug/L	5.00	0.00	114	70-130			
CIS-1,2-DICHLOROETHENE	5.16		ug/L	5.00	0.00	103	70-130			
CIS-1,3-DICHLOROPROPENE	5.03		ug/L	5.00	0.00	101	70-130			
DIBROMOCHLOROMETHANE	4.83		ug/L	5.00	0.00	97	70-130			
DIBROMOMETHANE	5.30		ug/L	5.00	0.00	106	70-130			
DICHLORODIFLUOROMETHANE	5.04		ug/L	5.00	0.00	101	70-130			
DICHLOROMETHANE	5.78		ug/L	5.00	0.00	116	70-130			
ETHYLBENZENE	5.39		ug/L	5.00	0.00	108	70-130			
ETHYLENE DIBROMIDE	5.38		ug/L	5.00	0.00	108	70-130			
HEXACHLOROBUTADIENE	6.07		ug/L	5.00	0.00	121	70-130			
ISOPROPYLBENZENE	5.36		ug/L	5.00	0.00	107	70-130			
M/P-XYLENES	10.2		ug/L	10.0	0.00	102	70-130			
METHYL-TERT-BUTYL ETHER	5.03		ug/L	5.00	0.00	101	70-130			
NAPHTHALENE	5.50		ug/L	5.00	0.00	110	70-130			
N-BUTYLBENZENE	6.28		ug/L	5.00	0.00	126	70-130			
N-PROPYLBENZENE	5.40		ug/L	5.00	0.00	108	70-130			
ORTHO-XYLENE	5.38		ug/L	5.00	0.00	108	70-130			
SEC-BUTYLBENZENE	5.61		ug/L	5.00	0.00	112	70-130			
STYRENE	5.22		ug/L	5.00	0.00	104	70-130			
TERT-BUTYLBENZENE	5.20		ug/L	5.00	0.00	104	70-130			
TETRACHLOROETHENE	5.34		ug/L	5.00	0.00	107	70-130			

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Tucson Water Quality Lab
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Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	06/01/2022 10:47

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike (BD22708-MS1)		**Source: L220596-02**			Prepared & Analyzed: 04/26/2022					
Batch BD22708 - DEFAULT ORGANIC PREP										
TOLUENE	5.33		ug/L	5.00	0.00	107	70-130			
TRANS-1,2-DICHLOROETHENE	5.42		ug/L	5.00	0.00	108	70-130			
TRANS-1,3-DICHLOROPROPENE	4.77		ug/L	5.00	0.00	95	70-130			
TRICHLOROETHENE	5.61		ug/L	5.00	0.00	112	70-130			
TRICHLOROFLUOROMETHANE	5.41		ug/L	5.00	0.00	108	70-130			
VINYL CHLORIDE	5.68		ug/L	5.00	0.00	114	70-130			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.65*		ug/L	*5.00*		*93*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.97*		ug/L	*5.00*		*99*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.03*		ug/L	*5.00*		*101*	*70-130*			
Matrix Spike Dup (BD22708-MSD1) (for RPD QC only)		**Source: L220596-02**			Prepared & Analyzed: 04/26/2022					
Batch BD22708 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	4.99		ug/L	5.00	0.00	100		3	20	
1,1,1-TRICHLOROETHANE	4.87		ug/L	5.00	0.00	97		0.4	20	
1,1,2,2-TETRACHLOROETHANE	5.51		ug/L	5.00	0.00	110		4	20	
1,1,2-TRICHLOROETHANE	5.13		ug/L	5.00	0.00	103		4	20	
1,1-DICHLOROETHANE	5.54		ug/L	5.00	0.00	111		3	20	
1,1-DICHLOROETHENE	5.64		ug/L	5.00	0.00	113		4	20	
1,1-DICHLOROPROPENE	5.38		ug/L	5.00	0.00	108		8	20	
1,2,3-TRICHLOROBENZENE	5.47		ug/L	5.00	0.00	109		8	20	
1,2,3-TRICHLOROPROPANE	5.15		ug/L	5.00	0.00	103		9	20	
1,2,4-TRICHLOROBENZENE	5.15		ug/L	5.00	0.00	103		11	20	
1,2,4-TRIMETHYLBENZENE	5.22		ug/L	5.00	0.00	104		0.8	20	
1,2-DIBROMO-3-CHLOROPROPANE	4.25		ug/L	5.00	0.00	85		19	20	
1,2-DICHLOROBENZENE	5.36		ug/L	5.00	0.00	107		8	20	
1,2-DICHLOROETHANE	5.61		ug/L	5.00	0.00	112		4	20	
1,2-DICHLOROPROPANE	5.50		ug/L	5.00	0.00	110		3	20	
1,3,5-TRIMETHYLBENZENE	5.16		ug/L	5.00	0.00	103		3	20	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	06/01/2022 10:47

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike Dup (BD22708-MSD1) (for RPD QC only)				**Source: L220596-02**		Prepared & Analyzed: 04/26/2022				
Batch BD22708 - DEFAULT ORGANIC PREP										
1,3-DICHLOROBENZENE	5.34		ug/L	5.00	0.00	107		1	20	
1,3-DICHLOROPROPANE	5.43		ug/L	5.00	0.00	109		3	20	
1,4-DICHLOROBENZENE	5.24		ug/L	5.00	0.00	105		11	20	
2,2-DICHLOROPROPANE	5.35		ug/L	5.00	0.00	107		7	20	
2-CHLOROTOLUENE	5.11		ug/L	5.00	0.00	102		8	20	
4-CHLOROTOLUENE	5.28		ug/L	5.00	0.00	106		3	20	
4-ISOPROPYLTOLUENE	5.17		ug/L	5.00	0.00	103		13	20	
BENZENE	5.46		ug/L	5.00	0.00	109		2	20	
BROMOBENZENE	5.01		ug/L	5.00	0.00	100		6	20	
BROMOCHLOROMETHANE	5.75		ug/L	5.00	0.00	115		0.8	20	
BROMODICHLOROMETHANE	5.18		ug/L	5.00	0.00	104		1	20	
BROMOFORM	4.87		ug/L	5.00	0.00	97		0.5	20	
BROMOMETHANE	5.16		ug/L	5.00	0.00	103		0.5	20	
CARBON TETRACHLORIDE	4.84		ug/L	5.00	0.00	97		2	20	
CHLOROBENZENE	5.38		ug/L	5.00	0.00	108		4	20	
CHLOROETHANE	5.60		ug/L	5.00	0.00	112		1	20	
CHLOROFORM	5.32		ug/L	5.00	0.00	106		2	20	
CHLOROMETHANE	5.83		ug/L	5.00	0.00	117		2	20	
CIS-1,2-DICHLOROETHENE	5.30		ug/L	5.00	0.00	106		3	20	
CIS-1,3-DICHLOROPROPENE	4.68		ug/L	5.00	0.00	94		7	20	
DIBROMOCHLOROMETHANE	4.66		ug/L	5.00	0.00	93		4	20	
DIBROMOMETHANE	5.19		ug/L	5.00	0.00	104		2	20	
DICHLORODIFLUOROMETHANE	5.26		ug/L	5.00	0.00	105		4	20	
DICHLOROMETHANE	5.88		ug/L	5.00	0.00	118		2	20	
ETHYLBENZENE	5.35		ug/L	5.00	0.00	107		0.7	20	
ETHYLENE DIBROMIDE	5.11		ug/L	5.00	0.00	102		5	20	
HEXACHLOROBUTADIENE	5.36		ug/L	5.00	0.00	107		12	20	
ISOPROPYLBENZENE	5.36		ug/L	5.00	0.00	107		0.02	20	
M/P-XYLENES	9.92		ug/L	10.0	0.00	99		3	20	
METHYL-TERT-BUTYL ETHER	5.01		ug/L	5.00	0.00	100		0.5	20	
NAPHTHALENE	5.09		ug/L	5.00	0.00	102		8	20	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	06/01/2022 10:47

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike Dup (BD22708-MSD1) (for RPD QC only)				**Source: L220596-02**		Prepared & Analyzed: 04/26/2022				
Batch BD22708 - DEFAULT ORGANIC PREP										
N-BUTYLBENZENE	5.60		ug/L	5.00	0.00	112		11	20	
N-PROPYLBENZENE	5.30		ug/L	5.00	0.00	106		2	20	
ORTHO-XYLENE	5.31		ug/L	5.00	0.00	106		1	20	
SEC-BUTYLBENZENE	5.50		ug/L	5.00	0.00	110		2	20	
STYRENE	5.15		ug/L	5.00	0.00	103		1	20	
TERT-BUTYLBENZENE	5.05		ug/L	5.00	0.00	101		3	20	
TETRACHLOROETHENE	4.86		ug/L	5.00	0.00	97		9	20	
TOLUENE	5.10		ug/L	5.00	0.00	102		4	20	
TRANS-1,2-DICHLOROETHENE	5.43		ug/L	5.00	0.00	109		0.1	20	
TRANS-1,3-DICHLOROPROPENE	4.60		ug/L	5.00	0.00	92		4	20	
TRICHLOROETHENE	5.39		ug/L	5.00	0.00	108		4	20	
TRICHLOROFLUOROMETHANE	5.45		ug/L	5.00	0.00	109		0.8	20	
VINYL CHLORIDE	5.81		ug/L	5.00	0.00	116		2	20	
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.78*		ug/L	*5.00*		*96*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.12*		ug/L	*5.00*		*102*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.03*		ug/L	*5.00*		*101*	*70-130*			
Reference (BD22708-SRM1)						Prepared & Analyzed: 04/26/2022				
Batch BD22708 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	5.10		ug/L	5.00		102	80-120			
1,1,1-TRICHLOROETHANE	4.65		ug/L	5.00		93	80-120			
1,1,2,2-TETRACHLOROETHANE	5.26		ug/L	5.00		105	80-120			
1,1,2-TRICHLOROETHANE	5.24		ug/L	5.00		105	80-120			
1,1-DICHLOROETHANE	5.18		ug/L	5.00		104	80-120			
1,1-DICHLOROETHENE	5.26		ug/L	5.00		105	80-120			
1,1-DICHLOROPROPENE	5.05		ug/L	5.00		101	80-120			
1,2,3-TRICHLOROBENZENE	5.24		ug/L	5.00		105	80-120			
1,2,3-TRICHLOROPROPANE	4.89		ug/L	5.00		98	80-120			

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Tucson Water Quality Lab
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Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	06/01/2022 10:47

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BD22708-SRM1)					Prepared & Analyzed: 04/26/2022					
Batch BD22708 - DEFAULT ORGANIC PREP										
1,2,4-TRICHLOROBENZENE	5.41		ug/L	5.00		108	80-120			
1,2,4-TRIMETHYLBENZENE	5.02		ug/L	5.00		100	80-120			
1,2-DIBROMO-3-CHLOROPROPANE	4.46		ug/L	5.00		89	72-115			
1,2-DICHLOROBENZENE	5.38		ug/L	5.00		108	80-120			
1,2-DICHLOROETHANE	5.13		ug/L	5.00		103	80-120			
1,2-DICHLOROPROPANE	5.43		ug/L	5.00		109	80-120			
1,3,5-TRIMETHYLBENZENE	5.10		ug/L	5.00		102	80-120			
1,3-DICHLOROBENZENE	5.01		ug/L	5.00		100	80-120			
1,3-DICHLOROPROPANE	5.28		ug/L	5.00		106	80-120			
1,4-DICHLOROBENZENE	5.40		ug/L	5.00		108	80-120			
2,2-DICHLOROPROPANE	4.71		ug/L	5.00		94	86-136			
2-CHLOROTOLUENE	5.16		ug/L	5.00		103	80-120			
4-CHLOROTOLUENE	5.01		ug/L	5.00		100	80-120			
4-ISOPROPYLTOLUENE	5.27		ug/L	5.00		105	80-120			
BENZENE	4.94		ug/L	5.00		99	80-120			
BROMOBENZENE	4.90		ug/L	5.00		98	80-120			
BROMOCHLOROMETHANE	5.21		ug/L	5.00		104	81-124			
BROMODICHLOROMETHANE	5.14		ug/L	5.00		103	80-120			
BROMOFORM	4.67		ug/L	5.00		93	74-118			
BROMOMETHANE	5.03		ug/L	5.00		101	66-136			
CARBON TETRACHLORIDE	4.55		ug/L	5.00		91	77-118			
CHLOROBENZENE	5.14		ug/L	5.00		103	80-120			
CHLOROETHANE	5.32		ug/L	5.00		106	80-120			
CHLOROFORM	4.87		ug/L	5.00		97	80-120			
CHLOROMETHANE	5.47		ug/L	5.00		109	69-115			
CIS-1,2-DICHLOROETHENE	4.73		ug/L	5.00		95	80-120			
CIS-1,3-DICHLOROPROPENE	4.73		ug/L	5.00		95	80-120			
DIBROMOCHLOROMETHANE	4.63		ug/L	5.00		93	80-120			
DIBROMOMETHANE	5.01		ug/L	5.00		100	80-120			
DICHLORODIFLUOROMETHANE	4.79		ug/L	5.00		96	59-125			
DICHLOROMETHANE	5.63		ug/L	5.00		113	80-120			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	06/01/2022 10:47

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BD22708-SRM1)				Prepared & Analyzed: 04/26/2022						
Batch BD22708 - DEFAULT ORGANIC PREP										
ETHYLBENZENE	4.98		ug/L	5.00		100	80-120			
ETHYLENE DIBROMIDE	5.03		ug/L	5.00		101	80-120			
HEXACHLOROBUTADIENE	5.54		ug/L	5.00		111	80-120			
ISOPROPYLBENZENE	5.01		ug/L	5.00		100	80-120			
M/P-XYLENES	9.63		ug/L	10.0		96	80-120			
METHYL-TERT-BUTYL ETHER	4.70		ug/L	5.00		94	80-120			
NAPHTHALENE	5.05		ug/L	5.00		101	75-119			
N-BUTYLBENZENE	5.69		ug/L	5.00		114	80-120			
N-PROPYLBENZENE	5.06		ug/L	5.00		101	80-120			
ORTHO-XYLENE	5.02		ug/L	5.00		100	80-120			
SEC-BUTYLBENZENE	5.15		ug/L	5.00		103	80-120			
STYRENE	5.04		ug/L	5.00		101	80-120			
TERT-BUTYLBENZENE	4.76		ug/L	5.00		95	80-120			
TETRACHLOROETHENE	4.91		ug/L	5.00		98	80-120			
TOLUENE	5.06		ug/L	5.00		101	80-120			
TRANS-1,2-DICHLOROETHENE	5.23		ug/L	5.00		105	80-120			
TRANS-1,3-DICHLOROPROPENE	4.61		ug/L	5.00		92	81-122			
TRICHLOROETHENE	5.13		ug/L	5.00		103	80-120			
TRICHLOROFLUOROMETHANE	4.94		ug/L	5.00		99	80-120			
VINYL CHLORIDE	5.24		ug/L	5.00		105	80-120			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.83*		ug/L	*5.00*		*97*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.07*		ug/L	*5.00*		*101*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.05*		ug/L	*5.00*		*101*	*70-130*			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	06/01/2022 10:47

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

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TUCSON WATER CHAIN OF CUSTODY

LOGIN ID: L220596

CLIENT: ES

PROJECT NAME/FREQUENCY:
LOS REALES Landfill
Monthly

PROJECT #: P01049

SAMPLING DATE:
4/25/2022

SAMPLED BY:
print full name
Chad Hancock

signature
Chad Hancock

SAMPLE #	TIME	LOCATION	SITE	NUMBER OF CONTAINERS	ICP	ICP	ICP	ICP	ICP	ICPMS	ICPMS	8260	COMMENTS
PRESERVATIVE													
-01	1055	LR GW INF	LRLF	4								X	TBs declined
-02	1059	LR GW EFF	LRLF	4								X	by ES for this
													project

PRESERVATIVE: (Na2S2O3) | (Unpreserved) | (HNO3) | (H2SO4) | (NaS2O3/H2SO4) | (Unpreserved) | (NaS2O3/H2SO4) | (H2SO4) | (HCl) | (Ascorbic Acid) | (Na2S2O3) | (Unpreserved) | (H2SO4) | (NaOH) | (NaOH/Zinc Acetate)

EEA

COMMENTS: Sample on the fourth Monday of the month.

SPECIAL TURNAROUND TIME:

	SIGNATURE	DATE/TIME		SIGNATURE	DATE/TIME
RELINQUISHED BY:	Chad Hancock	4/25/22 1145	RECEIVED BY:	[signature]	4-25-22 1151
RELINQUISHED BY:			RECEIVED BY:		

RECEIVING TEMPERATURE= 2.6 °C

4401 S. Tucson Estates Parkway
Tucson, Arizona 85735
520.837.2469 Phone
520.791.5260 Fax

08 July 2022

Gira Patel

Environmental Services

-

Tucson, AZ 85726

RE: Los Reales Landfill Monthly

Enclosed are the results for Work Order L220597, received by the laboratory on 05/23/2022 10:57. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Frank Walker

Frank Walker
Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	07/08/2022 12:17

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Secondary ID/Location	Date Sampled	Date Received
L220597-01	LR GW INF	LRLF	05/23/2022 09:49	05/23/2022 10:57
L220597-02	LR GW EFF	LRLF	05/23/2022 09:57	05/23/2022 10:57

Tucson Water Quality Laboratory

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Frank Walker

Frank Walker, Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	07/08/2022 12:17

Case Narative / Items for Project Manager Review

All QC results were within QC limits.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	07/08/2022 12:17

LR GW INF (LRLF)
L220597-01

Sampled: 05/23/2022 9:49

Tucson Water Quality Laboratory (AZ0038)

Volatile Organic Compounds by GC/MS

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	07/08/2022 12:17

LR GW INF (LRLF)
L220597-01

Sampled: 05/23/2022 9:49

Tucson Water Quality Laboratory (AZ0038)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CHLOROFORM	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
DICHLORODIFLUOROMETHANE	**0.00111**	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
NAPHTHALENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
TETRACHLOROETHENE	**0.00539**	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
TRICHLOROETHENE	**0.00213**	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
TRICHLOROFLUOROMETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
XYLENES (TOTAL)	ND	0.0015	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		*99 %*	*70-130*		*BE22005*	*05/26/2022*	*05/26/2022*	*EPA 8260B*	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		*102 %*	*70-130*		*BE22005*	*05/26/2022*	*05/26/2022*	*EPA 8260B*	
Surrogate: TOLUENE-D8 (SURR.)		*100 %*	*70-130*		*BE22005*	*05/26/2022*	*05/26/2022*	*EPA 8260B*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	07/08/2022 12:17

LR GW EFF (LRLF)
L220597-02

Sampled: 05/23/2022 9:57

Tucson Water Quality Laboratory (AZ0038)

Volatile Organic Compounds by GC/MS

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	07/08/2022 12:17

LR GW EFF (LRLF)
L220597-02

Sampled: 05/23/2022 9:57

Tucson Water Quality Laboratory (AZ0038)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CHLOROFORM	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
DICHLORODIFLUOROMETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
NAPHTHALENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
TETRACHLOROETHENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
TRICHLOROETHENE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
TRICHLOROFLUOROMETHANE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
XYLENES (TOTAL)	ND	0.0015	mg/L	1	BE22005	05/26/2022	05/26/2022	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		*102 %*		*70-130*	*BE22005*	*05/26/2022*	*05/26/2022*	*EPA 8260B*	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		*105 %*		*70-130*	*BE22005*	*05/26/2022*	*05/26/2022*	*EPA 8260B*	
Surrogate: TOLUENE-D8 (SURR.)		*102 %*		*70-130*	*BE22005*	*05/26/2022*	*05/26/2022*	*EPA 8260B*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	07/08/2022 12:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BE22005-BLK1)				Prepared & Analyzed: 05/26/2022						
Batch BE22005 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	ND	0.000500	mg/L							
1,1,1-TRICHLOROETHANE	ND	0.000500	mg/L							
1,1,2,2-TETRACHLOROETHANE	ND	0.000500	mg/L							
1,1,2-TRICHLOROETHANE	ND	0.000500	mg/L							
1,1-DICHLOROETHANE	ND	0.000500	mg/L							
1,1-DICHLOROETHENE	ND	0.000500	mg/L							
1,1-DICHLOROPROPENE	ND	0.000500	mg/L							
1,2,3-TRICHLOROBENZENE	ND	0.000500	mg/L							
1,2,3-TRICHLOROPROPANE	ND	0.000500	mg/L							
1,2,4-TRICHLOROBENZENE	ND	0.000500	mg/L							
1,2,4-TRIMETHYLBENZENE	ND	0.000500	mg/L							
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.000500	mg/L							
1,2-DICHLOROBENZENE	ND	0.000500	mg/L							
1,2-DICHLOROETHANE	ND	0.000500	mg/L							
1,2-DICHLOROPROPANE	ND	0.000500	mg/L							
1,3,5-TRIMETHYLBENZENE	ND	0.000500	mg/L							
1,3-DICHLOROBENZENE	ND	0.000500	mg/L							
1,3-DICHLOROPROPANE	ND	0.000500	mg/L							
1,4-DICHLOROBENZENE	ND	0.000500	mg/L							
2,2-DICHLOROPROPANE	ND	0.000500	mg/L							
2-CHLOROTOLUENE	ND	0.000500	mg/L							
4-CHLOROTOLUENE	ND	0.000500	mg/L							
4-ISOPROPYLTOLUENE	ND	0.000500	mg/L							
BENZENE	ND	0.000500	mg/L							
BROMOBENZENE	ND	0.000500	mg/L							
BROMOCHLOROMETHANE	ND	0.000500	mg/L							
BROMODICHLOROMETHANE	ND	0.000500	mg/L							
BROMOFORM	ND	0.000500	mg/L							
BROMOMETHANE	ND	0.000500	mg/L							
CARBON TETRACHLORIDE	ND	0.000500	mg/L							

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	07/08/2022 12:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BE22005-BLK1)					Prepared & Analyzed: 05/26/2022					
Batch BE22005 - DEFAULT ORGANIC PREP										
CHLOROBENZENE	ND	0.000500	mg/L							
CHLOROETHANE	ND	0.000500	mg/L							
CHLOROFORM	ND	0.000500	mg/L							
CHLOROMETHANE	ND	0.000500	mg/L							
CIS-1,2-DICHLOROETHENE	ND	0.000500	mg/L							
CIS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L							
DIBROMOCHLOROMETHANE	ND	0.000500	mg/L							
DIBROMOMETHANE	ND	0.000500	mg/L							
DICHLORODIFLUOROMETHANE	ND	0.000500	mg/L							
DICHLOROMETHANE	ND	0.000500	mg/L							
ETHYLBENZENE	ND	0.000500	mg/L							
ETHYLENE DIBROMIDE	ND	0.000500	mg/L							
HEXACHLOROBUTADIENE	ND	0.000500	mg/L							
ISOPROPYLBENZENE	ND	0.000500	mg/L							
M/P-XYLENES	ND	0.000500	mg/L							
METHYL-TERT-BUTYL ETHER	ND	0.000500	mg/L							
NAPHTHALENE	ND	0.000500	mg/L							
N-BUTYLBENZENE	ND	0.000500	mg/L							
N-PROPYLBENZENE	ND	0.000500	mg/L							
ORTHO-XYLENE	ND	0.000500	mg/L							
SEC-BUTYLBENZENE	ND	0.000500	mg/L							
STYRENE	ND	0.000500	mg/L							
TERT-BUTYLBENZENE	ND	0.000500	mg/L							
TETRACHLOROETHENE	ND	0.000500	mg/L							
TOLUENE	ND	0.000500	mg/L							
TRANS-1,2-DICHLOROETHENE	ND	0.000500	mg/L							
TRANS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L							
TRICHLOROETHENE	ND	0.000500	mg/L							
TRICHLOROFLUOROMETHANE	ND	0.000500	mg/L							
VINYL CHLORIDE	ND	0.000500	mg/L							

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	07/08/2022 12:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BE22005-BLK1)				Prepared & Analyzed: 05/26/2022						
Batch BE22005 - DEFAULT ORGANIC PREP										
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.87*		ug/L	*5.00*		*97*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.19*		ug/L	*5.00*		*104*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*4.95*		ug/L	*5.00*		*99*	*70-130*			
LCS (BE22005-BS1)				Prepared & Analyzed: 05/26/2022						
Batch BE22005 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	5.27		ug/L	5.00		105	70-130			
1,1,1-TRICHLOROETHANE	4.96		ug/L	5.00		99	70-130			
1,1,2,2-TETRACHLOROETHANE	4.98		ug/L	5.00		100	70-130			
1,1,2-TRICHLOROETHANE	4.96		ug/L	5.00		99	70-130			
1,1-DICHLOROETHANE	5.30		ug/L	5.00		106	70-130			
1,1-DICHLOROETHENE	5.22		ug/L	5.00		104	70-130			
1,1-DICHLOROPROPENE	5.10		ug/L	5.00		102	70-130			
1,2,3-TRICHLOROBENZENE	5.29		ug/L	5.00		106	70-130			
1,2,3-TRICHLOROPROPANE	5.11		ug/L	5.00		102	70-130			
1,2,4-TRICHLOROBENZENE	5.26		ug/L	5.00		105	70-130			
1,2,4-TRIMETHYLBENZENE	5.24		ug/L	5.00		105	70-130			
1,2-DIBROMO-3-CHLOROPROPANE	5.65		ug/L	5.00		113	70-130			
1,2-DICHLOROBENZENE	5.34		ug/L	5.00		107	70-130			
1,2-DICHLOROETHANE	5.29		ug/L	5.00		106	70-130			
1,2-DICHLOROPROPANE	5.02		ug/L	5.00		100	70-130			
1,3,5-TRIMETHYLBENZENE	5.20		ug/L	5.00		104	70-130			
1,3-DICHLOROBENZENE	5.30		ug/L	5.00		106	70-130			
1,3-DICHLOROPROPANE	5.16		ug/L	5.00		103	70-130			
1,4-DICHLOROBENZENE	5.29		ug/L	5.00		106	70-130			
2,2-DICHLOROPROPANE	6.40		ug/L	5.00		128	70-130			
2-CHLOROTOLUENE	5.38		ug/L	5.00		108	70-130			
4-CHLOROTOLUENE	5.13		ug/L	5.00		103	70-130			
4-ISOPROPYLTOLUENE	5.40		ug/L	5.00		108	70-130			

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Tucson Water Quality Lab
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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	07/08/2022 12:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
LCS (BE22005-BS1)				Prepared & Analyzed: 05/26/2022						
Batch BE22005 - DEFAULT ORGANIC PREP										
BENZENE	5.34		ug/L	5.00		107	70-130			
BROMOBENZENE	5.16		ug/L	5.00		103	70-130			
BROMOCHLOROMETHANE	5.64		ug/L	5.00		113	70-130			
BROMODICHLOROMETHANE	5.09		ug/L	5.00		102	70-130			
BROMOFORM	4.86		ug/L	5.00		97	70-130			
BROMOMETHANE	5.66		ug/L	5.00		113	70-130			
CARBON TETRACHLORIDE	5.32		ug/L	5.00		106	70-130			
CHLOROBENZENE	5.33		ug/L	5.00		107	70-130			
CHLOROETHANE	4.57		ug/L	5.00		91	70-130			
CHLOROFORM	5.35		ug/L	5.00		107	70-130			
CHLOROMETHANE	4.53		ug/L	5.00		91	70-130			
CIS-1,2-DICHLOROETHENE	5.13		ug/L	5.00		103	70-130			
CIS-1,3-DICHLOROPROPENE	5.27		ug/L	5.00		105	70-130			
DIBROMOCHLOROMETHANE	4.89		ug/L	5.00		98	70-130			
DIBROMOMETHANE	5.21		ug/L	5.00		104	70-130			
DICHLORODIFLUOROMETHANE	4.18		ug/L	5.00		84	70-130			
DICHLOROMETHANE	5.06		ug/L	5.00		101	70-130			
ETHYLBENZENE	5.26		ug/L	5.00		105	70-130			
ETHYLENE DIBROMIDE	5.22		ug/L	5.00		104	70-130			
HEXACHLOROBUTADIENE	5.48		ug/L	5.00		110	70-130			
ISOPROPYLBENZENE	5.20		ug/L	5.00		104	70-130			
M/P-XYLENES	10.5		ug/L	10.0		105	70-130			
METHYL-TERT-BUTYL ETHER	4.80		ug/L	5.00		96	70-130			
NAPHTHALENE	5.15		ug/L	5.00		103	70-130			
N-BUTYLBENZENE	5.27		ug/L	5.00		105	70-130			
N-PROPYLBENZENE	5.03		ug/L	5.00		101	70-130			
ORTHO-XYLENE	5.30		ug/L	5.00		106	70-130			
SEC-BUTYLBENZENE	5.51		ug/L	5.00		110	70-130			
STYRENE	5.04		ug/L	5.00		101	70-130			
TERT-BUTYLBENZENE	5.09		ug/L	5.00		102	70-130			
TETRACHLOROETHENE	5.32		ug/L	5.00		106	70-130			

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Tucson Water Quality Lab
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Tucson, AZ 85735
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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	07/08/2022 12:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
LCS (BE22005-BS1)				Prepared & Analyzed: 05/26/2022						
Batch BE22005 - DEFAULT ORGANIC PREP										
TOLUENE	5.10		ug/L	5.00		102	70-130			
TRANS-1,2-DICHLOROETHENE	5.23		ug/L	5.00		105	70-130			
TRANS-1,3-DICHLOROPROPENE	5.62		ug/L	5.00		112	70-130			
TRICHLOROETHENE	5.11		ug/L	5.00		102	70-130			
TRICHLOROFLUOROMETHANE	4.87		ug/L	5.00		97	70-130			
VINYL CHLORIDE	4.52		ug/L	5.00		90	70-130			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*5.07*		ug/L	*5.00*		*101*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.02*		ug/L	*5.00*		*100*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.00*		ug/L	*5.00*		*100*	*70-130*			
Matrix Spike (BE22005-MS1)			**Source: L220597-02**	Prepared & Analyzed: 05/26/2022						
Batch BE22005 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	4.76		ug/L	5.00	0.00	95	70-130			
1,1,1-TRICHLOROETHANE	4.80		ug/L	5.00	0.00	96	70-130			
1,1,2,2-TETRACHLOROETHANE	5.00		ug/L	5.00	0.00	100	70-130			
1,1,2-TRICHLOROETHANE	4.99		ug/L	5.00	0.00	100	70-130			
1,1-DICHLOROETHANE	4.98		ug/L	5.00	0.00	100	70-130			
1,1-DICHLOROETHENE	5.06		ug/L	5.00	0.00	101	70-130			
1,1-DICHLOROPROPENE	5.07		ug/L	5.00	0.00	101	70-130			
1,2,3-TRICHLOROBENZENE	5.15		ug/L	5.00	0.00	103	70-130			
1,2,3-TRICHLOROPROPANE	5.04		ug/L	5.00	0.00	101	70-130			
1,2,4-TRICHLOROBENZENE	5.17		ug/L	5.00	0.00	103	70-130			
1,2,4-TRIMETHYLBENZENE	5.13		ug/L	5.00	0.00	103	70-130			
1,2-DIBROMO-3-CHLOROPROPANE	4.71		ug/L	5.00	0.00	94	70-130			
1,2-DICHLOROBENZENE	5.37		ug/L	5.00	0.00	107	70-130			
1,2-DICHLOROETHANE	4.97		ug/L	5.00	0.00	99	70-130			
1,2-DICHLOROPROPANE	4.97		ug/L	5.00	0.00	99	70-130			
1,3,5-TRIMETHYLBENZENE	5.17		ug/L	5.00	0.00	103	70-130			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	07/08/2022 12:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike (BE22005-MS1)		**Source: L220597-02**		Prepared & Analyzed: 05/26/2022						
Batch BE22005 - DEFAULT ORGANIC PREP										
1,3-DICHLOROBENZENE	4.94		ug/L	5.00	0.00	99	70-130			
1,3-DICHLOROPROPANE	5.05		ug/L	5.00	0.00	101	70-130			
1,4-DICHLOROBENZENE	5.07		ug/L	5.00	0.00	101	70-130			
2,2-DICHLOROPROPANE	6.39		ug/L	5.00	0.00	128	70-130			
2-CHLOROTOLUENE	4.98		ug/L	5.00	0.00	100	70-130			
4-CHLOROTOLUENE	5.09		ug/L	5.00	0.00	102	70-130			
4-ISOPROPYLTOLUENE	5.37		ug/L	5.00	0.00	107	70-130			
BENZENE	5.05		ug/L	5.00	0.00	101	70-130			
BROMOBENZENE	5.04		ug/L	5.00	0.00	101	70-130			
BROMOCHLOROMETHANE	5.41		ug/L	5.00	0.00	108	70-130			
BROMODICHLOROMETHANE	5.13		ug/L	5.00	0.00	103	70-130			
BROMOFORM	4.42		ug/L	5.00	0.00	88	70-130			
BROMOMETHANE	5.29		ug/L	5.00	0.00	106	70-130			
CARBON TETRACHLORIDE	5.44		ug/L	5.00	0.00	109	70-130			
CHLOROBENZENE	5.09		ug/L	5.00	0.00	102	70-130			
CHLOROETHANE	4.43		ug/L	5.00	0.00	89	70-130			
CHLOROFORM	5.12		ug/L	5.00	0.00	102	70-130			
CHLOROMETHANE	4.50		ug/L	5.00	0.00	90	70-130			
CIS-1,2-DICHLOROETHENE	4.99		ug/L	5.00	0.00	100	70-130			
CIS-1,3-DICHLOROPROPENE	5.41		ug/L	5.00	0.00	108	70-130			
DIBROMOCHLOROMETHANE	4.81		ug/L	5.00	0.00	96	70-130			
DIBROMOMETHANE	4.80		ug/L	5.00	0.00	96	70-130			
DICHLORODIFLUOROMETHANE	4.19		ug/L	5.00	0.00	84	70-130			
DICHLOROMETHANE	4.78		ug/L	5.00	0.00	96	70-130			
ETHYLBENZENE	5.14		ug/L	5.00	0.00	103	70-130			
ETHYLENE DIBROMIDE	5.05		ug/L	5.00	0.00	101	70-130			
HEXACHLOROBUTADIENE	5.53		ug/L	5.00	0.00	111	70-130			
ISOPROPYLBENZENE	5.09		ug/L	5.00	0.00	102	70-130			
M/P-XYLENES	9.92		ug/L	10.0	0.00	99	70-130			
METHYL-TERT-BUTYL ETHER	4.54		ug/L	5.00	0.00	91	70-130			
NAPHTHALENE	4.94		ug/L	5.00	0.00	99	70-130			

