



MEMORANDUM

DATE: November 21, 2014

TO: File

FROM: Michael Henrich, P.E.
Engineering Manager
Environmental Services

**SUBJECT: Congress and Nearmont Landfills
Annual Monitoring Report for
October 2013 – July 2014**

The City of Tucson (COT) – Environmental Services (ES) has prepared this report to document landfill gas and groundwater monitoring, and dewatering activities conducted at the Congress and Nearmont Landfills for October 2012 – July 2014.

If you have any questions concerning this report, please contact me at (520) 837-3713.

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**CONGRESS AND NEARMONT LANDFILLS
ANNUAL MONITORING REPORT FOR
OCTOBER 2012 – JULY 2014**

NOVEMBER 21, 2014

**Prepared By:
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ENVIRONMENTAL
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TABLE OF CONTENTS

1.0 INTRODUCTION	1
2.0 BACKGROUND	1
3.0 PERIMETER SHALLOW LANDFILL GAS MONITORING	2
4.0 GROUNDWATER ELEVATIONS	2
4.1 PERCHED WATER CONDITIONS	2
4.2 REGIONAL GROUNDWATER ELEVATIONS.....	3
5.0 GROUNDWATER MONITORING RESULTS	3
5.1 PERCHED WATER QUALITY	3
5.2 REGIONAL WATER QUALITY.....	3
5.3 QUALITY ASSURANCE/QUALITY CONTROL.....	4
6.0 DEWATERING	4
7.0 FUTURE MONTIORING SCHEDULES	5

LIST OF TABLES

Table 1	2013 - 2014 Monitoring and Sampling Schedule
Table 2	Well Information
Table 3	Monthly Perched Water Level Data 2013-2014
Table 4	Expanded Annual Perched and Regional Water Level Data 2013 & 2014
Table 5	Analyte List
Table 6	Perched Monitor Well CM-9 Selected Laboratory Analytical Results
Table 7	Regional Monitor Wells: Selected Laboratory Analytical Results
Table 8	2015 Monitoring Schedule

LIST OF FIGURES

Figure 1	Location Map
Figure 2	Site Map
Figure 3	Regional Groundwater Elevation Contour Map 2013
Figure 4	Regional Groundwater Elevation Contour Map 2014
Figure 5	Trend Charts for Perched Monitor Wells
Figure 6	Regional Monitor Well PCE Trend Chart

LIST OF APPENDICES

A.	Landfill Gas Monitoring Results
B.	Water Level Data Field Forms
C.	2003 Geologic Cross Section
D.	Groundwater Field Sampling Forms and Laboratory Data Packages
E.	Regional Wells: Trend Charts
F.	Duplicate Groundwater Analysis Comparison
G.	Dewatering Summary and Weekly Logs

List of Acronyms

1,1-dichloroethane	(1,1 DCA)
Arizona Department of Water Resources	(ADWR)
Aquifer Water Quality Standards	(AWQS)
Arizona Department of Environmental Quality	(ADEQ)
Below Ground Surface	(bgs)
cis-1,2 dichloroethene	(cis-1,2 DCE)
City of Tucson Environmental Services	(COT-ES)
Feet	(ft)
Feet above mean sea level	(ft amsl)
Non-detect	(ND)
Micrograms per liter	(µg/L)
Poor Water Quality Permit	(PWQP)
Quality Control/Quality Assurance	(QA/QC)
Relative Percent Difference	(RPD)
Remedial Objectives	(ROs)
Sampling and Analysis Plan	(SAP)
Soil Vapor Extraction	(SVE)
Southwest Disposal Area	(SWDA)
Tetrachloroethene	(PCE)
Trichloroethene	(TCE)
Volatile Organic Compounds	(VOCs)
Voluntary Remediation Program	(VRP)
Water Quality Assurance Revolving Fund	(WQARF)
Water Table Elevation	(WTE)

EXECUTIVE SUMMARY

This report provides an analysis of data collected between October 2012 and July 2014 at the Congress and Nearmont Landfills. During this period, the City of Tucson – Environmental Services (COT-ES) monitored the landfill perimeters for landfill gases, collected water level data from perched and regional wells, and sampled one perched monitor well and three regional monitor wells for water quality.

COT-ES monitors methane at the boundaries of landfills to be protective of nearby residences and other developments. Methane was not detected in any perimeter landfill gas monitoring probe. COT-ES will continue the quarterly methane monitoring schedule.

Until 2010, groundwater monitoring at the Congress and Nearmont Landfills was done in accordance with the 2003 Work Plan approved by the Arizona Department of Environmental Quality (ADEQ) Voluntary Remediation Program (VRP) to assess the impact to regional groundwater, if any, posed by the Landfill Stabilization Project (LSP). The LSP ended in 2008, and COT-ES submitted the final report on the project to ADEQ in 2010. In the final report, COT-ES proposed a groundwater monitoring and dewatering schedule and stated that the data would be evaluated and the schedule adjusted as needed to be protective of the regional aquifer. ADEQ issued a letter, dated January 4, 2011, which approved withdrawal of the LSP from the VRP. Currently, the landfills are regulated by 40 Code of Federal Regulations (CFR) Part 257.1 through 257.3, Arizona Revised Statutes (ARS) §49-701 to §49-881 and the City of Tucson (COT) Landfill Ordinance 10037.

Regional groundwater flows towards the northwest beneath the landfills. The regional groundwater water quality results remain stable and below associated aquifer water quality standards (AWQS). As caused during the bioreactor, nitrate concentrations were above the AWQS in one perched well (CM-9), located north of the Congress Landfill, but recent sampling events indicated concentrations had decreased below the 10 mg/L AWQS to 8.02 mg/L in January 2014 and 3.0 mg/L in July 2014.

During the LSP, the maximum allowed water level elevation in perched wells at the site was 2,332 feet above mean sea level (ft amsl) in order to prevent buildup of a hydraulic head sufficient to cause the downward migration of the water through the clay layer that underlies the waste at the site. Measured perched water elevations did not exceed levels sufficient to cause downward migration either during or after the LSP. After the end of the LSP, COT-ES continued dewatering in an effort to reduce the nitrate in CM-9 to below the AWQS. A 2003 geologic cross section¹ indicates that the perched water beneath the landfills exists primarily in isolated pockets created by the clay mining that occurred prior to landfilling activities. Dewatering was ceased in November 2012 due to the low yield of CM-9, but perched water level elevations and water quality monitoring was continued. Perched water level elevations were monitored in January, February, August, September, October, November for 2013, and in January and February for 2014, and did not rise above the maximum elevation of 2,332 ft amsl.

¹ HGC, Inc., *Rio Nuevo Site Full Scale Stabilization Project Work Plan*, Tucson, Arizona, November 24, 2003

Current site conditions indicate that all groundwater constituents are stable below regulatory standards and continued groundwater monitoring is not warranted (nitrate concentrations in the perched water are below AWQS and regional water quality remains below regulatory standards). Water level elevations and water quality monitoring will be discontinued, but quarterly methane monitoring will continue at the perimeter of the two landfills in accordance with the COT Landfill Ordinance 10037. Table 8 summarizes the current monitoring schedule, but COT-ES will evaluate and develop a comprehensive landfill gas monitoring and management plan with consideration of future development near these landfills. COT-ES will inspect and maintain the landfill annually to correct problems such as wildcat dumping, erosion of soil cover, and vandalism of the remaining wells.

1.0 INTRODUCTION

The City of Tucson Environmental Services (COT-ES) prepared this report to document landfill gas, water level data, and water quality samples collected between September 2012 and July 2014 at the Congress and Nearmont Landfills (Figure 1). Table 1 lists the monitoring schedule performed at the two landfills in during this reporting period. As documented in the 2012 Annual Report², COT-ES ceased groundwater monitoring at the A-Mountain Landfill after September 2012 because groundwater quality data collected from 2000 through 2012 from wells associated with the landfill indicate that groundwater quality concentrations are stable and below the AWQS for all parameters. A-Mountain Landfill is located south of the Congress and Nearmont Landfills as shown on Figures 2 – 4. This report also contains data from water level monitoring events conducted for a wider range of wells for July-September 2013 and July 2014 in order to better understand the regional groundwater flow in the area. Previous data from the Congress and Nearmont Landfills can be found under the Congress Landfill, Nearmont Landfill and Rio Nuevo Project Files. Previous data for A-Mountain Landfill can be found under Comprehensive and A-Mountain Landfill project files.

2.0 BACKGROUND

The Congress and Nearmont Landfills are located along the west bank of the Santa Cruz River (Figure 1). The landfills were owned and operated by the City of Tucson for the disposal of municipal solid waste. Operation dates and the current waste foot print are shown below.

Landfill	Operated	Size (acres)
Congress	1953 - 1960	8.2
Nearmont	1960 - 1967	3.1

The landfills meet the definition of closed solid waste facilities under A.R.S. §49-701 through A.R.S. §49.881 and are exempt from the state rules covering solid waste facilities. However, methane monitoring for City landfills was directed by Mayor and Council in August 1995 as part of a directive to the Solid Waste Management Department to manage and control methane gas from landfills within the City. Mayor and Council placed evaluation of methane hazards as the highest priority but also directed staff to evaluate and establish protocols for other environmental concerns, specifically the impacts to groundwater from City-owned landfills^{3,4}. To protect the public's health and safety from potential adverse effects of methane gas, the Mayor and Council adopted the Landfill Ordinance No. 10037 in September 2004.

To be protective of nearby residences and other developments, COT-ES monitors methane quarterly at the boundary of each City-owned landfill. The Congress and Nearmont landfills were the site of the Rio Nuevo Landfill Stabilization Project (LSP), which ended in 2008. COT-ES submitted the final report to the Arizona Department of Environmental Quality (ADEQ)

² COT-ES: *A-Mountain, Congress and Nearmont Landfills 2012 Annual Monitoring Report*, December 4, 2012

³ Solid Waste Management Department: *Memorandum to Mayor and Council. Closed Landfill Investigation Summary*, February 18, 1998

⁴ Mayor and Council: *Memorandum: Update on Landfill Methane Monitoring and Compliance*, March 15, 1999

Voluntary Remediation Program (VRP) in February 2010⁵. In the final report to VRP, COT-ES proposed monitoring schedules for groundwater, perched water and dewatering at the site, and stated that the data would be evaluated and the schedule adjusted as needed. This report documents monitoring events conducted in between October 2012 and July 2014 to evaluate perched water conditions for improvement, and continued stable conditions of the regional aquifer.

3.0 PERIMETER SHALLOW LANDFILL GAS MONITORING

A total of twenty-six shallow landfill gas probes in sixteen locations were monitored quarterly in January, April, July, and October. Methane was not detected (Appendix A). The probes will continue to be monitored quarterly (Table 8).

4.0 GROUNDWATER ELEVATIONS

COT-ES conducted perched water level monitoring events at remaining wells located at the Congress and Nearmont Landfills in January, February, August, September, October, November for 2013, and in January and February for 2014. Expanded annual water level monitoring events were conducted on July 23, 2013 through September 5, 2013 and on July 24, 2014 for wells on both the east and west sides of the Santa Cruz River to gain a better understanding of the regional and perched groundwater flow in the area. The water level data field forms are provided in Appendix B.

4.1 Perched Water Conditions

Perched water was detected in several wells at the Congress and Nearmont Landfills and at sites east of the Santa Cruz River (Table 3 and Figure 3). From January 2013 through July 2014 the measured perched water table elevations (WTEs) ranged between 2,239.11 and 2,320.23 feet above mean sea level (ft amsl). Perched WTEs collected during the annual events were measured in wells to the east and west sides of the river, do not clearly show a direction of flow; of the twelve remaining perched wells at the Congress and Nearmont Landfills, eight are commonly dry (Table 3). COT-ES considers the perched water to be unconnected in this area, and data from the perched wells was not contoured on Figures 3 and 4.

In the vicinity of the Congress and Nearmont Landfills, the perched groundwater is discontinuous and occurs in isolated perched aquifer monitor wells. As noted in the geologic cross section presented in the LSP Work Plan⁶, and shown in Appendix C, the clay layer which is approximately 10 – 15 feet thick, serves as the base of the perched aquifer beneath the Congress and Nearmont Landfills is laterally continuous but contains depressions created by the clay mining which occurred prior to landfilling activities.

⁵ COT-ES: *Rio Nuevo Full Scale Stabilization Project 17-Acre Site Annual Report (April 2008-October 2009) and Final Report: VRP Site Code: 504075-00*, February 2010

⁶ HGC, INC, *Rio Nuevo Site Full Scale Stabilization Project Work Plan Tucson, Arizona*, November 24, 2003

4.2 Regional Groundwater Elevations

For the full list of wells measured and their locations, see Table 3 and Figures 3 and 4. Regional WTEs were contoured as Figure 3 for 2013 and Figure 4 for 2014. The 2013 water levels were collected on July 23, 2013 and September 5, 2013. Only the July readings were considered for contouring the 2013 WTE on Figure 3 because the elapsed time of measurements was too great to be considered as the same event. The regional water table elevations ranged between 2,189.38 - 2,258.58 ft amsl in 2013, and 2,189.08 - 2,261.94 ft amsl in 2014. Flow is generally north with a variable horizontal gradient. The average gradient east of I-10 is approximately 0.0057 feet per foot (ft/ft) with a northeast flow direction (Figure 4). A groundwater divide that locally shifts flow to the northwest (west of I-10) or northeast (east of I-10) is evident from the contours in Figure 4, and is consistent with previous water level data². The divide appears to be roughly parallel to I-10 and lies to the east of the Santa Cruz River.

5.0 GROUNDWATER MONITORING RESULTS

The regional wells are sampled annually for the COT-ES standard list of parameters for landfills considered “closed solid waste facilities” where discretionary monitoring is conducted to determine if the landfill poses an environmental risk to groundwater. The standard list includes VOCs, total organic carbon and 17 inorganic parameters (Table 5). The perched well CM-9 was sampled for nitrate and nitrite only because nitrate was the remaining compound above AWQS in 2012. Included in the anion EPA 300.0 analytical method for reporting nitrate/nitrites, other compounds were reported for CM-9 (bromide, chloride, fluoride, ortho-phosphate, and sulfate). The 2013 - 2014 monitoring schedule is included in Table 1.

5.1 Perched Water Quality

Nitrate exceeded the AWQS of 10 mg/L in CM-9 in January and July 2013, but was below AWQS in January and July 2014. Figure 5 shows the nitrate concentrations for the perched wells at the site. As previously reported, nitrate exceeded the AWQS in CM-9 since 2008, and reached a concentration high of 262 mg/L in July 2009, but concentrations were on a general decreasing trend, and dropped below the 10 mg/L AWQS in January 2014 at 8.02 mg/L and in July 2014 at 3 mg/L (Table 6 and Figure 5). Since Nitrate trends in the regional wells have not increased, the nitrate detected at perched well CM-9 does not appear to pose a threat to regional groundwater quality. Table 6 provides a summary of select compounds for monitor well CM-9 since it was the only perched well monitored during this reporting period. Previous reports for this project should be referenced for water quality information on other perched wells.

5.2 Regional Water Quality

No VOC or inorganic compounds exceeded their respective AWQS in the three regional groundwater wells sampled by COT ES near the landfills (WR-350B, WR-351A, and WR-429A). Appendix D contains field forms and laboratory data analytical reports. Table 7 provides the results for selected compounds. As stated in the 2011 annual report⁷, RNM-542 is not positioned downgradient of the Congress and Nearthmont Landfills and is no longer sampled.

⁷ COT-ES, *Congress and Nearthmont Landfill, Tucson, AZ, January 2010 to July 2011 Groundwater Monitoring and Landfill Gas Monitoring Results*, November 4, 2011

Regional groundwater monitoring data was collected from two events in July 2013 and July 2014, and the only detected VOCs were chloroform and total trihalomethanes in WR-350B at an average of 0.00065 µg/L, and in WR-351A at an average of 1.3 µg/L. Chloroform is a trihalomethane, and the values for these compounds equal each other as no other trihalomethane was detected. These compounds are typically a by-product of potable water chlorination, thus the landfill is not likely to cause these detections. These concentrations are low in comparison to the total trihalomethanes AWQS of 100 µg/L.

All detected compounds, including general chemistry, anions, metals (except iron), and VOCs show decreasing or stable trends (see Figure 6 for PCE and Appendix E for concentration trends of other inorganic compounds). Monitor well WR-351A iron concentration trend is irregular, as demonstrated with concentrations collected during this reporting period: 0.23 mg/L in July 2013 and 3.6 mg/L in July 2014. Iron does not have a respective AWQS.

Based on this data, the regional aquifer downgradient of the Congress and Nearmont landfills does not appear to have been impacted by the landfills.

5.3 Quality Assurance/Quality Control

Quality assurance/quality control (QA/QC) analyses for this reporting period included 2 duplicate sample analyses and 2 trip blanks. Duplicate comparisons are summarized in the tables in Appendix F, and analytical results for QA/QC samples are presented in the laboratory reports in Appendix D.

Trip blanks are taken one per day per cooler of sampling and analyzed for VOCs. No compounds were detected in either of the 2 trip blanks.

The laboratory percent recoveries were within laboratory quality assurance objectives for accuracy, except for the data qualifiers listed in the case narratives presented in laboratory analytical reports available in Appendix D. All were within acceptable quality, and are not considered to be a quality control issue.

The sampling and analysis plan (SAP) quality control evaluation criteria target is at a 30% relative percent difference (RPD) between duplicate sample results. If the RPD between original and duplicate samples is greater than 30%, laboratory precision and sampling protocols or sample crew field methodology may be evaluated. All duplicate results were within 30% (Appendix F).

6.0 DEWATERING

During the LSP, the maximum allowed water level elevation in perched wells at the site was 2,332 ft amsl in order to prevent buildup of a hydraulic head sufficient to cause the downward migration of the water through the clay layer that underlies the waste at the site⁶. COT-ES used a network of dewatering wells (denoted CLW) which pumped continuously during the LSP project to remove water that accumulated on the clay. No water level elevation reached 2,332 ft amsl during or after the LSP. As discussed in a previous section, the maximum perched water elevation observed during the October 2012 – September 2014 reporting period was 2,320.23 ft

amsl, which is 11.77 ft lower than the maximum water level elevation of 2,332 ft amsl. After the LSP ended, COT-ES continued to remove accumulated water from both CM and CLW wells with sufficient water in attempt to remediate the elevated nitrate concentrations in the perched aquifer as these conditions were possibly created by LSP operations. Two wells (WR-287A and CM-09) were manually dewatered weekly because there was insufficient water to continuously pump. A total of 48 gallons were removed between October 2012 through November 2012; Appendix H contains dewatering logs showing the amount of water removed from each well.