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Tucson Water Quality Lab
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Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	07/08/2022 12:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike (BE22005-MS1)		**Source: L220597-02**			Prepared & Analyzed: 05/26/2022					
Batch BE22005 - DEFAULT ORGANIC PREP										
N-BUTYLBENZENE	5.14		ug/L	5.00	0.00	103	70-130			
N-PROPYLBENZENE	4.98		ug/L	5.00	0.00	100	70-130			
ORTHO-XYLENE	5.05		ug/L	5.00	0.00	101	70-130			
SEC-BUTYLBENZENE	5.31		ug/L	5.00	0.00	106	70-130			
STYRENE	5.00		ug/L	5.00	0.00	100	70-130			
TERT-BUTYLBENZENE	5.01		ug/L	5.00	0.00	100	70-130			
TETRACHLOROETHENE	5.47		ug/L	5.00	0.317	103	70-130			
TOLUENE	4.94		ug/L	5.00	0.00	99	70-130			
TRANS-1,2-DICHLOROETHENE	5.03		ug/L	5.00	0.00	101	70-130			
TRANS-1,3-DICHLOROPROPENE	5.51		ug/L	5.00	0.00	110	70-130			
TRICHLOROETHENE	5.15		ug/L	5.00	0.00	103	70-130			
TRICHLOROFLUOROMETHANE	4.70		ug/L	5.00	0.00	94	70-130			
VINYL CHLORIDE	4.19		ug/L	5.00	0.00	84	70-130			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.97*		ug/L	*5.00*		*99*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.29*		ug/L	*5.00*		*106*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.00*		ug/L	*5.00*		*100*	*70-130*			
Matrix Spike Dup (BE22005-MSD1) (for RPD QC only)		**Source: L220597-02**			Prepared & Analyzed: 05/26/2022					
Batch BE22005 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	5.07		ug/L	5.00	0.00	101		6	20	
1,1,1-TRICHLOROETHANE	5.07		ug/L	5.00	0.00	101		5	20	
1,1,2,2-TETRACHLOROETHANE	5.09		ug/L	5.00	0.00	102		2	20	
1,1,2-TRICHLOROETHANE	5.30		ug/L	5.00	0.00	106		6	20	
1,1-DICHLOROETHANE	5.55		ug/L	5.00	0.00	111		11	20	
1,1-DICHLOROETHENE	5.38		ug/L	5.00	0.00	108		6	20	
1,1-DICHLOROPROPENE	4.92		ug/L	5.00	0.00	98		3	20	
1,2,3-TRICHLOROBENZENE	5.67		ug/L	5.00	0.00	113		10	20	
1,2,3-TRICHLOROPROPANE	5.54		ug/L	5.00	0.00	111		9	20	

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Environmental Services	Project: Los Reales Landfill Monthly	
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Tucson AZ, 85726	Project Manager: Gira Patel	07/08/2022 12:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike Dup (BE22005-MSD1) (for RPD QC only)				**Source: L220597-02**		Prepared & Analyzed: 05/26/2022				
Batch BE22005 - DEFAULT ORGANIC PREP										
1,2,4-TRICHLOROBENZENE	5.70		ug/L	5.00	0.00	114		10	20	
1,2,4-TRIMETHYLBENZENE	5.38		ug/L	5.00	0.00	108		5	20	
1,2-DIBROMO-3-CHLOROPROPANE	5.29		ug/L	5.00	0.00	106		12	20	
1,2-DICHLOROBENZENE	5.80		ug/L	5.00	0.00	116		8	20	
1,2-DICHLOROETHANE	5.45		ug/L	5.00	0.00	109		9	20	
1,2-DICHLOROPROPANE	5.24		ug/L	5.00	0.00	105		5	20	
1,3,5-TRIMETHYLBENZENE	5.40		ug/L	5.00	0.00	108		5	20	
1,3-DICHLOROBENZENE	5.42		ug/L	5.00	0.00	108		9	20	
1,3-DICHLOROPROPANE	5.42		ug/L	5.00	0.00	108		7	20	
1,4-DICHLOROBENZENE	5.59		ug/L	5.00	0.00	112		10	20	
2,2-DICHLOROPROPANE	6.62		ug/L	5.00	0.00	132		4	20	
2-CHLOROTOLUENE	5.50		ug/L	5.00	0.00	110		10	20	
4-CHLOROTOLUENE	5.33		ug/L	5.00	0.00	107		5	20	
4-ISOPROPYLTOLUENE	5.83		ug/L	5.00	0.00	117		8	20	
BENZENE	5.51		ug/L	5.00	0.00	110		9	20	
BROMOBENZENE	5.24		ug/L	5.00	0.00	105		4	20	
BROMOCHLOROMETHANE	5.69		ug/L	5.00	0.00	114		5	20	
BROMODICHLOROMETHANE	5.46		ug/L	5.00	0.00	109		6	20	
BROMOFORM	4.81		ug/L	5.00	0.00	96		8	20	
BROMOMETHANE	5.66		ug/L	5.00	0.00	113		7	20	
CARBON TETRACHLORIDE	5.73		ug/L	5.00	0.00	115		5	20	
CHLOROBENZENE	5.31		ug/L	5.00	0.00	106		4	20	
CHLOROETHANE	4.95		ug/L	5.00	0.00	99		11	20	
CHLOROFORM	5.46		ug/L	5.00	0.00	109		6	20	
CHLOROMETHANE	4.68		ug/L	5.00	0.00	94		4	20	
CIS-1,2-DICHLOROETHENE	5.37		ug/L	5.00	0.00	107		7	20	
CIS-1,3-DICHLOROPROPENE	5.72		ug/L	5.00	0.00	114		6	20	
DIBROMOCHLOROMETHANE	5.05		ug/L	5.00	0.00	101		5	20	
DIBROMOMETHANE	5.03		ug/L	5.00	0.00	101		5	20	
DICHLORODIFLUOROMETHANE	4.46		ug/L	5.00	0.00	89		6	20	
DICHLOROMETHANE	4.90		ug/L	5.00	0.00	98		3	20	

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Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	07/08/2022 12:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike Dup (BE22005-MSD1) (for RPD QC only)			**Source: L220597-02**		Prepared & Analyzed: 05/26/2022					
Batch BE22005 - DEFAULT ORGANIC PREP										
ETHYLBENZENE	5.33		ug/L	5.00	0.00	107		4	20	
ETHYLENE DIBROMIDE	5.33		ug/L	5.00	0.00	107		5	20	
HEXACHLOROBUTADIENE	6.18		ug/L	5.00	0.00	124		11	20	
ISOPROPYLBENZENE	5.36		ug/L	5.00	0.00	107		5	20	
M/P-XYLENES	10.8		ug/L	10.0	0.00	108		8	20	
METHYL-TERT-BUTYL ETHER	4.71		ug/L	5.00	0.00	94		4	20	
NAPHTHALENE	5.62		ug/L	5.00	0.00	112		13	20	
N-BUTYLBENZENE	5.70		ug/L	5.00	0.00	114		10	20	
N-PROPYLBENZENE	5.32		ug/L	5.00	0.00	106		7	20	
ORTHO-XYLENE	5.44		ug/L	5.00	0.00	109		8	20	
SEC-BUTYLBENZENE	5.58		ug/L	5.00	0.00	112		5	20	
STYRENE	5.20		ug/L	5.00	0.00	104		4	20	
TERT-BUTYLBENZENE	5.17		ug/L	5.00	0.00	103		3	20	
TETRACHLOROETHENE	5.98		ug/L	5.00	0.317	113		9	20	
TOLUENE	5.41		ug/L	5.00	0.00	108		9	20	
TRANS-1,2-DICHLOROETHENE	5.48		ug/L	5.00	0.00	110		8	20	
TRANS-1,3-DICHLOROPROPENE	5.67		ug/L	5.00	0.00	113		3	20	
TRICHLOROETHENE	5.50		ug/L	5.00	0.00	110		7	20	
TRICHLOROFLUOROMETHANE	4.97		ug/L	5.00	0.00	99		6	20	
VINYL CHLORIDE	4.79		ug/L	5.00	0.00	96		13	20	
Surrogate: BROMOFLUOROBENZENE (SURR.)	*5.04*		ug/L	*5.00*		*101*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.07*		ug/L	*5.00*		*101*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*4.99*		ug/L	*5.00*		*100*	*70-130*			
Reference (BE22005-SRM1)					Prepared & Analyzed: 05/26/2022					
Batch BE22005 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	4.87		ug/L	5.00		97	80-120			
1,1,1-TRICHLOROETHANE	4.59		ug/L	5.00		92	80-120			

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BE22005-SRM1)					Prepared & Analyzed: 05/26/2022					
Batch BE22005 - DEFAULT ORGANIC PREP										
1,1,2,2-TETRACHLOROETHANE	4.73		ug/L	5.00		95	80-120			
1,1,2-TRICHLOROETHANE	4.97		ug/L	5.00		99	80-120			
1,1-DICHLOROETHANE	4.92		ug/L	5.00		98	80-120			
1,1-DICHLOROETHENE	4.94		ug/L	5.00		99	80-120			
1,1-DICHLOROPROPENE	4.83		ug/L	5.00		97	80-120			
1,2,3-TRICHLOROBENZENE	5.05		ug/L	5.00		101	80-120			
1,2,3-TRICHLOROPROPANE	4.80		ug/L	5.00		96	80-120			
1,2,4-TRICHLOROBENZENE	5.14		ug/L	5.00		103	80-120			
1,2,4-TRIMETHYLBENZENE	5.01		ug/L	5.00		100	80-120			
1,2-DIBROMO-3-CHLOROPROPANE	4.71		ug/L	5.00		94	72-115			
1,2-DICHLOROBENZENE	5.03		ug/L	5.00		101	80-120			
1,2-DICHLOROETHANE	5.01		ug/L	5.00		100	80-120			
1,2-DICHLOROPROPANE	4.88		ug/L	5.00		98	80-120			
1,3,5-TRIMETHYLBENZENE	4.95		ug/L	5.00		99	80-120			
1,3-DICHLOROBENZENE	5.03		ug/L	5.00		101	80-120			
1,3-DICHLOROPROPANE	4.80		ug/L	5.00		96	80-120			
1,4-DICHLOROBENZENE	5.02		ug/L	5.00		100	80-120			
2,2-DICHLOROPROPANE	6.12		ug/L	5.00		122	86-136			
2-CHLOROTOLUENE	4.88		ug/L	5.00		98	80-120			
4-CHLOROTOLUENE	5.09		ug/L	5.00		102	80-120			
4-ISOPROPYLTOLUENE	5.20		ug/L	5.00		104	80-120			
BENZENE	4.92		ug/L	5.00		98	80-120			
BROMOBENZENE	4.81		ug/L	5.00		96	80-120			
BROMOCHLOROMETHANE	5.08		ug/L	5.00		102	81-124			
BROMODICHLOROMETHANE	5.04		ug/L	5.00		101	80-120			
BROMOFORM	4.49		ug/L	5.00		90	74-118			
BROMOMETHANE	5.19		ug/L	5.00		104	66-136			
CARBON TETRACHLORIDE	5.14		ug/L	5.00		103	77-118			
CHLOROBENZENE	4.95		ug/L	5.00		99	80-120			
CHLOROETHANE	4.53		ug/L	5.00		91	80-120			
CHLOROFORM	4.97		ug/L	5.00		99	80-120			

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Tucson AZ, 85726	Project Manager: Gira Patel	07/08/2022 12:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BE22005-SRM1)				Prepared & Analyzed: 05/26/2022						
Batch BE22005 - DEFAULT ORGANIC PREP										
CHLOROMETHANE	4.31		ug/L	5.00		86	69-115			
CIS-1,2-DICHLOROETHENE	4.75		ug/L	5.00		95	80-120			
CIS-1,3-DICHLOROPROPENE	5.20		ug/L	5.00		104	80-120			
DIBROMOCHLOROMETHANE	4.57		ug/L	5.00		91	80-120			
DIBROMOMETHANE	4.70		ug/L	5.00		94	80-120			
DICHLORODIFLUOROMETHANE	4.09		ug/L	5.00		82	59-125			
DICHLOROMETHANE	4.80		ug/L	5.00		96	79-119			
ETHYLBENZENE	4.89		ug/L	5.00		98	80-120			
ETHYLENE DIBROMIDE	5.14		ug/L	5.00		103	80-120			
HEXACHLOROBUTADIENE	5.41		ug/L	5.00		108	80-120			
ISOPROPYLBENZENE	4.97		ug/L	5.00		99	80-120			
M/P-XYLENES	9.89		ug/L	10.0		99	80-120			
METHYL-TERT-BUTYL ETHER	4.35		ug/L	5.00		87	80-120			
NAPHTHALENE	4.82		ug/L	5.00		96	75-119			
N-BUTYLBENZENE	5.10		ug/L	5.00		102	80-120			
N-PROPYLBENZENE	4.91		ug/L	5.00		98	80-120			
ORTHO-XYLENE	4.88		ug/L	5.00		98	80-120			
SEC-BUTYLBENZENE	5.20		ug/L	5.00		104	80-120			
STYRENE	4.96		ug/L	5.00		99	80-120			
TERT-BUTYLBENZENE	4.89		ug/L	5.00		98	80-120			
TETRACHLOROETHENE	5.10		ug/L	5.00		102	80-120			
TOLUENE	4.97		ug/L	5.00		99	80-120			
TRANS-1,2-DICHLOROETHENE	4.96		ug/L	5.00		99	80-120			
TRANS-1,3-DICHLOROPROPENE	5.44		ug/L	5.00		109	81-122			
TRICHLOROETHENE	4.99		ug/L	5.00		100	80-120			
TRICHLOROFLUOROMETHANE	4.53		ug/L	5.00		91	80-120			
VINYL CHLORIDE	4.27		ug/L	5.00		85	80-120			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.90*		ug/L	*5.00*		*98*	*70-130*			

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Environmental Services	Project: Los Reales Landfill Monthly	
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Tucson AZ, 85726	Project Manager: Gira Patel	07/08/2022 12:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BE22005-SRM1)					Prepared & Analyzed: 05/26/2022					
Batch BE22005 - DEFAULT ORGANIC PREP										
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.08*		ug/L	*5.00*		*102*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.00*		ug/L	*5.00*		*100*	*70-130*			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	07/08/2022 12:17

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

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TUCSON WATER CHAIN OF CUSTODY

LOGIN ID: L220597

CLIENT: ES

PROJECT NAME/FREQUENCY:
LOS REALES Landfill
Monthly

PROJECT #: P01049

SAMPLING DATE:
May 23, 2022

SAMPLED BY:
print full name
Chad Hancock
signature
Chad S. Hancock

SAMPLE #	TIME	LOCATION	SITE	NUMBER OF CONTAINERS	ICP	ICP	ICP	ICP	ICP	ICPMS	ICPMS	(H2SO4)	(NaS2O3/H2SO4)	(Unpreserved)	(NaS2O3/H2SO4)	(H2SO4)	(HCl) 8260	(Ascorbic Acid)	(Na2S2O3) EEA	(Na2S2O3) EEA	(Na2S2O3) EEA	(Unpreserved) EEA	(Unpreserved) EEA	(Unpreserved) EEA	(Unpreserved) EEA	(Unpreserved) EEA	(Unpreserved) EEA	(Unpreserved) EEA	(H2SO4) EEA	(NaOH) EEA	(NaOH/Zinc Acetate) EEA	COMMENTS
-01	0949	LR GW INF	LRLF	4													X															TBs declined
-02	0957	LR GW EFF	LRLF	4													X															by ES for this
																																project

COMMENTS: Sample on the fourth Monday of the month.

SPECIAL TURNAROUND TIME:

	SIGNATURE	DATE/TIME		SIGNATURE	DATE/TIME
RELINQUISHED BY:	Chad S. Hancock	5/23/22 1014	**RECEIVED BY:**		5-23-22 1057
RELINQUISHED BY:			**RECEIVED BY:**		

RECEIVING TEMPERATURE= 6.1 °C

4401 S. Tucson Estates Parkway
Tucson, Arizona 85735
520.837.2469 Phone
520.791.5260 Fax

19 August 2022

Gira Patel

Environmental Services

-

Tucson, AZ 85726

RE: Los Reales Landfill Monthly

Enclosed are the results for Work Order L220909, received by the laboratory on 06/27/2022 12:57. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Frank Walker

Frank Walker
Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	08/19/2022 17:13

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Secondary ID/Location	Date Sampled	Date Received
L220909-01	LR GW INF	LRLF	06/27/2022 11:06	06/27/2022 12:57
L220909-02	LR GW EFF	LRLF	06/27/2022 11:12	06/27/2022 12:57

Tucson Water Quality Laboratory

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Frank Walker

Frank Walker, Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	08/19/2022 17:13

Case Narative / Items for Project Manager Review

All QC results were within QC limits.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	08/19/2022 17:13

LR GW INF (LRLF)
L220909-01

Sampled: 06/27/2022 11:06

Tucson Water Quality Laboratory (AZ0038)

Volatile Organic Compounds by GC/MS

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	08/19/2022 17:13

LR GW INF (LRLF)
L220909-01

Sampled: 06/27/2022 11:06

Tucson Water Quality Laboratory (AZ0038)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CHLOROFORM	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
CHLOROMETHANE	**0.000523**	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
DICHLORODIFLUOROMETHANE	**0.00144**	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
NAPHTHALENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
TETRACHLOROETHENE	**0.00467**	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
TRICHLOROETHENE	**0.00173**	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
TRICHLOROFLUOROMETHANE	**0.000563**	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
XYLENES (TOTAL)	ND	0.0015	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		*92 %*	*70-130*		*BF22806*	*06/28/2022*	*06/28/2022*	*EPA 8260B*	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		*97 %*	*70-130*		*BF22806*	*06/28/2022*	*06/28/2022*	*EPA 8260B*	
Surrogate: TOLUENE-D8 (SURR.)		*95 %*	*70-130*		*BF22806*	*06/28/2022*	*06/28/2022*	*EPA 8260B*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	08/19/2022 17:13

LR GW EFF (LRLF)
L220909-02

Sampled: 06/27/2022 11:12

Tucson Water Quality Laboratory (AZ0038)

Volatile Organic Compounds by GC/MS

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	08/19/2022 17:13

LR GW EFF (LRLF)
L220909-02

Sampled: 06/27/2022 11:12

Tucson Water Quality Laboratory (AZ0038)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CHLOROFORM	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
DICHLORODIFLUOROMETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
NAPHTHALENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
TETRACHLOROETHENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
TRICHLOROETHENE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
TRICHLOROFLUOROMETHANE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
XYLENES (TOTAL)	ND	0.0015	mg/L	1	BF22806	06/28/2022	06/28/2022	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		*92 %*		*70-130*	*BF22806*	*06/28/2022*	*06/28/2022*	*EPA 8260B*	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		*96 %*		*70-130*	*BF22806*	*06/28/2022*	*06/28/2022*	*EPA 8260B*	
Surrogate: TOLUENE-D8 (SURR.)		*99 %*		*70-130*	*BF22806*	*06/28/2022*	*06/28/2022*	*EPA 8260B*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	08/19/2022 17:13

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BF22806-BLK1)				Prepared & Analyzed: 06/28/2022						
Batch BF22806 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	ND	0.000500	mg/L							
1,1,1-TRICHLOROETHANE	ND	0.000500	mg/L							
1,1,2,2-TETRACHLOROETHANE	ND	0.000500	mg/L							
1,1,2-TRICHLOROETHANE	ND	0.000500	mg/L							
1,1-DICHLOROETHANE	ND	0.000500	mg/L							
1,1-DICHLOROETHENE	ND	0.000500	mg/L							
1,1-DICHLOROPROPENE	ND	0.000500	mg/L							
1,2,3-TRICHLOROBENZENE	ND	0.000500	mg/L							
1,2,3-TRICHLOROPROPANE	ND	0.000500	mg/L							
1,2,4-TRICHLOROBENZENE	ND	0.000500	mg/L							
1,2,4-TRIMETHYLBENZENE	ND	0.000500	mg/L							
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.000500	mg/L							
1,2-DICHLOROBENZENE	ND	0.000500	mg/L							
1,2-DICHLOROETHANE	ND	0.000500	mg/L							
1,2-DICHLOROPROPANE	ND	0.000500	mg/L							
1,3,5-TRIMETHYLBENZENE	ND	0.000500	mg/L							
1,3-DICHLOROBENZENE	ND	0.000500	mg/L							
1,3-DICHLOROPROPANE	ND	0.000500	mg/L							
1,4-DICHLOROBENZENE	ND	0.000500	mg/L							
2,2-DICHLOROPROPANE	ND	0.000500	mg/L							
2-CHLOROTOLUENE	ND	0.000500	mg/L							
4-CHLOROTOLUENE	ND	0.000500	mg/L							
4-ISOPROPYLTOLUENE	ND	0.000500	mg/L							
BENZENE	ND	0.000500	mg/L							
BROMOBENZENE	ND	0.000500	mg/L							
BROMOCHLOROMETHANE	ND	0.000500	mg/L							
BROMODICHLOROMETHANE	ND	0.000500	mg/L							
BROMOFORM	ND	0.000500	mg/L							
BROMOMETHANE	ND	0.000500	mg/L							
CARBON TETRACHLORIDE	ND	0.000500	mg/L							

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Tucson Water Quality Lab
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Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	08/19/2022 17:13

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BF22806-BLK1)				Prepared & Analyzed: 06/28/2022						
Batch BF22806 - DEFAULT ORGANIC PREP										
CHLOROBENZENE	ND	0.000500	mg/L							
CHLOROETHANE	ND	0.000500	mg/L							
CHLOROFORM	ND	0.000500	mg/L							
CHLOROMETHANE	ND	0.000500	mg/L							
CIS-1,2-DICHLOROETHENE	ND	0.000500	mg/L							
CIS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L							
DIBROMOCHLOROMETHANE	ND	0.000500	mg/L							
DIBROMOMETHANE	ND	0.000500	mg/L							
DICHLORODIFLUOROMETHANE	ND	0.000500	mg/L							
DICHLOROMETHANE	ND	0.000500	mg/L							
ETHYLBENZENE	ND	0.000500	mg/L							
ETHYLENE DIBROMIDE	ND	0.000500	mg/L							
HEXACHLOROBUTADIENE	ND	0.000500	mg/L							
ISOPROPYLBENZENE	ND	0.000500	mg/L							
M/P-XYLENES	ND	0.000500	mg/L							
METHYL-TERT-BUTYL ETHER	ND	0.000500	mg/L							
NAPHTHALENE	ND	0.000500	mg/L							
N-BUTYLBENZENE	ND	0.000500	mg/L							
N-PROPYLBENZENE	ND	0.000500	mg/L							
ORTHO-XYLENE	ND	0.000500	mg/L							
SEC-BUTYLBENZENE	ND	0.000500	mg/L							
STYRENE	ND	0.000500	mg/L							
TERT-BUTYLBENZENE	ND	0.000500	mg/L							
TETRACHLOROETHENE	ND	0.000500	mg/L							
TOLUENE	ND	0.000500	mg/L							
TRANS-1,2-DICHLOROETHENE	ND	0.000500	mg/L							
TRANS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L							
TRICHLOROETHENE	ND	0.000500	mg/L							
TRICHLOROFLUOROMETHANE	ND	0.000500	mg/L							
VINYL CHLORIDE	ND	0.000500	mg/L							

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Tucson Water Quality Lab
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Tucson, AZ 85735
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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	08/19/2022 17:13

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BF22806-BLK1)				Prepared & Analyzed: 06/28/2022						
Batch BF22806 - DEFAULT ORGANIC PREP										
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.64*		ug/L	*5.00*		*93*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.96*		ug/L	*5.00*		*99*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.07*		ug/L	*5.00*		*101*	*70-130*			
Matrix Spike (BF22806-MS1)			**Source: L220909-02**	Prepared & Analyzed: 06/28/2022						
Batch BF22806 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	4.84		ug/L	5.00	0.00	97	70-130			
1,1,1-TRICHLOROETHANE	4.60		ug/L	5.00	0.00	92	70-130			
1,1,2,2-TETRACHLOROETHANE	4.80		ug/L	5.00	0.00	96	70-130			
1,1,2-TRICHLOROETHANE	4.95		ug/L	5.00	0.00	99	70-130			
1,1-DICHLOROETHANE	4.79		ug/L	5.00	0.00	96	70-130			
1,1-DICHLOROETHENE	4.94		ug/L	5.00	0.00	99	70-130			
1,1-DICHLOROPROPENE	4.46		ug/L	5.00	0.00	89	70-130			
1,2,3-TRICHLOROBENZENE	5.11		ug/L	5.00	0.00	102	70-130			
1,2,3-TRICHLOROPROPANE	4.76		ug/L	5.00	0.00	95	70-130			
1,2,4-TRICHLOROBENZENE	5.04		ug/L	5.00	0.00	101	70-130			
1,2,4-TRIMETHYLBENZENE	4.65		ug/L	5.00	0.00	93	70-130			
1,2-DIBROMO-3-CHLOROPROPANE	4.68		ug/L	5.00	0.00	94	70-130			
1,2-DICHLOROBENZENE	5.02		ug/L	5.00	0.00	100	70-130			
1,2-DICHLOROETHANE	4.64		ug/L	5.00	0.00	93	70-130			
1,2-DICHLOROPROPANE	4.84		ug/L	5.00	0.00	97	70-130			
1,3,5-TRIMETHYLBENZENE	4.53		ug/L	5.00	0.00	91	70-130			
1,3-DICHLOROBENZENE	4.93		ug/L	5.00	0.00	99	70-130			
1,3-DICHLOROPROPANE	4.72		ug/L	5.00	0.00	94	70-130			
1,4-DICHLOROBENZENE	4.98		ug/L	5.00	0.00	100	70-130			
2,2-DICHLOROPROPANE	4.97		ug/L	5.00	0.00	99	70-130			
2-CHLOROTOLUENE	4.78		ug/L	5.00	0.00	96	70-130			
4-CHLOROTOLUENE	4.78		ug/L	5.00	0.00	96	70-130			
4-ISOPROPYLTOLUENE	5.07		ug/L	5.00	0.00	101	70-130			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	08/19/2022 17:13

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike (BF22806-MS1)		**Source: L220909-02**		Prepared & Analyzed: 06/28/2022						
Batch BF22806 - DEFAULT ORGANIC PREP										
BENZENE	4.98		ug/L	5.00	0.00	100	70-130			
BROMOBENZENE	4.89		ug/L	5.00	0.00	98	70-130			
BROMOCHLOROMETHANE	5.07		ug/L	5.00	0.00	101	70-130			
BROMODICHLOROMETHANE	4.90		ug/L	5.00	0.00	98	70-130			
BROMOFORM	4.69		ug/L	5.00	0.00	94	70-130			
BROMOMETHANE	6.44		ug/L	5.00	0.00	129	70-130			
CARBON TETRACHLORIDE	4.76		ug/L	5.00	0.00	95	70-130			
CHLOROBENZENE	4.90		ug/L	5.00	0.00	98	70-130			
CHLOROETHANE	4.37		ug/L	5.00	0.00	87	70-130			
CHLOROFORM	4.58		ug/L	5.00	0.00	92	70-130			
CHLOROMETHANE	5.17		ug/L	5.00	0.451	94	70-130			
CIS-1,2-DICHLOROETHENE	4.91		ug/L	5.00	0.00	98	70-130			
CIS-1,3-DICHLOROPROPENE	4.70		ug/L	5.00	0.00	94	70-130			
DIBROMOCHLOROMETHANE	4.72		ug/L	5.00	0.00	94	70-130			
DIBROMOMETHANE	4.84		ug/L	5.00	0.00	97	70-130			
DICHLORODIFLUOROMETHANE	5.65		ug/L	5.00	0.00	113	70-130			
DICHLOROMETHANE	4.75		ug/L	5.00	0.00	95	70-130			
ETHYLBENZENE	4.79		ug/L	5.00	0.00	96	70-130			
ETHYLENE DIBROMIDE	4.84		ug/L	5.00	0.00	97	70-130			
HEXACHLOROBUTADIENE	5.46		ug/L	5.00	0.00	109	70-130			
ISOPROPYLBENZENE	4.64		ug/L	5.00	0.00	93	70-130			
M/P-XYLENES	9.05		ug/L	10.0	0.00	90	70-130			
METHYL-TERT-BUTYL ETHER	4.39		ug/L	5.00	0.00	88	70-130			
NAPHTHALENE	4.65		ug/L	5.00	0.00	93	70-130			
N-BUTYLBENZENE	4.91		ug/L	5.00	0.00	98	70-130			
N-PROPYLBENZENE	4.73		ug/L	5.00	0.00	95	70-130			
ORTHO-XYLENE	4.84		ug/L	5.00	0.00	97	70-130			
SEC-BUTYLBENZENE	5.04		ug/L	5.00	0.00	101	70-130			
STYRENE	4.42		ug/L	5.00	0.00	88	70-130			
TERT-BUTYLBENZENE	4.80		ug/L	5.00	0.00	96	70-130			
TETRACHLOROETHENE	5.28		ug/L	5.00	0.00	106	70-130			

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Tucson, AZ 85735
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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	08/19/2022 17:13

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike (BF22806-MS1)		**Source: L220909-02**			Prepared & Analyzed: 06/28/2022					
Batch BF22806 - DEFAULT ORGANIC PREP										
TOLUENE	5.00		ug/L	5.00	0.00	100	70-130			
TRANS-1,2-DICHLOROETHENE	4.75		ug/L	5.00	0.00	95	70-130			
TRANS-1,3-DICHLOROPROPENE	4.83		ug/L	5.00	0.00	97	70-130			
TRICHLOROETHENE	4.88		ug/L	5.00	0.00	98	70-130			
TRICHLOROFLUOROMETHANE	4.89		ug/L	5.00	0.00	98	70-130			
VINYL CHLORIDE	4.90		ug/L	5.00	0.00	98	70-130			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.69*		ug/L	*5.00*		*94*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.82*		ug/L	*5.00*		*96*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.00*		ug/L	*5.00*		*100*	*70-130*			
Matrix Spike Dup (BF22806-MSD1) (for RPD QC only)		**Source: L220909-02**			Prepared & Analyzed: 06/28/2022					
Batch BF22806 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	4.73		ug/L	5.00	0.00	95		2	20	
1,1,1-TRICHLOROETHANE	4.89		ug/L	5.00	0.00	98		6	20	
1,1,2,2-TETRACHLOROETHANE	5.16		ug/L	5.00	0.00	103		7	20	
1,1,2-TRICHLOROETHANE	5.18		ug/L	5.00	0.00	104		5	20	
1,1-DICHLOROETHANE	5.21		ug/L	5.00	0.00	104		8	20	
1,1-DICHLOROETHENE	5.54		ug/L	5.00	0.00	111		11	20	
1,1-DICHLOROPROPENE	5.10		ug/L	5.00	0.00	102		13	20	
1,2,3-TRICHLOROBENZENE	5.33		ug/L	5.00	0.00	107		4	20	
1,2,3-TRICHLOROPROPANE	4.66		ug/L	5.00	0.00	93		2	20	
1,2,4-TRICHLOROBENZENE	5.07		ug/L	5.00	0.00	101		0.7	20	
1,2,4-TRIMETHYLBENZENE	4.90		ug/L	5.00	0.00	98		5	20	
1,2-DIBROMO-3-CHLOROPROPANE	4.87		ug/L	5.00	0.00	97		4	20	
1,2-DICHLOROBENZENE	5.19		ug/L	5.00	0.00	104		3	20	
1,2-DICHLOROETHANE	5.20		ug/L	5.00	0.00	104		11	20	
1,2-DICHLOROPROPANE	4.82		ug/L	5.00	0.00	96		0.4	20	
1,3,5-TRIMETHYLBENZENE	5.01		ug/L	5.00	0.00	100		10	20	

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Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	08/19/2022 17:13

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike Dup (BF22806-MSD1) (for RPD QC only)				**Source: L220909-02**		Prepared & Analyzed: 06/28/2022				
Batch BF22806 - DEFAULT ORGANIC PREP										
1,3-DICHLOROBENZENE	5.16		ug/L	5.00	0.00	103		5	20	
1,3-DICHLOROPROPANE	4.79		ug/L	5.00	0.00	96		2	20	
1,4-DICHLOROBENZENE	5.10		ug/L	5.00	0.00	102		2	20	
2,2-DICHLOROPROPANE	5.18		ug/L	5.00	0.00	104		4	20	
2-CHLOROTOLUENE	5.12		ug/L	5.00	0.00	102		7	20	
4-CHLOROTOLUENE	4.93		ug/L	5.00	0.00	99		3	20	
4-ISOPROPYLTOLUENE	5.28		ug/L	5.00	0.00	106		4	20	
BENZENE	5.40		ug/L	5.00	0.00	108		8	20	
BROMOBENZENE	5.41		ug/L	5.00	0.00	108		10	20	
BROMOCHLOROMETHANE	5.16		ug/L	5.00	0.00	103		2	20	
BROMODICHLOROMETHANE	4.86		ug/L	5.00	0.00	97		0.6	20	
BROMOFORM	4.64		ug/L	5.00	0.00	93		1	20	
BROMOMETHANE	6.50		ug/L	5.00	0.00	130		0.9	20	
CARBON TETRACHLORIDE	5.14		ug/L	5.00	0.00	103		8	20	
CHLOROBENZENE	5.17		ug/L	5.00	0.00	103		5	20	
CHLOROETHANE	4.99		ug/L	5.00	0.00	100		13	20	
CHLOROFORM	4.82		ug/L	5.00	0.00	96		5	20	
CHLOROMETHANE	5.52		ug/L	5.00	0.451	101		7	20	
CIS-1,2-DICHLOROETHENE	5.25		ug/L	5.00	0.00	105		7	20	
CIS-1,3-DICHLOROPROPENE	4.75		ug/L	5.00	0.00	95		1	20	
DIBROMOCHLOROMETHANE	4.66		ug/L	5.00	0.00	93		1	20	
DIBROMOMETHANE	4.95		ug/L	5.00	0.00	99		2	20	
DICHLORODIFLUOROMETHANE	5.94		ug/L	5.00	0.00	119		5	20	
DICHLOROMETHANE	5.40		ug/L	5.00	0.00	108		13	20	
ETHYLBENZENE	5.05		ug/L	5.00	0.00	101		5	20	
ETHYLENE DIBROMIDE	5.00		ug/L	5.00	0.00	100		3	20	
HEXACHLOROBUTADIENE	5.73		ug/L	5.00	0.00	115		5	20	
ISOPROPYLBENZENE	4.92		ug/L	5.00	0.00	98		6	20	
M/P-XYLENES	9.74		ug/L	10.0	0.00	97		7	20	
METHYL-TERT-BUTYL ETHER	4.83		ug/L	5.00	0.00	97		10	20	
NAPHTHALENE	4.85		ug/L	5.00	0.00	97		4	20	

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Tucson Water Quality Lab
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Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	08/19/2022 17:13

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike Dup (BF22806-MSD1) (for RPD QC only)				**Source: L220909-02**		Prepared & Analyzed: 06/28/2022				
Batch BF22806 - DEFAULT ORGANIC PREP										
N-BUTYLBENZENE	5.02		ug/L	5.00	0.00	100		2	20	
N-PROPYLBENZENE	4.56		ug/L	5.00	0.00	91		4	20	
ORTHO-XYLENE	4.99		ug/L	5.00	0.00	100		3	20	
SEC-BUTYLBENZENE	5.22		ug/L	5.00	0.00	104		4	20	
STYRENE	4.75		ug/L	5.00	0.00	95		7	20	
TERT-BUTYLBENZENE	4.73		ug/L	5.00	0.00	95		2	20	
TETRACHLOROETHENE	5.16		ug/L	5.00	0.00	103		2	20	
TOLUENE	5.07		ug/L	5.00	0.00	101		1	20	
TRANS-1,2-DICHLOROETHENE	5.42		ug/L	5.00	0.00	108		13	20	
TRANS-1,3-DICHLOROPROPENE	5.04		ug/L	5.00	0.00	101		4	20	
TRICHLOROETHENE	5.00		ug/L	5.00	0.00	100		3	20	
TRICHLOROFLUOROMETHANE	5.54		ug/L	5.00	0.00	111		13	20	
VINYL CHLORIDE	5.51		ug/L	5.00	0.00	110		12	20	
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.94*		ug/L	*5.00*		*99*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.02*		ug/L	*5.00*		*100*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.05*		ug/L	*5.00*		*101*	*70-130*			
Reference (BF22806-SRM1)						Prepared & Analyzed: 06/28/2022				
Batch BF22806 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	4.82		ug/L	5.00		96	80-120			
1,1,1-TRICHLOROETHANE	4.82		ug/L	5.00		96	80-120			
1,1,2,2-TETRACHLOROETHANE	5.13		ug/L	5.00		103	80-120			
1,1,2-TRICHLOROETHANE	5.28		ug/L	5.00		106	80-120			
1,1-DICHLOROETHANE	5.08		ug/L	5.00		102	80-120			
1,1-DICHLOROETHENE	5.55		ug/L	5.00		111	80-120			
1,1-DICHLOROPROPENE	4.98		ug/L	5.00		100	80-120			
1,2,3-TRICHLOROBENZENE	5.14		ug/L	5.00		103	80-120			
1,2,3-TRICHLOROPROPANE	4.91		ug/L	5.00		98	80-120			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	08/19/2022 17:13

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BF22806-SRM1)					Prepared & Analyzed: 06/28/2022					
Batch BF22806 - DEFAULT ORGANIC PREP										
1,2,4-TRICHLOROBENZENE	4.93		ug/L	5.00		99	80-120			
1,2,4-TRIMETHYLBENZENE	4.84		ug/L	5.00		97	80-120			
1,2-DIBROMO-3-CHLOROPROPANE	4.92		ug/L	5.00		98	72-115			
1,2-DICHLOROBENZENE	5.07		ug/L	5.00		101	80-120			
1,2-DICHLOROETHANE	5.13		ug/L	5.00		103	80-120			
1,2-DICHLOROPROPANE	5.02		ug/L	5.00		100	80-120			
1,3,5-TRIMETHYLBENZENE	4.71		ug/L	5.00		94	80-120			
1,3-DICHLOROBENZENE	5.14		ug/L	5.00		103	80-120			
1,3-DICHLOROPROPANE	4.90		ug/L	5.00		98	80-120			
1,4-DICHLOROBENZENE	4.98		ug/L	5.00		100	80-120			
2,2-DICHLOROPROPANE	5.25		ug/L	5.00		105	86-136			
2-CHLOROTOLUENE	5.02		ug/L	5.00		100	80-120			
4-CHLOROTOLUENE	5.02		ug/L	5.00		100	80-120			
4-ISOPROPYLTOLUENE	5.03		ug/L	5.00		101	80-120			
BENZENE	5.38		ug/L	5.00		108	80-120			
BROMOBENZENE	5.17		ug/L	5.00		103	80-120			
BROMOCHLOROMETHANE	5.26		ug/L	5.00		105	81-124			
BROMODICHLOROMETHANE	5.04		ug/L	5.00		101	80-120			
BROMOFORM	4.85		ug/L	5.00		97	74-118			
BROMOMETHANE	6.41		ug/L	5.00		128	66-136			
CARBON TETRACHLORIDE	5.06		ug/L	5.00		101	77-118			
CHLOROBENZENE	5.19		ug/L	5.00		104	80-120			
CHLOROETHANE	4.73		ug/L	5.00		95	80-120			
CHLOROFORM	4.94		ug/L	5.00		99	80-120			
CHLOROMETHANE	5.31		ug/L	5.00		106	69-115			
CIS-1,2-DICHLOROETHENE	5.05		ug/L	5.00		101	80-120			
CIS-1,3-DICHLOROPROPENE	5.08		ug/L	5.00		102	80-120			
DIBROMOCHLOROMETHANE	4.90		ug/L	5.00		98	80-120			
DIBROMOMETHANE	5.25		ug/L	5.00		105	80-120			
DICHLORODIFLUOROMETHANE	6.00		ug/L	5.00		120	59-125			
DICHLOROMETHANE	5.31		ug/L	5.00		106	80-120			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	08/19/2022 17:13

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BF22806-SRM1)				Prepared & Analyzed: 06/28/2022						
Batch BF22806 - DEFAULT ORGANIC PREP										
ETHYLBENZENE	4.95		ug/L	5.00		99	80-120			
ETHYLENE DIBROMIDE	5.00		ug/L	5.00		100	80-120			
HEXACHLOROBUTADIENE	5.24		ug/L	5.00		105	80-120			
ISOPROPYLBENZENE	4.79		ug/L	5.00		96	80-120			
M/P-XYLENES	9.64		ug/L	10.0		96	80-120			
METHYL-TERT-BUTYL ETHER	4.71		ug/L	5.00		94	80-120			
NAPHTHALENE	4.63		ug/L	5.00		93	75-119			
N-BUTYLBENZENE	4.78		ug/L	5.00		96	80-120			
N-PROPYLBENZENE	4.72		ug/L	5.00		94	80-120			
ORTHO-XYLENE	4.96		ug/L	5.00		99	80-120			
SEC-BUTYLBENZENE	5.15		ug/L	5.00		103	80-120			
STYRENE	4.80		ug/L	5.00		96	80-120			
TERT-BUTYLBENZENE	5.09		ug/L	5.00		102	80-120			
TETRACHLOROETHENE	5.32		ug/L	5.00		106	80-120			
TOLUENE	5.17		ug/L	5.00		103	80-120			
TRANS-1,2-DICHLOROETHENE	5.03		ug/L	5.00		101	80-120			
TRANS-1,3-DICHLOROPROPENE	5.27		ug/L	5.00		105	81-122			
TRICHLOROETHENE	5.09		ug/L	5.00		102	80-120			
TRICHLOROFLUOROMETHANE	5.42		ug/L	5.00		108	80-120			
VINYL CHLORIDE	5.27		ug/L	5.00		105	80-120			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*5.05*		ug/L	*5.00*		*101*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.98*		ug/L	*5.00*		*100*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.00*		ug/L	*5.00*		*100*	*70-130*			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	08/19/2022 17:13

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

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TUCSON WATER CHAIN OF CUSTODY

LOGIN ID: L220909

CLIENT: ES

PROJECT NAME/FREQUENCY:
LOS REALES Landfill
Monthly

PROJECT #: P01049

SAMPLING DATE:
6/27/2022

SAMPLED BY:
print full name
Chad Hancock
signature
Chad S. Hancock

SAMPLE #	TIME	LOCATION	SITE	NUMBER OF CONTAINERS	PRESERVATIVE	(Na2S2O3)	(Unpreserved)	(HNO3)						(H2SO4)	(NaS2O3/H2SO4)	(Unpreserved)	(NaS2O3/H2SO4)	(H2SO4)	(HCl)	(Ascorbic Acid)	(Na2S2O3)			(Unpreserved)							(H2SO4)		(NaOH)	(NaOH/Zinc Acetate)	COMMENTS
								ICP	ICP	ICP	ICP	ICP	ICPMS	ICPMS					8260		EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	
-01	1106	LR GW INF	LRLF	4															X															TBs declined
-02	1112	LR GW EFF	LRLF	4															X															by ES for this
																																		project

COMMENTS: Sample on the fourth Monday of the month.

SPECIAL TURNAROUND TIME:

	SIGNATURE	DATE/TIME		SIGNATURE	DATE/TIME
RELINQUISHED BY:	Chad S. Hancock	6/27/22 1255	RECEIVED BY:		06/27/22 1257
RELINQUISHED BY:			RECEIVED BY:		

RECEIVING TEMPERATURE= 0.3 °C

4401 S. Tucson Estates Parkway
Tucson, Arizona 85735
520.837.2469 Phone
520.791.5260 Fax

07 October 2022

Gira Patel

Environmental Services

-

Tucson, AZ 85726

RE: Los Reales Landfill Monthly

Enclosed are the results for Work Order L221069, received by the laboratory on 07/25/2022 13:23. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Frank Walker

Frank Walker
Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/07/2022 14:34

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Secondary ID/Location	Date Sampled	Date Received
L221069-01	LR GW INF	Spigot	07/25/2022 12:20	07/25/2022 13:23
L221069-02	LR GW EFF	Spigot	07/25/2022 12:25	07/25/2022 13:23

Tucson Water Quality Laboratory

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Frank Walker

Frank Walker, Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/07/2022 14:34

Case Narative / Items for Project Manager Review

All QC results were within QC limits.

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/07/2022 14:34

LR GW INF (Spigot)
L221069-01

Sampled: 07/25/2022 12:20

Tucson Water Quality Laboratory (AZ0038)

Volatile Organic Compounds by GC/MS

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/07/2022 14:34

LR GW INF (Spigot)
L221069-01

Sampled: 07/25/2022 12:20

Tucson Water Quality Laboratory (AZ0038)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CHLOROFORM	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
DICHLORODIFLUOROMETHANE	**0.00105**	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
NAPHTHALENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
TETRACHLOROETHENE	**0.00384**	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
TRICHLOROETHENE	**0.00165**	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
TRICHLOROFLUOROMETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
XYLENES (TOTAL)	ND	0.0015	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		*93 %*		*70-130*	*BH21702*	*08/01/2022*	*08/01/2022*	*EPA 8260B*	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		*96 %*		*70-130*	*BH21702*	*08/01/2022*	*08/01/2022*	*EPA 8260B*	
Surrogate: TOLUENE-D8 (SURR.)		*100 %*		*70-130*	*BH21702*	*08/01/2022*	*08/01/2022*	*EPA 8260B*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/07/2022 14:34

LR GW EFF (Spigot)
L221069-02

Sampled:
07/25/2022 12:25

Tucson Water Quality Laboratory (AZ0038)

Volatile Organic Compounds by GC/MS

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/07/2022 14:34

LR GW EFF (Spigot)
L221069-02

Sampled: 07/25/2022 12:25

Tucson Water Quality Laboratory (AZ0038)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CHLOROFORM	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
DICHLORODIFLUOROMETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
NAPHTHALENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
TETRACHLOROETHENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
TRICHLOROETHENE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
TRICHLOROFLUOROMETHANE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
XYLENES (TOTAL)	ND	0.0015	mg/L	1	BH21702	08/01/2022	08/01/2022	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		*95 %*		*70-130*	*BH21702*	*08/01/2022*	*08/01/2022*	*EPA 8260B*	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		*96 %*		*70-130*	*BH21702*	*08/01/2022*	*08/01/2022*	*EPA 8260B*	
Surrogate: TOLUENE-D8 (SURR.)		*96 %*		*70-130*	*BH21702*	*08/01/2022*	*08/01/2022*	*EPA 8260B*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/07/2022 14:34

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BH21702-BLK1)					Prepared & Analyzed: 08/01/2022					
Batch BH21702 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	ND	0.000500	mg/L							
1,1,1-TRICHLOROETHANE	ND	0.000500	mg/L							
1,1,2,2-TETRACHLOROETHANE	ND	0.000500	mg/L							
1,1,2-TRICHLOROETHANE	ND	0.000500	mg/L							
1,1-DICHLOROETHANE	ND	0.000500	mg/L							
1,1-DICHLOROETHENE	ND	0.000500	mg/L							
1,1-DICHLOROPROPENE	ND	0.000500	mg/L							
1,2,3-TRICHLOROBENZENE	ND	0.000500	mg/L							
1,2,3-TRICHLOROPROPANE	ND	0.000500	mg/L							
1,2,4-TRICHLOROBENZENE	ND	0.000500	mg/L							
1,2,4-TRIMETHYLBENZENE	ND	0.000500	mg/L							
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.000500	mg/L							
1,2-DICHLOROBENZENE	ND	0.000500	mg/L							
1,2-DICHLOROETHANE	ND	0.000500	mg/L							
1,2-DICHLOROPROPANE	ND	0.000500	mg/L							
1,3,5-TRIMETHYLBENZENE	ND	0.000500	mg/L							
1,3-DICHLOROBENZENE	ND	0.000500	mg/L							
1,3-DICHLOROPROPANE	ND	0.000500	mg/L							
1,4-DICHLOROBENZENE	ND	0.000500	mg/L							
2,2-DICHLOROPROPANE	ND	0.000500	mg/L							
2-CHLOROTOLUENE	ND	0.000500	mg/L							
4-CHLOROTOLUENE	ND	0.000500	mg/L							
4-ISOPROPYLTOLUENE	ND	0.000500	mg/L							
BENZENE	ND	0.000500	mg/L							
BROMOBENZENE	ND	0.000500	mg/L							
BROMOCHLOROMETHANE	ND	0.000500	mg/L							
BROMODICHLOROMETHANE	ND	0.000500	mg/L							
BROMOFORM	ND	0.000500	mg/L							
BROMOMETHANE	ND	0.000500	mg/L							
CARBON TETRACHLORIDE	ND	0.000500	mg/L							

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/07/2022 14:34

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BH21702-BLK1)					Prepared & Analyzed: 08/01/2022					
Batch BH21702 - DEFAULT ORGANIC PREP										
CHLOROBENZENE	ND	0.000500	mg/L							
CHLOROETHANE	ND	0.000500	mg/L							
CHLOROFORM	ND	0.000500	mg/L							
CHLOROMETHANE	ND	0.000500	mg/L							
CIS-1,2-DICHLOROETHENE	ND	0.000500	mg/L							
CIS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L							
DIBROMOCHLOROMETHANE	ND	0.000500	mg/L							
DIBROMOMETHANE	ND	0.000500	mg/L							
DICHLORODIFLUOROMETHANE	ND	0.000500	mg/L							
DICHLOROMETHANE	ND	0.000500	mg/L							
ETHYLBENZENE	ND	0.000500	mg/L							
ETHYLENE DIBROMIDE	ND	0.000500	mg/L							
HEXACHLOROBUTADIENE	ND	0.000500	mg/L							
ISOPROPYLBENZENE	ND	0.000500	mg/L							
M/P-XYLENES	ND	0.000500	mg/L							
METHYL-TERT-BUTYL ETHER	ND	0.000500	mg/L							
NAPHTHALENE	ND	0.000500	mg/L							
N-BUTYLBENZENE	ND	0.000500	mg/L							
N-PROPYLBENZENE	ND	0.000500	mg/L							
ORTHO-XYLENE	ND	0.000500	mg/L							
SEC-BUTYLBENZENE	ND	0.000500	mg/L							
STYRENE	ND	0.000500	mg/L							
TERT-BUTYLBENZENE	ND	0.000500	mg/L							
TETRACHLOROETHENE	ND	0.000500	mg/L							
TOLUENE	ND	0.000500	mg/L							
TRANS-1,2-DICHLOROETHENE	ND	0.000500	mg/L							
TRANS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L							
TRICHLOROETHENE	ND	0.000500	mg/L							
TRICHLOROFLUOROMETHANE	ND	0.000500	mg/L							
VINYL CHLORIDE	ND	0.000500	mg/L							

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/07/2022 14:34

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BH21702-BLK1)					Prepared & Analyzed: 08/01/2022					
Batch BH21702 - DEFAULT ORGANIC PREP										
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.63*		ug/L	*5.00*		*93*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.74*		ug/L	*5.00*		*95*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*4.76*		ug/L	*5.00*		*95*	*70-130*			
Matrix Spike (BH21702-MS1)			**Source: L221069-02**		Prepared & Analyzed: 08/01/2022					
Batch BH21702 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	5.00		ug/L	5.00	0.00	100	70-130			
1,1,1-TRICHLOROETHANE	4.18		ug/L	5.00	0.00	84	70-130			
1,1,2,2-TETRACHLOROETHANE	5.12		ug/L	5.00	0.00	102	70-130			
1,1,2-TRICHLOROETHANE	5.20		ug/L	5.00	0.00	104	70-130			
1,1-DICHLOROETHANE	4.61		ug/L	5.00	0.00	92	70-130			
1,1-DICHLOROETHENE	4.09		ug/L	5.00	0.00	82	70-130			
1,1-DICHLOROPROPENE	3.95		ug/L	5.00	0.00	79	70-130			
1,2,3-TRICHLOROBENZENE	4.72		ug/L	5.00	0.00	94	70-130			
1,2,3-TRICHLOROPROPANE	5.31		ug/L	5.00	0.00	106	70-130			
1,2,4-TRICHLOROBENZENE	4.59		ug/L	5.00	0.00	92	70-130			
1,2,4-TRIMETHYLBENZENE	4.47		ug/L	5.00	0.00	89	70-130			
1,2-DIBROMO-3-CHLOROPROPANE	5.29		ug/L	5.00	0.00	106	70-130			
1,2-DICHLOROBENZENE	4.90		ug/L	5.00	0.00	98	70-130			
1,2-DICHLOROETHANE	5.04		ug/L	5.00	0.00	101	70-130			
1,2-DICHLOROPROPANE	4.88		ug/L	5.00	0.00	98	70-130			
1,3,5-TRIMETHYLBENZENE	4.56		ug/L	5.00	0.00	91	70-130			
1,3-DICHLOROBENZENE	4.72		ug/L	5.00	0.00	94	70-130			
1,3-DICHLOROPROPANE	4.95		ug/L	5.00	0.00	99	70-130			
1,4-DICHLOROBENZENE	4.61		ug/L	5.00	0.00	92	70-130			
2,2-DICHLOROPROPANE	4.54		ug/L	5.00	0.00	91	70-130			
2-CHLOROTOLUENE	4.60		ug/L	5.00	0.00	92	70-130			
4-CHLOROTOLUENE	4.44		ug/L	5.00	0.00	89	70-130			
4-ISOPROPYLTOLUENE	4.49		ug/L	5.00	0.00	90	70-130			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/07/2022 14:34

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike (BH21702-MS1)		**Source: L221069-02**			Prepared & Analyzed: 08/01/2022					
Batch BH21702 - DEFAULT ORGANIC PREP										
BENZENE	4.61		ug/L	5.00	0.00	92	70-130			
BROMOBENZENE	4.99		ug/L	5.00	0.00	100	70-130			
BROMOCHLOROMETHANE	4.82		ug/L	5.00	0.00	96	70-130			
BROMODICHLOROMETHANE	5.18		ug/L	5.00	0.00	104	70-130			
BROMOFORM	5.06		ug/L	5.00	0.00	101	70-130			
BROMOMETHANE	5.73		ug/L	5.00	0.00	115	70-130			
CARBON TETRACHLORIDE	4.31		ug/L	5.00	0.00	86	70-130			
CHLOROBENZENE	4.87		ug/L	5.00	0.00	97	70-130			
CHLOROETHANE	4.67		ug/L	5.00	0.00	93	70-130			
CHLOROFORM	4.72		ug/L	5.00	0.00	94	70-130			
CHLOROMETHANE	3.94		ug/L	5.00	0.417	70	70-130			
CIS-1,2-DICHLOROETHENE	4.82		ug/L	5.00	0.00	96	70-130			
CIS-1,3-DICHLOROPROPENE	5.21		ug/L	5.00	0.00	104	70-130			
DIBROMOCHLOROMETHANE	5.20		ug/L	5.00	0.00	104	70-130			
DIBROMOMETHANE	5.14		ug/L	5.00	0.00	103	70-130			
DICHLORODIFLUOROMETHANE	3.56		ug/L	5.00	0.00	71	70-130			
DICHLOROMETHANE	4.63		ug/L	5.00	0.00	93	70-130			
ETHYLBENZENE	4.57		ug/L	5.00	0.00	91	70-130			
ETHYLENE DIBROMIDE	4.88		ug/L	5.00	0.00	98	70-130			
HEXACHLOROBUTADIENE	4.59		ug/L	5.00	0.00	92	70-130			
ISOPROPYLBENZENE	4.48		ug/L	5.00	0.00	90	70-130			
M/P-XYLENES	8.95		ug/L	10.0	0.00	89	70-130			
METHYL-TERT-BUTYL ETHER	4.43		ug/L	5.00	0.00	89	70-130			
NAPHTHALENE	5.01		ug/L	5.00	0.00	100	70-130			
N-BUTYLBENZENE	4.17		ug/L	5.00	0.00	83	70-130			
N-PROPYLBENZENE	4.48		ug/L	5.00	0.00	90	70-130			
ORTHO-XYLENE	4.76		ug/L	5.00	0.00	95	70-130			
SEC-BUTYLBENZENE	4.56		ug/L	5.00	0.00	91	70-130			
STYRENE	4.60		ug/L	5.00	0.00	92	70-130			
TERT-BUTYLBENZENE	4.31		ug/L	5.00	0.00	86	70-130			
TETRACHLOROETHENE	4.52		ug/L	5.00	0.00	90	70-130			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/07/2022 14:34

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike (BH21702-MS1)		**Source: L221069-02**			Prepared & Analyzed: 08/01/2022					
Batch BH21702 - DEFAULT ORGANIC PREP										
TOLUENE	4.75		ug/L	5.00	0.00	95	70-130			
TRANS-1,2-DICHLOROETHENE	4.35		ug/L	5.00	0.00	87	70-130			
TRANS-1,3-DICHLOROPROPENE	5.49		ug/L	5.00	0.00	110	70-130			
TRICHLOROETHENE	4.65		ug/L	5.00	0.00	93	70-130			
TRICHLOROFLUOROMETHANE	3.73		ug/L	5.00	0.00	75	70-130			
VINYL CHLORIDE	3.68		ug/L	5.00	0.00	74	70-130			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.91*		ug/L	*5.00*		*98*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.88*		ug/L	*5.00*		*98*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.06*		ug/L	*5.00*		*101*	*70-130*			
Matrix Spike Dup (BH21702-MSD1) (for RPD QC only)		**Source: L221069-02**			Prepared & Analyzed: 08/01/2022					
Batch BH21702 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	4.65		ug/L	5.00	0.00	93		7	20	
1,1,1-TRICHLOROETHANE	4.12		ug/L	5.00	0.00	82		1	20	
1,1,2,2-TETRACHLOROETHANE	4.81		ug/L	5.00	0.00	96		6	20	
1,1,2-TRICHLOROETHANE	5.08		ug/L	5.00	0.00	102		2	20	
1,1-DICHLOROETHANE	4.48		ug/L	5.00	0.00	90		3	20	
1,1-DICHLOROETHENE	4.22		ug/L	5.00	0.00	84		3	20	
1,1-DICHLOROPROPENE	3.94		ug/L	5.00	0.00	79		0.08	20	
1,2,3-TRICHLOROBENZENE	4.32		ug/L	5.00	0.00	86		9	20	
1,2,3-TRICHLOROPROPANE	4.80		ug/L	5.00	0.00	96		10	20	
1,2,4-TRICHLOROBENZENE	4.29		ug/L	5.00	0.00	86		7	20	
1,2,4-TRIMETHYLBENZENE	4.24		ug/L	5.00	0.00	85		5	20	
1,2-DIBROMO-3-CHLOROPROPANE	4.72		ug/L	5.00	0.00	94		11	20	
1,2-DICHLOROBENZENE	4.68		ug/L	5.00	0.00	94		5	20	
1,2-DICHLOROETHANE	4.82		ug/L	5.00	0.00	96		4	20	
1,2-DICHLOROPROPANE	4.76		ug/L	5.00	0.00	95		3	20	
1,3,5-TRIMETHYLBENZENE	4.29		ug/L	5.00	0.00	86		6	20	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/07/2022 14:34

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike Dup (BH21702-MSD1) (for RPD QC only)			**Source: L221069-02**		Prepared & Analyzed: 08/01/2022					
Batch BH21702 - DEFAULT ORGANIC PREP										
1,3-DICHLOROBENZENE	4.53		ug/L	5.00	0.00	91		4	20	
1,3-DICHLOROPROPANE	4.66		ug/L	5.00	0.00	93		6	20	
1,4-DICHLOROBENZENE	4.30		ug/L	5.00	0.00	86		7	20	
2,2-DICHLOROPROPANE	4.73		ug/L	5.00	0.00	95		4	20	
2-CHLOROTOLUENE	4.42		ug/L	5.00	0.00	88		4	20	
4-CHLOROTOLUENE	4.25		ug/L	5.00	0.00	85		4	20	
4-ISOPROPYLTOLUENE	4.18		ug/L	5.00	0.00	84		7	20	
BENZENE	4.67		ug/L	5.00	0.00	93		1	20	
BROMOBENZENE	4.72		ug/L	5.00	0.00	94		6	20	
BROMOCHLOROMETHANE	4.07		ug/L	5.00	0.00	81		17	20	
BROMODICHLOROMETHANE	4.78		ug/L	5.00	0.00	96		8	20	
BROMOFORM	4.36		ug/L	5.00	0.00	87		15	20	
BROMOMETHANE	5.27		ug/L	5.00	0.00	105		8	20	
CARBON TETRACHLORIDE	4.20		ug/L	5.00	0.00	84		2	20	
CHLOROBENZENE	4.57		ug/L	5.00	0.00	91		6	20	
CHLOROETHANE	4.03		ug/L	5.00	0.00	81		15	20	
CHLOROFORM	4.75		ug/L	5.00	0.00	95		0.6	20	
CHLOROMETHANE	3.95		ug/L	5.00	0.417	71		0.4	20	
CIS-1,2-DICHLOROETHENE	4.63		ug/L	5.00	0.00	93		4	20	
CIS-1,3-DICHLOROPROPENE	4.93		ug/L	5.00	0.00	99		5	20	
DIBROMOCHLOROMETHANE	4.91		ug/L	5.00	0.00	98		6	20	
DIBROMOMETHANE	4.70		ug/L	5.00	0.00	94		9	20	
DICHLORODIFLUOROMETHANE	3.46		ug/L	5.00	0.00	69		3	20	
DICHLOROMETHANE	4.66		ug/L	5.00	0.00	93		0.7	20	
ETHYLBENZENE	4.42		ug/L	5.00	0.00	88		3	20	
ETHYLENE DIBROMIDE	4.77		ug/L	5.00	0.00	95		2	20	
HEXACHLOROBUTADIENE	4.36		ug/L	5.00	0.00	87		5	20	
ISOPROPYLBENZENE	4.25		ug/L	5.00	0.00	85		5	20	
M/P-XYLENES	8.69		ug/L	10.0	0.00	87		3	20	
METHYL-TERT-BUTYL ETHER	4.43		ug/L	5.00	0.00	89		0.02	20	
NAPHTHALENE	4.64		ug/L	5.00	0.00	93		8	20	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/07/2022 14:34

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike Dup (BH21702-MSD1) (for RPD QC only)				**Source: L221069-02**		Prepared & Analyzed: 08/01/2022				
Batch BH21702 - DEFAULT ORGANIC PREP										
N-BUTYLBENZENE	3.82		ug/L	5.00	0.00	76		9	20	
N-PROPYLBENZENE	4.18		ug/L	5.00	0.00	84		7	20	
ORTHO-XYLENE	4.58		ug/L	5.00	0.00	92		4	20	
SEC-BUTYLBENZENE	4.27		ug/L	5.00	0.00	85		7	20	
STYRENE	4.06		ug/L	5.00	0.00	81		12	20	
TERT-BUTYLBENZENE	4.14		ug/L	5.00	0.00	83		4	20	
TETRACHLOROETHENE	4.17		ug/L	5.00	0.00	83		8	20	
TOLUENE	4.52		ug/L	5.00	0.00	90		5	20	
TRANS-1,2-DICHLOROETHENE	4.30		ug/L	5.00	0.00	86		1	20	
TRANS-1,3-DICHLOROPROPENE	5.38		ug/L	5.00	0.00	108		2	20	
TRICHLOROETHENE	4.16		ug/L	5.00	0.00	83		11	20	
TRICHLOROFLUOROMETHANE	3.70		ug/L	5.00	0.00	74		0.9	20	
VINYL CHLORIDE	3.62		ug/L	5.00	0.00	72		2	20	
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.88*		ug/L	*5.00*		*98*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.73*		ug/L	*5.00*		*95*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*4.90*		ug/L	*5.00*		*98*	*70-130*			
Reference (BH21702-SRM1)						Prepared & Analyzed: 08/01/2022				
Batch BH21702 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	4.92		ug/L	5.00		98	80-120			
1,1,1-TRICHLOROETHANE	4.62		ug/L	5.00		92	80-120			
1,1,2,2-TETRACHLOROETHANE	5.12		ug/L	5.00		102	80-120			
1,1,2-TRICHLOROETHANE	5.12		ug/L	5.00		102	80-120			
1,1-DICHLOROETHANE	4.57		ug/L	5.00		91	80-120			
1,1-DICHLOROETHENE	4.59		ug/L	5.00		92	80-120			
1,1-DICHLOROPROPENE	4.72		ug/L	5.00		94	80-120			
1,2,3-TRICHLOROBENZENE	5.06		ug/L	5.00		101	80-120			
1,2,3-TRICHLOROPROPANE	5.44		ug/L	5.00		109	80-120			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/07/2022 14:34