Although nitrate concentrations continued to be above AWQS in perched well CM-9, COT-ES discontinued dewatering at the wells after November 5, 2012 because CM-9 yields only a small quantity of water (125 gallons in one year), which is not enough to effectively remediate the perched water quality around it. In addition, the geologic cross section (Appendix C) indicates that the perched water beneath the landfills exists in isolated pockets created by the clay mining that occurred prior to landfilling activities. The perched water is not used for human consumption and the regional aquifer is not impacted by nitrate or other compounds above their respective AWQS. If perched water elevations were measured above 2,332 ft amsl in 2013 or 2014, dewatering would have been resumed, but that condition did not occur.

7.0 FUTURE MONITORING SCHEDULES

Current site conditions indicate that all groundwater constituents are stable below regulatory standards and continued groundwater monitoring is not warranted (nitrate concentrations in the perched water are below AWQS and regional water quality remains below regulatory standards). Water level elevations and water quality monitoring will be discontinued, but quarterly methane monitoring will continue at the perimeter of the two landfills in accordance with the COT Landfill Ordinance 10037. Table 8 summarizes the current monitoring schedule, but COT-ES will evaluate and develop a comprehensive landfill gas monitoring and management plan with consideration of future development near these landfills. COT-ES will inspect and maintain the landfill annually to correct problems such as wildcat dumping, erosion of soil cover, and vandalism of the remaining wells.

FIGURES

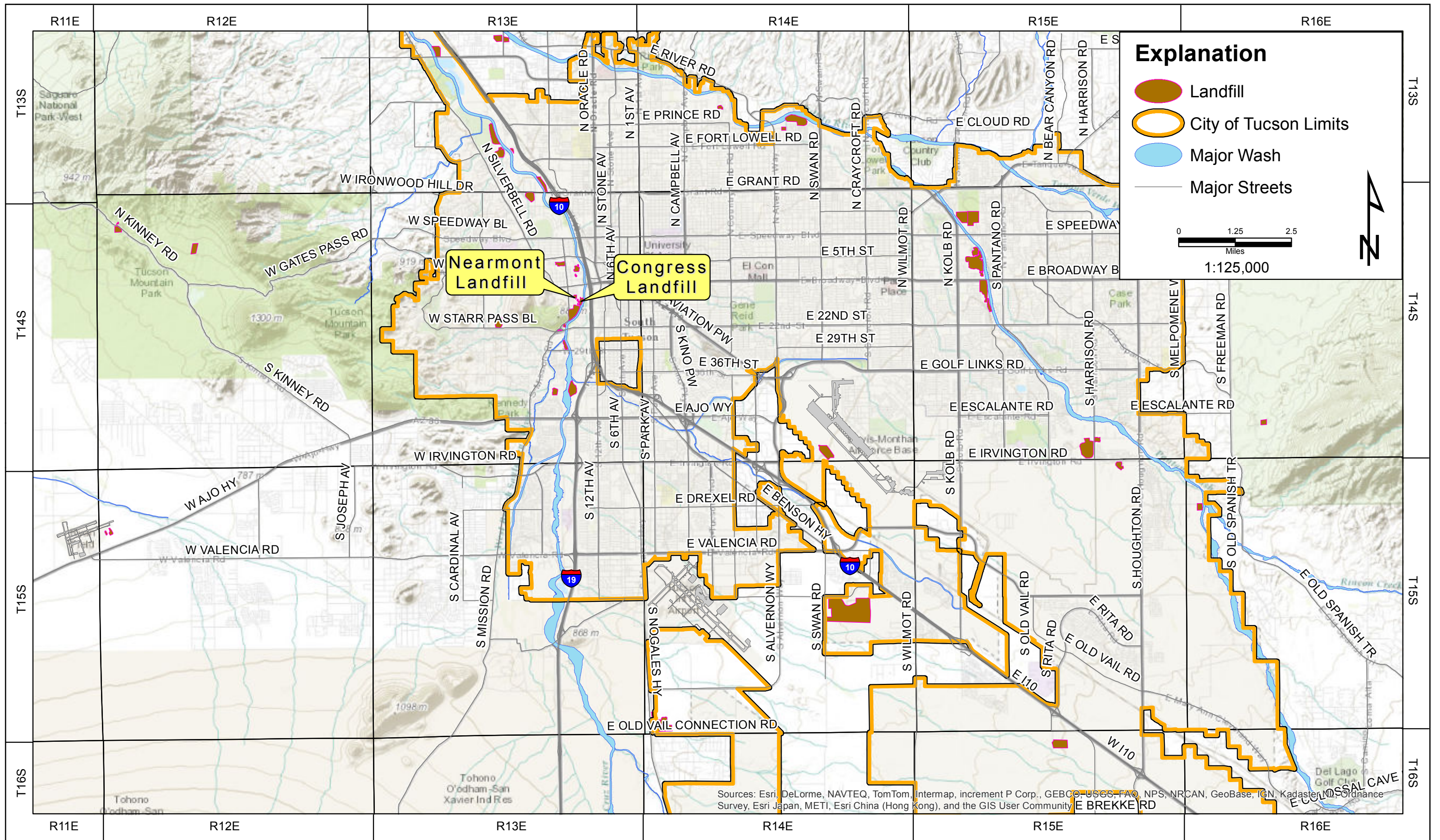










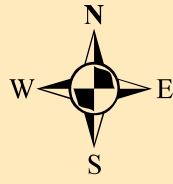


Figure 1
Location Map
Congress and Nearmont Landfill

Explanation

Well Type

-  0.5" PVC Vapor
-  2" and 4" SVE/AI
-  4" Steel Dewatering
-  Multipurpose
-  Perched Monitor
-  Regional Monitor
-  Abandoned Regional Monitor
-  Methane Monitoring Probe
-  Major Wash
-  Landfill Boundary