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BH21702-SRM1)					Prepared & Analyzed: 08/01/2022					
Batch BH21702 - DEFAULT ORGANIC PREP										
1,2,4-TRICHLOROBENZENE	5.06		ug/L	5.00		101	80-120			
1,2,4-TRIMETHYLBENZENE	4.86		ug/L	5.00		97	80-120			
1,2-DIBROMO-3-CHLOROPROPANE	5.46		ug/L	5.00		109	72-115			
1,2-DICHLOROBENZENE	5.34		ug/L	5.00		107	80-120			
1,2-DICHLOROETHANE	5.02		ug/L	5.00		100	80-120			
1,2-DICHLOROPROPANE	5.02		ug/L	5.00		100	80-120			
1,3,5-TRIMETHYLBENZENE	4.91		ug/L	5.00		98	80-120			
1,3-DICHLOROBENZENE	5.22		ug/L	5.00		104	80-120			
1,3-DICHLOROPROPANE	5.01		ug/L	5.00		100	80-120			
1,4-DICHLOROBENZENE	5.00		ug/L	5.00		100	80-120			
2,2-DICHLOROPROPANE	5.52		ug/L	5.00		110	86-136			
2-CHLOROTOLUENE	4.95		ug/L	5.00		99	80-120			
4-CHLOROTOLUENE	5.04		ug/L	5.00		101	80-120			
4-ISOPROPYLTOLUENE	5.00		ug/L	5.00		100	80-120			
BENZENE	5.12		ug/L	5.00		102	80-120			
BROMOBENZENE	5.26		ug/L	5.00		105	80-120			
BROMOCHLOROMETHANE	4.91		ug/L	5.00		98	81-124			
BROMODICHLOROMETHANE	5.20		ug/L	5.00		104	80-120			
BROMOFORM	5.23		ug/L	5.00		105	74-118			
BROMOMETHANE	5.60		ug/L	5.00		112	66-136			
CARBON TETRACHLORIDE	5.02		ug/L	5.00		100	77-118			
CHLOROBENZENE	5.04		ug/L	5.00		101	80-120			
CHLOROETHANE	4.06		ug/L	5.00		81	80-120			
CHLOROFORM	5.07		ug/L	5.00		101	80-120			
CHLOROMETHANE	4.29		ug/L	5.00		86	69-115			
CIS-1,2-DICHLOROETHENE	4.87		ug/L	5.00		97	80-120			
CIS-1,3-DICHLOROPROPENE	5.21		ug/L	5.00		104	80-120			
DIBROMOCHLOROMETHANE	5.24		ug/L	5.00		105	80-120			
DIBROMOMETHANE	5.29		ug/L	5.00		106	80-120			
DICHLORODIFLUOROMETHANE	4.40		ug/L	5.00		88	59-125			
DICHLOROMETHANE	4.83		ug/L	5.00		97	80-120			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/07/2022 14:34

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BH21702-SRM1)					Prepared & Analyzed: 08/01/2022					
Batch BH21702 - DEFAULT ORGANIC PREP										
ETHYLBENZENE	4.94		ug/L	5.00		99	80-120			
ETHYLENE DIBROMIDE	5.15		ug/L	5.00		103	80-120			
HEXACHLOROBUTADIENE	5.56		ug/L	5.00		111	80-120			
ISOPROPYLBENZENE	4.82		ug/L	5.00		96	80-120			
M/P-XYLENES	9.75		ug/L	10.0		98	80-120			
METHYL-TERT-BUTYL ETHER	4.61		ug/L	5.00		92	80-120			
NAPHTHALENE	5.23		ug/L	5.00		105	75-119			
N-BUTYLBENZENE	4.86		ug/L	5.00		97	80-120			
N-PROPYLBENZENE	4.78		ug/L	5.00		96	80-120			
ORTHO-XYLENE	5.01		ug/L	5.00		100	80-120			
SEC-BUTYLBENZENE	5.03		ug/L	5.00		101	80-120			
STYRENE	4.99		ug/L	5.00		100	80-120			
TERT-BUTYLBENZENE	4.98		ug/L	5.00		100	80-120			
TETRACHLOROETHENE	5.04		ug/L	5.00		101	80-120			
TOLUENE	4.80		ug/L	5.00		96	80-120			
TRANS-1,2-DICHLOROETHENE	4.80		ug/L	5.00		96	80-120			
TRANS-1,3-DICHLOROPROPENE	5.72		ug/L	5.00		114	81-122			
TRICHLOROETHENE	4.83		ug/L	5.00		97	80-120			
TRICHLOROFLUOROMETHANE	4.65		ug/L	5.00		93	80-120			
VINYL CHLORIDE	4.10		ug/L	5.00		82	80-120			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.89*		ug/L	*5.00*		*98*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.98*		ug/L	*5.00*		*100*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*4.81*		ug/L	*5.00*		*96*	*70-130*			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/07/2022 14:34

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

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TUCSON WATER CHAIN OF CUSTODY

LOGIN ID: L221069

CLIENT: ES

PROJECT NAME/FREQUENCY:
LOS REALES Landfill
Monthly

PROJECT #: P01049

SAMPLING DATE:
7/25/2022

SAMPLED BY:
print full name
Chad Hancock
signature
Chad Hancock

SAMPLE #	TIME	LOCATION	SITE	NUMBER OF CONTAINERS	ICP	ICP	ICP	ICP	ICP	ICPMS	ICPMS	(H2SO4)	(NaS2O3/H2SO4)	(Unpreserved)	(NaS2O3/H2SO4)	(H2SO4)	8260 (HCl)	(Ascorbic Acid)	(Na2S2O3) EEA	(Na2S2O3) EEA	(Na2S2O3) EEA	(Unpreserved) EEA	(Unpreserved) EEA	(Unpreserved) EEA	(Unpreserved) EEA	(Unpreserved) EEA	(Unpreserved) EEA	(Unpreserved) EEA	(H2SO4) EEA	(NaOH) EEA	(NaOH/Zinc Acetate) EEA	COMMENTS
-01	1220	LR GW INF	LRLF	4													X															TBs declined
-02	1225	LR GW EFF	LRLF	4													X															by ES for this
																																project

COMMENTS: Sample on the fourth Monday of the month.

SPECIAL TURNAROUND TIME:

	SIGNATURE	DATE/TIME		SIGNATURE	DATE/TIME
RELINQUISHED BY:	Chad Hancock	7/25/22 1322	**RECEIVED BY:**		07/25/22 1323
RELINQUISHED BY:			**RECEIVED BY:**		

RECEIVING TEMPERATURE= 0.9 °C

4401 S. Tucson Estates Parkway
Tucson, Arizona 85735
520.837.2469 Phone
520.791.5260 Fax

11 October 2022

Gira Patel

Environmental Services

-

Tucson, AZ 85726

RE: Los Reales Landfill Monthly

Enclosed are the results for Work Order L221183, received by the laboratory on 08/22/2022 11:23. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Frank Walker

Frank Walker
Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/11/2022 18:31

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Secondary ID/Location	Date Sampled	Date Received
L221183-01	LR GW INF	LRLF	08/22/2022 10:18	08/22/2022 11:23
L221183-02	LR GW EFF	LRLF	08/22/2022 10:22	08/22/2022 11:23

Tucson Water Quality Laboratory

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Frank Walker

Frank Walker, Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/11/2022 18:31

Case Narative / Items for Project Manager Review

All QC results were within QC limits.

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/11/2022 18:31

LR GW INF (LRLF)
L221183-01

Sampled: 08/22/2022 10:18

Tucson Water Quality Laboratory (AZ0038)

Volatile Organic Compounds by GC/MS

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/11/2022 18:31

LR GW INF (LRLF)
L221183-01

Sampled: 08/22/2022 10:18

Tucson Water Quality Laboratory (AZ0038)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CHLOROFORM	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
DICHLORODIFLUOROMETHANE	**0.00120**	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
NAPHTHALENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
TETRACHLOROETHENE	**0.00425**	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
TRICHLOROETHENE	**0.00162**	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
TRICHLOROFLUOROMETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
XYLENES (TOTAL)	ND	0.0015	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		*103 %*		*70-130*	*BH22410*	*08/23/2022*	*08/23/2022*	*EPA 8260B*	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		*89 %*		*70-130*	*BH22410*	*08/23/2022*	*08/23/2022*	*EPA 8260B*	
Surrogate: TOLUENE-D8 (SURR.)		*95 %*		*70-130*	*BH22410*	*08/23/2022*	*08/23/2022*	*EPA 8260B*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/11/2022 18:31

LR GW EFF (LRLF)
L221183-02

Sampled:
08/22/2022 10:22

Tucson Water Quality Laboratory (AZ0038)

Volatile Organic Compounds by GC/MS

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/11/2022 18:31

LR GW EFF (LRLF)
L221183-02

Sampled: 08/22/2022 10:22

Tucson Water Quality Laboratory (AZ0038)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CHLOROFORM	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
DICHLORODIFLUOROMETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
NAPHTHALENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
TETRACHLOROETHENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
TRICHLOROETHENE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
TRICHLOROFLUOROMETHANE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
XYLENES (TOTAL)	ND	0.0015	mg/L	1	BH22410	08/23/2022	08/23/2022	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		*97 %*		*70-130*	*BH22410*	*08/23/2022*	*08/23/2022*	*EPA 8260B*	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		*92 %*		*70-130*	*BH22410*	*08/23/2022*	*08/23/2022*	*EPA 8260B*	
Surrogate: TOLUENE-D8 (SURR.)		*98 %*		*70-130*	*BH22410*	*08/23/2022*	*08/23/2022*	*EPA 8260B*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/11/2022 18:31

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BH22410-BLK1)				Prepared & Analyzed: 08/23/2022						
Batch BH22410 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	ND	0.000500	mg/L							
1,1,1-TRICHLOROETHANE	ND	0.000500	mg/L							
1,1,2,2-TETRACHLOROETHANE	ND	0.000500	mg/L							
1,1,2-TRICHLOROETHANE	ND	0.000500	mg/L							
1,1-DICHLOROETHANE	ND	0.000500	mg/L							
1,1-DICHLOROETHENE	ND	0.000500	mg/L							
1,1-DICHLOROPROPENE	ND	0.000500	mg/L							
1,2,3-TRICHLOROBENZENE	ND	0.000500	mg/L							
1,2,3-TRICHLOROPROPANE	ND	0.000500	mg/L							
1,2,4-TRICHLOROBENZENE	ND	0.000500	mg/L							
1,2,4-TRIMETHYLBENZENE	ND	0.000500	mg/L							
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.000500	mg/L							
1,2-DICHLOROBENZENE	ND	0.000500	mg/L							
1,2-DICHLOROETHANE	ND	0.000500	mg/L							
1,2-DICHLOROPROPANE	ND	0.000500	mg/L							
1,3,5-TRIMETHYLBENZENE	ND	0.000500	mg/L							
1,3-DICHLOROBENZENE	ND	0.000500	mg/L							
1,3-DICHLOROPROPANE	ND	0.000500	mg/L							
1,4-DICHLOROBENZENE	ND	0.000500	mg/L							
2,2-DICHLOROPROPANE	ND	0.000500	mg/L							
2-CHLOROTOLUENE	ND	0.000500	mg/L							
4-CHLOROTOLUENE	ND	0.000500	mg/L							
4-ISOPROPYLTOLUENE	ND	0.000500	mg/L							
BENZENE	ND	0.000500	mg/L							
BROMOBENZENE	ND	0.000500	mg/L							
BROMOCHLOROMETHANE	ND	0.000500	mg/L							
BROMODICHLOROMETHANE	ND	0.000500	mg/L							
BROMOFORM	ND	0.000500	mg/L							
BROMOMETHANE	ND	0.000500	mg/L							
CARBON TETRACHLORIDE	ND	0.000500	mg/L							

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/11/2022 18:31

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BH22410-BLK1)				Prepared & Analyzed: 08/23/2022						
Batch BH22410 - DEFAULT ORGANIC PREP										
CHLOROBENZENE	ND	0.000500	mg/L							
CHLOROETHANE	ND	0.000500	mg/L							
CHLOROFORM	ND	0.000500	mg/L							
CHLOROMETHANE	ND	0.000500	mg/L							
CIS-1,2-DICHLOROETHENE	ND	0.000500	mg/L							
CIS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L							
DIBROMOCHLOROMETHANE	ND	0.000500	mg/L							
DIBROMOMETHANE	ND	0.000500	mg/L							
DICHLORODIFLUOROMETHANE	ND	0.000500	mg/L							
DICHLOROMETHANE	ND	0.000500	mg/L							
ETHYLBENZENE	ND	0.000500	mg/L							
ETHYLENE DIBROMIDE	ND	0.000500	mg/L							
HEXACHLOROBUTADIENE	ND	0.000500	mg/L							
ISOPROPYLBENZENE	ND	0.000500	mg/L							
M/P-XYLENES	ND	0.000500	mg/L							
METHYL-TERT-BUTYL ETHER	ND	0.000500	mg/L							
NAPHTHALENE	ND	0.000500	mg/L							
N-BUTYLBENZENE	ND	0.000500	mg/L							
N-PROPYLBENZENE	ND	0.000500	mg/L							
ORTHO-XYLENE	ND	0.000500	mg/L							
SEC-BUTYLBENZENE	ND	0.000500	mg/L							
STYRENE	ND	0.000500	mg/L							
TERT-BUTYLBENZENE	ND	0.000500	mg/L							
TETRACHLOROETHENE	ND	0.000500	mg/L							
TOLUENE	ND	0.000500	mg/L							
TRANS-1,2-DICHLOROETHENE	ND	0.000500	mg/L							
TRANS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L							
TRICHLOROETHENE	ND	0.000500	mg/L							
TRICHLOROFLUOROMETHANE	ND	0.000500	mg/L							
VINYL CHLORIDE	ND	0.000500	mg/L							

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/11/2022 18:31

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BH22410-BLK1)					Prepared & Analyzed: 08/23/2022					
Batch BH22410 - DEFAULT ORGANIC PREP										
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.71*		ug/L	*5.00*		*94*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.57*		ug/L	*5.00*		*91*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*4.92*		ug/L	*5.00*		*98*	*70-130*			
Matrix Spike (BH22410-MS1)			**Source: L221183-02**		Prepared & Analyzed: 08/23/2022					
Batch BH22410 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	4.97		ug/L	5.00	0.00	99	70-130			
1,1,1-TRICHLOROETHANE	4.78		ug/L	5.00	0.00	96	70-130			
1,1,2,2-TETRACHLOROETHANE	4.84		ug/L	5.00	0.00	97	70-130			
1,1,2-TRICHLOROETHANE	5.26		ug/L	5.00	0.00	105	70-130			
1,1-DICHLOROETHANE	4.49		ug/L	5.00	0.00	90	70-130			
1,1-DICHLOROETHENE	4.61		ug/L	5.00	0.00	92	70-130			
1,1-DICHLOROPROPENE	4.58		ug/L	5.00	0.00	92	70-130			
1,2,3-TRICHLOROBENZENE	5.28		ug/L	5.00	0.00	106	70-130			
1,2,3-TRICHLOROPROPANE	5.06		ug/L	5.00	0.00	101	70-130			
1,2,4-TRICHLOROBENZENE	5.45		ug/L	5.00	0.00	109	70-130			
1,2,4-TRIMETHYLBENZENE	4.92		ug/L	5.00	0.00	98	70-130			
1,2-DIBROMO-3-CHLOROPROPANE	5.31		ug/L	5.00	0.00	106	70-130			
1,2-DICHLOROBENZENE	5.46		ug/L	5.00	0.00	109	70-130			
1,2-DICHLOROETHANE	4.90		ug/L	5.00	0.00	98	70-130			
1,2-DICHLOROPROPANE	4.81		ug/L	5.00	0.00	96	70-130			
1,3,5-TRIMETHYLBENZENE	5.08		ug/L	5.00	0.00	102	70-130			
1,3-DICHLOROBENZENE	5.29		ug/L	5.00	0.00	106	70-130			
1,3-DICHLOROPROPANE	4.93		ug/L	5.00	0.00	99	70-130			
1,4-DICHLOROBENZENE	5.32		ug/L	5.00	0.00	106	70-130			
2,2-DICHLOROPROPANE	5.37		ug/L	5.00	0.00	107	70-130			
2-CHLOROTOLUENE	4.98		ug/L	5.00	0.00	100	70-130			
4-CHLOROTOLUENE	5.28		ug/L	5.00	0.00	106	70-130			
4-ISOPROPYLTOLUENE	5.37		ug/L	5.00	0.00	107	70-130			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/11/2022 18:31

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike (BH22410-MS1)		**Source: L221183-02**		Prepared & Analyzed: 08/23/2022						
Batch BH22410 - DEFAULT ORGANIC PREP										
BENZENE	4.90		ug/L	5.00	0.00	98	70-130			
BROMOBENZENE	5.35		ug/L	5.00	0.00	107	70-130			
BROMOCHLOROMETHANE	4.69		ug/L	5.00	0.00	94	70-130			
BROMODICHLOROMETHANE	5.26		ug/L	5.00	0.00	105	70-130			
BROMOFORM	4.21		ug/L	5.00	0.00	84	70-130			
BROMOMETHANE	4.10		ug/L	5.00	0.00	82	70-130			
CARBON TETRACHLORIDE	5.03		ug/L	5.00	0.00	101	70-130			
CHLOROBENZENE	5.01		ug/L	5.00	0.00	100	70-130			
CHLOROETHANE	4.67		ug/L	5.00	0.00	93	70-130			
CHLOROFORM	4.76		ug/L	5.00	0.00	95	70-130			
CHLOROMETHANE	4.62		ug/L	5.00	0.248	87	70-130			
CIS-1,2-DICHLOROETHENE	5.08		ug/L	5.00	0.00	102	70-130			
CIS-1,3-DICHLOROPROPENE	5.29		ug/L	5.00	0.00	106	70-130			
DIBROMOCHLOROMETHANE	5.15		ug/L	5.00	0.00	103	70-130			
DIBROMOMETHANE	5.04		ug/L	5.00	0.00	101	70-130			
DICHLORODIFLUOROMETHANE	4.61		ug/L	5.00	0.00	92	70-130			
DICHLOROMETHANE	4.70		ug/L	5.00	0.00	94	70-130			
ETHYLBENZENE	5.00		ug/L	5.00	0.00	100	70-130			
ETHYLENE DIBROMIDE	5.04		ug/L	5.00	0.00	101	70-130			
HEXACHLOROBUTADIENE	6.00		ug/L	5.00	0.00	120	70-130			
ISOPROPYLBENZENE	4.97		ug/L	5.00	0.00	99	70-130			
M/P-XYLENES	10.2		ug/L	10.0	0.00	102	70-130			
METHYL-TERT-BUTYL ETHER	4.63		ug/L	5.00	0.00	93	70-130			
NAPHTHALENE	4.98		ug/L	5.00	0.00	100	70-130			
N-BUTYLBENZENE	5.11		ug/L	5.00	0.0600	101	70-130			
N-PROPYLBENZENE	5.07		ug/L	5.00	0.00	101	70-130			
ORTHO-XYLENE	4.82		ug/L	5.00	0.00	96	70-130			
SEC-BUTYLBENZENE	5.28		ug/L	5.00	0.00	106	70-130			
STYRENE	4.89		ug/L	5.00	0.00	98	70-130			
TERT-BUTYLBENZENE	5.10		ug/L	5.00	0.00	102	70-130			
TETRACHLOROETHENE	5.40		ug/L	5.00	0.168	105	70-130			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/11/2022 18:31

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike (BH22410-MS1)		**Source: L221183-02**		Prepared & Analyzed: 08/23/2022						
Batch BH22410 - DEFAULT ORGANIC PREP										
TOLUENE	5.19		ug/L	5.00	0.00	104	70-130			
TRANS-1,2-DICHLOROETHENE	4.82		ug/L	5.00	0.00	96	70-130			
TRANS-1,3-DICHLOROPROPENE	5.71		ug/L	5.00	0.00	114	70-130			
TRICHLOROETHENE	5.19		ug/L	5.00	0.0640	103	70-130			
TRICHLOROFLUOROMETHANE	4.72		ug/L	5.00	0.00	94	70-130			
VINYL CHLORIDE	4.32		ug/L	5.00	0.00	86	70-130			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.96*		ug/L	*5.00*		*99*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.40*		ug/L	*5.00*		*88*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*4.88*		ug/L	*5.00*		*98*	*70-130*			
Matrix Spike Dup (BH22410-MSD1) (for RPD QC only)		**Source: L221183-02**		Prepared & Analyzed: 08/23/2022						
Batch BH22410 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	5.01		ug/L	5.00	0.00	100		0.8	20	
1,1,1-TRICHLOROETHANE	4.98		ug/L	5.00	0.00	100		4	20	
1,1,2,2-TETRACHLOROETHANE	4.84		ug/L	5.00	0.00	97		0.06	20	
1,1,2-TRICHLOROETHANE	5.48		ug/L	5.00	0.00	110		4	20	
1,1-DICHLOROETHANE	4.78		ug/L	5.00	0.00	96		6	20	
1,1-DICHLOROETHENE	4.85		ug/L	5.00	0.00	97		5	20	
1,1-DICHLOROPROPENE	5.06		ug/L	5.00	0.00	101		10	20	
1,2,3-TRICHLOROBENZENE	5.42		ug/L	5.00	0.00	108		3	20	
1,2,3-TRICHLOROPROPANE	5.05		ug/L	5.00	0.00	101		0.2	20	
1,2,4-TRICHLOROBENZENE	5.47		ug/L	5.00	0.00	109		0.3	20	
1,2,4-TRIMETHYLBENZENE	4.94		ug/L	5.00	0.00	99		0.4	20	
1,2-DIBROMO-3-CHLOROPROPANE	5.18		ug/L	5.00	0.00	104		2	20	
1,2-DICHLOROBENZENE	5.54		ug/L	5.00	0.00	111		1	20	
1,2-DICHLOROETHANE	4.94		ug/L	5.00	0.00	99		0.7	20	
1,2-DICHLOROPROPANE	5.20		ug/L	5.00	0.00	104		8	20	
1,3,5-TRIMETHYLBENZENE	5.07		ug/L	5.00	0.00	101		0.1	20	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/11/2022 18:31

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike Dup (BH22410-MSD1) (for RPD QC only)			**Source: L221183-02**		Prepared & Analyzed: 08/23/2022					
Batch BH22410 - DEFAULT ORGANIC PREP										
1,3-DICHLOROBENZENE	5.40		ug/L	5.00	0.00	108		2	20	
1,3-DICHLOROPROPANE	5.13		ug/L	5.00	0.00	103		4	20	
1,4-DICHLOROBENZENE	5.45		ug/L	5.00	0.00	109		2	20	
2,2-DICHLOROPROPANE	5.88		ug/L	5.00	0.00	118		9	20	
2-CHLOROTOLUENE	5.08		ug/L	5.00	0.00	102		2	20	
4-CHLOROTOLUENE	5.24		ug/L	5.00	0.00	105		0.8	20	
4-ISOPROPYLTOLUENE	5.67		ug/L	5.00	0.00	113		5	20	
BENZENE	5.03		ug/L	5.00	0.00	101		3	20	
BROMOBENZENE	5.26		ug/L	5.00	0.00	105		2	20	
BROMOCHLOROMETHANE	4.49		ug/L	5.00	0.00	90		4	20	
BROMODICHLOROMETHANE	5.12		ug/L	5.00	0.00	102		3	20	
BROMOFORM	4.98		ug/L	5.00	0.00	100		17	20	
BROMOMETHANE	4.36		ug/L	5.00	0.00	87		6	20	
CARBON TETRACHLORIDE	5.35		ug/L	5.00	0.00	107		6	20	
CHLOROBENZENE	5.16		ug/L	5.00	0.00	103		3	20	
CHLOROETHANE	4.79		ug/L	5.00	0.00	96		3	20	
CHLOROFORM	4.70		ug/L	5.00	0.00	94		1	20	
CHLOROMETHANE	4.58		ug/L	5.00	0.248	87		0.9	20	
CIS-1,2-DICHLOROETHENE	5.19		ug/L	5.00	0.00	104		2	20	
CIS-1,3-DICHLOROPROPENE	5.41		ug/L	5.00	0.00	108		2	20	
DIBROMOCHLOROMETHANE	5.32		ug/L	5.00	0.00	106		3	20	
DIBROMOMETHANE	5.15		ug/L	5.00	0.00	103		2	20	
DICHLORODIFLUOROMETHANE	4.73		ug/L	5.00	0.00	95		3	20	
DICHLOROMETHANE	4.80		ug/L	5.00	0.00	96		2	20	
ETHYLBENZENE	5.04		ug/L	5.00	0.00	101		0.9	20	
ETHYLENE DIBROMIDE	5.25		ug/L	5.00	0.00	105		4	20	
HEXACHLOROBUTADIENE	5.94		ug/L	5.00	0.00	119		0.9	20	
ISOPROPYLBENZENE	5.10		ug/L	5.00	0.00	102		3	20	
M/P-XYLENES	9.84		ug/L	10.0	0.00	98		4	20	
METHYL-TERT-BUTYL ETHER	4.78		ug/L	5.00	0.00	96		3	20	
NAPHTHALENE	5.13		ug/L	5.00	0.00	103		3	20	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/11/2022 18:31

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike Dup (BH22410-MSD1) (for RPD QC only)				**Source: L221183-02**		Prepared & Analyzed: 08/23/2022				
Batch BH22410 - DEFAULT ORGANIC PREP										
N-BUTYLBENZENE	5.21		ug/L	5.00	0.0600	103		2	20	
N-PROPYLBENZENE	5.12		ug/L	5.00	0.00	102		1	20	
ORTHO-XYLENE	4.80		ug/L	5.00	0.00	96		0.5	20	
SEC-BUTYLBENZENE	5.25		ug/L	5.00	0.00	105		0.5	20	
STYRENE	4.94		ug/L	5.00	0.00	99		1	20	
TERT-BUTYLBENZENE	4.98		ug/L	5.00	0.00	100		2	20	
TETRACHLOROETHENE	5.65		ug/L	5.00	0.168	110		5	20	
TOLUENE	5.28		ug/L	5.00	0.00	106		2	20	
TRANS-1,2-DICHLOROETHENE	4.98		ug/L	5.00	0.00	100		3	20	
TRANS-1,3-DICHLOROPROPENE	5.95		ug/L	5.00	0.00	119		4	20	
TRICHLOROETHENE	5.54		ug/L	5.00	0.0640	110		7	20	
TRICHLOROFLUOROMETHANE	4.80		ug/L	5.00	0.00	96		2	20	
VINYL CHLORIDE	4.39		ug/L	5.00	0.00	88		2	20	
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.73*		ug/L	*5.00*		*95*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.77*		ug/L	*5.00*		*95*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*4.98*		ug/L	*5.00*		*100*	*70-130*			
Reference (BH22410-SRM1)						Prepared & Analyzed: 08/23/2022				
Batch BH22410 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	5.14		ug/L	5.00		103	80-120			
1,1,1-TRICHLOROETHANE	4.54		ug/L	5.00		91	80-120			
1,1,2,2-TETRACHLOROETHANE	4.69		ug/L	5.00		94	80-120			
1,1,2-TRICHLOROETHANE	4.88		ug/L	5.00		98	80-120			
1,1-DICHLOROETHANE	4.34		ug/L	5.00		87	80-120			
1,1-DICHLOROETHENE	4.50		ug/L	5.00		90	80-120			
1,1-DICHLOROPROPENE	4.60		ug/L	5.00		92	80-120			
1,2,3-TRICHLOROBENZENE	4.91		ug/L	5.00		98	80-120			
1,2,3-TRICHLOROPROPANE	5.07		ug/L	5.00		101	80-120			

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Tucson Water Quality Lab
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Tucson, AZ 85735
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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/11/2022 18:31

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BH22410-SRM1)					Prepared & Analyzed: 08/23/2022					
Batch BH22410 - DEFAULT ORGANIC PREP										
1,2,4-TRICHLOROBENZENE	5.13		ug/L	5.00		103	80-120			
1,2,4-TRIMETHYLBENZENE	4.98		ug/L	5.00		100	80-120			
1,2-DIBROMO-3-CHLOROPROPANE	4.86		ug/L	5.00		97	72-115			
1,2-DICHLOROBENZENE	5.07		ug/L	5.00		101	80-120			
1,2-DICHLOROETHANE	4.77		ug/L	5.00		95	80-120			
1,2-DICHLOROPROPANE	4.86		ug/L	5.00		97	80-120			
1,3,5-TRIMETHYLBENZENE	5.02		ug/L	5.00		100	80-120			
1,3-DICHLOROBENZENE	5.34		ug/L	5.00		107	80-120			
1,3-DICHLOROPROPANE	4.70		ug/L	5.00		94	80-120			
1,4-DICHLOROBENZENE	4.98		ug/L	5.00		100	80-120			
2,2-DICHLOROPROPANE	5.42		ug/L	5.00		108	86-136			
2-CHLOROTOLUENE	5.10		ug/L	5.00		102	80-120			
4-CHLOROTOLUENE	5.14		ug/L	5.00		103	80-120			
4-ISOPROPYLTOLUENE	5.11		ug/L	5.00		102	80-120			
BENZENE	4.63		ug/L	5.00		93	80-120			
BROMOBENZENE	5.30		ug/L	5.00		106	80-120			
BROMOCHLOROMETHANE	4.38		ug/L	5.00		88	81-124			
BROMODICHLOROMETHANE	5.14		ug/L	5.00		103	80-120			
BROMOFORM	4.19		ug/L	5.00		84	74-118			
BROMOMETHANE	4.07		ug/L	5.00		81	66-136			
CARBON TETRACHLORIDE	5.00		ug/L	5.00		100	77-118			
CHLOROBENZENE	5.09		ug/L	5.00		102	80-120			
CHLOROETHANE	4.42		ug/L	5.00		88	80-120			
CHLOROFORM	4.29		ug/L	5.00		86	80-120			
CHLOROMETHANE	4.37		ug/L	5.00		87	69-115			
CIS-1,2-DICHLOROETHENE	4.61		ug/L	5.00		92	80-120			
CIS-1,3-DICHLOROPROPENE	5.11		ug/L	5.00		102	80-120			
DIBROMOCHLOROMETHANE	5.09		ug/L	5.00		102	80-120			
DIBROMOMETHANE	5.03		ug/L	5.00		101	80-120			
DICHLORODIFLUOROMETHANE	4.38		ug/L	5.00		88	59-125			
DICHLOROMETHANE	4.23		ug/L	5.00		85	80-120			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/11/2022 18:31

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BH22410-SRM1)					Prepared & Analyzed: 08/23/2022					
Batch BH22410 - DEFAULT ORGANIC PREP										
ETHYLBENZENE	5.10		ug/L	5.00		102	80-120			
ETHYLENE DIBROMIDE	5.08		ug/L	5.00		102	80-120			
HEXACHLOROBUTADIENE	5.56		ug/L	5.00		111	80-120			
ISOPROPYLBENZENE	4.83		ug/L	5.00		97	80-120			
M/P-XYLENES	9.94		ug/L	10.0		99	80-120			
METHYL-TERT-BUTYL ETHER	4.34		ug/L	5.00		87	80-120			
NAPHTHALENE	4.69		ug/L	5.00		94	75-119			
N-BUTYLBENZENE	4.76		ug/L	5.00		95	80-120			
N-PROPYLBENZENE	5.13		ug/L	5.00		103	80-120			
ORTHO-XYLENE	5.09		ug/L	5.00		102	80-120			
SEC-BUTYLBENZENE	5.16		ug/L	5.00		103	80-120			
STYRENE	4.95		ug/L	5.00		99	80-120			
TERT-BUTYLBENZENE	5.02		ug/L	5.00		100	80-120			
TETRACHLOROETHENE	5.36		ug/L	5.00		107	80-120			
TOLUENE	4.96		ug/L	5.00		99	80-120			
TRANS-1,2-DICHLOROETHENE	4.53		ug/L	5.00		91	80-120			
TRANS-1,3-DICHLOROPROPENE	5.37		ug/L	5.00		107	81-122			
TRICHLOROETHENE	5.05		ug/L	5.00		101	80-120			
TRICHLOROFLUOROMETHANE	4.49		ug/L	5.00		90	80-120			
VINYL CHLORIDE	4.11		ug/L	5.00		82	80-120			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*5.18*		ug/L	*5.00*		*104*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.74*		ug/L	*5.00*		*95*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.02*		ug/L	*5.00*		*100*	*70-130*			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Gira Patel	10/11/2022 18:31

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

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TUCSON WATER CHAIN OF CUSTODY

LOGIN ID: L221183

CLIENT: ES

PROJECT NAME/FREQUENCY:
LOS REALES Landfill
Monthly

PROJECT #: P01049

SAMPLING DATE:
8/22/2022

SAMPLED BY:
print full name
Chad Hanuck
signature
Chad Hanuck

SAMPLE #	TIME	LOCATION	SITE	PRESERVATIVE	NUMBER OF CONTAINERS	(Na2S2O3)		(Unpreserved)		(HNO3)						(H2SO4)	(NaS2O3/H2SO4)	(Unpreserved)	(NaS2O3/H2SO4)	(H2SO4)	(HCl)	(Ascorbic Acid)	(Na2S2O3)			(Unpreserved)								(H2SO4)		(NaOH)	(NaOH/Zinc Acetate)	COMMENTS
										ICP	ICP	ICP	ICP	ICP	ICPMS	ICPMS					8260		EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	
-01	1018	LR GW INF	LRIF		4																X																TBs declined
-02	1022	LR GW EFF	LREF		4																X																by ES for this
																																					project

COMMENTS: Sample on the fourth Monday of the month.

SPECIAL TURNAROUND TIME:

	SIGNATURE	DATE/TIME		SIGNATURE	DATE/TIME
RELINQUISHED BY:	Chad Hanuck	8/22/22 1121	RECEIVED BY:		08/22/22 1123
RELINQUISHED BY:			RECEIVED BY:		

RECEIVING TEMPERATURE= 1.5 °C

4401 S. Tucson Estates Parkway
Tucson, Arizona 85735
520.837.2469 Phone
520.791.5260 Fax

18 November 2022

Valerie Herman

Environmental Services

-

Tucson, AZ 85726

RE: Los Reales Landfill Monthly

Enclosed are the results for Work Order L221351, received by the laboratory on 09/26/2022 13:43. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Frank Walker

Frank Walker
Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	11/18/2022 18:04

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Secondary ID/Location	Date Sampled	Date Received
L221351-01	LR GW INF	Spigot	09/26/2022 10:21	09/26/2022 13:43
L221351-02	LR GW EFF	Spigot	09/26/2022 10:24	09/26/2022 13:43

Tucson Water Quality Laboratory

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Frank Walker

Frank Walker, Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	11/18/2022 18:04

Case Narative / Items for Project Manager Review

All QC results were within QC limits with the following exceptions:

BI22805-MSD1 STYRENE VOA (I)8260

R13: MS/MSD RPD exceeded method acceptance limit. Matrix spike recovery was outside acceptance criteria. Batch precision and accuracy were demonstrated.

BI22805-MS1 1,1-DICHLOROETHANE VOA (I)8260

M1: Matrix spike recovery was high, associated blank spike recovery was acceptable.

BI22805-MS1 BENZENE VOA (I)8260

M1: Matrix spike recovery was high, associated blank spike recovery was acceptable.

BI22805-MS1 BROMOCHLOROMETHANE VOA (I)8260

M1: Matrix spike recovery was high, associated blank spike recovery was acceptable.

BI22805-MS1 STYRENE VOA (I)8260

M2: Matrix spike recovery was low, associated blank spike recovery was acceptable.

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	11/18/2022 18:04

LR GW INF (Spigot)
L221351-01

Sampled: 09/26/2022 10:21

Tucson Water Quality Laboratory (AZ0038)

Volatile Organic Compounds by GC/MS

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	11/18/2022 18:04

LR GW INF (Spigot)
L221351-01

Sampled: 09/26/2022 10:21

Tucson Water Quality Laboratory (AZ0038)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CHLOROFORM	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
DICHLORODIFLUOROMETHANE	**0.00157**	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
NAPHTHALENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
TETRACHLOROETHENE	**0.00416**	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
TRICHLOROETHENE	**0.00189**	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
TRICHLOROFLUOROMETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
XYLENES (TOTAL)	ND	0.0015	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		*94 %*		*70-130*	*BI22805*	*09/27/2022*	*09/27/2022*	*EPA 8260B*	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		*100 %*		*70-130*	*BI22805*	*09/27/2022*	*09/27/2022*	*EPA 8260B*	
Surrogate: TOLUENE-D8 (SURR.)		*102 %*		*70-130*	*BI22805*	*09/27/2022*	*09/27/2022*	*EPA 8260B*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	11/18/2022 18:04

LR GW EFF (Spigot)
L221351-02

Sampled:
09/26/2022 10:24

Tucson Water Quality Laboratory (AZ0038)

Volatile Organic Compounds by GC/MS

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	11/18/2022 18:04

LR GW EFF (Spigot)
L221351-02

Sampled: 09/26/2022 10:24

Tucson Water Quality Laboratory (AZ0038)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CHLOROFORM	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
DICHLORODIFLUOROMETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
NAPHTHALENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
TETRACHLOROETHENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
TRICHLOROETHENE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
TRICHLOROFLUOROMETHANE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
XYLENES (TOTAL)	ND	0.0015	mg/L	1	BI22805	09/27/2022	09/27/2022	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		*95 %*		*70-130*	*BI22805*	*09/27/2022*	*09/27/2022*	*EPA 8260B*	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		*103 %*		*70-130*	*BI22805*	*09/27/2022*	*09/27/2022*	*EPA 8260B*	
Surrogate: TOLUENE-D8 (SURR.)		*101 %*		*70-130*	*BI22805*	*09/27/2022*	*09/27/2022*	*EPA 8260B*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	11/18/2022 18:04

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BI22805-BLK1)				Prepared & Analyzed: 09/27/2022						
Batch BI22805 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	ND	0.000500	mg/L							
1,1,1-TRICHLOROETHANE	ND	0.000500	mg/L							
1,1,2,2-TETRACHLOROETHANE	ND	0.000500	mg/L							
1,1,2-TRICHLOROETHANE	ND	0.000500	mg/L							
1,1-DICHLOROETHANE	ND	0.000500	mg/L							
1,1-DICHLOROETHENE	ND	0.000500	mg/L							
1,1-DICHLOROPROPENE	ND	0.000500	mg/L							
1,2,3-TRICHLOROBENZENE	ND	0.000500	mg/L							
1,2,3-TRICHLOROPROPANE	ND	0.000500	mg/L							
1,2,4-TRICHLOROBENZENE	ND	0.000500	mg/L							
1,2,4-TRIMETHYLBENZENE	ND	0.000500	mg/L							
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.000500	mg/L							
1,2-DICHLOROBENZENE	ND	0.000500	mg/L							
1,2-DICHLOROETHANE	ND	0.000500	mg/L							
1,2-DICHLOROPROPANE	ND	0.000500	mg/L							
1,3,5-TRIMETHYLBENZENE	ND	0.000500	mg/L							
1,3-DICHLOROBENZENE	ND	0.000500	mg/L							
1,3-DICHLOROPROPANE	ND	0.000500	mg/L							
1,4-DICHLOROBENZENE	ND	0.000500	mg/L							
2,2-DICHLOROPROPANE	ND	0.000500	mg/L							
2-CHLOROTOLUENE	ND	0.000500	mg/L							
4-CHLOROTOLUENE	ND	0.000500	mg/L							
4-ISOPROPYLTOLUENE	ND	0.000500	mg/L							
BENZENE	ND	0.000500	mg/L							
BROMOBENZENE	ND	0.000500	mg/L							
BROMOCHLOROMETHANE	ND	0.000500	mg/L							
BROMODICHLOROMETHANE	ND	0.000500	mg/L							
BROMOFORM	ND	0.000500	mg/L							
BROMOMETHANE	ND	0.000500	mg/L							
CARBON TETRACHLORIDE	ND	0.000500	mg/L							

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	11/18/2022 18:04

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BI22805-BLK1)				Prepared & Analyzed: 09/27/2022						
Batch BI22805 - DEFAULT ORGANIC PREP										
CHLOROBENZENE	ND	0.000500	mg/L							
CHLOROETHANE	ND	0.000500	mg/L							
CHLOROFORM	ND	0.000500	mg/L							
CHLOROMETHANE	ND	0.000500	mg/L							
CIS-1,2-DICHLOROETHENE	ND	0.000500	mg/L							
CIS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L							
DIBROMOCHLOROMETHANE	ND	0.000500	mg/L							
DIBROMOMETHANE	ND	0.000500	mg/L							
DICHLORODIFLUOROMETHANE	ND	0.000500	mg/L							
DICHLOROMETHANE	ND	0.000500	mg/L							
ETHYLBENZENE	ND	0.000500	mg/L							
ETHYLENE DIBROMIDE	ND	0.000500	mg/L							
HEXACHLOROBUTADIENE	ND	0.000500	mg/L							
ISOPROPYLBENZENE	ND	0.000500	mg/L							
M/P-XYLENES	ND	0.000500	mg/L							
METHYL-TERT-BUTYL ETHER	ND	0.000500	mg/L							
NAPHTHALENE	ND	0.000500	mg/L							
N-BUTYLBENZENE	ND	0.000500	mg/L							
N-PROPYLBENZENE	ND	0.000500	mg/L							
ORTHO-XYLENE	ND	0.000500	mg/L							
SEC-BUTYLBENZENE	ND	0.000500	mg/L							
STYRENE	ND	0.000500	mg/L							
TERT-BUTYLBENZENE	ND	0.000500	mg/L							
TETRACHLOROETHENE	ND	0.000500	mg/L							
TOLUENE	ND	0.000500	mg/L							
TRANS-1,2-DICHLOROETHENE	ND	0.000500	mg/L							
TRANS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L							
TRICHLOROETHENE	ND	0.000500	mg/L							
TRICHLOROFLUOROMETHANE	ND	0.000500	mg/L							
VINYL CHLORIDE	ND	0.000500	mg/L							

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Tucson Water Quality Lab
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Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	11/18/2022 18:04

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BI22805-BLK1)				Prepared & Analyzed: 09/27/2022						
Batch BI22805 - DEFAULT ORGANIC PREP										
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.83*		ug/L	*5.00*		*97*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.38*		ug/L	*5.00*		*108*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.10*		ug/L	*5.00*		*102*	*70-130*			
LCS (BI22805-BS1)				Prepared & Analyzed: 09/27/2022						
Batch BI22805 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	4.90		ug/L	5.00		98	70-130			
1,1,1-TRICHLOROETHANE	4.94		ug/L	5.00		99	70-130			
1,1,2,2-TETRACHLOROETHANE	5.37		ug/L	5.00		107	70-130			
1,1,2-TRICHLOROETHANE	5.53		ug/L	5.00		111	70-130			
1,1-DICHLOROETHANE	5.85		ug/L	5.00		117	70-130			
1,1-DICHLOROETHENE	5.67		ug/L	5.00		113	70-130			
1,1-DICHLOROPROPENE	5.77		ug/L	5.00		115	70-130			
1,2,3-TRICHLOROBENZENE	5.19		ug/L	5.00		104	70-130			
1,2,3-TRICHLOROPROPANE	5.23		ug/L	5.00		105	70-130			
1,2,4-TRICHLOROBENZENE	5.25		ug/L	5.00		105	70-130			
1,2,4-TRIMETHYLBENZENE	5.06		ug/L	5.00		101	70-130			
1,2-DIBROMO-3-CHLOROPROPANE	4.95		ug/L	5.00		99	70-130			
1,2-DICHLOROBENZENE	5.54		ug/L	5.00		111	70-130			
1,2-DICHLOROETHANE	5.91		ug/L	5.00		118	70-130			
1,2-DICHLOROPROPANE	5.60		ug/L	5.00		112	70-130			
1,3,5-TRIMETHYLBENZENE	5.14		ug/L	5.00		103	70-130			
1,3-DICHLOROBENZENE	5.25		ug/L	5.00		105	70-130			
1,3-DICHLOROPROPANE	5.52		ug/L	5.00		110	70-130			
1,4-DICHLOROBENZENE	5.41		ug/L	5.00		108	70-130			
2,2-DICHLOROPROPANE	5.39		ug/L	5.00		108	70-130			
2-CHLOROTOLUENE	4.90		ug/L	5.00		98	70-130			
4-CHLOROTOLUENE	5.42		ug/L	5.00		108	70-130			
4-ISOPROPYLTOLUENE	5.55		ug/L	5.00		111	70-130			

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Tucson Water Quality Lab
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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	11/18/2022 18:04

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
LCS (BI22805-BS1)				Prepared & Analyzed: 09/27/2022						
Batch BI22805 - DEFAULT ORGANIC PREP										
BENZENE	6.12		ug/L	5.00		122	70-130			
BROMOBENZENE	5.16		ug/L	5.00		103	70-130			
BROMOCHLOROMETHANE	6.44		ug/L	5.00		129	70-130			
BROMODICHLOROMETHANE	5.10		ug/L	5.00		102	70-130			
BROMOFORM	4.57		ug/L	5.00		91	70-130			
BROMOMETHANE	4.83		ug/L	5.00		97	70-130			
CARBON TETRACHLORIDE	5.00		ug/L	5.00		100	70-130			
CHLOROBENZENE	5.39		ug/L	5.00		108	70-130			
CHLOROETHANE	4.39		ug/L	5.00		88	70-130			
CHLOROFORM	5.70		ug/L	5.00		114	70-130			
CHLOROMETHANE	5.23		ug/L	5.00		105	70-130			
CIS-1,2-DICHLOROETHENE	5.60		ug/L	5.00		112	70-130			
CIS-1,3-DICHLOROPROPENE	5.02		ug/L	5.00		100	70-130			
DIBROMOCHLOROMETHANE	4.89		ug/L	5.00		98	70-130			
DIBROMOMETHANE	5.21		ug/L	5.00		104	70-130			
DICHLORODIFLUOROMETHANE	4.46		ug/L	5.00		89	70-130			
DICHLOROMETHANE	5.76		ug/L	5.00		115	70-130			
ETHYLBENZENE	5.19		ug/L	5.00		104	70-130			
ETHYLENE DIBROMIDE	5.21		ug/L	5.00		104	70-130			
HEXACHLOROBUTADIENE	4.89		ug/L	5.00		98	70-130			
ISOPROPYLBENZENE	4.97		ug/L	5.00		99	70-130			
M/P-XYLENES	10.3		ug/L	10.0		103	70-130			
METHYL-TERT-BUTYL ETHER	5.52		ug/L	5.00		110	70-130			
NAPHTHALENE	5.41		ug/L	5.00		108	70-130			
N-BUTYLBENZENE	5.30		ug/L	5.00		106	70-130			
N-PROPYLBENZENE	4.96		ug/L	5.00		99	70-130			
ORTHO-XYLENE	5.25		ug/L	5.00		105	70-130			
SEC-BUTYLBENZENE	5.24		ug/L	5.00		105	70-130			
STYRENE	5.07		ug/L	5.00		101	70-130			
TERT-BUTYLBENZENE	5.07		ug/L	5.00		101	70-130			
TETRACHLOROETHENE	4.90		ug/L	5.00		98	70-130			

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Tucson, AZ 85735
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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	11/18/2022 18:04

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
LCS (BI22805-BS1)				Prepared & Analyzed: 09/27/2022						
Batch BI22805 - DEFAULT ORGANIC PREP										
TOLUENE	5.44		ug/L	5.00		109	70-130			
TRANS-1,2-DICHLOROETHENE	5.74		ug/L	5.00		115	70-130			
TRANS-1,3-DICHLOROPROPENE	5.48		ug/L	5.00		110	70-130			
TRICHLOROETHENE	5.17		ug/L	5.00		103	70-130			
TRICHLOROFLUOROMETHANE	5.00		ug/L	5.00		100	70-130			
VINYL CHLORIDE	4.67		ug/L	5.00		93	70-130			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.90*		ug/L	*5.00*		*98*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.65*		ug/L	*5.00*		*113*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*4.96*		ug/L	*5.00*		*99*	*70-130*			
Matrix Spike (BI22805-MS1)		**Source: L221353-02**		Prepared & Analyzed: 09/27/2022						
Batch BI22805 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	5.43		ug/L	5.00	0.00	109	70-130			
1,1,1-TRICHLOROETHANE	5.43		ug/L	5.00	0.00	109	70-130			
1,1,2,2-TETRACHLOROETHANE	5.54		ug/L	5.00	0.00	111	70-130			
1,1,2-TRICHLOROETHANE	5.92		ug/L	5.00	0.00	118	70-130			
1,1-DICHLOROETHANE	6.56		ug/L	5.00	0.00	**131**	70-130			M1
1,1-DICHLOROETHENE	6.30		ug/L	5.00	0.00	126	70-130			
1,1-DICHLOROPROPENE	6.26		ug/L	5.00	0.00	125	70-130			
1,2,3-TRICHLOROBENZENE	5.54		ug/L	5.00	0.00	111	70-130			
1,2,3-TRICHLOROPROPANE	5.56		ug/L	5.00	0.00	111	70-130			
1,2,4-TRICHLOROBENZENE	5.57		ug/L	5.00	0.00	111	70-130			
1,2,4-TRIMETHYLBENZENE	5.62		ug/L	5.00	0.00	112	70-130			
1,2-DIBROMO-3-CHLOROPROPANE	5.12		ug/L	5.00	0.00	102	70-130			
1,2-DICHLOROBENZENE	5.87		ug/L	5.00	0.00	117	70-130			
1,2-DICHLOROETHANE	6.23		ug/L	5.00	0.00	125	70-130			
1,2-DICHLOROPROPANE	6.10		ug/L	5.00	0.00	122	70-130			
1,3,5-TRIMETHYLBENZENE	5.66		ug/L	5.00	0.00	113	70-130			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	11/18/2022 18:04

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike (BI22805-MS1)		**Source: L221353-02**		Prepared & Analyzed: 09/27/2022						
Batch BI22805 - DEFAULT ORGANIC PREP										
1,3-DICHLOROBENZENE	5.64		ug/L	5.00	0.00	113	70-130			
1,3-DICHLOROPROPANE	5.96		ug/L	5.00	0.00	119	70-130			
1,4-DICHLOROBENZENE	5.88		ug/L	5.00	0.00	118	70-130			
2,2-DICHLOROPROPANE	6.25		ug/L	5.00	0.00	125	70-130			
2-CHLOROTOLUENE	5.51		ug/L	5.00	0.00	110	70-130			
4-CHLOROTOLUENE	5.55		ug/L	5.00	0.00	111	70-130			
4-ISOPROPYLTOLUENE	6.08		ug/L	5.00	0.00	122	70-130			
BENZENE	6.60		ug/L	5.00	0.00	**132**	70-130			M1
BROMOBENZENE	5.50		ug/L	5.00	0.00	110	70-130			
BROMOCHLOROMETHANE	6.98		ug/L	5.00	0.00	**140**	70-130			M1
BROMODICHLOROMETHANE	5.68		ug/L	5.00	0.00	114	70-130			
BROMOFORM	4.92		ug/L	5.00	0.00	98	70-130			
BROMOMETHANE	5.37		ug/L	5.00	0.00	107	70-130			
CARBON TETRACHLORIDE	5.72		ug/L	5.00	0.00	114	70-130			
CHLOROBENZENE	5.76		ug/L	5.00	0.00	115	70-130			
CHLOROETHANE	5.08		ug/L	5.00	0.00	102	70-130			
CHLOROFORM	6.26		ug/L	5.00	0.00	125	70-130			
CHLOROMETHANE	5.63		ug/L	5.00	0.280	107	70-130			
CIS-1,2-DICHLOROETHENE	6.17		ug/L	5.00	0.00	123	70-130			
CIS-1,3-DICHLOROPROPENE	5.68		ug/L	5.00	0.00	114	70-130			
DIBROMOCHLOROMETHANE	5.25		ug/L	5.00	0.00	105	70-130			
DIBROMOMETHANE	5.75		ug/L	5.00	0.00	115	70-130			
DICHLORODIFLUOROMETHANE	5.24		ug/L	5.00	0.00	105	70-130			
DICHLOROMETHANE	5.93		ug/L	5.00	0.00	119	70-130			
ETHYLBENZENE	5.85		ug/L	5.00	0.00	117	70-130			
ETHYLENE DIBROMIDE	5.69		ug/L	5.00	0.00	114	70-130			
HEXACHLOROBUTADIENE	5.88		ug/L	5.00	0.00	118	70-130			
ISOPROPYLBENZENE	5.63		ug/L	5.00	0.00	113	70-130			
M/P-XYLENES	11.4		ug/L	10.0	0.00	114	70-130			
METHYL-TERT-BUTYL ETHER	5.69		ug/L	5.00	0.00	114	70-130			
NAPHTHALENE	5.53		ug/L	5.00	0.00	111	70-130			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	11/18/2022 18:04

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike (BI22805-MS1)		**Source: L221353-02**		Prepared & Analyzed: 09/27/2022						
Batch BI22805 - DEFAULT ORGANIC PREP										
N-BUTYLBENZENE	5.84		ug/L	5.00	0.00	117	70-130			
N-PROPYLBENZENE	5.34		ug/L	5.00	0.00	107	70-130			
ORTHO-XYLENE	5.74		ug/L	5.00	0.00	115	70-130			
SEC-BUTYLBENZENE	5.92		ug/L	5.00	0.00	118	70-130			
STYRENE	0.193		ug/L	5.00	0.00	4	70-130			M2
TERT-BUTYLBENZENE	5.34		ug/L	5.00	0.00	107	70-130			
TETRACHLOROETHENE	5.81		ug/L	5.00	0.00	116	70-130			
TOLUENE	6.17		ug/L	5.00	0.00	123	70-130			
TRANS-1,2-DICHLOROETHENE	6.33		ug/L	5.00	0.00	127	70-130			
TRANS-1,3-DICHLOROPROPENE	6.00		ug/L	5.00	0.00	120	70-130			
TRICHLOROETHENE	5.85		ug/L	5.00	0.00	117	70-130			
TRICHLOROFLUOROMETHANE	5.67		ug/L	5.00	0.00	113	70-130			
VINYL CHLORIDE	5.28		ug/L	5.00	0.00	106	70-130			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.92*		ug/L	*5.00*		*98*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.48*		ug/L	*5.00*		*110*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.08*		ug/L	*5.00*		*102*	*70-130*			
Matrix Spike Dup (BI22805-MSD1) (for RPD QC only)		**Source: L221353-02**		Prepared & Analyzed: 09/27/2022						
Batch BI22805 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	5.10		ug/L	5.00	0.00	102		6	20	
1,1,1-TRICHLOROETHANE	5.29		ug/L	5.00	0.00	106		3	20	
1,1,2,2-TETRACHLOROETHANE	5.32		ug/L	5.00	0.00	106		4	20	
1,1,2-TRICHLOROETHANE	5.38		ug/L	5.00	0.00	108		10	20	
1,1-DICHLOROETHANE	6.02		ug/L	5.00	0.00	120		9	20	
1,1-DICHLOROETHENE	6.08		ug/L	5.00	0.00	122		4	20	
1,1-DICHLOROPROPENE	5.62		ug/L	5.00	0.00	112		11	20	
1,2,3-TRICHLOROBENZENE	5.39		ug/L	5.00	0.00	108		3	20	
1,2,3-TRICHLOROPROPANE	5.49		ug/L	5.00	0.00	110		1	20	

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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	11/18/2022 18:04

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike Dup (BI22805-MSD1) (for RPD QC only)				**Source: L221353-02**		Prepared & Analyzed: 09/27/2022				
Batch BI22805 - DEFAULT ORGANIC PREP										
1,2,4-TRICHLOROBENZENE	5.44		ug/L	5.00	0.00	109		2	20	
1,2,4-TRIMETHYLBENZENE	5.53		ug/L	5.00	0.00	111		2	20	
1,2-DIBROMO-3-CHLOROPROPANE	4.76		ug/L	5.00	0.00	95		7	20	
1,2-DICHLOROBENZENE	5.66		ug/L	5.00	0.00	113		4	20	
1,2-DICHLOROETHANE	6.06		ug/L	5.00	0.00	121		3	20	
1,2-DICHLOROPROPANE	5.79		ug/L	5.00	0.00	116		5	20	
1,3,5-TRIMETHYLBENZENE	5.61		ug/L	5.00	0.00	112		0.9	20	
1,3-DICHLOROBENZENE	5.53		ug/L	5.00	0.00	111		2	20	
1,3-DICHLOROPROPANE	5.57		ug/L	5.00	0.00	111		7	20	
1,4-DICHLOROBENZENE	5.61		ug/L	5.00	0.00	112		5	20	
2,2-DICHLOROPROPANE	5.84		ug/L	5.00	0.00	117		7	20	
2-CHLOROTOLUENE	5.50		ug/L	5.00	0.00	110		0.2	20	
4-CHLOROTOLUENE	5.77		ug/L	5.00	0.00	115		4	20	
4-ISOPROPYLTOLUENE	5.90		ug/L	5.00	0.00	118		3	20	
BENZENE	6.28		ug/L	5.00	0.00	126		5	20	
BROMOBENZENE	5.33		ug/L	5.00	0.00	107		3	20	
BROMOCHLOROMETHANE	6.46		ug/L	5.00	0.00	129		8	20	
BROMODICHLOROMETHANE	5.38		ug/L	5.00	0.00	108		6	20	
BROMOFORM	4.76		ug/L	5.00	0.00	95		3	20	
BROMOMETHANE	4.98		ug/L	5.00	0.00	100		8	20	
CARBON TETRACHLORIDE	5.40		ug/L	5.00	0.00	108		6	20	
CHLOROBENZENE	5.67		ug/L	5.00	0.00	113		2	20	
CHLOROETHANE	4.71		ug/L	5.00	0.00	94		8	20	
CHLOROFORM	5.94		ug/L	5.00	0.00	119		5	20	
CHLOROMETHANE	5.50		ug/L	5.00	0.280	104		2	20	
CIS-1,2-DICHLOROETHENE	5.99		ug/L	5.00	0.00	120		3	20	
CIS-1,3-DICHLOROPROPENE	5.38		ug/L	5.00	0.00	108		6	20	
DIBROMOCHLOROMETHANE	4.95		ug/L	5.00	0.00	99		6	20	
DIBROMOMETHANE	5.35		ug/L	5.00	0.00	107		7	20	
DICHLORODIFLUOROMETHANE	4.95		ug/L	5.00	0.00	99		6	20	
DICHLOROMETHANE	5.91		ug/L	5.00	0.00	118		0.4	20	

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Tucson, AZ 85735
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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	11/18/2022 18:04

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike Dup (BI22805-MSD1) (for RPD QC only)			**Source: L221353-02**		Prepared & Analyzed: 09/27/2022					
Batch BI22805 - DEFAULT ORGANIC PREP										
ETHYLBENZENE	5.82		ug/L	5.00	0.00	116		0.5	20	
ETHYLENE DIBROMIDE	5.39		ug/L	5.00	0.00	108		5	20	
HEXACHLOROBUTADIENE	5.39		ug/L	5.00	0.00	108		9	20	
ISOPROPYLBENZENE	5.54		ug/L	5.00	0.00	111		2	20	
M/P-XYLENES	11.2		ug/L	10.0	0.00	112		1	20	
METHYL-TERT-BUTYL ETHER	5.24		ug/L	5.00	0.00	105		8	20	
NAPHTHALENE	5.22		ug/L	5.00	0.00	104		6	20	
N-BUTYLBENZENE	5.62		ug/L	5.00	0.00	112		4	20	
N-PROPYLBENZENE	5.31		ug/L	5.00	0.00	106		0.5	20	
ORTHO-XYLENE	5.56		ug/L	5.00	0.00	111		3	20	
SEC-BUTYLBENZENE	5.91		ug/L	5.00	0.00	118		0.2	20	
STYRENE	0.543		ug/L	5.00	0.00	11		**95**	20	R13
TERT-BUTYLBENZENE	5.62		ug/L	5.00	0.00	112		5	20	
TETRACHLOROETHENE	5.21		ug/L	5.00	0.00	104		11	20	
TOLUENE	5.66		ug/L	5.00	0.00	113		9	20	
TRANS-1,2-DICHLOROETHENE	6.02		ug/L	5.00	0.00	120		5	20	
TRANS-1,3-DICHLOROPROPENE	5.56		ug/L	5.00	0.00	111		7	20	
TRICHLOROETHENE	5.17		ug/L	5.00	0.00	103		12	20	
TRICHLOROFLUOROMETHANE	5.34		ug/L	5.00	0.00	107		6	20	
VINYL CHLORIDE	4.90		ug/L	5.00	0.00	98		7	20	
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.99*		ug/L	*5.00*		*100*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.43*		ug/L	*5.00*		*109*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*4.94*		ug/L	*5.00*		*99*	*70-130*			
Reference (BI22805-SRM1)					Prepared & Analyzed: 09/27/2022					
Batch BI22805 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	5.07		ug/L	5.00		101	80-120			
1,1,1-TRICHLOROETHANE	4.75		ug/L	5.00		95	80-120			

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Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BI22805-SRM1)					Prepared & Analyzed: 09/27/2022					
Batch BI22805 - DEFAULT ORGANIC PREP										
1,1,2,2-TETRACHLOROETHANE	5.44		ug/L	5.00		109	80-120			
1,1,2-TRICHLOROETHANE	5.56		ug/L	5.00		111	80-120			
1,1-DICHLOROETHANE	5.78		ug/L	5.00		116	80-120			
1,1-DICHLOROETHENE	5.46		ug/L	5.00		109	80-120			
1,1-DICHLOROPROPENE	5.01		ug/L	5.00		100	80-120			
1,2,3-TRICHLOROBENZENE	5.06		ug/L	5.00		101	80-120			
1,2,3-TRICHLOROPROPANE	5.48		ug/L	5.00		110	80-120			
1,2,4-TRICHLOROBENZENE	5.34		ug/L	5.00		107	80-120			
1,2,4-TRIMETHYLBENZENE	5.26		ug/L	5.00		105	80-120			
1,2-DIBROMO-3-CHLOROPROPANE	4.94		ug/L	5.00		99	72-115			
1,2-DICHLOROBENZENE	5.39		ug/L	5.00		108	80-120			
1,2-DICHLOROETHANE	5.87		ug/L	5.00		117	80-120			
1,2-DICHLOROPROPANE	5.56		ug/L	5.00		111	80-120			
1,3,5-TRIMETHYLBENZENE	5.41		ug/L	5.00		108	80-120			
1,3-DICHLOROBENZENE	5.10		ug/L	5.00		102	80-120			
1,3-DICHLOROPROPANE	5.42		ug/L	5.00		108	80-120			
1,4-DICHLOROBENZENE	5.42		ug/L	5.00		108	80-120			
2,2-DICHLOROPROPANE	5.51		ug/L	5.00		110	86-136			
2-CHLOROTOLUENE	5.19		ug/L	5.00		104	80-120			
4-CHLOROTOLUENE	5.22		ug/L	5.00		104	80-120			
4-ISOPROPYLTOLUENE	5.55		ug/L	5.00		111	80-120			
BENZENE	5.97		ug/L	5.00		119	80-120			
BROMOBENZENE	5.21		ug/L	5.00		104	80-120			
BROMOCHLOROMETHANE	6.07		ug/L	5.00		121	81-124			
BROMODICHLOROMETHANE	5.11		ug/L	5.00		102	80-120			
BROMOFORM	4.86		ug/L	5.00		97	74-118			
BROMOMETHANE	4.76		ug/L	5.00		95	66-136			
CARBON TETRACHLORIDE	4.82		ug/L	5.00		96	77-118			
CHLOROBENZENE	5.44		ug/L	5.00		109	80-120			
CHLOROETHANE	4.33		ug/L	5.00		87	80-120			
CHLOROFORM	5.79		ug/L	5.00		116	80-120			

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Environmental Services	Project: Los Reales Landfill Monthly	
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Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BI22805-SRM1)					Prepared & Analyzed: 09/27/2022					
Batch BI22805 - DEFAULT ORGANIC PREP										
CHLOROMETHANE	4.73		ug/L	5.00		95	69-115			
CIS-1,2-DICHLOROETHENE	5.45		ug/L	5.00		109	80-120			
CIS-1,3-DICHLOROPROPENE	5.26		ug/L	5.00		105	80-120			
DIBROMOCHLOROMETHANE	4.83		ug/L	5.00		97	80-120			
DIBROMOMETHANE	5.60		ug/L	5.00		112	80-120			
DICHLORODIFLUOROMETHANE	4.43		ug/L	5.00		89	59-125			
DICHLOROMETHANE	5.53		ug/L	5.00		111	80-120			
ETHYLBENZENE	5.46		ug/L	5.00		109	80-120			
ETHYLENE DIBROMIDE	5.36		ug/L	5.00		107	80-120			
HEXACHLOROBUTADIENE	4.72		ug/L	5.00		94	80-120			
ISOPROPYLBENZENE	5.31		ug/L	5.00		106	80-120			
M/P-XYLENES	10.4		ug/L	10.0		104	80-120			
METHYL-TERT-BUTYL ETHER	5.40		ug/L	5.00		108	80-120			
NAPHTHALENE	5.32		ug/L	5.00		106	75-119			
N-BUTYLBENZENE	5.20		ug/L	5.00		104	80-120			
N-PROPYLBENZENE	5.08		ug/L	5.00		102	80-120			
ORTHO-XYLENE	5.39		ug/L	5.00		108	80-120			
SEC-BUTYLBENZENE	5.38		ug/L	5.00		108	80-120			
STYRENE	5.22		ug/L	5.00		104	80-120			
TERT-BUTYLBENZENE	5.06		ug/L	5.00		101	80-120			
TETRACHLOROETHENE	5.02		ug/L	5.00		100	80-120			
TOLUENE	5.32		ug/L	5.00		106	80-120			
TRANS-1,2-DICHLOROETHENE	5.44		ug/L	5.00		109	80-120			
TRANS-1,3-DICHLOROPROPENE	5.64		ug/L	5.00		113	81-122			
TRICHLOROETHENE	5.09		ug/L	5.00		102	80-120			
TRICHLOROFLUOROMETHANE	4.79		ug/L	5.00		96	80-120			
VINYL CHLORIDE	4.52		ug/L	5.00		90	80-120			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.94*		ug/L	*5.00*		*99*	*70-130*			

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Environmental Services	Project: Los Reales Landfill Monthly	
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Tucson AZ, 85726	Project Manager: Valerie Herman	11/18/2022 18:04

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BI22805-SRM1)					Prepared & Analyzed: 09/27/2022					
Batch BI22805 - DEFAULT ORGANIC PREP										
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.49*		ug/L	*5.00*		*110*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.07*		ug/L	*5.00*		*101*	*70-130*			

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Tucson Water Quality Lab
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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	11/18/2022 18:04

Notes and Definitions

R13	MS/MSD RPD exceeded method acceptance limit. Matrix spike recovery was outside acceptance criteria. Batch precision and accuracy were demonstrated.
M2	Matrix spike recovery was low, associated blank spike recovery was acceptable.
M1	Matrix spike recovery was high, associated blank spike recovery was acceptable.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

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TUCSON WATER CHAIN OF CUSTODY

LOGIN ID: L221351

CLIENT: ES

PROJECT NAME/FREQUENCY:
LOS REALES Landfill
Monthly

PROJECT #: P01049

SAMPLING DATE:
9/26/2022

SAMPLED BY:
print full name
Chad Hancock
signature
Chad Hancock

SAMPLE #	TIME	LOCATION	SITE	NUMBER OF CONTAINERS	ICP	ICP	ICP	ICP	ICP	ICPMS	ICPMS	(H2SO4)	(NaS2O3/H2SO4)	(Unpreserved)	(NaS2O3/H2SO4)	(H2SO4)	8260 (HCl)	(Ascorbic Acid)	EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	COMMENTS
PRESERVATIVE					(HNO3)							(H2SO4)	(NaS2O3/H2SO4)	(Unpreserved)	(NaS2O3/H2SO4)	(H2SO4)	(HCl)	(Ascorbic Acid)	(Na2S2O3)			(Unpreserved)											(H2SO4)		(NaOH)	(NaOH/Zinc Acetate)	
-01	1021	LR GW INF	LRLF	4													X																			TBs declined
-02	1024	LR GW EFF	LRLF	4													X																			by ES for this
																																				project

COMMENTS: Sample on the fourth Monday of the month.