0 125 250 500 Feet

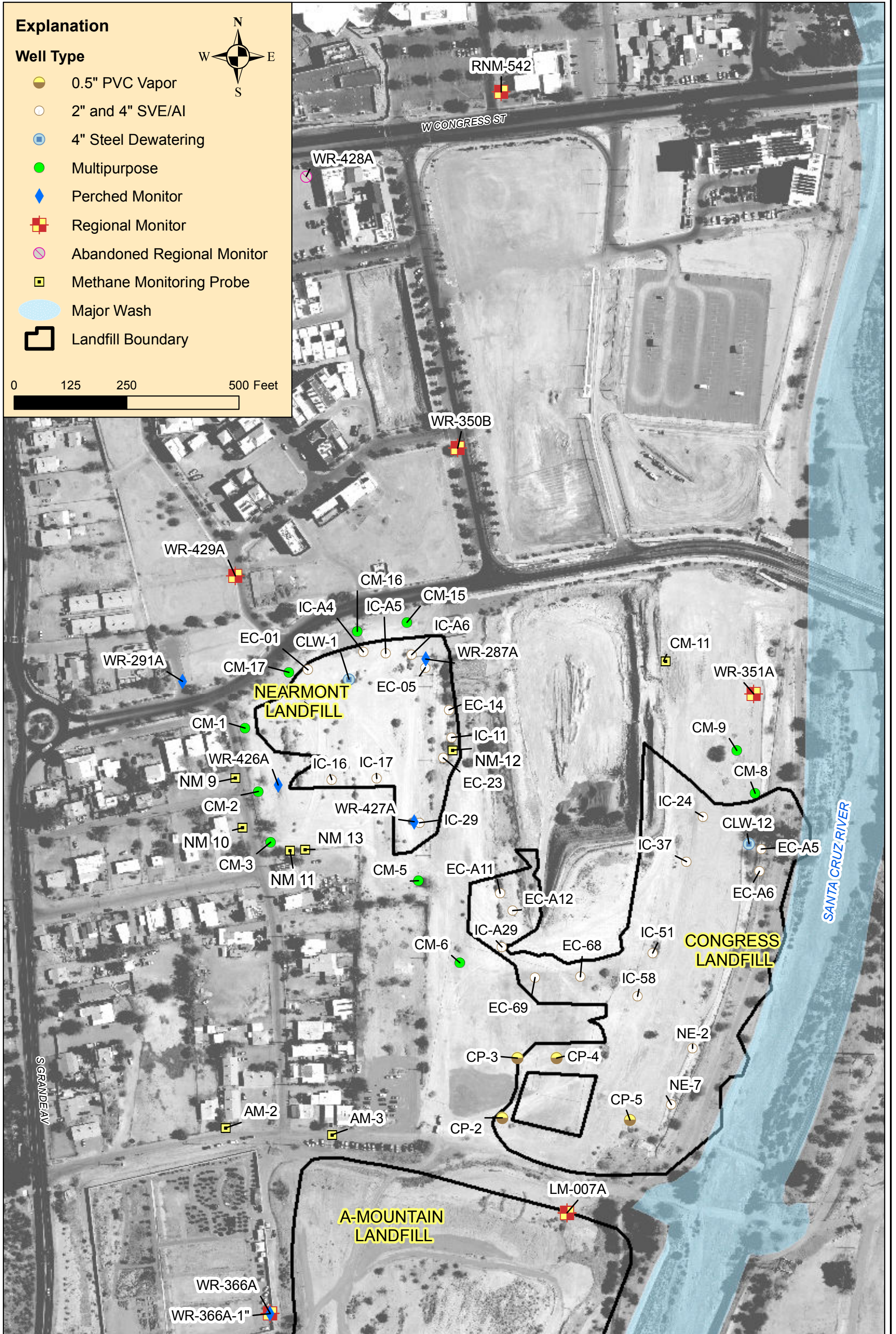
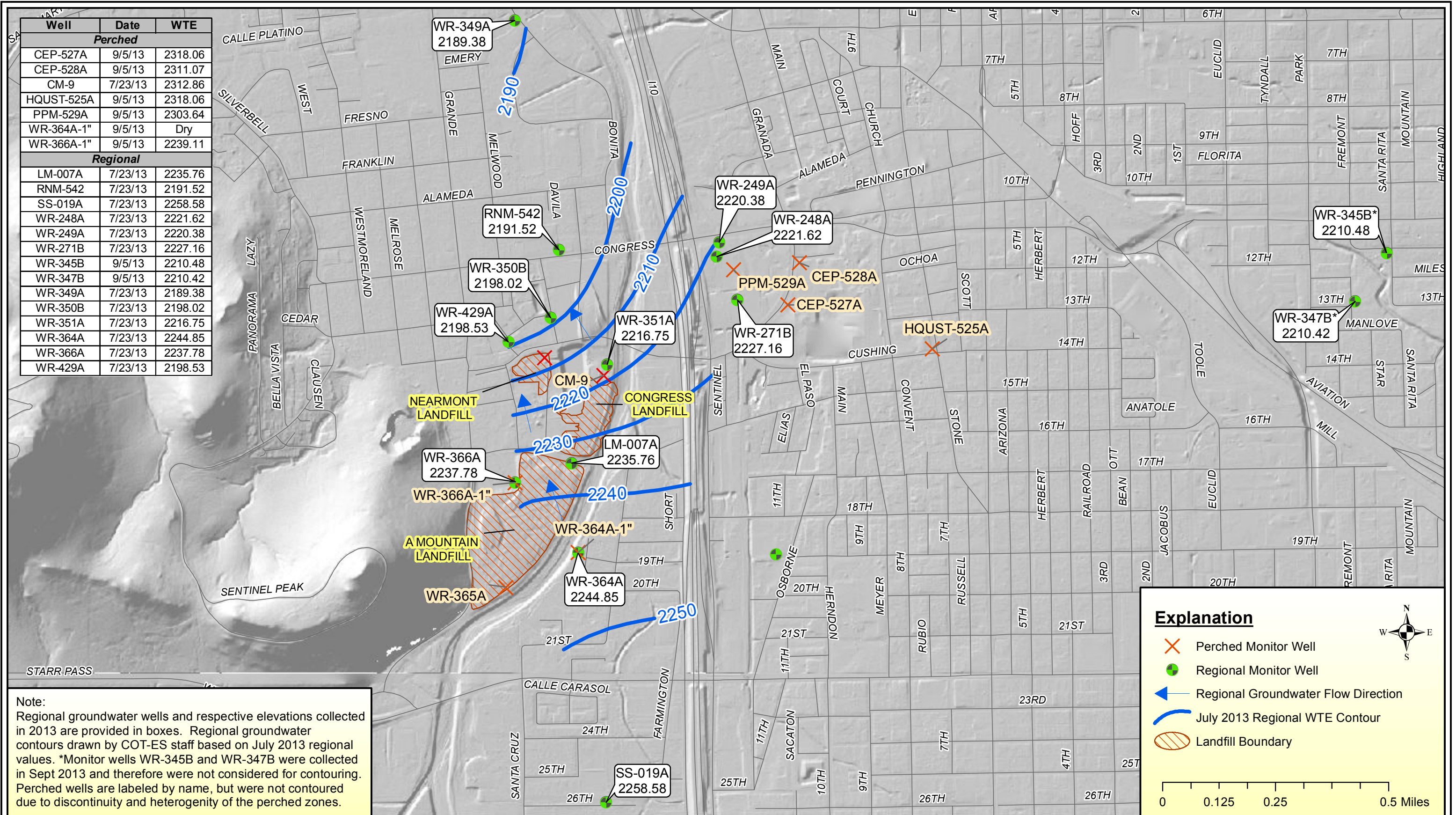


Figure 2
Site Map
Congress and Nearmont Landfills

Drawn By:	LE
Checked:	LC
Approved:	MH
Date:	10/1/2014
File:	See Below

J:\GIS\RioNuevo South\2011\WELLSLEFTV2.mxd

Well	Date	WTE
Perched		
CEP-527A	9/5/13	2318.06
CEP-528A	9/5/13	2311.07
CM-9	7/23/13	2312.86
HQUST-525A	9/5/13	2318.06
PPM-529A	9/5/13	2303.64
WR-364A-1"	9/5/13	Dry
WR-366A-1"	9/5/13	2239.11
Regional		
LM-007A	7/23/13	2235.76
RNM-542	7/23/13	2191.52
SS-019A	7/23/13	2258.58
WR-248A	7/23/13	2221.62
WR-249A	7/23/13	2220.38
WR-271B	7/23/13	2227.16
WR-345B	9/5/13	2210.48
WR-347B	9/5/13	2210.42
WR-349A	7/23/13	2189.38
WR-350B	7/23/13	2198.02
WR-351A	7/23/13	2216.75
WR-351A	7/23/13	2216.75
WR-364A	7/23/13	2244.85
WR-366A	7/23/13	2237.78
WR-429A	7/23/13	2198.53



Note:
Regional groundwater wells and respective elevations collected in 2013 are provided in boxes. Regional groundwater contours drawn by COT-ES staff based on July 2013 regional values. *Monitor wells WR-345B and WR-347B were collected in Sept 2013 and therefore were not considered for contouring. Perched wells are labeled by name, but were not contoured due to discontinuity and heterogeneity of the perched zones.

Explanation

- Perched Monitor Well
- Regional Monitor Well
- Regional Groundwater Flow Direction
- July 2013 Regional WTE Contour
- Landfill Boundary

0 0.125 0.25 0.5 Miles

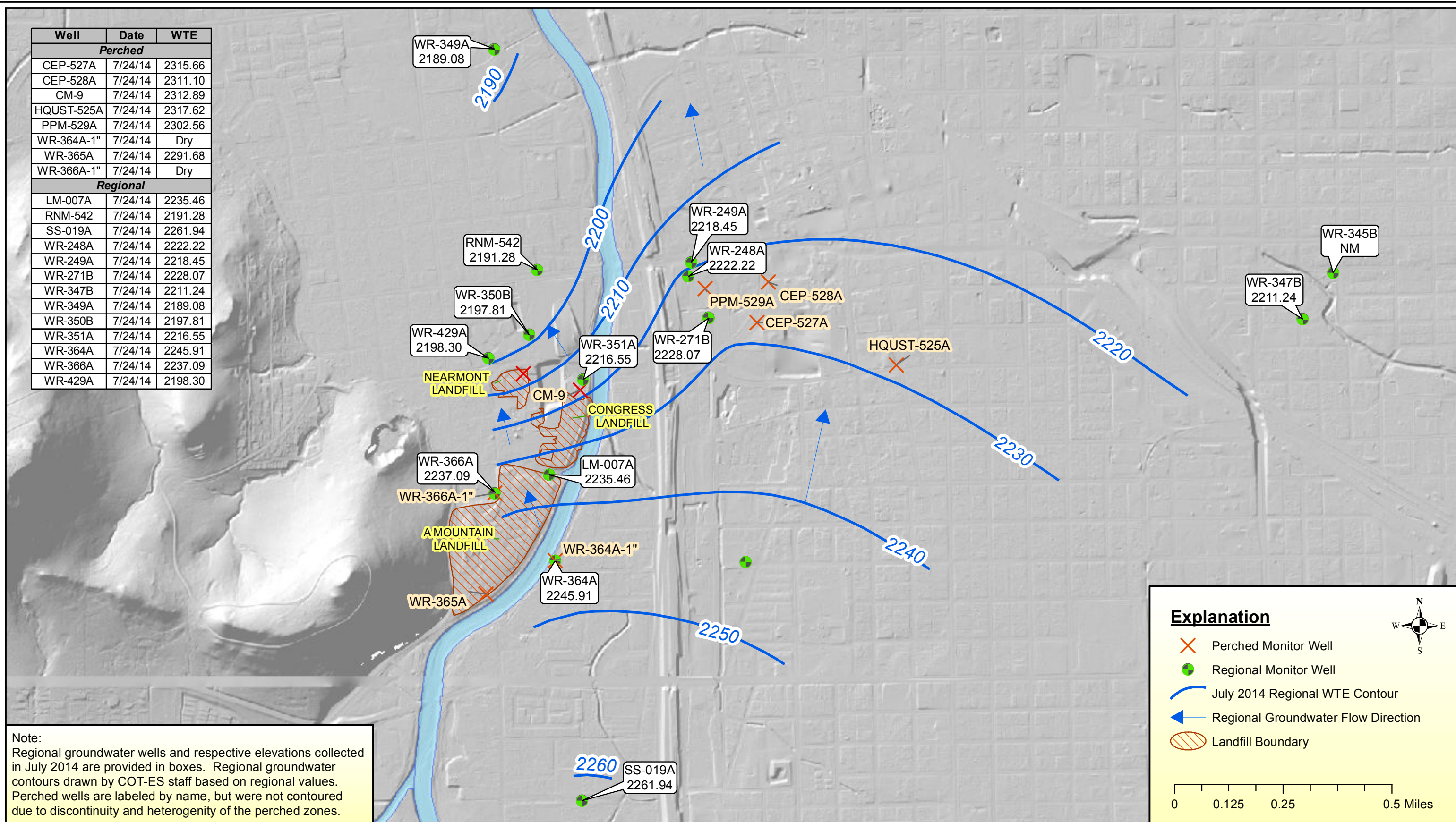


Figure 3
July 2013 Regional Water Table Elevation Contour Map
Downtown Area

Drawn By:	LE
Checked:	DS/LC
Approved:	MH
Date:	10/3/2014
File:	See Below

S:\MAPDATA\GIS\RioNuevo South\2014 WL_2013.mxd

Well	Date	WTE
Perched		
CEP-527A	7/24/14	2315.66
CEP-528A	7/24/14	2311.10
CM-9	7/24/14	2312.89
HQUST-525A	7/24/14	2317.62
PPM-529A	7/24/14	2302.56
WR-364A-1"	7/24/14	Dry
WR-365A	7/24/14	2291.68
WR-366A-1"	7/24/14	Dry
Regional		
LM-007A	7/24/14	2235.46
RNM-542	7/24/14	2191.28
SS-019A	7/24/14	2261.94
WR-248A	7/24/14	2222.22
WR-249A	7/24/14	2218.45
WR-271B	7/24/14	2228.07
WR-347B	7/24/14	2211.24
WR-349A	7/24/14	2189.08
WR-350B	7/24/14	2197.81
WR-351A	7/24/14	2216.55
WR-364A	7/24/14	2245.91
WR-366A	7/24/14	2237.09
WR-429A	7/24/14	2198.30



Note:
Regional groundwater wells and respective elevations collected in July 2014 are provided in boxes. Regional groundwater contours drawn by COT-ES staff based on regional values. Perched wells are labeled by name, but were not contoured due to discontinuity and heterogeneity of the perched zones.

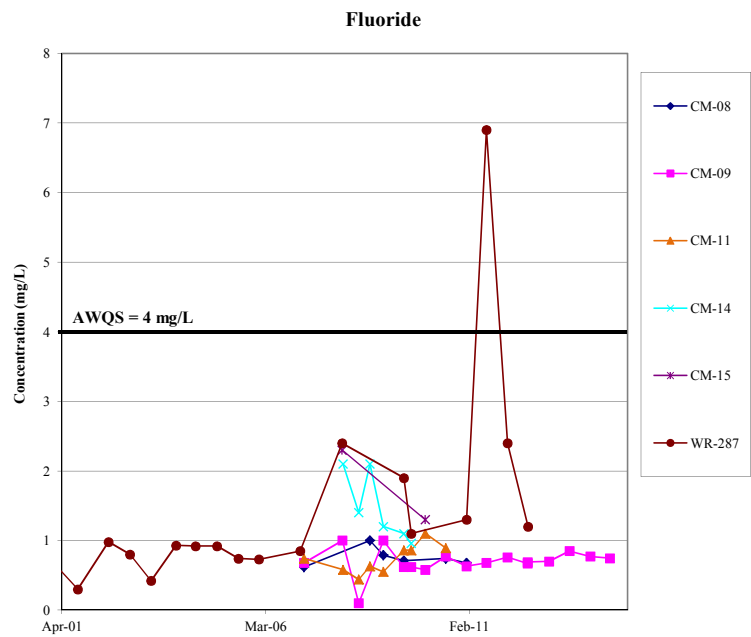
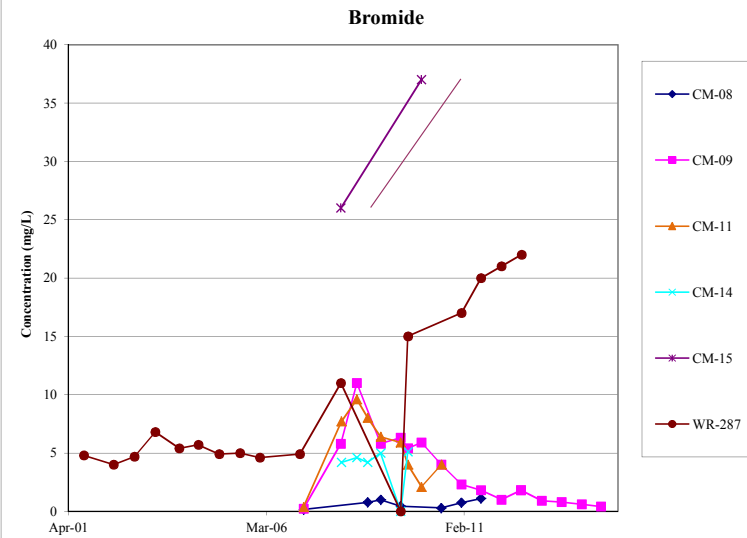
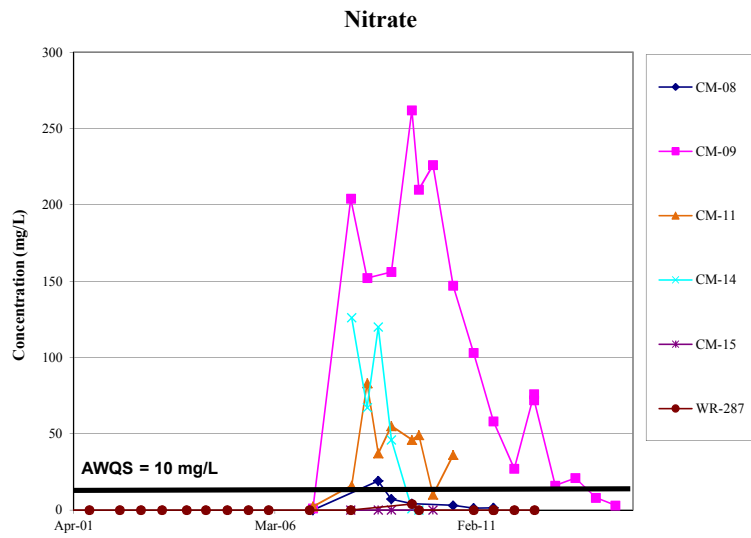
Explanation

- Perched Monitor Well (Orange X)
- Regional Monitor Well (Green Dot)
- July 2014 Regional WTE Contour (Blue Line)
- Regional Groundwater Flow Direction (Blue Arrow)
- Landfill Boundary (Orange Hatched Area)

0 0.125 0.25 0.5 Miles

Scale bar and north arrow.

Figure 4
July 2014 Regional Water Table Elevation Contour Map
Downtown Area

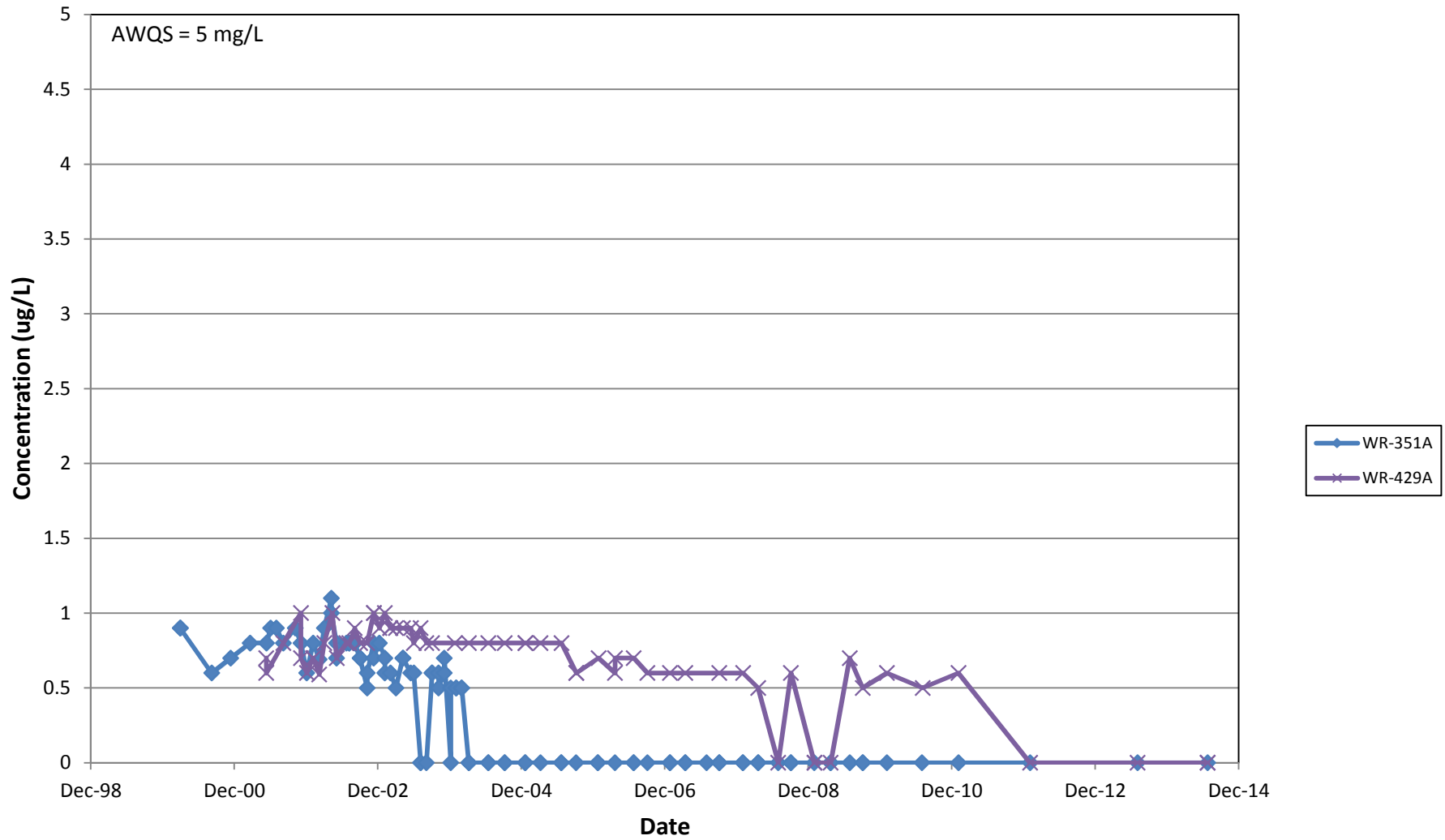


Note: CM-15 is dry. CM-11 and CM-14 have been destroyed.