SPECIAL TURNAROUND TIME:

	SIGNATURE	DATE/TIME		SIGNATURE	DATE/TIME
RELINQUISHED BY:	Chad Hancock	9/26/22 1340	**RECEIVED BY:**		09/26/22 1343
RELINQUISHED BY:			**RECEIVED BY:**		

RECEIVING TEMPERATURE= 1.7 °C

4401 S. Tucson Estates Parkway
Tucson, Arizona 85735
520.837.2469 Phone
520.791.5260 Fax

08 December 2022

Valerie Herman

Environmental Services

-

Tucson, AZ 85726

RE: Los Reales Landfill Monthly

Enclosed are the results for Work Order L221481, received by the laboratory on 10/25/2022 13:50. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Frank Walker

Frank Walker
Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	12/08/2022 10:00

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Secondary ID/Location	Date Sampled	Date Received
L221481-01	LR GW INF	Spigot	10/25/2022 12:54	10/25/2022 13:50
L221481-02	LR GW EFF	Spigot	10/25/2022 12:59	10/25/2022 13:50

Tucson Water Quality Laboratory

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Frank Walker

Frank Walker, Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	12/08/2022 10:00

Case Narative / Items for Project Manager Review

All QC results were within QC limits.

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	12/08/2022 10:00

LR GW INF (Spigot)
L221481-01

Sampled:
10/25/2022 12:54

Tucson Water Quality Laboratory (AZ0038)

Volatile Organic Compounds by GC/MS

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	12/08/2022 10:00

LR GW INF (Spigot)
L221481-01

Sampled: 10/25/2022 12:54

Tucson Water Quality Laboratory (AZ0038)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CHLOROFORM	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
DICHLORODIFLUOROMETHANE	**0.000917**	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
NAPHTHALENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
TETRACHLOROETHENE	**0.00390**	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
TRICHLOROETHENE	**0.00166**	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
TRICHLOROFLUOROMETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
XYLENES (TOTAL)	ND	0.0015	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		*96 %*		*70-130*	*BK20104*	*11/01/2022*	*11/01/2022*	*EPA 8260B*	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		*102 %*		*70-130*	*BK20104*	*11/01/2022*	*11/01/2022*	*EPA 8260B*	
Surrogate: TOLUENE-D8 (SURR.)		*101 %*		*70-130*	*BK20104*	*11/01/2022*	*11/01/2022*	*EPA 8260B*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	12/08/2022 10:00

LR GW EFF (Spigot)
L221481-02

Sampled:
10/25/2022 12:59

Tucson Water Quality Laboratory (AZ0038)

Volatile Organic Compounds by GC/MS

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	12/08/2022 10:00

LR GW EFF (Spigot)
L221481-02

Sampled: 10/25/2022 12:59

Tucson Water Quality Laboratory (AZ0038)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CHLOROFORM	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
DICHLORODIFLUOROMETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
NAPHTHALENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
TETRACHLOROETHENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
TRICHLOROETHENE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
TRICHLOROFLUOROMETHANE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
XYLENES (TOTAL)	ND	0.0015	mg/L	1	BK20104	11/01/2022	11/01/2022	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		*99 %*		*70-130*	*BK20104*	*11/01/2022*	*11/01/2022*	*EPA 8260B*	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		*99 %*		*70-130*	*BK20104*	*11/01/2022*	*11/01/2022*	*EPA 8260B*	
Surrogate: TOLUENE-D8 (SURR.)		*100 %*		*70-130*	*BK20104*	*11/01/2022*	*11/01/2022*	*EPA 8260B*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	12/08/2022 10:00

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BK20104-BLK1)				Prepared & Analyzed: 11/01/2022						
Batch BK20104 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	ND	0.000500	mg/L							
1,1,1-TRICHLOROETHANE	ND	0.000500	mg/L							
1,1,2,2-TETRACHLOROETHANE	ND	0.000500	mg/L							
1,1,2-TRICHLOROETHANE	ND	0.000500	mg/L							
1,1-DICHLOROETHANE	ND	0.000500	mg/L							
1,1-DICHLOROETHENE	ND	0.000500	mg/L							
1,1-DICHLOROPROPENE	ND	0.000500	mg/L							
1,2,3-TRICHLOROBENZENE	ND	0.000500	mg/L							
1,2,3-TRICHLOROPROPANE	ND	0.000500	mg/L							
1,2,4-TRICHLOROBENZENE	ND	0.000500	mg/L							
1,2,4-TRIMETHYLBENZENE	ND	0.000500	mg/L							
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.000500	mg/L							
1,2-DICHLOROBENZENE	ND	0.000500	mg/L							
1,2-DICHLOROETHANE	ND	0.000500	mg/L							
1,2-DICHLOROPROPANE	ND	0.000500	mg/L							
1,3,5-TRIMETHYLBENZENE	ND	0.000500	mg/L							
1,3-DICHLOROBENZENE	ND	0.000500	mg/L							
1,3-DICHLOROPROPANE	ND	0.000500	mg/L							
1,4-DICHLOROBENZENE	ND	0.000500	mg/L							
2,2-DICHLOROPROPANE	ND	0.000500	mg/L							
2-CHLOROTOLUENE	ND	0.000500	mg/L							
4-CHLOROTOLUENE	ND	0.000500	mg/L							
4-ISOPROPYLTOLUENE	ND	0.000500	mg/L							
BENZENE	ND	0.000500	mg/L							
BROMOBENZENE	ND	0.000500	mg/L							
BROMOCHLOROMETHANE	ND	0.000500	mg/L							
BROMODICHLOROMETHANE	ND	0.000500	mg/L							
BROMOFORM	ND	0.000500	mg/L							
BROMOMETHANE	ND	0.000500	mg/L							
CARBON TETRACHLORIDE	ND	0.000500	mg/L							

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	12/08/2022 10:00

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BK20104-BLK1)				Prepared & Analyzed: 11/01/2022						
Batch BK20104 - DEFAULT ORGANIC PREP										
CHLOROBENZENE	ND	0.000500	mg/L							
CHLOROETHANE	ND	0.000500	mg/L							
CHLOROFORM	ND	0.000500	mg/L							
CHLOROMETHANE	ND	0.000500	mg/L							
CIS-1,2-DICHLOROETHENE	ND	0.000500	mg/L							
CIS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L							
DIBROMOCHLOROMETHANE	ND	0.000500	mg/L							
DIBROMOMETHANE	ND	0.000500	mg/L							
DICHLORODIFLUOROMETHANE	ND	0.000500	mg/L							
DICHLOROMETHANE	ND	0.000500	mg/L							
ETHYLBENZENE	ND	0.000500	mg/L							
ETHYLENE DIBROMIDE	ND	0.000500	mg/L							
HEXACHLOROBUTADIENE	ND	0.000500	mg/L							
ISOPROPYLBENZENE	ND	0.000500	mg/L							
M/P-XYLENES	ND	0.000500	mg/L							
METHYL-TERT-BUTYL ETHER	ND	0.000500	mg/L							
NAPHTHALENE	ND	0.000500	mg/L							
N-BUTYLBENZENE	ND	0.000500	mg/L							
N-PROPYLBENZENE	ND	0.000500	mg/L							
ORTHO-XYLENE	ND	0.000500	mg/L							
SEC-BUTYLBENZENE	ND	0.000500	mg/L							
STYRENE	ND	0.000500	mg/L							
TERT-BUTYLBENZENE	ND	0.000500	mg/L							
TETRACHLOROETHENE	ND	0.000500	mg/L							
TOLUENE	ND	0.000500	mg/L							
TRANS-1,2-DICHLOROETHENE	ND	0.000500	mg/L							
TRANS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L							
TRICHLOROETHENE	ND	0.000500	mg/L							
TRICHLOROFLUOROMETHANE	ND	0.000500	mg/L							
VINYL CHLORIDE	ND	0.000500	mg/L							

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	12/08/2022 10:00

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BK20104-BLK1)				Prepared & Analyzed: 11/01/2022						
Batch BK20104 - DEFAULT ORGANIC PREP										
Surrogate: BROMOFLUOROBENZENE (SURR.)	*5.04*		ug/L	*5.00*		*101*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.89*		ug/L	*5.00*		*98*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*4.86*		ug/L	*5.00*		*97*	*70-130*			
Matrix Spike (BK20104-MS1)			**Source: L221481-02**	Prepared & Analyzed: 11/01/2022						
Batch BK20104 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	5.11		ug/L	5.00	0.00	102	70-130			
1,1,1-TRICHLOROETHANE	4.82		ug/L	5.00	0.00	96	70-130			
1,1,2,2-TETRACHLOROETHANE	4.97		ug/L	5.00	0.00	99	70-130			
1,1,2-TRICHLOROETHANE	5.07		ug/L	5.00	0.00	101	70-130			
1,1-DICHLOROETHANE	5.22		ug/L	5.00	0.00	104	70-130			
1,1-DICHLOROETHENE	5.10		ug/L	5.00	0.00	102	70-130			
1,1-DICHLOROPROPENE	5.15		ug/L	5.00	0.393	95	70-130			
1,2,3-TRICHLOROBENZENE	5.70		ug/L	5.00	0.00	114	70-130			
1,2,3-TRICHLOROPROPANE	5.04		ug/L	5.00	0.00	101	70-130			
1,2,4-TRICHLOROBENZENE	5.49		ug/L	5.00	0.00	110	70-130			
1,2,4-TRIMETHYLBENZENE	5.03		ug/L	5.00	0.00	101	70-130			
1,2-DIBROMO-3-CHLOROPROPANE	4.85		ug/L	5.00	0.00	97	70-130			
1,2-DICHLOROBENZENE	5.59		ug/L	5.00	0.00	112	70-130			
1,2-DICHLOROETHANE	4.84		ug/L	5.00	0.00	97	70-130			
1,2-DICHLOROPROPANE	5.19		ug/L	5.00	0.00	104	70-130			
1,3,5-TRIMETHYLBENZENE	5.23		ug/L	5.00	0.00	105	70-130			
1,3-DICHLOROBENZENE	5.32		ug/L	5.00	0.00	106	70-130			
1,3-DICHLOROPROPANE	5.06		ug/L	5.00	0.00	101	70-130			
1,4-DICHLOROBENZENE	5.61		ug/L	5.00	0.00	112	70-130			
2,2-DICHLOROPROPANE	5.62		ug/L	5.00	0.00	112	70-130			
2-CHLOROTOLUENE	5.25		ug/L	5.00	0.00	105	70-130			
4-CHLOROTOLUENE	5.18		ug/L	5.00	0.00	104	70-130			
4-ISOPROPYLTOLUENE	5.72		ug/L	5.00	0.00	114	70-130			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	12/08/2022 10:00

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike (BK20104-MS1)		**Source: L221481-02**			Prepared & Analyzed: 11/01/2022					
Batch BK20104 - DEFAULT ORGANIC PREP										
BENZENE	5.22		ug/L	5.00	0.00	104	70-130			
BROMOBENZENE	5.30		ug/L	5.00	0.00	106	70-130			
BROMOCHLOROMETHANE	5.64		ug/L	5.00	0.00	113	70-130			
BROMODICHLOROMETHANE	4.84		ug/L	5.00	0.00	97	70-130			
BROMOFORM	4.72		ug/L	5.00	0.00	94	70-130			
BROMOMETHANE	4.94		ug/L	5.00	0.00	99	70-130			
CARBON TETRACHLORIDE	5.30		ug/L	5.00	0.00	106	70-130			
CHLOROBENZENE	5.08		ug/L	5.00	0.00	102	70-130			
CHLOROETHANE	4.78		ug/L	5.00	0.00	96	70-130			
CHLOROFORM	5.20		ug/L	5.00	0.00	104	70-130			
CHLOROMETHANE	4.39		ug/L	5.00	0.00	88	70-130			
CIS-1,2-DICHLOROETHENE	5.45		ug/L	5.00	0.00	109	70-130			
CIS-1,3-DICHLOROPROPENE	5.42		ug/L	5.00	0.00	108	70-130			
DIBROMOCHLOROMETHANE	5.00		ug/L	5.00	0.00	100	70-130			
DIBROMOMETHANE	4.87		ug/L	5.00	0.00	97	70-130			
DICHLORODIFLUOROMETHANE	3.62		ug/L	5.00	0.00	72	70-130			
DICHLOROMETHANE	4.89		ug/L	5.00	0.00	98	70-130			
ETHYLBENZENE	5.09		ug/L	5.00	0.00	102	70-130			
ETHYLENE DIBROMIDE	5.13		ug/L	5.00	0.00	103	70-130			
HEXACHLOROBUTADIENE	5.76		ug/L	5.00	0.00	115	70-130			
ISOPROPYLBENZENE	5.15		ug/L	5.00	0.00	103	70-130			
M/P-XYLENES	10.0		ug/L	10.0	0.00	100	70-130			
METHYL-TERT-BUTYL ETHER	4.60		ug/L	5.00	0.00	92	70-130			
NAPHTHALENE	5.36		ug/L	5.00	0.00	107	70-130			
N-BUTYLBENZENE	5.66		ug/L	5.00	0.00	113	70-130			
N-PROPYLBENZENE	5.00		ug/L	5.00	0.00	100	70-130			
ORTHO-XYLENE	5.34		ug/L	5.00	0.00	107	70-130			
SEC-BUTYLBENZENE	5.39		ug/L	5.00	0.00	108	70-130			
STYRENE	5.00		ug/L	5.00	0.00	100	70-130			
TERT-BUTYLBENZENE	5.25		ug/L	5.00	0.00	105	70-130			
TETRACHLOROETHENE	5.37		ug/L	5.00	0.00	107	70-130			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	12/08/2022 10:00

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike (BK20104-MS1)		**Source: L221481-02**		Prepared & Analyzed: 11/01/2022						
Batch BK20104 - DEFAULT ORGANIC PREP										
TOLUENE	5.37		ug/L	5.00	0.00	107	70-130			
TRANS-1,2-DICHLOROETHENE	5.14		ug/L	5.00	0.00	103	70-130			
TRANS-1,3-DICHLOROPROPENE	5.28		ug/L	5.00	0.00	106	70-130			
TRICHLOROETHENE	5.28		ug/L	5.00	0.00	106	70-130			
TRICHLOROFLUOROMETHANE	4.91		ug/L	5.00	0.00	98	70-130			
VINYL CHLORIDE	4.47		ug/L	5.00	0.00	89	70-130			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.96*		ug/L	*5.00*		*99*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.09*		ug/L	*5.00*		*102*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.13*		ug/L	*5.00*		*103*	*70-130*			
Matrix Spike Dup (BK20104-MSD1) (for RPD QC only)		**Source: L221481-02**		Prepared & Analyzed: 11/01/2022						
Batch BK20104 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	4.54		ug/L	5.00	0.00	91		12	20	
1,1,1-TRICHLOROETHANE	4.45		ug/L	5.00	0.00	89		8	20	
1,1,2,2-TETRACHLOROETHANE	4.47		ug/L	5.00	0.00	89		11	20	
1,1,2-TRICHLOROETHANE	4.76		ug/L	5.00	0.00	95		6	20	
1,1-DICHLOROETHANE	4.83		ug/L	5.00	0.00	97		8	20	
1,1-DICHLOROETHENE	4.72		ug/L	5.00	0.00	94		8	20	
1,1-DICHLOROPROPENE	4.71		ug/L	5.00	0.393	86		9	20	
1,2,3-TRICHLOROBENZENE	4.73		ug/L	5.00	0.00	95		19	20	
1,2,3-TRICHLOROPROPANE	4.42		ug/L	5.00	0.00	88		13	20	
1,2,4-TRICHLOROBENZENE	4.80		ug/L	5.00	0.00	96		13	20	
1,2,4-TRIMETHYLBENZENE	4.69		ug/L	5.00	0.00	94		7	20	
1,2-DIBROMO-3-CHLOROPROPANE	4.15		ug/L	5.00	0.00	83		16	20	
1,2-DICHLOROBENZENE	4.72		ug/L	5.00	0.00	94		17	20	
1,2-DICHLOROETHANE	4.67		ug/L	5.00	0.00	93		4	20	
1,2-DICHLOROPROPANE	5.13		ug/L	5.00	0.00	103		1	20	
1,3,5-TRIMETHYLBENZENE	4.76		ug/L	5.00	0.00	95		9	20	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	12/08/2022 10:00

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike Dup (BK20104-MSD1) (for RPD QC only)				**Source: L221481-02**		Prepared & Analyzed: 11/01/2022				
Batch BK20104 - DEFAULT ORGANIC PREP										
1,3-DICHLOROBENZENE	4.90		ug/L	5.00	0.00	98		8	20	
1,3-DICHLOROPROPANE	4.83		ug/L	5.00	0.00	97		5	20	
1,4-DICHLOROBENZENE	4.80		ug/L	5.00	0.00	96		16	20	
2,2-DICHLOROPROPANE	5.13		ug/L	5.00	0.00	103		9	20	
2-CHLOROTOLUENE	4.76		ug/L	5.00	0.00	95		10	20	
4-CHLOROTOLUENE	4.76		ug/L	5.00	0.00	95		8	20	
4-ISOPROPYLTOLUENE	5.05		ug/L	5.00	0.00	101		12	20	
BENZENE	4.80		ug/L	5.00	0.00	96		8	20	
BROMOBENZENE	4.77		ug/L	5.00	0.00	95		11	20	
BROMOCHLOROMETHANE	5.23		ug/L	5.00	0.00	105		8	20	
BROMODICHLOROMETHANE	4.78		ug/L	5.00	0.00	96		1	20	
BROMOFORM	4.43		ug/L	5.00	0.00	89		6	20	
BROMOMETHANE	4.70		ug/L	5.00	0.00	94		5	20	
CARBON TETRACHLORIDE	4.61		ug/L	5.00	0.00	92		14	20	
CHLOROBENZENE	4.80		ug/L	5.00	0.00	96		6	20	
CHLOROETHANE	4.11		ug/L	5.00	0.00	82		15	20	
CHLOROFORM	4.78		ug/L	5.00	0.00	96		8	20	
CHLOROMETHANE	3.82		ug/L	5.00	0.00	76		14	20	
CIS-1,2-DICHLOROETHENE	4.99		ug/L	5.00	0.00	100		9	20	
CIS-1,3-DICHLOROPROPENE	5.07		ug/L	5.00	0.00	101		7	20	
DIBROMOCHLOROMETHANE	4.62		ug/L	5.00	0.00	92		8	20	
DIBROMOMETHANE	4.60		ug/L	5.00	0.00	92		6	20	
DICHLORODIFLUOROMETHANE	3.79		ug/L	5.00	0.00	76		5	20	
DICHLOROMETHANE	4.33		ug/L	5.00	0.00	87		12	20	
ETHYLBENZENE	4.78		ug/L	5.00	0.00	96		6	20	
ETHYLENE DIBROMIDE	4.96		ug/L	5.00	0.00	99		3	20	
HEXACHLOROBUTADIENE	5.00		ug/L	5.00	0.00	100		14	20	
ISOPROPYLBENZENE	4.74		ug/L	5.00	0.00	95		8	20	
M/P-XYLENES	9.21		ug/L	10.0	0.00	92		8	20	
METHYL-TERT-BUTYL ETHER	4.24		ug/L	5.00	0.00	85		8	20	
NAPHTHALENE	4.64		ug/L	5.00	0.00	93		14	20	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	12/08/2022 10:00

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike Dup (BK20104-MSD1) (for RPD QC only)				**Source: L221481-02**		Prepared & Analyzed: 11/01/2022				
Batch BK20104 - DEFAULT ORGANIC PREP										
N-BUTYLBENZENE	4.77		ug/L	5.00	0.00	95		17	20	
N-PROPYLBENZENE	4.70		ug/L	5.00	0.00	94		6	20	
ORTHO-XYLENE	4.73		ug/L	5.00	0.00	95		12	20	
SEC-BUTYLBENZENE	4.90		ug/L	5.00	0.00	98		10	20	
STYRENE	4.66		ug/L	5.00	0.00	93		7	20	
TERT-BUTYLBENZENE	4.85		ug/L	5.00	0.00	97		8	20	
TETRACHLOROETHENE	4.96		ug/L	5.00	0.00	99		8	20	
TOLUENE	4.99		ug/L	5.00	0.00	100		7	20	
TRANS-1,2-DICHLOROETHENE	4.75		ug/L	5.00	0.00	95		8	20	
TRANS-1,3-DICHLOROPROPENE	4.94		ug/L	5.00	0.00	99		7	20	
TRICHLOROETHENE	4.94		ug/L	5.00	0.00	99		7	20	
TRICHLOROFLUOROMETHANE	4.53		ug/L	5.00	0.00	91		8	20	
VINYL CHLORIDE	4.09		ug/L	5.00	0.00	82		9	20	
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.92*		ug/L	*5.00*		*98*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.84*		ug/L	*5.00*		*97*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.03*		ug/L	*5.00*		*101*	*70-130*			
Reference (BK20104-SRM1)						Prepared & Analyzed: 11/01/2022				
Batch BK20104 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	5.16		ug/L	5.00		103	80-120			
1,1,1-TRICHLOROETHANE	4.88		ug/L	5.00		98	80-120			
1,1,2,2-TETRACHLOROETHANE	5.10		ug/L	5.00		102	80-120			
1,1,2-TRICHLOROETHANE	5.02		ug/L	5.00		100	80-120			
1,1-DICHLOROETHANE	5.19		ug/L	5.00		104	80-120			
1,1-DICHLOROETHENE	4.89		ug/L	5.00		98	80-120			
1,1-DICHLOROPROPENE	4.89		ug/L	5.00		98	80-120			
1,2,3-TRICHLOROBENZENE	5.23		ug/L	5.00		105	80-120			
1,2,3-TRICHLOROPROPANE	5.38		ug/L	5.00		108	80-120			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	12/08/2022 10:00

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BK20104-SRM1)				Prepared & Analyzed: 11/01/2022						
Batch BK20104 - DEFAULT ORGANIC PREP										
1,2,4-TRICHLOROBENZENE	5.10		ug/L	5.00		102	80-120			
1,2,4-TRIMETHYLBENZENE	5.16		ug/L	5.00		103	80-120			
1,2-DIBROMO-3-CHLOROPROPANE	4.72		ug/L	5.00		94	72-115			
1,2-DICHLOROBENZENE	5.09		ug/L	5.00		102	80-120			
1,2-DICHLOROETHANE	5.08		ug/L	5.00		102	80-120			
1,2-DICHLOROPROPANE	4.97		ug/L	5.00		99	80-120			
1,3,5-TRIMETHYLBENZENE	5.08		ug/L	5.00		102	80-120			
1,3-DICHLOROBENZENE	5.24		ug/L	5.00		105	80-120			
1,3-DICHLOROPROPANE	5.10		ug/L	5.00		102	80-120			
1,4-DICHLOROBENZENE	5.04		ug/L	5.00		101	80-120			
2,2-DICHLOROPROPANE	5.57		ug/L	5.00		111	86-136			
2-CHLOROTOLUENE	5.06		ug/L	5.00		101	80-120			
4-CHLOROTOLUENE	5.09		ug/L	5.00		102	80-120			
4-ISOPROPYLTOLUENE	5.10		ug/L	5.00		102	80-120			
BENZENE	5.04		ug/L	5.00		101	80-120			
BROMOBENZENE	5.24		ug/L	5.00		105	80-120			
BROMOCHLOROMETHANE	5.17		ug/L	5.00		103	80-120			
BROMODICHLOROMETHANE	4.91		ug/L	5.00		98	81-124			
BROMOFORM	5.14		ug/L	5.00		103	74-118			
BROMOMETHANE	4.85		ug/L	5.00		97	66-136			
CARBON TETRACHLORIDE	5.01		ug/L	5.00		100	76-118			
CHLOROBENZENE	5.21		ug/L	5.00		104	80-120			
CHLOROETHANE	4.43		ug/L	5.00		89	80-120			
CHLOROFORM	5.20		ug/L	5.00		104	80-120			
CHLOROMETHANE	4.24		ug/L	5.00		85	69-115			
CIS-1,2-DICHLOROETHENE	5.25		ug/L	5.00		105	80-120			
CIS-1,3-DICHLOROPROPENE	5.65		ug/L	5.00		113	80-120			
DIBROMOCHLOROMETHANE	5.16		ug/L	5.00		103	80-120			
DIBROMOMETHANE	5.00		ug/L	5.00		100	80-120			
DICHLORODIFLUOROMETHANE	3.87		ug/L	5.00		77	59-125			
DICHLOROMETHANE	4.70		ug/L	5.00		94	80-120			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	12/08/2022 10:00

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BK20104-SRM1)				Prepared & Analyzed: 11/01/2022						
Batch BK20104 - DEFAULT ORGANIC PREP										
ETHYLBENZENE	5.00		ug/L	5.00		100	80-120			
ETHYLENE DIBROMIDE	5.35		ug/L	5.00		107	80-120			
HEXACHLOROBUTADIENE	4.78		ug/L	5.00		96	80-120			
ISOPROPYLBENZENE	4.97		ug/L	5.00		99	80-120			
M/P-XYLENES	9.97		ug/L	10.0		100	80-120			
METHYL-TERT-BUTYL ETHER	4.79		ug/L	5.00		96	80-120			
NAPHTHALENE	5.11		ug/L	5.00		102	75-119			
N-BUTYLBENZENE	4.84		ug/L	5.00		97	80-120			
N-PROPYLBENZENE	4.91		ug/L	5.00		98	80-120			
ORTHO-XYLENE	5.17		ug/L	5.00		103	80-120			
SEC-BUTYLBENZENE	5.09		ug/L	5.00		102	80-120			
STYRENE	5.03		ug/L	5.00		101	80-120			
TERT-BUTYLBENZENE	5.06		ug/L	5.00		101	80-120			
TETRACHLOROETHENE	4.90		ug/L	5.00		98	80-120			
TOLUENE	5.17		ug/L	5.00		103	80-120			
TRANS-1,2-DICHLOROETHENE	5.18		ug/L	5.00		104	80-120			
TRANS-1,3-DICHLOROPROPENE	5.37		ug/L	5.00		107	81-122			
TRICHLOROETHENE	4.88		ug/L	5.00		98	80-120			
TRICHLOROFLUOROMETHANE	4.56		ug/L	5.00		91	80-120			
VINYL CHLORIDE	4.21		ug/L	5.00		84	80-120			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.97*		ug/L	*5.00*		*99*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.22*		ug/L	*5.00*		*104*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*4.94*		ug/L	*5.00*		*99*	*70-130*			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	12/08/2022 10:00

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

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TUCSON WATER CHAIN OF CUSTODY

LOGIN ID: L221481

CLIENT: ES

PROJECT NAME/FREQUENCY:
LOS REALES Landfill
Monthly

PROJECT #: P01049

SAMPLING DATE:
10/25/2022

SAMPLED BY:
print full name
Chad Hancock

signature
Chad S. Hancock

SAMPLE #	TIME	LOCATION	SITE	NUMBER OF CONTAINERS	ICP	ICP	ICP	ICP	ICP	ICPMS	ICPMS	8260	COMMENTS
PRESERVATIVE								(HNO3)				(HCl)	
-01	1254	LR GW INF	LRIF	4								X	TBs declined
-02	1259	LR GW EFF	LREF	4								X	by ES for this project

PRESERVATIVE	(Na2S2O3)	(Unpreserved)	(HNO3)	(H2SO4)	(NaS2O3/H2SO4)	(Unpreserved)	(NaS2O3/H2SO4)	(H2SO4)	(HCl)	(Ascorbic Acid)	(Na2S2O3)	(Unpreserved)	(H2SO4)	(NaOH)	(NaOH/Zinc Acetate)
											EEA EEA EEA	EEA EEA EEA EEA EEA EEA EEA EEA	EEA EEA	EEA	EEA

COMMENTS: Sample on the fourth Monday of the month.

SPECIAL TURNAROUND TIME:

	SIGNATURE	DATE/TIME		SIGNATURE	DATE/TIME
RELINQUISHED BY:	Chad Hancock	10/25/22 1349	**RECEIVED BY:**	Melanie Bobbitt	10/25/22 1350
RELINQUISHED BY:			**RECEIVED BY:**		

RECEIVING TEMPERATURE= 3.4 °C

4401 S. Tucson Estates Parkway
Tucson, Arizona 85735
520.837.2469 Phone
520.791.5260 Fax

06 January 2023

Valerie Herman

Environmental Services

-

Tucson, AZ 85726

RE: Los Reales Landfill Monthly

Enclosed are the results for Work Order L221572, received by the laboratory on 11/21/2022 10:32. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Frank Walker

Frank Walker
Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/06/2023 16:30

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Secondary ID/Location	Date Sampled	Date Received
L221572-01	LR GW INF	LRLF	11/21/2022 09:15	11/21/2022 10:32
L221572-02	LR GW EFF	LRLF	11/21/2022 09:10	11/21/2022 10:32

Tucson Water Quality Laboratory

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Frank Walker

Frank Walker, Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/06/2023 16:30

Case Narative / Items for Project Manager Review

All QC results were within QC limits with the following exceptions:

L221572-01 LR GW INF STYRENE VOA (I)8260

R13: MS/MSD RPD exceeded method acceptance limit. Matrix spike recovery was outside acceptance criteria. Batch precision and accuracy were demonstrated.

L221572-01 LR GW INF STYRENE VOA (I)8260

M2: Matrix spike recovery was low, associated blank spike recovery was acceptable.

BK22802-MSD STYRENE VOA (I)8260

R13: MS/MSD RPD exceeded method acceptance limit. Matrix spike recovery was outside acceptance criteria. Batch precision and accuracy were demonstrated.

BK22802-MS1 STYRENE VOA (I)8260

M2: Matrix spike recovery was low, associated blank spike recovery was acceptable.