FIGURE 5
Perched Water Monitoring Wells
Selected Parameter Trend Charts

Figure 6
Regional Monitor Well PCE Trend Chart
Congress and Nearmont Landfills



Note: Regional wells WR-350A and WR-350B have been non-detect for PCE.

TABLES

TABLE 1
2013 - 2014 Monitoring and Sampling Schedule
Congress and Nearmont Landfills

Methane Monitoring

Well ID	Type of Well	Schedule
CM-1, CM-2, CM-3, CM-5, CM-6, CM-8, CM-9, CM-15, CM-16, CM-17, NM-9, NM-10, NM-11, NM-12, NM-13	Boundary Perched Water and Methane Monitoring Wells	Quarterly

Water Level Data

Well ID	Type of Well	Schedule
CM-1, CM-2, CM-3, CM-5, CM-6, CM-8, CM-9, CM-15, CM-16, CM-17, CLW-1, CLW-12	Boundary Perched Water	Monthly
WR-350B, WR-351A, WR-429A, RNM-542, LM-007, SS-019A, WR-248A, WR-249A, WR-271B, WR-345B, WR-347B, WR-349B, WR-364A, WR-366A	Regional	July 2013/2014

Water Quality Sampling

Well ID	Type of Well	Schedule
CM-9	Boundary Perched Water	January and July 2013/2014
WR-350B, WR-351A, WR-429A	Downgradient Regional Groundwater Monitor	July 2013/2014

Dewatering will be discontinued for the Congress and Nearmont Landfills at the end of 2012.
 See Table 5 for the analyte list for the regional wells.
 CM-9 will be sampled for nitrate only.

TABLE 2
Well Information
Congress and Nearmont Landfills

WELL_ID	ADWR Well ID#	WELL TYPE	LAND OWNER	CONCRETE SLAB OR GROUND SURFACE Northing	CONCRETE SLAB OR GROUND SURFACE Easting	Top of Casing Elevation (ft amsl)	Diameter (in)	Casing material	Total Well Depth (ft)	Total Boring Depth (ft)	Slot Screen Size (in)	Screened Section (ft)	Comments
Regional Monitor Wells													
LM-007A	55-700356	Regional Water Monitor	COT	442744.59	988357.55	2358.51	12	steel	226.5*	302			
RNM-542	55-219413	Regional Water Monitor	PC	445237.14	988211.70	2350.47	5	PVC	210	210	0.02	130-210	Replaced WR-428A
WR-350B	55-208703	Regional Water Monitor	COT	444445.88	988114.82	2353.40	5	PVC	210	210	0.02	110-200	Replaced WR-350A
WR-351A	55-575267	Regional Water Monitor	COT	443899.09	988774.19	2355.83	5	PVC	200	200	0.02	120-200	
WR-364A	55-581137	Regional Water Monitor	COT	441700.76	988435.24	2359.80	5	PVC	185	186	0.02	95-185	
WR-366A	55-581135	Regional Water Monitor	COT	442521.14	987697.09	2360.88	5	PVC	168	168	0.02	78-168	Well casing was lowered by 2' in February 2010. All casing depths reflect this change.
WR-429A	55-586096	Regional Water Monitor	COT	444161.69	987620.35	2350.88	5	PVC	200	205	0.02	130-200	
Perched Water Monitor Wells													
WR-287A	55-523297	Perched Water Monitor, Set In Waste	COT	443976.83	988043.39	2349.12	2	PVC	47.5	47.5	0.02	42.1-47.4	AKA MW-1
WR-291A	55-557563	Perched Water Monitor	COT	443926.74	987502.98	2353.20	2	PVC	60	60	0.20	45-60	AKA MW-T1
WR-364A - 1"	55-581137	Piezometer	COT	441700.82	988434.60	2359.66	1	PVC	57.9*		0.02	35-55	1" PVC piezometer in same borehole as WR-364A.
WR-365A	55-581136	Perched Water Monitor	COT	441296.22	987590.38	2368.43	4	PVC	77	77	0.02	42-77	Well completed to bedrock.
WR-366A - 1"	55-581135	Piezometer	COT	442521.16	987697.39	2360.85	1	PVC	49.56*		0.02	28-53	1" PVC piezometer in same borehole as WR-366A.
WR-426A	55-585611	Perched Water Monitor, Set In Waste	COT	443696.47	987715.85	2351.80	4	PVC	47	47	0.06	37-47	
WR-427A	55-585612	Perched Water Monitor, Set In Waste	COT	443614.86	988017.58	2349.68	4	PVC	41	42	0.06	31-41	x,y orthophoto estimated

*Depth tagged in the field

TABLE 2
Well Information
Congress and Nearmont Landfills

WELL ID	WELL DEPTH (FT)	SCREENED INTERVAL (FT)	EASTING (NAD 83)	NORTHING (NAD 83)	LAND SURFACE ELEVATION (FT MSL)	TOP OF CASING ELEVATION (FT MSL)
2" PVC Perched Water Monitor with 0.5" Vapor Monitor Probes						
CM-1	40	(12-15) (30-40)	987641.845	443822.942	2353.706	2355.97
CM-2	37	(12-15) (27-37)	987671.722	443682.081	2354.831	2357.33
CM-3	40	(12-15), (30-40)	987698.603	443569.815	2355.857	2359.182
CM-4	34	(12-15) (24-34)	987910.429	443523.334	2354.407	2356.48
CM-5	44	(12-15) (34-44)	988027.405	443483.835	2355.291	2357.64
CM-6	35	(12-15) (25-35)	988119.428	443301.489	2357.078	2357.71
CM-8	43*	(12-15) (29-39)	988776.39	443678.458	2355.349	2355.64
CM-9	45.5*	(12-15) (29-39)	988735.844	443773.361	2352.141	2353.41
CM-15	43*	(12-15) (30-40)	988001.964	444058.202	2355.717	2358.82
CM-16	52.5*	(12-15) (40-50)	987891.157	444038.142	2354.742	2357.69
CM-17	45	(12-15) (35-45)	987739.075	443946.785	2354.57	2357.99

Note: All CM wells are set outside of waste.

*Total depths field tagged in 2012.

WELL ID	DEPTH TO TOP OF WASTE (FT)	DEPTH TO BASE OF WASTE (FT)	WELL DEPTH (FT)	SCREENED INTERVAL (FT)	EASTING (NAD 83)	NORTHING (NAD 83)	LAND SURFACE ELEVATION (FT MSL)
4" Steel Dewatering Wells							
CLW-1	10	35	40	30-40	987873.449	443932.32	2351.468
CLW-12	8	24	50	40-50	988763.166	443565.994	2356.324

WELL ID	DEPTH TO TOP OF WASTE (FT)	DEPTH TO BASE OF WASTE (FT)	WELL DEPTH (FT)	SCREENED INTERVAL (FT)	EASTING (NAD 83)	NORTHING (NAD 83)	LAND SURFACE ELEVATION (FT MSL)
0.5" PVC Vapor Monitoring Probes							
CP-2	NA	NA	20	(7-10) (15-20)	988214.15	442956.922	NS
CP-3	12	19	20	(7-10) (15-20)	988247.519	443089.733	NS
CP-4	13	20	20	(7-10) (15-20)	988334.518	443089.431	NS
CP-5	7	23	22	(9-12) (18-23)	988497.567	442952.022	NS

WELL ID	2" WELL DEPTH (FT)	SCREENED INTERVAL (FT)	DEPTH TO TOP OF WASTE (FT)	DEPTH TO BASE OF WASTE (FT)	EASTING (NAD 83)	NORTHING (NAD 83)	TOP OF CASING ELEVATION (FT MSL)
2" PVC Wells with 0.5" Probes Set in Waste							
CGM-1	30	(7-10) (17-20) (27-30)	9	25	443197.883	988642.442	2359.516
CGM-3	18	(7-10) (15-18)	8	17	443211.909	988445.951	2359.745

NS = Land Surface not surveyed.