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/06/2023 16:30

LR GW INF (LRLF)
L221572-01

Sampled: 11/21/2022 9:15

Tucson Water Quality Laboratory (AZ0038)

Volatile Organic Compounds by GC/MS

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/06/2023 16:30

LR GW INF (LRLF)
L221572-01

Sampled: 11/21/2022 9:15

Tucson Water Quality Laboratory (AZ0038)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CHLOROFORM	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
DICHLORODIFLUOROMETHANE	**0.00132**	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
NAPHTHALENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	M2, R13
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
TETRACHLOROETHENE	**0.00265**	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
TRICHLOROETHENE	**0.000869**	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
TRICHLOROFLUOROMETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
XYLENES (TOTAL)	ND	0.0015	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		*101 %*		*70-130*	*BK22802*	*11/23/2022*	*11/23/2022*	*EPA 8260B*	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		*107 %*		*70-130*	*BK22802*	*11/23/2022*	*11/23/2022*	*EPA 8260B*	
Surrogate: TOLUENE-D8 (SURR.)		*96 %*		*70-130*	*BK22802*	*11/23/2022*	*11/23/2022*	*EPA 8260B*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/06/2023 16:30

LR GW EFF (LRLF)
L221572-02

Sampled:
11/21/2022 9:10

Tucson Water Quality Laboratory (AZ0038)

Volatile Organic Compounds by GC/MS

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/06/2023 16:30

LR GW EFF (LRLF)
L221572-02

Sampled: 11/21/2022 9:10

Tucson Water Quality Laboratory (AZ0038)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CHLOROFORM	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
DICHLORODIFLUOROMETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
NAPHTHALENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
TETRACHLOROETHENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
TRICHLOROETHENE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
TRICHLOROFLUOROMETHANE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
XYLENES (TOTAL)	ND	0.0015	mg/L	1	BK22802	11/23/2022	11/23/2022	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		*98 %*		*70-130*	*BK22802*	*11/23/2022*	*11/23/2022*	*EPA 8260B*	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		*106 %*		*70-130*	*BK22802*	*11/23/2022*	*11/23/2022*	*EPA 8260B*	
Surrogate: TOLUENE-D8 (SURR.)		*103 %*		*70-130*	*BK22802*	*11/23/2022*	*11/23/2022*	*EPA 8260B*	

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Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/06/2023 16:30

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BK22802-BLK1)				Prepared & Analyzed: 11/23/2022						
Batch BK22802 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	ND	0.000500	mg/L							
1,1,1-TRICHLOROETHANE	ND	0.000500	mg/L							
1,1,2,2-TETRACHLOROETHANE	ND	0.000500	mg/L							
1,1,2-TRICHLOROETHANE	ND	0.000500	mg/L							
1,1-DICHLOROETHANE	ND	0.000500	mg/L							
1,1-DICHLOROETHENE	ND	0.000500	mg/L							
1,1-DICHLOROPROPENE	ND	0.000500	mg/L							
1,2,3-TRICHLOROBENZENE	ND	0.000500	mg/L							
1,2,3-TRICHLOROPROPANE	ND	0.000500	mg/L							
1,2,4-TRICHLOROBENZENE	ND	0.000500	mg/L							
1,2,4-TRIMETHYLBENZENE	ND	0.000500	mg/L							
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.000500	mg/L							
1,2-DICHLOROBENZENE	ND	0.000500	mg/L							
1,2-DICHLOROETHANE	ND	0.000500	mg/L							
1,2-DICHLOROPROPANE	ND	0.000500	mg/L							
1,3,5-TRIMETHYLBENZENE	ND	0.000500	mg/L							
1,3-DICHLOROBENZENE	ND	0.000500	mg/L							
1,3-DICHLOROPROPANE	ND	0.000500	mg/L							
1,4-DICHLOROBENZENE	ND	0.000500	mg/L							
2,2-DICHLOROPROPANE	ND	0.000500	mg/L							
2-CHLOROTOLUENE	ND	0.000500	mg/L							
4-CHLOROTOLUENE	ND	0.000500	mg/L							
4-ISOPROPYLTOLUENE	ND	0.000500	mg/L							
BENZENE	ND	0.000500	mg/L							
BROMOBENZENE	ND	0.000500	mg/L							
BROMOCHLOROMETHANE	ND	0.000500	mg/L							
BROMODICHLOROMETHANE	ND	0.000500	mg/L							
BROMOFORM	ND	0.000500	mg/L							
BROMOMETHANE	ND	0.000500	mg/L							
CARBON TETRACHLORIDE	ND	0.000500	mg/L							

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Tucson, AZ 85735
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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/06/2023 16:30

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BK22802-BLK1)				Prepared & Analyzed: 11/23/2022						
Batch BK22802 - DEFAULT ORGANIC PREP										
CHLOROBENZENE	ND	0.000500	mg/L							
CHLOROETHANE	ND	0.000500	mg/L							
CHLOROFORM	ND	0.000500	mg/L							
CHLOROMETHANE	ND	0.000500	mg/L							
CIS-1,2-DICHLOROETHENE	ND	0.000500	mg/L							
CIS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L							
DIBROMOCHLOROMETHANE	ND	0.000500	mg/L							
DIBROMOMETHANE	ND	0.000500	mg/L							
DICHLORODIFLUOROMETHANE	ND	0.000500	mg/L							
DICHLOROMETHANE	ND	0.000500	mg/L							
ETHYLBENZENE	ND	0.000500	mg/L							
ETHYLENE DIBROMIDE	ND	0.000500	mg/L							
HEXACHLOROBUTADIENE	ND	0.000500	mg/L							
ISOPROPYLBENZENE	ND	0.000500	mg/L							
M/P-XYLENES	ND	0.000500	mg/L							
METHYL-TERT-BUTYL ETHER	ND	0.000500	mg/L							
NAPHTHALENE	ND	0.000500	mg/L							
N-BUTYLBENZENE	ND	0.000500	mg/L							
N-PROPYLBENZENE	ND	0.000500	mg/L							
ORTHO-XYLENE	ND	0.000500	mg/L							
SEC-BUTYLBENZENE	ND	0.000500	mg/L							
STYRENE	ND	0.000500	mg/L							
TERT-BUTYLBENZENE	ND	0.000500	mg/L							
TETRACHLOROETHENE	ND	0.000500	mg/L							
TOLUENE	ND	0.000500	mg/L							
TRANS-1,2-DICHLOROETHENE	ND	0.000500	mg/L							
TRANS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L							
TRICHLOROETHENE	ND	0.000500	mg/L							
TRICHLOROFLUOROMETHANE	ND	0.000500	mg/L							
VINYL CHLORIDE	ND	0.000500	mg/L							

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Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/06/2023 16:30

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BK22802-BLK1)				Prepared & Analyzed: 11/23/2022						
Batch BK22802 - DEFAULT ORGANIC PREP										
Surrogate: BROMOFLUOROBENZENE (SURR.)	*5.02*		ug/L	*5.00*		*100*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.55*		ug/L	*5.00*		*111*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.14*		ug/L	*5.00*		*103*	*70-130*			
LCS (BK22802-BS1)				Prepared & Analyzed: 11/23/2022						
Batch BK22802 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	4.38		ug/L	5.00		88	70-130			
1,1,1-TRICHLOROETHANE	4.68		ug/L	5.00		94	70-130			
1,1,2,2-TETRACHLOROETHANE	4.80		ug/L	5.00		96	70-130			
1,1,2-TRICHLOROETHANE	4.99		ug/L	5.00		100	70-130			
1,1-DICHLOROETHANE	4.88		ug/L	5.00		98	70-130			
1,1-DICHLOROETHENE	5.00		ug/L	5.00		100	70-130			
1,1-DICHLOROPROPENE	4.57		ug/L	5.00		91	70-130			
1,2,3-TRICHLOROBENZENE	4.45		ug/L	5.00		89	70-130			
1,2,3-TRICHLOROPROPANE	4.67		ug/L	5.00		93	70-130			
1,2,4-TRICHLOROBENZENE	4.61		ug/L	5.00		92	70-130			
1,2,4-TRIMETHYLBENZENE	4.58		ug/L	5.00		92	70-130			
1,2-DIBROMO-3-CHLOROPROPANE	4.03		ug/L	5.00		81	70-130			
1,2-DICHLOROBENZENE	4.67		ug/L	5.00		93	70-130			
1,2-DICHLOROETHANE	5.08		ug/L	5.00		102	70-130			
1,2-DICHLOROPROPANE	4.58		ug/L	5.00		92	70-130			
1,3,5-TRIMETHYLBENZENE	4.58		ug/L	5.00		92	70-130			
1,3-DICHLOROBENZENE	4.65		ug/L	5.00		93	70-130			
1,3-DICHLOROPROPANE	4.98		ug/L	5.00		100	70-130			
1,4-DICHLOROBENZENE	4.68		ug/L	5.00		94	70-130			
2,2-DICHLOROPROPANE	4.65		ug/L	5.00		93	70-130			
2-CHLOROTOLUENE	4.78		ug/L	5.00		96	70-130			
4-CHLOROTOLUENE	4.51		ug/L	5.00		90	70-130			
4-ISOPROPYLTOLUENE	4.57		ug/L	5.00		91	70-130			

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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/06/2023 16:30

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
LCS (BK22802-BS1)				Prepared & Analyzed: 11/23/2022						
Batch BK22802 - DEFAULT ORGANIC PREP										
BENZENE	4.83		ug/L	5.00		97	70-130			
BROMOBENZENE	4.52		ug/L	5.00		90	70-130			
BROMOCHLOROMETHANE	4.90		ug/L	5.00		98	70-130			
BROMODICHLOROMETHANE	4.51		ug/L	5.00		90	70-130			
BROMOFORM	4.26		ug/L	5.00		85	70-130			
BROMOMETHANE	4.65		ug/L	5.00		93	70-130			
CARBON TETRACHLORIDE	4.43		ug/L	5.00		89	70-130			
CHLOROBENZENE	4.69		ug/L	5.00		94	70-130			
CHLOROETHANE	4.96		ug/L	5.00		99	70-130			
CHLOROFORM	4.81		ug/L	5.00		96	70-130			
CHLOROMETHANE	4.75		ug/L	5.00		95	70-130			
CIS-1,2-DICHLOROETHENE	4.68		ug/L	5.00		94	70-130			
CIS-1,3-DICHLOROPROPENE	4.60		ug/L	5.00		92	70-130			
DIBROMOCHLOROMETHANE	4.40		ug/L	5.00		88	70-130			
DIBROMOMETHANE	4.77		ug/L	5.00		95	70-130			
DICHLORODIFLUOROMETHANE	4.58		ug/L	5.00		92	70-130			
DICHLOROMETHANE	5.07		ug/L	5.00		101	70-130			
ETHYLBENZENE	4.50		ug/L	5.00		90	70-130			
ETHYLENE DIBROMIDE	4.62		ug/L	5.00		92	70-130			
HEXACHLOROBUTADIENE	4.17		ug/L	5.00		83	70-130			
ISOPROPYLBENZENE	4.54		ug/L	5.00		91	70-130			
M/P-XYLENES	9.08		ug/L	10.0		91	70-130			
METHYL-TERT-BUTYL ETHER	5.12		ug/L	5.00		102	70-130			
NAPHTHALENE	4.77		ug/L	5.00		95	70-130			
N-BUTYLBENZENE	4.56		ug/L	5.00		91	70-130			
N-PROPYLBENZENE	4.32		ug/L	5.00		86	70-130			
ORTHO-XYLENE	4.68		ug/L	5.00		94	70-130			
SEC-BUTYLBENZENE	4.53		ug/L	5.00		91	70-130			
STYRENE	4.57		ug/L	5.00		91	70-130			
TERT-BUTYLBENZENE	4.52		ug/L	5.00		90	70-130			
TETRACHLOROETHENE	4.40		ug/L	5.00		88	70-130			

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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/06/2023 16:30

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
LCS (BK22802-BS1)					Prepared & Analyzed: 11/23/2022					
Batch BK22802 - DEFAULT ORGANIC PREP										
TOLUENE	4.61		ug/L	5.00		92	70-130			
TRANS-1,2-DICHLOROETHENE	4.66		ug/L	5.00		93	70-130			
TRANS-1,3-DICHLOROPROPENE	4.50		ug/L	5.00		90	70-130			
TRICHLOROETHENE	4.54		ug/L	5.00		91	70-130			
TRICHLOROFLUOROMETHANE	4.80		ug/L	5.00		96	70-130			
VINYL CHLORIDE	4.87		ug/L	5.00		97	70-130			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*5.05*		ug/L	*5.00*		*101*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.18*		ug/L	*5.00*		*104*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.17*		ug/L	*5.00*		*103*	*70-130*			
Matrix Spike (BK22802-MS1)			**Source: L221572-01**		Prepared & Analyzed: 11/23/2022					
Batch BK22802 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	4.71		ug/L	5.00	0.00	94	70-130			
1,1,1-TRICHLOROETHANE	5.51		ug/L	5.00	0.00	110	70-130			
1,1,2,2-TETRACHLOROETHANE	4.94		ug/L	5.00	0.00	99	70-130			
1,1,2-TRICHLOROETHANE	4.75		ug/L	5.00	0.00	95	70-130			
1,1-DICHLOROETHANE	5.67		ug/L	5.00	0.00	113	70-130			
1,1-DICHLOROETHENE	5.97		ug/L	5.00	0.00	119	70-130			
1,1-DICHLOROPROPENE	5.82		ug/L	5.00	0.00	116	70-130			
1,2,3-TRICHLOROBENZENE	4.56		ug/L	5.00	0.00	91	70-130			
1,2,3-TRICHLOROPROPANE	4.73		ug/L	5.00	0.00	95	70-130			
1,2,4-TRICHLOROBENZENE	4.72		ug/L	5.00	0.00	94	70-130			
1,2,4-TRIMETHYLBENZENE	4.94		ug/L	5.00	0.00	99	70-130			
1,2-DIBROMO-3-CHLOROPROPANE	4.36		ug/L	5.00	0.00	87	70-130			
1,2-DICHLOROBENZENE	4.68		ug/L	5.00	0.00	94	70-130			
1,2-DICHLOROETHANE	5.50		ug/L	5.00	0.00	110	70-130			
1,2-DICHLOROPROPANE	4.86		ug/L	5.00	0.00	97	70-130			
1,3,5-TRIMETHYLBENZENE	5.00		ug/L	5.00	0.00	100	70-130			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/06/2023 16:30

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike (BK22802-MS1)		**Source: L221572-01**		Prepared & Analyzed: 11/23/2022						
Batch BK22802 - DEFAULT ORGANIC PREP										
1,3-DICHLOROBENZENE	4.89		ug/L	5.00	0.00	98	70-130			
1,3-DICHLOROPROPANE	4.84		ug/L	5.00	0.00	97	70-130			
1,4-DICHLOROBENZENE	4.81		ug/L	5.00	0.00	96	70-130			
2,2-DICHLOROPROPANE	5.62		ug/L	5.00	0.00	112	70-130			
2-CHLOROTOLUENE	4.85		ug/L	5.00	0.00	97	70-130			
4-CHLOROTOLUENE	4.85		ug/L	5.00	0.00	97	70-130			
4-ISOPROPYLTOLUENE	4.91		ug/L	5.00	0.00	98	70-130			
BENZENE	5.42		ug/L	5.00	0.00	108	70-130			
BROMOBENZENE	4.70		ug/L	5.00	0.00	94	70-130			
BROMOCHLOROMETHANE	5.25		ug/L	5.00	0.00	105	70-130			
BROMODICHLOROMETHANE	4.59		ug/L	5.00	0.00	92	70-130			
BROMOFORM	4.40		ug/L	5.00	0.00	88	70-130			
BROMOMETHANE	5.24		ug/L	5.00	0.00	105	70-130			
CARBON TETRACHLORIDE	5.72		ug/L	5.00	0.00	114	70-130			
CHLOROBENZENE	5.10		ug/L	5.00	0.00	102	70-130			
CHLOROETHANE	5.60		ug/L	5.00	0.00	112	70-130			
CHLOROFORM	5.20		ug/L	5.00	0.00	104	70-130			
CHLOROMETHANE	5.60		ug/L	5.00	0.00	112	70-130			
CIS-1,2-DICHLOROETHENE	5.07		ug/L	5.00	0.00	101	70-130			
CIS-1,3-DICHLOROPROPENE	4.52		ug/L	5.00	0.00	90	70-130			
DIBROMOCHLOROMETHANE	4.43		ug/L	5.00	0.00	89	70-130			
DIBROMOMETHANE	4.66		ug/L	5.00	0.00	93	70-130			
DICHLORODIFLUOROMETHANE	7.11		ug/L	5.00	1.32	116	70-130			
DICHLOROMETHANE	5.38		ug/L	5.00	0.00	108	70-130			
ETHYLBENZENE	5.06		ug/L	5.00	0.00	101	70-130			
ETHYLENE DIBROMIDE	4.60		ug/L	5.00	0.00	92	70-130			
HEXACHLOROBUTADIENE	4.81		ug/L	5.00	0.00	96	70-130			
ISOPROPYLBENZENE	5.20		ug/L	5.00	0.00	104	70-130			
M/P-XYLENES	9.82		ug/L	10.0	0.00	98	70-130			
METHYL-TERT-BUTYL ETHER	5.25		ug/L	5.00	0.00	105	70-130			
NAPHTHALENE	4.71		ug/L	5.00	0.00	94	70-130			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/06/2023 16:30

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike (BK22802-MS1)		**Source: L221572-01**		Prepared & Analyzed: 11/23/2022						
Batch BK22802 - DEFAULT ORGANIC PREP										
N-BUTYLBENZENE	5.04		ug/L	5.00	0.00	101	70-130			
N-PROPYLBENZENE	5.07		ug/L	5.00	0.00	101	70-130			
ORTHO-XYLENE	4.96		ug/L	5.00	0.00	99	70-130			
SEC-BUTYLBENZENE	5.23		ug/L	5.00	0.00	105	70-130			
STYRENE	2.40		ug/L	5.00	0.00	48	70-130			M2
TERT-BUTYLBENZENE	4.91		ug/L	5.00	0.00	98	70-130			
TETRACHLOROETHENE	7.84		ug/L	5.00	2.65	104	70-130			
TOLUENE	4.80		ug/L	5.00	0.00	96	70-130			
TRANS-1,2-DICHLOROETHENE	5.66		ug/L	5.00	0.00	113	70-130			
TRANS-1,3-DICHLOROPROPENE	4.42		ug/L	5.00	0.00	88	70-130			
TRICHLOROETHENE	6.02		ug/L	5.00	0.869	103	70-130			
TRICHLOROFLUOROMETHANE	6.28		ug/L	5.00	0.355	118	70-130			
VINYL CHLORIDE	5.86		ug/L	5.00	0.00	117	70-130			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*5.10*		ug/L	*5.00*		*102*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.25*		ug/L	*5.00*		*105*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.03*		ug/L	*5.00*		*101*	*70-130*			
Matrix Spike Dup (BK22802-MSD1) (for RPD QC only)		**Source: L221572-01**		Prepared & Analyzed: 11/23/2022						
Batch BK22802 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	4.40		ug/L	5.00	0.00	88		7	20	
1,1,1-TRICHLOROETHANE	5.34		ug/L	5.00	0.00	107		3	20	
1,1,2,2-TETRACHLOROETHANE	4.76		ug/L	5.00	0.00	95		4	20	
1,1,2-TRICHLOROETHANE	5.08		ug/L	5.00	0.00	102		7	20	
1,1-DICHLOROETHANE	5.33		ug/L	5.00	0.00	107		6	20	
1,1-DICHLOROETHENE	5.93		ug/L	5.00	0.00	119		0.8	20	
1,1-DICHLOROPROPENE	5.71		ug/L	5.00	0.00	114		2	20	
1,2,3-TRICHLOROBENZENE	4.74		ug/L	5.00	0.00	95		4	20	
1,2,3-TRICHLOROPROPANE	4.79		ug/L	5.00	0.00	96		1	20	

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Tucson Water Quality Lab
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Tucson, AZ 85735
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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/06/2023 16:30

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike Dup (BK22802-MSD1) (for RPD QC only)			**Source: L221572-01**		Prepared & Analyzed: 11/23/2022					
Batch BK22802 - DEFAULT ORGANIC PREP										
1,2,4-TRICHLOROBENZENE	4.82		ug/L	5.00	0.00	96		2	20	
1,2,4-TRIMETHYLBENZENE	4.88		ug/L	5.00	0.00	98		1	20	
1,2-DIBROMO-3-CHLOROPROPANE	4.34		ug/L	5.00	0.00	87		0.5	20	
1,2-DICHLOROBENZENE	4.91		ug/L	5.00	0.00	98		5	20	
1,2-DICHLOROETHANE	5.12		ug/L	5.00	0.00	102		7	20	
1,2-DICHLOROPROPANE	4.94		ug/L	5.00	0.00	99		2	20	
1,3,5-TRIMETHYLBENZENE	4.88		ug/L	5.00	0.00	98		2	20	
1,3-DICHLOROBENZENE	4.65		ug/L	5.00	0.00	93		5	20	
1,3-DICHLOROPROPANE	4.93		ug/L	5.00	0.00	99		2	20	
1,4-DICHLOROBENZENE	4.81		ug/L	5.00	0.00	96		0.06	20	
2,2-DICHLOROPROPANE	5.42		ug/L	5.00	0.00	108		4	20	
2-CHLOROTOLUENE	4.94		ug/L	5.00	0.00	99		2	20	
4-CHLOROTOLUENE	4.83		ug/L	5.00	0.00	97		0.5	20	
4-ISOPROPYLTOLUENE	5.13		ug/L	5.00	0.00	103		4	20	
BENZENE	5.24		ug/L	5.00	0.00	105		3	20	
BROMOBENZENE	4.57		ug/L	5.00	0.00	91		3	20	
BROMOCHLOROMETHANE	5.17		ug/L	5.00	0.00	103		2	20	
BROMODICHLOROMETHANE	4.85		ug/L	5.00	0.00	97		6	20	
BROMOFORM	4.31		ug/L	5.00	0.00	86		2	20	
BROMOMETHANE	5.42		ug/L	5.00	0.00	108		3	20	
CARBON TETRACHLORIDE	5.46		ug/L	5.00	0.00	109		5	20	
CHLOROBENZENE	4.91		ug/L	5.00	0.00	98		4	20	
CHLOROETHANE	5.34		ug/L	5.00	0.00	107		5	20	
CHLOROFORM	5.29		ug/L	5.00	0.00	106		2	20	
CHLOROMETHANE	5.56		ug/L	5.00	0.00	111		0.7	20	
CIS-1,2-DICHLOROETHENE	4.97		ug/L	5.00	0.00	99		2	20	
CIS-1,3-DICHLOROPROPENE	4.86		ug/L	5.00	0.00	97		7	20	
DIBROMOCHLOROMETHANE	4.42		ug/L	5.00	0.00	88		0.05	20	
DIBROMOMETHANE	4.92		ug/L	5.00	0.00	98		5	20	
DICHLORODIFLUOROMETHANE	6.76		ug/L	5.00	1.32	109		5	20	
DICHLOROMETHANE	5.38		ug/L	5.00	0.00	108		0.02	20	

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Tucson Water Quality Lab
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Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/06/2023 16:30

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike Dup (BK22802-MSD1) (for RPD QC only)			**Source: L221572-01**		Prepared & Analyzed: 11/23/2022					
Batch BK22802 - DEFAULT ORGANIC PREP										
ETHYLBENZENE	4.98		ug/L	5.00	0.00	100		2	20	
ETHYLENE DIBROMIDE	4.67		ug/L	5.00	0.00	93		2	20	
HEXACHLOROBUTADIENE	5.00		ug/L	5.00	0.00	100		4	20	
ISOPROPYLBENZENE	5.09		ug/L	5.00	0.00	102		2	20	
M/P-XYLENES	9.75		ug/L	10.0	0.00	98		0.7	20	
METHYL-TERT-BUTYL ETHER	5.22		ug/L	5.00	0.00	104		0.7	20	
NAPHTHALENE	4.71		ug/L	5.00	0.00	94		0	20	
N-BUTYLBENZENE	5.27		ug/L	5.00	0.00	105		5	20	
N-PROPYLBENZENE	4.87		ug/L	5.00	0.00	97		4	20	
ORTHO-XYLENE	4.82		ug/L	5.00	0.00	96		3	20	
SEC-BUTYLBENZENE	5.20		ug/L	5.00	0.00	104		0.5	20	
STYRENE	4.44		ug/L	5.00	0.00	89		60	20	R13
TERT-BUTYLBENZENE	4.98		ug/L	5.00	0.00	100		2	20	
TETRACHLOROETHENE	8.22		ug/L	5.00	2.65	111		5	20	
TOLUENE	5.06		ug/L	5.00	0.00	101		5	20	
TRANS-1,2-DICHLOROETHENE	5.33		ug/L	5.00	0.00	107		6	20	
TRANS-1,3-DICHLOROPROPENE	4.53		ug/L	5.00	0.00	91		2	20	
TRICHLOROETHENE	6.09		ug/L	5.00	0.869	104		1	20	
TRICHLOROFLUOROMETHANE	6.15		ug/L	5.00	0.355	116		2	20	
VINYL CHLORIDE	5.76		ug/L	5.00	0.00	115		2	20	
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.96*		ug/L	*5.00*		*99*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.05*		ug/L	*5.00*		*101*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.10*		ug/L	*5.00*		*102*	*70-130*			
Reference (BK22802-SRM1)					Prepared & Analyzed: 11/23/2022					
Batch BK22802 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	4.50		ug/L	5.00		90	80-120			
1,1,1-TRICHLOROETHANE	5.37		ug/L	5.00		107	80-120			

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Tucson, AZ 85735
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Environmental Services	Project: Los Reales Landfill Monthly	
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Tucson AZ, 85726	Project Manager: Valerie Herman	01/06/2023 16:30

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BK22802-SRM1)				Prepared & Analyzed: 11/23/2022						
Batch BK22802 - DEFAULT ORGANIC PREP										
1,1,2,2-TETRACHLOROETHANE	5.05		ug/L	5.00		101	80-120			
1,1,2-TRICHLOROETHANE	5.12		ug/L	5.00		102	80-120			
1,1-DICHLOROETHANE	5.41		ug/L	5.00		108	80-120			
1,1-DICHLOROETHENE	5.63		ug/L	5.00		113	80-120			
1,1-DICHLOROPROPENE	5.58		ug/L	5.00		112	80-120			
1,2,3-TRICHLOROBENZENE	4.98		ug/L	5.00		100	80-120			
1,2,3-TRICHLOROPROPANE	4.91		ug/L	5.00		98	80-120			
1,2,4-TRICHLOROBENZENE	5.16		ug/L	5.00		103	80-120			
1,2,4-TRIMETHYLBENZENE	4.97		ug/L	5.00		99	80-120			
1,2-DIBROMO-3-CHLOROPROPANE	4.60		ug/L	5.00		92	72-115			
1,2-DICHLOROBENZENE	5.10		ug/L	5.00		102	80-120			
1,2-DICHLOROETHANE	5.44		ug/L	5.00		109	80-120			
1,2-DICHLOROPROPANE	5.01		ug/L	5.00		100	80-120			
1,3,5-TRIMETHYLBENZENE	4.78		ug/L	5.00		96	80-120			
1,3-DICHLOROBENZENE	4.84		ug/L	5.00		97	80-120			
1,3-DICHLOROPROPANE	5.14		ug/L	5.00		103	80-120			
1,4-DICHLOROBENZENE	4.95		ug/L	5.00		99	80-120			
2,2-DICHLOROPROPANE	5.66		ug/L	5.00		113	86-136			
2-CHLOROTOLUENE	4.84		ug/L	5.00		97	80-120			
4-CHLOROTOLUENE	4.77		ug/L	5.00		95	80-120			
4-ISOPROPYLTOLUENE	5.11		ug/L	5.00		102	80-120			
BENZENE	5.42		ug/L	5.00		108	80-120			
BROMOBENZENE	4.67		ug/L	5.00		93	80-120			
BROMOCHLOROMETHANE	5.65		ug/L	5.00		113	81-124			
BROMODICHLOROMETHANE	4.71		ug/L	5.00		94	80-120			
BROMOFORM	4.55		ug/L	5.00		91	74-118			
BROMOMETHANE	5.28		ug/L	5.00		106	66-136			
CARBON TETRACHLORIDE	5.58		ug/L	5.00		112	76-118			
CHLOROBENZENE	4.82		ug/L	5.00		96	80-120			
CHLOROETHANE	5.16		ug/L	5.00		103	80-120			
CHLOROFORM	5.39		ug/L	5.00		108	80-120			

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Tucson Water Quality Lab
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Tucson, AZ 85735
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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/06/2023 16:30

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BK22802-SRM1)					Prepared & Analyzed: 11/23/2022					
Batch BK22802 - DEFAULT ORGANIC PREP										
CHLOROMETHANE	5.34		ug/L	5.00		107	69-115			
CIS-1,2-DICHLOROETHENE	5.31		ug/L	5.00		106	80-120			
CIS-1,3-DICHLOROPROPENE	5.02		ug/L	5.00		100	80-120			
DIBROMOCHLOROMETHANE	4.52		ug/L	5.00		90	80-120			
DIBROMOMETHANE	5.11		ug/L	5.00		102	80-120			
DICHLORODIFLUOROMETHANE	5.69		ug/L	5.00		114	59-125			
DICHLOROMETHANE	5.53		ug/L	5.00		111	80-120			
ETHYLBENZENE	4.87		ug/L	5.00		97	80-120			
ETHYLENE DIBROMIDE	4.98		ug/L	5.00		100	80-120			
HEXACHLOROBUTADIENE	4.86		ug/L	5.00		97	80-120			
ISOPROPYLBENZENE	4.95		ug/L	5.00		99	80-120			
M/P-XYLENES	9.90		ug/L	10.0		99	80-120			
METHYL-TERT-BUTYL ETHER	5.65		ug/L	5.00		113	80-120			
NAPHTHALENE	5.09		ug/L	5.00		102	75-119			
N-BUTYLBENZENE	5.43		ug/L	5.00		109	80-120			
N-PROPYLBENZENE	4.87		ug/L	5.00		97	80-120			
ORTHO-XYLENE	4.84		ug/L	5.00		97	80-120			
SEC-BUTYLBENZENE	5.03		ug/L	5.00		101	80-120			
STYRENE	4.88		ug/L	5.00		98	80-120			
TERT-BUTYLBENZENE	4.88		ug/L	5.00		98	80-120			
TETRACHLOROETHENE	4.89		ug/L	5.00		98	80-120			
TOLUENE	4.93		ug/L	5.00		99	80-120			
TRANS-1,2-DICHLOROETHENE	5.63		ug/L	5.00		113	80-120			
TRANS-1,3-DICHLOROPROPENE	4.74		ug/L	5.00		95	81-122			
TRICHLOROETHENE	5.09		ug/L	5.00		102	80-120			
TRICHLOROFLUOROMETHANE	5.75		ug/L	5.00		115	80-120			
VINYL CHLORIDE	5.79		ug/L	5.00		116	80-120			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.96*		ug/L	*5.00*		*99*	*70-130*			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/06/2023 16:30

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BK22802-SRM1)					Prepared & Analyzed: 11/23/2022					
Batch BK22802 - DEFAULT ORGANIC PREP										
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.39*		ug/L	*5.00*		*108*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.01*		ug/L	*5.00*		*100*	*70-130*			

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Tucson Water Quality Lab
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Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/06/2023 16:30

Notes and Definitions

R13	MS/MSD RPD exceeded method acceptance limit. Matrix spike recovery was outside acceptance criteria. Batch precision and accuracy were demonstrated.
M2	Matrix spike recovery was low, associated blank spike recovery was acceptable.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

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TUCSON WATER CHAIN OF CUSTODY

LOGIN ID: L221572

CLIENT: ES

PROJECT NAME/FREQUENCY:
LOS REALES Landfill
Monthly

PROJECT #: P01049

SAMPLING DATE:
11/21/2022

SAMPLED BY:
print full name
Kevin A. Pierce
signature
Kevin A Pierce

SAMPLE #	TIME	LOCATION	SITE	NUMBER OF CONTAINERS	ICP	ICP	ICP	ICP	ICP	ICPMS	ICPMS	(H2SO4)	(Na2S2O3/H2SO4)	(Unpreserved)	(NaS2O3/H2SO4)	(H2SO4)	(HCl) 8260	(Ascorbic Acid)	(Na2S2O3) EEA	EEA	EEA	(Unpreserved) EEA	EEA	EEA	EEA	EEA	EEA	EEA	EEA	(H2SO4) EEA	EEA	(NaOH) EEA	(NaOH/Zinc Acetate) EEA	COMMENTS
-01	0915	LR GW INF	LRLF	4													X																TBs declined
-02	0910	LR GW EFF	LRLF	4													X																by ES for this
																																	project

COMMENTS: Sample on the fourth Monday of the month.

SPECIAL TURNAROUND TIME:

	SIGNATURE	DATE/TIME		SIGNATURE	DATE/TIME
RELINQUISHED BY:	Kevin A Pierce	11/21/22 1031	**RECEIVED BY:**	Frank Walker	11.21.22 1032
RELINQUISHED BY:			**RECEIVED BY:**		

RECEIVING TEMPERATURE= 0.6 °C

4401 S. Tucson Estates Parkway
Tucson, Arizona 85735
520.837.2469 Phone
520.791.5260 Fax

18 January 2023

Valerie Herman

Environmental Services

-

Tucson, AZ 85726

RE: Los Reales Landfill Monthly

Enclosed are the results for Work Order L221771, received by the laboratory on 12/21/2022 13:53. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Frank Walker

Frank Walker
Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/18/2023 09:17

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Secondary ID/Location	Date Sampled	Date Received
L221771-01	LR GW INF	Spigot	12/21/2022 11:42	12/21/2022 13:53
L221771-02	LR GW EFF	Spigot	12/21/2022 11:45	12/21/2022 13:53

Tucson Water Quality Laboratory

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Frank Walker

Frank Walker, Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/18/2023 09:17

Case Narative / Items for Project Manager Review

All QC results were within QC limits with the following exceptions:

BL22706-MS1	1,1-DICHLOROETHENE	VOA (I)8260

M1: Matrix spike recovery was high, associated blank spike recovery was acceptable.

BL22706-MS1	1,1-DICHLOROPROPENE	VOA (I)8260

M1: Matrix spike recovery was high, associated blank spike recovery was acceptable.

BL22706-MS1	CIS-1,2-DICHLOROETHENE	VOA (I)8260

M1: Matrix spike recovery was high, associated blank spike recovery was acceptable.

BL22706-MS1	TRANS-1,2-DICHLOROETHENE	VOA (I)8260

M1: Matrix spike recovery was high, associated blank spike recovery was acceptable.

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/18/2023 09:17

LR GW INF (Spigot)
L221771-01

Sampled: 12/21/2022 11:42

Tucson Water Quality Laboratory (AZ0038)

Volatile Organic Compounds by GC/MS

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/18/2023 09:17

LR GW INF (Spigot)
L221771-01

Sampled: 12/21/2022 11:42

Tucson Water Quality Laboratory (AZ0038)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CHLOROFORM	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
DICHLORODIFLUOROMETHANE	**0.00109**	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
NAPHTHALENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
TETRACHLOROETHENE	**0.00444**	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
TRICHLOROETHENE	**0.00135**	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
TRICHLOROFLUOROMETHANE	**0.000510**	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
XYLENES (TOTAL)	ND	0.0015	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		*95 %*	*70-130*		*BL22706*	*12/22/2022*	*12/22/2022*	*EPA 8260B*	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		*100 %*	*70-130*		*BL22706*	*12/22/2022*	*12/22/2022*	*EPA 8260B*	
Surrogate: TOLUENE-D8 (SURR.)		*99 %*	*70-130*		*BL22706*	*12/22/2022*	*12/22/2022*	*EPA 8260B*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/18/2023 09:17

LR GW EFF (Spigot)
L221771-02

Sampled:
12/21/2022 11:45

Tucson Water Quality Laboratory (AZ0038)

Volatile Organic Compounds by GC/MS

EPA 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/18/2023 09:17

LR GW EFF (Spigot)
L221771-02

Sampled: 12/21/2022 11:45

Tucson Water Quality Laboratory (AZ0038)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CHLOROFORM	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
DICHLORODIFLUOROMETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
NAPHTHALENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
TETRACHLOROETHENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
TRICHLOROETHENE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
TRICHLOROFLUOROMETHANE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
XYLENES (TOTAL)	ND	0.0015	mg/L	1	BL22706	12/22/2022	12/22/2022	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		*96 %*		*70-130*	*BL22706*	*12/22/2022*	*12/22/2022*	*EPA 8260B*	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		*102 %*		*70-130*	*BL22706*	*12/22/2022*	*12/22/2022*	*EPA 8260B*	
Surrogate: TOLUENE-D8 (SURR.)		*102 %*		*70-130*	*BL22706*	*12/22/2022*	*12/22/2022*	*EPA 8260B*	

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/18/2023 09:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BL22706-BLK1)				Prepared & Analyzed: 12/22/2022						
Batch BL22706 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	ND	0.000500	mg/L							
1,1,1-TRICHLOROETHANE	ND	0.000500	mg/L							
1,1,2,2-TETRACHLOROETHANE	ND	0.000500	mg/L							
1,1,2-TRICHLOROETHANE	ND	0.000500	mg/L							
1,1-DICHLOROETHANE	ND	0.000500	mg/L							
1,1-DICHLOROETHENE	ND	0.000500	mg/L							
1,1-DICHLOROPROPENE	ND	0.000500	mg/L							
1,2,3-TRICHLOROBENZENE	ND	0.000500	mg/L							
1,2,3-TRICHLOROPROPANE	ND	0.000500	mg/L							
1,2,4-TRICHLOROBENZENE	ND	0.000500	mg/L							
1,2,4-TRIMETHYLBENZENE	ND	0.000500	mg/L							
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.000500	mg/L							
1,2-DICHLOROBENZENE	ND	0.000500	mg/L							
1,2-DICHLOROETHANE	ND	0.000500	mg/L							
1,2-DICHLOROPROPANE	ND	0.000500	mg/L							
1,3,5-TRIMETHYLBENZENE	ND	0.000500	mg/L							
1,3-DICHLOROBENZENE	ND	0.000500	mg/L							
1,3-DICHLOROPROPANE	ND	0.000500	mg/L							
1,4-DICHLOROBENZENE	ND	0.000500	mg/L							
2,2-DICHLOROPROPANE	ND	0.000500	mg/L							
2-CHLOROTOLUENE	ND	0.000500	mg/L							
4-CHLOROTOLUENE	ND	0.000500	mg/L							
4-ISOPROPYLTOLUENE	ND	0.000500	mg/L							
BENZENE	ND	0.000500	mg/L							
BROMOBENZENE	ND	0.000500	mg/L							
BROMOCHLOROMETHANE	ND	0.000500	mg/L							
BROMODICHLOROMETHANE	ND	0.000500	mg/L							
BROMOFORM	ND	0.000500	mg/L							
BROMOMETHANE	ND	0.000500	mg/L							
CARBON TETRACHLORIDE	ND	0.000500	mg/L							

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/18/2023 09:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BL22706-BLK1)					Prepared & Analyzed: 12/22/2022					
Batch BL22706 - DEFAULT ORGANIC PREP										
CHLOROBENZENE	ND	0.000500	mg/L							
CHLOROETHANE	ND	0.000500	mg/L							
CHLOROFORM	ND	0.000500	mg/L							
CHLOROMETHANE	ND	0.000500	mg/L							
CIS-1,2-DICHLOROETHENE	ND	0.000500	mg/L							
CIS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L							
DIBROMOCHLOROMETHANE	ND	0.000500	mg/L							
DIBROMOMETHANE	ND	0.000500	mg/L							
DICHLORODIFLUOROMETHANE	ND	0.000500	mg/L							
DICHLOROMETHANE	ND	0.000500	mg/L							
ETHYLBENZENE	ND	0.000500	mg/L							
ETHYLENE DIBROMIDE	ND	0.000500	mg/L							
HEXACHLOROBUTADIENE	ND	0.000500	mg/L							
ISOPROPYLBENZENE	ND	0.000500	mg/L							
M/P-XYLENES	ND	0.000500	mg/L							
METHYL-TERT-BUTYL ETHER	ND	0.000500	mg/L							
NAPHTHALENE	ND	0.000500	mg/L							
N-BUTYLBENZENE	ND	0.000500	mg/L							
N-PROPYLBENZENE	ND	0.000500	mg/L							
ORTHO-XYLENE	ND	0.000500	mg/L							
SEC-BUTYLBENZENE	ND	0.000500	mg/L							
STYRENE	ND	0.000500	mg/L							
TERT-BUTYLBENZENE	ND	0.000500	mg/L							
TETRACHLOROETHENE	ND	0.000500	mg/L							
TOLUENE	ND	0.000500	mg/L							
TRANS-1,2-DICHLOROETHENE	ND	0.000500	mg/L							
TRANS-1,3-DICHLOROPROPENE	ND	0.000500	mg/L							
TRICHLOROETHENE	ND	0.000500	mg/L							
TRICHLOROFLUOROMETHANE	ND	0.000500	mg/L							
VINYL CHLORIDE	ND	0.000500	mg/L							

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/18/2023 09:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Blank (BL22706-BLK1)					Prepared & Analyzed: 12/22/2022					
Batch BL22706 - DEFAULT ORGANIC PREP										
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.72*		ug/L	*5.00*		*94*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.26*		ug/L	*5.00*		*105*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.11*		ug/L	*5.00*		*102*	*70-130*			
LCS (BL22706-BS1)					Prepared & Analyzed: 12/22/2022					
Batch BL22706 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	4.57		ug/L	5.00		91	70-130			
1,1,1-TRICHLOROETHANE	5.44		ug/L	5.00		109	70-130			
1,1,2,2-TETRACHLOROETHANE	5.64		ug/L	5.00		113	70-130			
1,1,2-TRICHLOROETHANE	5.32		ug/L	5.00		106	70-130			
1,1-DICHLOROETHANE	5.44		ug/L	5.00		109	70-130			
1,1-DICHLOROETHENE	5.60		ug/L	5.00		112	70-130			
1,1-DICHLOROPROPENE	5.90		ug/L	5.00		118	70-130			
1,2,3-TRICHLOROBENZENE	5.41		ug/L	5.00		108	70-130			
1,2,3-TRICHLOROPROPANE	5.32		ug/L	5.00		106	70-130			
1,2,4-TRICHLOROBENZENE	5.36		ug/L	5.00		107	70-130			
1,2,4-TRIMETHYLBENZENE	5.39		ug/L	5.00		108	70-130			
1,2-DIBROMO-3-CHLOROPROPANE	4.65		ug/L	5.00		93	70-130			
1,2-DICHLOROBENZENE	5.69		ug/L	5.00		114	70-130			
1,2-DICHLOROETHANE	5.65		ug/L	5.00		113	70-130			
1,2-DICHLOROPROPANE	5.56		ug/L	5.00		111	70-130			
1,3,5-TRIMETHYLBENZENE	5.60		ug/L	5.00		112	70-130			
1,3-DICHLOROBENZENE	5.70		ug/L	5.00		114	70-130			
1,3-DICHLOROPROPANE	5.53		ug/L	5.00		111	70-130			
1,4-DICHLOROBENZENE	5.71		ug/L	5.00		114	70-130			
2,2-DICHLOROPROPANE	5.74		ug/L	5.00		115	70-130			
2-CHLOROTOLUENE	5.64		ug/L	5.00		113	70-130			
4-CHLOROTOLUENE	5.46		ug/L	5.00		109	70-130			
4-ISOPROPYLTOLUENE	5.68		ug/L	5.00		114	70-130			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/18/2023 09:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
LCS (BL22706-BS1)				Prepared & Analyzed: 12/22/2022						
Batch BL22706 - DEFAULT ORGANIC PREP										
BENZENE	5.92		ug/L	5.00		118	70-130			
BROMOBENZENE	5.64		ug/L	5.00		113	70-130			
BROMOCHLOROMETHANE	5.79		ug/L	5.00		116	70-130			
BROMODICHLOROMETHANE	4.81		ug/L	5.00		96	70-130			
BROMOFORM	4.39		ug/L	5.00		88	70-130			
BROMOMETHANE	5.46		ug/L	5.00		109	70-130			
CARBON TETRACHLORIDE	5.17		ug/L	5.00		103	70-130			
CHLOROBENZENE	5.69		ug/L	5.00		114	70-130			
CHLOROETHANE	4.82		ug/L	5.00		96	70-130			
CHLOROFORM	5.48		ug/L	5.00		110	70-130			
CHLOROMETHANE	5.45		ug/L	5.00		109	70-130			
CIS-1,2-DICHLOROETHENE	5.34		ug/L	5.00		107	70-130			
CIS-1,3-DICHLOROPROPENE	4.74		ug/L	5.00		95	70-130			
DIBROMOCHLOROMETHANE	4.05		ug/L	5.00		81	70-130			
DIBROMOMETHANE	4.80		ug/L	5.00		96	70-130			
DICHLORODIFLUOROMETHANE	4.16		ug/L	5.00		83	70-130			
DICHLOROMETHANE	5.75		ug/L	5.00		115	70-130			
ETHYLBENZENE	5.95		ug/L	5.00		119	70-130			
ETHYLENE DIBROMIDE	5.48		ug/L	5.00		110	70-130			
HEXACHLOROBUTADIENE	5.29		ug/L	5.00		106	70-130			
ISOPROPYLBENZENE	5.86		ug/L	5.00		117	70-130			
M/P-XYLENES	11.7		ug/L	10.0		117	70-130			
METHYL-TERT-BUTYL ETHER	4.88		ug/L	5.00		98	70-130			
NAPHTHALENE	5.32		ug/L	5.00		106	70-130			
N-BUTYLBENZENE	5.64		ug/L	5.00		113	70-130			
N-PROPYLBENZENE	5.71		ug/L	5.00		114	70-130			
ORTHO-XYLENE	6.00		ug/L	5.00		120	70-130			
SEC-BUTYLBENZENE	5.92		ug/L	5.00		118	70-130			
STYRENE	5.55		ug/L	5.00		111	70-130			
TERT-BUTYLBENZENE	5.47		ug/L	5.00		109	70-130			
TETRACHLOROETHENE	5.42		ug/L	5.00		108	70-130			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/18/2023 09:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
LCS (BL22706-BS1)				Prepared & Analyzed: 12/22/2022						
Batch BL22706 - DEFAULT ORGANIC PREP										
TOLUENE	5.86		ug/L	5.00		117	70-130			
TRANS-1,2-DICHLOROETHENE	5.70		ug/L	5.00		114	70-130			
TRANS-1,3-DICHLOROPROPENE	5.30		ug/L	5.00		106	70-130			
TRICHLOROETHENE	5.73		ug/L	5.00		115	70-130			
TRICHLOROFLUOROMETHANE	5.68		ug/L	5.00		114	70-130			
VINYL CHLORIDE	4.98		ug/L	5.00		100	70-130			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.56*		ug/L	*5.00*		*91*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.86*		ug/L	*5.00*		*97*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.08*		ug/L	*5.00*		*102*	*70-130*			
Matrix Spike (BL22706-MS1)			**Source: L221695-03**	Prepared & Analyzed: 12/22/2022						
Batch BL22706 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	4.80		ug/L	5.00	0.00	96	70-130			
1,1,1-TRICHLOROETHANE	5.55		ug/L	5.00	0.00	111	70-130			
1,1,2,2-TETRACHLOROETHANE	5.29		ug/L	5.00	0.00	106	70-130			
1,1,2-TRICHLOROETHANE	5.68		ug/L	5.00	0.00	114	70-130			
1,1-DICHLOROETHANE	6.08		ug/L	5.00	0.00	122	70-130			
1,1-DICHLOROETHENE	6.68		ug/L	5.00	0.00	**134**	70-130			M1
1,1-DICHLOROPROPENE	6.53		ug/L	5.00	0.00	**131**	70-130			M1
1,2,3-TRICHLOROBENZENE	5.33		ug/L	5.00	0.00	107	70-130			
1,2,3-TRICHLOROPROPANE	5.22		ug/L	5.00	0.00	104	70-130			
1,2,4-TRICHLOROBENZENE	5.21		ug/L	5.00	0.00	104	70-130			
1,2,4-TRIMETHYLBENZENE	5.78		ug/L	5.00	0.00	116	70-130			
1,2-DIBROMO-3-CHLOROPROPANE	4.08		ug/L	5.00	0.00	82	70-130			
1,2-DICHLOROBENZENE	5.73		ug/L	5.00	0.00	115	70-130			
1,2-DICHLOROETHANE	5.77		ug/L	5.00	0.00	115	70-130			
1,2-DICHLOROPROPANE	5.84		ug/L	5.00	0.00	117	70-130			
1,3,5-TRIMETHYLBENZENE	5.71		ug/L	5.00	0.00	114	70-130			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/18/2023 09:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike (BL22706-MS1)		**Source: L221695-03**		Prepared & Analyzed: 12/22/2022						
Batch BL22706 - DEFAULT ORGANIC PREP										
1,3-DICHLOROBENZENE	5.57		ug/L	5.00	0.00	111	70-130			
1,3-DICHLOROPROPANE	5.11		ug/L	5.00	0.00	102	70-130			
1,4-DICHLOROBENZENE	5.51		ug/L	5.00	0.00	110	70-130			
2,2-DICHLOROPROPANE	6.11		ug/L	5.00	0.00	122	70-130			
2-CHLOROTOLUENE	5.50		ug/L	5.00	0.00	110	70-130			
4-CHLOROTOLUENE	5.58		ug/L	5.00	0.00	112	70-130			
4-ISOPROPYLTOLUENE	6.09		ug/L	5.00	0.00	122	70-130			
BENZENE	6.32		ug/L	5.00	0.00	126	70-130			
BROMOBENZENE	5.55		ug/L	5.00	0.00	111	70-130			
BROMOCHLOROMETHANE	6.15		ug/L	5.00	0.00	123	70-130			
BROMODICHLOROMETHANE	5.30		ug/L	5.00	0.00	106	70-130			
BROMOFORM	4.36		ug/L	5.00	0.00	87	70-130			
BROMOMETHANE	5.49		ug/L	5.00	0.00	110	70-130			
CARBON TETRACHLORIDE	5.72		ug/L	5.00	0.00	114	70-130			
CHLOROBENZENE	5.74		ug/L	5.00	0.00	115	70-130			
CHLOROETHANE	5.48		ug/L	5.00	0.00	110	70-130			
CHLOROFORM	10.1		ug/L	5.00	3.65	130	70-130			
CHLOROMETHANE	6.10		ug/L	5.00	0.00	122	70-130			
CIS-1,2-DICHLOROETHENE	6.83		ug/L	5.00	0.00	137	70-130			M1
CIS-1,3-DICHLOROPROPENE	5.56		ug/L	5.00	0.00	111	70-130			
DIBROMOCHLOROMETHANE	4.50		ug/L	5.00	0.00	90	70-130			
DIBROMOMETHANE	5.16		ug/L	5.00	0.00	103	70-130			
DICHLORODIFLUOROMETHANE	4.85		ug/L	5.00	0.00	97	70-130			
DICHLOROMETHANE	6.14		ug/L	5.00	0.00	123	70-130			
ETHYLBENZENE	6.02		ug/L	5.00	0.00	120	70-130			
ETHYLENE DIBROMIDE	5.56		ug/L	5.00	0.00	111	70-130			
HEXACHLOROBUTADIENE	5.91		ug/L	5.00	0.00	118	70-130			
ISOPROPYLBENZENE	6.03		ug/L	5.00	0.00	121	70-130			
M/P-XYLENES	11.4		ug/L	10.0	0.00	114	70-130			
METHYL-TERT-BUTYL ETHER	5.26		ug/L	5.00	0.00	105	70-130			
NAPHTHALENE	5.11		ug/L	5.00	0.00	102	70-130			

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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2469

Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/18/2023 09:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike (BL22706-MS1)		**Source: L221695-03**		Prepared & Analyzed: 12/22/2022						
Batch BL22706 - DEFAULT ORGANIC PREP										
N-BUTYLBENZENE	6.12		ug/L	5.00	0.00	122	70-130			
N-PROPYLBENZENE	5.85		ug/L	5.00	0.00	117	70-130			
ORTHO-XYLENE	6.14		ug/L	5.00	0.00	123	70-130			
SEC-BUTYLBENZENE	6.21		ug/L	5.00	0.00	124	70-130			
STYRENE	5.59		ug/L	5.00	0.00	112	70-130			
TERT-BUTYLBENZENE	5.19		ug/L	5.00	0.00	104	70-130			
TETRACHLOROETHENE	5.81		ug/L	5.00	0.00	116	70-130			
TOLUENE	6.24		ug/L	5.00	0.00	125	70-130			
TRANS-1,2-DICHLOROETHENE	6.69		ug/L	5.00	0.00	134	70-130			M1
TRANS-1,3-DICHLOROPROPENE	5.41		ug/L	5.00	0.00	108	70-130			
TRICHLOROETHENE	6.08		ug/L	5.00	0.00	122	70-130			
TRICHLOROFLUOROMETHANE	6.32		ug/L	5.00	0.00	126	70-130			
VINYL CHLORIDE	5.82		ug/L	5.00	0.00	116	70-130			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.79*		ug/L	*5.00*		*96*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.28*		ug/L	*5.00*		*106*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.19*		ug/L	*5.00*		*104*	*70-130*			
Matrix Spike Dup (BL22706-MSD1) (for RPD QC only)		**Source: L221695-03**		Prepared & Analyzed: 12/22/2022						
Batch BL22706 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	4.74		ug/L	5.00	0.00	95		1	20	
1,1,1-TRICHLOROETHANE	5.39		ug/L	5.00	0.00	108		3	20	
1,1,2,2-TETRACHLOROETHANE	5.22		ug/L	5.00	0.00	104		1	20	
1,1,2-TRICHLOROETHANE	5.49		ug/L	5.00	0.00	110		3	20	
1,1-DICHLOROETHANE	6.09		ug/L	5.00	0.00	122		0.2	20	
1,1-DICHLOROETHENE	6.17		ug/L	5.00	0.00	123		8	20	
1,1-DICHLOROPROPENE	6.38		ug/L	5.00	0.00	128		2	20	
1,2,3-TRICHLOROBENZENE	5.69		ug/L	5.00	0.00	114		7	20	
1,2,3-TRICHLOROPROPANE	5.06		ug/L	5.00	0.00	101		3	20	

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Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike Dup (BL22706-MSD1) (for RPD QC only)				**Source: L221695-03**		Prepared & Analyzed: 12/22/2022				
Batch BL22706 - DEFAULT ORGANIC PREP										
1,2,4-TRICHLOROBENZENE	5.59		ug/L	5.00	0.00	112		7	20	
1,2,4-TRIMETHYLBENZENE	5.62		ug/L	5.00	0.00	112		3	20	
1,2-DIBROMO-3-CHLOROPROPANE	4.44		ug/L	5.00	0.00	89		8	20	
1,2-DICHLOROBENZENE	5.97		ug/L	5.00	0.00	119		4	20	
1,2-DICHLOROETHANE	5.86		ug/L	5.00	0.00	117		2	20	
1,2-DICHLOROPROPANE	5.97		ug/L	5.00	0.00	119		2	20	
1,3,5-TRIMETHYLBENZENE	5.72		ug/L	5.00	0.00	114		0.2	20	
1,3-DICHLOROBENZENE	5.76		ug/L	5.00	0.00	115		3	20	
1,3-DICHLOROPROPANE	5.14		ug/L	5.00	0.00	103		0.6	20	
1,4-DICHLOROBENZENE	5.97		ug/L	5.00	0.00	119		8	20	
2,2-DICHLOROPROPANE	6.12		ug/L	5.00	0.00	122		0.2	20	
2-CHLOROTOLUENE	5.36		ug/L	5.00	0.00	107		3	20	
4-CHLOROTOLUENE	5.81		ug/L	5.00	0.00	116		4	20	
4-ISOPROPYLTOLUENE	6.41		ug/L	5.00	0.00	128		5	20	
BENZENE	6.24		ug/L	5.00	0.00	125		1	20	
BROMOBENZENE	5.59		ug/L	5.00	0.00	112		0.8	20	
BROMOCHLOROMETHANE	5.92		ug/L	5.00	0.00	118		4	20	
BROMODICHLOROMETHANE	5.25		ug/L	5.00	0.00	105		0.9	20	
BROMOFORM	4.18		ug/L	5.00	0.00	84		4	20	
BROMOMETHANE	5.42		ug/L	5.00	0.00	108		1	20	
CARBON TETRACHLORIDE	5.78		ug/L	5.00	0.00	116		1	20	
CHLOROBENZENE	5.66		ug/L	5.00	0.00	113		1	20	
CHLOROETHANE	5.14		ug/L	5.00	0.00	103		6	20	
CHLOROFORM	9.48		ug/L	5.00	3.65	117		7	20	
CHLOROMETHANE	5.71		ug/L	5.00	0.00	114		7	20	
CIS-1,2-DICHLOROETHENE	6.52		ug/L	5.00	0.00	130		5	20	
CIS-1,3-DICHLOROPROPENE	4.93		ug/L	5.00	0.00	99		12	20	
DIBROMOCHLOROMETHANE	4.55		ug/L	5.00	0.00	91		1	20	
DIBROMOMETHANE	4.62		ug/L	5.00	0.00	92		11	20	
DICHLORODIFLUOROMETHANE	4.30		ug/L	5.00	0.00	86		12	20	
DICHLOROMETHANE	5.73		ug/L	5.00	0.00	115		7	20	

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Environmental Services	Project: Los Reales Landfill Monthly	
-	Project Number: P01049	**Reported:**
Tucson AZ, 85726	Project Manager: Valerie Herman	01/18/2023 09:17

Volatile Organic Compounds by GC/MS - Quality Control

Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Matrix Spike Dup (BL22706-MSD1) (for RPD QC only)				**Source: L221695-03**		Prepared & Analyzed: 12/22/2022				
Batch BL22706 - DEFAULT ORGANIC PREP										
ETHYLBENZENE	6.09		ug/L	5.00	0.00	122		1	20	
ETHYLENE DIBROMIDE	5.61		ug/L	5.00	0.00	112		0.9	20	
HEXACHLOROBUTADIENE	5.86		ug/L	5.00	0.00	117		0.9	20	
ISOPROPYLBENZENE	6.00		ug/L	5.00	0.00	120		0.5	20	
M/P-XYLENES	11.5		ug/L	10.0	0.00	115		1	20	
METHYL-TERT-BUTYL ETHER	5.14		ug/L	5.00	0.00	103		2	20	
NAPHTHALENE	5.44		ug/L	5.00	0.00	109		6	20	
N-BUTYLBENZENE	6.18		ug/L	5.00	0.00	124		0.9	20	
N-PROPYLBENZENE	6.13		ug/L	5.00	0.00	123		5	20	
ORTHO-XYLENE	6.04		ug/L	5.00	0.00	121		2	20	
SEC-BUTYLBENZENE	6.45		ug/L	5.00	0.00	129		4	20	
STYRENE	5.55		ug/L	5.00	0.00	111		0.7	20	
TERT-BUTYLBENZENE	5.67		ug/L	5.00	0.00	113		9	20	
TETRACHLOROETHENE	5.58		ug/L	5.00	0.00	112		4	20	
TOLUENE	6.14		ug/L	5.00	0.00	123		2	20	
TRANS-1,2-DICHLOROETHENE	6.36		ug/L	5.00	0.00	127		5	20	
TRANS-1,3-DICHLOROPROPENE	5.33		ug/L	5.00	0.00	107		1	20	
TRICHLOROETHENE	5.95		ug/L	5.00	0.00	119		2	20	
TRICHLOROFLUOROMETHANE	6.38		ug/L	5.00	0.00	128		0.9	20	
VINYL CHLORIDE	5.45		ug/L	5.00	0.00	109		7	20	
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.72*		ug/L	*5.00*		*94*	*70-130*			
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*5.07*		ug/L	*5.00*		*101*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.19*		ug/L	*5.00*		*104*	*70-130*			
Reference (BL22706-SRM1)						Prepared & Analyzed: 12/22/2022				
Batch BL22706 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	4.30		ug/L	5.00		86	80-120			
1,1,1-TRICHLOROETHANE	4.87		ug/L	5.00		97	80-120			

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Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BL22706-SRM1)				Prepared & Analyzed: 12/22/2022						
Batch BL22706 - DEFAULT ORGANIC PREP										
1,1,2,2-TETRACHLOROETHANE	5.34		ug/L	5.00		107	80-120			
1,1,2-TRICHLOROETHANE	5.50		ug/L	5.00		110	80-120			
1,1-DICHLOROETHANE	5.62		ug/L	5.00		112	80-120			
1,1-DICHLOROETHENE	5.34		ug/L	5.00		107	80-120			
1,1-DICHLOROPROPENE	5.54		ug/L	5.00		111	80-120			
1,2,3-TRICHLOROBENZENE	5.00		ug/L	5.00		100	80-120			
1,2,3-TRICHLOROPROPANE	4.86		ug/L	5.00		97	80-120			
1,2,4-TRICHLOROBENZENE	5.06		ug/L	5.00		101	80-120			
1,2,4-TRIMETHYLBENZENE	5.28		ug/L	5.00		106	80-120			
1,2-DIBROMO-3-CHLOROPROPANE	4.46		ug/L	5.00		89	72-120			
1,2-DICHLOROBENZENE	5.64		ug/L	5.00		113	80-120			
1,2-DICHLOROETHANE	5.47		ug/L	5.00		109	80-120			
1,2-DICHLOROPROPANE	5.37		ug/L	5.00		107	80-120			
1,3,5-TRIMETHYLBENZENE	5.14		ug/L	5.00		103	80-120			
1,3-DICHLOROBENZENE	5.24		ug/L	5.00		105	80-120			
1,3-DICHLOROPROPANE	5.24		ug/L	5.00		105	80-120			
1,4-DICHLOROBENZENE	5.40		ug/L	5.00		108	80-120			
2,2-DICHLOROPROPANE	5.71		ug/L	5.00		114	86-136			
2-CHLOROTOLUENE	4.95		ug/L	5.00		99	80-120			
4-CHLOROTOLUENE	5.26		ug/L	5.00		105	80-120			
4-ISOPROPYLTOLUENE	5.72		ug/L	5.00		114	80-120			
BENZENE	5.47		ug/L	5.00		109	80-120			
BROMOBENZENE	5.17		ug/L	5.00		103	80-120			
BROMOCHLOROMETHANE	5.34		ug/L	5.00		107	80-120			
BROMODICHLOROMETHANE	4.82		ug/L	5.00		96	81-124			
BROMOFORM	4.36		ug/L	5.00		87	74-118			
BROMOMETHANE	5.13		ug/L	5.00		103	66-136			
CARBON TETRACHLORIDE	5.41		ug/L	5.00		108	76-118			
CHLOROBENZENE	5.20		ug/L	5.00		104	80-120			
CHLOROETHANE	4.78		ug/L	5.00		96	69-115			
CHLOROFORM	5.08		ug/L	5.00		102	80-120			

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BL22706-SRM1)				Prepared & Analyzed: 12/22/2022						
Batch BL22706 - DEFAULT ORGANIC PREP										
CHLOROMETHANE	4.70		ug/L	5.00		94	80-120			
CIS-1,2-DICHLOROETHENE	5.62		ug/L	5.00		112	80-120			
CIS-1,3-DICHLOROPROPENE	5.13		ug/L	5.00		103	80-120			
DIBROMOCHLOROMETHANE	4.80		ug/L	5.00		96	80-120			
DIBROMOMETHANE	4.76		ug/L	5.00		95	80-120			
DICHLORODIFLUOROMETHANE	3.78		ug/L	5.00		76	59-125			
DICHLOROMETHANE	5.25		ug/L	5.00		105	80-120			
ETHYLBENZENE	5.57		ug/L	5.00		111	80-120			
ETHYLENE DIBROMIDE	5.32		ug/L	5.00		106	80-120			
HEXACHLOROBUTADIENE	5.28		ug/L	5.00		106	80-120			
ISOPROPYLBENZENE	5.34		ug/L	5.00		107	80-120			
M/P-XYLENES	10.5		ug/L	10.0		105	80-120			
METHYL-TERT-BUTYL ETHER	4.86		ug/L	5.00		97	80-120			
NAPHTHALENE	5.19		ug/L	5.00		104	75-119			
N-BUTYLBENZENE	5.43		ug/L	5.00		109	80-120			
N-PROPYLBENZENE	5.39		ug/L	5.00		108	80-120			
ORTHO-XYLENE	5.54		ug/L	5.00		111	80-120			
SEC-BUTYLBENZENE	5.43		ug/L	5.00		109	80-120			
STYRENE	5.40		ug/L	5.00		108	80-120			
TERT-BUTYLBENZENE	5.12		ug/L	5.00		102	80-120			
TETRACHLOROETHENE	5.11		ug/L	5.00		102	80-120			
TOLUENE	5.74		ug/L	5.00		115	80-120			
TRANS-1,2-DICHLOROETHENE	5.58		ug/L	5.00		112	80-120			
TRANS-1,3-DICHLOROPROPENE	5.49		ug/L	5.00		110	81-122			
TRICHLOROETHENE	5.88		ug/L	5.00		118	80-120			
TRICHLOROFLUOROMETHANE	4.96		ug/L	5.00		99	80-120			
VINYL CHLORIDE	4.57		ug/L	5.00		91	80-120			
Surrogate: BROMOFLUOROBENZENE (SURR.)	*4.99*		ug/L	*5.00*		*100*	*70-130*			

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
EPA 8260B										
Reference (BL22706-SRM1)					Prepared & Analyzed: 12/22/2022					
Batch BL22706 - DEFAULT ORGANIC PREP										
Surrogate: DIBROMOFLUOROMETHANE (SURR.)	*4.96*		ug/L	*5.00*		*99*	*70-130*			
Surrogate: TOLUENE-D8 (SURR.)	*5.27*		ug/L	*5.00*		*105*	*70-130*			

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Notes and Definitions

M1	Matrix spike recovery was high, associated blank spike recovery was acceptable.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

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TUCSON WATER CHAIN OF CUSTODY

LOGIN ID: L221771

CLIENT: ES

PROJECT NAME/FREQUENCY:
LOS REALES Landfill
Monthly

PROJECT #: P01049

SAMPLING DATE:
12/21/2022

SAMPLED BY:
print full name
Chad Hancock
signature
Chad Hancock

SAMPLE #	TIME	LOCATION	SITE	NUMBER OF CONTAINERS	ICP	ICP	ICP	ICP	ICP	ICPMS	ICPMS	(H2SO4)	(NaS2O3/H2SO4)	(Unpreserved)	(NaS2O3/H2SO4)	(H2SO4)	8260 (HCl)	(Ascorbic Acid)	(Na2S2O3) EEA	(Na2S2O3) EEA	(Na2S2O3) EEA	(Unpreserved) EEA	(Unpreserved) EEA	(Unpreserved) EEA	(Unpreserved) EEA	(Unpreserved) EEA	(Unpreserved) EEA	(H2SO4) EEA	(NaOH) EEA	(NaOH/Zinc Acetate) EEA	COMMENTS
-01	1142	LR GW INF	LRLF	4													X														TBs declined
-02	1145	LR GW EFF	LRLF	4													X														by ES for this
																															project

COMMENTS: Sample on the fourth Monday of the month.

SPECIAL TURNAROUND TIME:

	SIGNATURE	DATE/TIME		SIGNATURE	DATE/TIME
RELINQUISHED BY:	Chad S. Hancock 12	12/21/22 1350	RECEIVED BY:		12-21-22 1353
RELINQUISHED BY:			RECEIVED BY:		

RECEIVING TEMPERATURE= 2.6°C

GHD