WELL ID	DEPTH TO TOP OF WASTE (FT)	DEPTH TO BASE OF WASTE (FT)	WELL DEPTH (FT)	SCREENED INTERVAL (FT)	EASTING (NAD 83)	NORTHING (NAD 83)	LAND SURFACE ELEVATION (FT MSL)
2" Steel Wells, Set in Waste							
NE-2	5	25	26	5-25	988637.3309	443110.8019	2352.745
NE-7	5	25	26	5-25	988589.7214	442986.2136	2354.18
IC-11	6	8	20	5-20	988101.266	443802.361	2352.117
IC-16	12	18	30	5-30	987834.913	443708.451	2352.218
IC-17	16	27	30	5-30	987935.035	443710.854	2351.117
IC-24	10	30	30	5-30	988660.369	443626.446	2355.297
IC-29	10	16	25	5-25	988029.531	443612.882	2351.186
IC-37	10	28	30	5-30	988623.376	443526.129	2355.306
IC-51	12	25	30	5-30	988548.038	443322.969	2358.396
IC-58	14	26	30	5-30	988514.655	443226.89	2357.538
IC-A4	7	34	35	5-35	987904.986	443992.5	2351.455
IC-A5	12	34	35	5-35	987955.039	443989.369	2351.003
IC-A6	12	33	34	4-34	988012.667	443986.204	2350.771
IC-A29	7	NA	20	5-20	988212.7637	443336.5484	NS
EC-01	7	28	30	5-30	987781.625	443952.45	2351.607
EC-05	13	35.5	35	5-35	988042.766	443957.819	2350.614
EC-14	6	17	20	5-20	988095.376	443863.743	2351.472
EC-23	13	25	30	5-30	988082.829	443756.814	2350.949
EC-68	12	32	30	5-30	988387.687	443269.953	2357.14
EC-69	12	29	30	5-30	988287.128	443268.378	2357.067
EC-A5	7	NA	20	5-20	988790.0	443554.3	2355.109
EC-A6	7	NA	20	5-20	988786.2	443504.9	NS
EC-A11	10	NA	20	5-20	988208.9	443456.2	2355.726
EC-A12	7	NA	20	5-20	988237.159	443417.214	NS

NS = Land Surface not surveyed.

Only wells found during a well inventory in September 2012 are shown.

Table 3
 Monthly Perched Water Level Data 2013 - 2014
 Congress and Nearmont Landfills

Well ID	Date	Time	DTW (ft)	Corr Factor (ft)	Corr DTW (ft)	Benchmark Elev. (ft. a.m.s.l.)	WTE (ft)	Sounder	Collected by	Comments
January 2013										
CLW-1	1/25/2013	1135	33.70	0	33.70	2351.47	2317.77	SOL 1	JM	TD=40'
CLW-12	1/25/2013	1155	37.80	0	37.80	2356.32	2318.52	SOL 1	JM	TD=48.2'
CM-01	1/25/2013	1020	Dry	0	Dry			SOL 1	JM	TD=42.45'
CM-02	1/25/2013	1030	Dry	0	Dry			SOL 1	JM	TD=37.86'
CM-03	1/25/2013	1038	Dry	0	Dry			SOL 1	JM	TD=43.19'
CM-05	1/25/2013	1050	Dry	0	Dry			SOL 1	JM	TD=45.79'
CM-06	1/25/2013	1100	Dry	0	Dry			SOL 1	JM	TD=39.51'
CM-08	1/25/2013	1110	40.45	0	40.45	2355.64	2315.19	SOL 1	JM	TD=42.6'
CM-09	1/25/2013	1117	40.21	0	40.21	2353.41	2313.20	SOL 1	JM	TD=44.3'
CM-15	1/25/2013	1123	40.6	0	40.60	2358.82	2318.22	SOL 1	JM	TD=43'
CM-16	1/25/2013	1130	Dry	0	Dry	2357.69		SOL 1	JM	TD=52.5'
CM-17	1/25/2013	1144	Dry	0	Dry	2357.99		SOL 1	JM	TD=45'
February 2013										
CLW-1	2/21/2013	1002	32.91	0	32.91	2351.47	2318.56	SOL 1	JB	TD=40'
CLW-12	2/21/2013	1017	36.87	0	36.87	2356.32	2319.45	SOL 1	JB	TD=48.2'
CM-01	2/21/2013	808	Dry	0	Dry			SOL 1	JB	TD=42.45'
CM-02	2/21/2013	813	Dry	0	Dry			SOL 1	JB	TD=37.86'
CM-03	2/21/2013	821	Dry	0	Dry			SOL 1	JB	TD=43.19'
CM-05	2/21/2013	837	Dry	0	Dry			SOL 1	JB	TD=45.79'
CM-06	2/21/2013	849	Dry	0	Dry			SOL 1	JB	TD=39.51'
CM-08	2/21/2013	901	39.97	0	39.97	2355.64	2315.67	SOL 1	JB	TD=42.6'
CM-09	2/21/2013	917	40.02	0	40.02	2353.41	2313.39	SOL 1	JB	TD=44.3'
CM-15	2/21/2013	929	40.17	0	40.17	2358.82	2318.65	SOL 1	JB	TD=43'
CM-16	2/21/2013	940	Dry	0	Dry	2357.69		SOL 1	JB	TD=52.5'
CM-17	2/21/2013	951	Dry	0	Dry	2357.99		SOL 1	JB	TD=45'
August 2013										
CLW-1	8/30/2013	745	Dry	0	Dry	2351.47		SOL 3	GB	TD=34.82'
CLW-12	8/30/2013	735	36.52	0	36.52	2356.32	2319.80	SOL 3	GB	
CM-01	8/30/2013	650	Dry	0	Dry			SOL 3	GB	TD=43.45'
CM-02	8/30/2013	655	Dry	0	Dry			SOL 3	GB	TD=38.75'
CM-03	8/30/2013	700	Dry	0	Dry			SOL 3	GB	TD=44.37'
CM-05	8/30/2013	705	Dry	0	Dry			SOL 3	GB	TD=49.95'
CM-06	8/30/2013	710	Dry	0	Dry			SOL 3	GB	TD=40.65'
CM-08	8/30/2013	725	38.87	0	38.87	2355.64	2316.77	SOL 3	GB	
CM-09	8/30/2013	720	39.67	0	39.67	2353.41	2313.74	SOL 3	GB	
CM-15	8/30/2013	750	42.78	0	42.78	2358.82	2316.04	SOL 3	GB	
CM-16	8/30/2013	800	Dry	0	Dry	2357.69		SOL 3	GB	TD=53.65'
CM-17	8/30/2013	805	Dry	0	Dry	2357.99		SOL 3	GB	TD=49.38'

Table 3
 Monthly Perched Water Level Data 2013 - 2014
 Congress and Nearmont Landfills

Well ID	Date	Time	DTW (ft)	Corr Factor (ft)	Corr DTW (ft)	Benchmark Elev. (ft. a.m.s.l.)	WTE (ft)	Sounder	Collected by	Comments
September 2013										
CLW-1	9/19/2013	755	Dry	0	Dry	2351.47		SOL 4	JM/HV	TD=34.85
CLW-12	9/19/2013	800	36.53	0	36.53	2356.32	2319.79	SOL 4	JM/HV	
CM-01	9/19/2013	640	Dry	0	Dry			SOL 4	JM/HV	TD=42.50
CM-02	9/19/2013	650	Dry	0	Dry			SOL 4	JM/HV	TD=37.90
CM-03	9/19/2013	700	Dry	0	Dry			SOL 4	JM/HV	TD=43.35
CM-05	9/19/2013	710	Dry	0	Dry			SOL 4	JM/HV	TD=45.91
CM-06	9/19/2013	725	Dry	0	Dry			SOL 4	JM/HV	TD=39.85
CM-08	9/19/2013	730	38.85	0	38.85	2355.64	2316.79	SOL 4	JM/HV	
CM-09	9/19/2013	735	39.64	0	39.64	2353.41	2313.77	SOL 4	JM/HV	
CM-15	9/19/2013	740	42.70	0	42.70	2358.82	2316.12	SOL 4	JM/HV	
CM-16	9/19/2013	745	Dry	0	Dry	2357.69		SOL 4	JM/HV	TD=52.55
CM-17	9/19/2013	750	Dry	0	Dry	2357.99		SOL 4	JM/HV	TD=48.20
October 2013										
CLW-1	10/25/2013	919	Dry	0	Dry	2351.47		SOL 3	JB	TD=35.05
CLW-12	10/25/2013	926	36.42	0	36.42	2356.32	2319.90	SOL 3	JB	
CM-01	10/25/2013	750	Dry	0	Dry			SOL 3	JB	TD=42.90
CM-02	10/25/2013	800	Dry	0	Dry			SOL 3	JB	TD=39.01
CM-03	10/25/2013	815	Dry	0	Dry			SOL 3	JB	TD=41.81
CM-05	10/25/2013	822	Dry	0	Dry			SOL 3	JB	TD=46.21
CM-06	10/25/2013	831	Dry	0	Dry			SOL 3	JB	TD=38.97
CM-08	10/25/2013	837	38.81	0	38.81	2355.64	2316.83	SOL 3	JB	
CM-09	10/25/2013	844	39.60	0	39.60	2353.41	2313.81	SOL 3	JB	
CM-15	10/25/2013	850	42.62	0	42.62	2358.82	2316.20	SOL 3	JB	
CM-16	10/25/2013	901	Dry	0	Dry	2357.69		SOL 3	JB	TD=52.80
CM-17	10/25/2013	911	Dry	0	Dry	2357.99		SOL 3	JB	TD=48.38
November 2013										
CLW-1	11/22/2013	1025	Dry	0	Dry	2351.47		SOL 4	JVM	TD=34.91
CLW-12	11/22/2013	1050	36.55	0	36.55	2356.32	2319.77	SOL 4	JVM	
CM-01	11/22/2013	850	Dry	0	Dry			SOL 4	JVM	TD=42.51
CM-02	11/22/2013	900	Dry	0	Dry			SOL 4	JVM	TD=37.92
CM-03	11/22/2013	910	Dry	0	Dry			SOL 4	JVM	TD=43.35
CM-05	11/22/2013	925	Dry	0	Dry			SOL 4	JVM	TD=45.90
CM-06	11/22/2013	935	Dry	0	Dry			SOL 4	JVM	TD=39.88
CM-08	11/22/2013	945	38.87	0	38.87	2355.64	2316.77	SOL 4	JVM	
CM-09	11/22/2013	955	39.65	0	39.65	2353.41	2313.76	SOL 4	JVM	
CM-15	11/22/2013	1005	42.71	0	42.71	2358.82	2316.11	SOL 4	JVM	
CM-16	11/22/2013	1015	Dry	0	Dry	2357.69		SOL 4	JVM	TD=52.60
CM-17	11/22/2013	1025	Dry	0	Dry	2357.99		SOL 4	JVM	TD=48.95

Table 3
 Monthly Perched Water Level Data 2013 - 2014
 Congress and Nearmont Landfills

Well ID	Date	Time	DTW (ft)	Corr Factor (ft)	Corr DTW (ft)	Benchmark Elev. (ft. a.m.s.l.)	WTE (ft)	Sounder	Collected by	Comments
January 2014										
CLW-1	1/30/2014	841	Dry	0	Dry	2351.47		SOL 3	GB/JB	TD=34.57
CLW-12	1/30/2014	850	36.92	0	36.92	2356.32	2319.40	SOL 3	GB/JB	
CM-01	1/30/2014	823	Dry	0	Dry			SOL 3	GB/JB	TD=42.51
CM-02	1/30/2014	827	Dry	0	Dry			SOL 3	GB/JB	TD=38.21
CM-03	1/30/2014	830	Dry	0	Dry			SOL 3	GB/JB	TD=43.87
CM-05	1/30/2014	834	Dry	0	Dry			SOL 3	GB/JB	TD=45.90
CM-06	1/30/2014	840	Dry	0	Dry			SOL 3	GB/JB	TD=40.51
CM-08	1/30/2014	853	39.26	0	39.26	2355.64	2316.38	SOL 3	GB/JB	
CM-09	1/30/2014	850	40.05	0	40.05	2353.41	2313.36	SOL 1	GB/JB	
CM-15	1/30/2014	815	42.81	0	42.81	2358.82	2316.01	SOL 3	GB/JB	
CM-16	1/30/2014	817	Dry	0	Dry	2357.69		SOL 3	GB/JB	TD=53.51
CM-17	1/30/2014	821	Dry	0	Dry	2357.99		SOL 3	GB/JB	TD=48.52
February 2014										
CLW-1	2/27/2014	1043	Dry	0	Dry	2351.47				TD=34.88
CLW-12	2/27/2014	1049	36.70	0	36.70	2356.32	2319.62			
CM-01	2/27/2014	1015	Dry	0	Dry					TD=42.59
CM-02	2/27/2014	1020	Dry	0	Dry					TD=38.08
CM-03	2/27/2014	1024	Dry	0	Dry					TD=43.53
CM-05	2/27/2014	1029	Dry	0	Dry					TD=46.60
CM-06	2/27/2014	1036	Dry	0	Dry					TD=39.48
CM-08	2/25/2014	859	39.75	0	39.75	2355.64	2315.89	SOL 1	GB	
CM-09	2/25/2014	903	40.39	0	40.39	2353.41	2313.02	SOL 1	GB	
CM-15	2/25/2014	905	42.86	0	42.86	2358.82	2315.96	SOL 1	GB	
CM-16	2/25/2014	907	Dry	0	Dry	2357.69		SOL 1	GB	TD=53.61
CM-17	2/25/2014	910	Dry	0	Dry	2357.99		SOL 1	GB	TD=48.62

DTW = Depth to Water

Corr. Factor = Correction Factor

WTE = Water Table Elevation in feet above mean sea level

NM = Not Measured, well inaccessible

TD = Total Depth in feet below top of casing

Alarm water level elevation is 2332 ft amsl

Table 4
Expanded Annual Perched and Regional Water Level Data 2013 - 2014
Congress and Nearmont Landfills

Well ID	Date	Time	DTW (ft)	Corr Factor (ft)	Corr DTW (ft)	Benchmark Elev. (ft. a.m.s.l.)	WTE (ft)	Sounder	Collected by	Comments
Regional Wells										
A-Mountain Landfill										
LLM-007	7/23/2013	655	122.75	0	122.75	2358.51	2235.76	HER 1	GB	
WR-364A	7/23/2013	825	114.95	0	114.95	2359.80	2244.85	HER 1	GB	
WR-366A	7/23/2013	845	123.10	0	123.10	2360.88	2237.78	HER 1	GB	
Congress and Nearmont Landfills										
WR-350B	7/23/2013	1020	155.38	0	155.38	2353.40	2198.02	HER 1	GB	
WR-351A	7/23/2013	900	139.08	0	139.08	2355.83	2216.75	HER 1	GB	
WR-429A	7/23/2013	1010	152.35	0	152.35	2350.88	2198.53	HER 1	GB	
RNM-542	7/23/2013	1020	158.95	0	158.95	2350.47	2191.52	HER 1	GB	
WR-349A	7/23/2013	1045	152.58	0	152.58	2341.96	2189.38	HER 1	GB	
Wells East of Santa Cruz River										
SS-019A	7/23/2013	1350	114.91	0	114.91	2373.49	2258.58	HER 1	GB	
WR-248A	7/23/2013	1125	127.68	0.80	128.48	2350.10	2221.62	HER 1	GB	
WR-249A	7/23/2013	1115	130.15	0.27	130.42	2350.80	2220.38	HER 1	GB	
WR-271B	7/23/2013	1140	127.00	0	127.00	2354.16	2227.16	HER 1	GB	
WR-345B	9/5/2013	1001	202.32	0	202.32	2412.80	2210.48	HER 1	JB	
WR-347B	9/5/2013	1017	209.82	0	209.82	2420.24	2210.42	HER 1	JB	
Perched Wells										
A-Mountain Landfill										
WR-364A-1"	9/5/2013	835	Dry	0	Dry	2359.66		HER 1	JB	TD=57.9'
WR-365A	9/5/2013		NM	0	NM	2368.43		HER 1	JB	TD=77'
WR-366A-1"	9/5/2013*	1205	121.74	0	121.74	2360.85	2239.11	HER 1	JB	TD=49.6'
Congress and Nearmont Landfills										
CLW-1	7/23/2013	950	33.25	0	33.25	2351.47	2318.22	HER 1	GB	TD=40'
CLW-12	7/23/2013	920	36.18	0	36.18	2356.32	2320.14	HER 1	GB	TD=48.2'
CM-01	7/23/2013	720	Dry	0	Dry			HER 1	GB	TD=42.45'
CM-02	7/23/2013	723	Dry	0	Dry			HER 1	GB	TD=37.86'
CM-03	7/23/2013	726	Dry	0	Dry			HER 1	GB	TD=43.19'
CM-05	7/23/2013	731	Dry	0	Dry			HER 1	GB	TD=45.79'
CM-06	7/23/2013	736	Dry	0	Dry			HER 1	GB	TD=39.51'
CM-08	7/23/2013	910	38.78	0	38.78	2355.64	2316.86	HER 1	GB	TD=42.6'
CM-09	7/23/2013	905	40.55	0	40.55	2353.41	2312.86	HER 1	GB	TD=44.3'
CM-15	7/23/2013	935	40.05	0	40.05	2358.82	2318.77	HER 1	GB	TD=43'
CM-16	7/23/2013	940	52.45	0	52.45	2357.69	2305.24	HER 1	GB	TD=52.5'
CM-17	7/23/2013	947	47.88	0	47.88	2357.99	2310.11	HER 1	GB	TD=45'
Wells East of Santa Cruz River										
HQUST-525A	9/5/2013	935	73.44	0	73.44	2391.50	2318.06	HER 1	JB	
CEP-527A	9/5/2013	919	44.59	0	44.59	2357.48	2312.89	HER 1	JB	
CEP-528A	9/5/2013	911	48.71	0	48.71	2359.78	2311.07	HER 1	JB	
PPM-529A	9/5/2013	835	47.41	0.55	47.96	2351.60	2303.64	HER 1	JB	

Well ID	Date	Time	DTW (ft)	Corr Factor (ft)	Corr DTW (ft)	Benchmark Elev. (ft. a.m.s.l.)	WTE (ft)	Sounder	Collected by	Comments
Regional Wells										
A-Mountain Landfill										
LLM-007	7/24/2014	730	123.05	0	123.05	2358.51	2235.46	SOL3	GB/HV	
WR-364A	7/24/2014	810	113.89	0	113.89	2359.80	2245.91	SOL3	GB/HV	
WR-366A	7/24/2014	740	123.79	0	123.79	2360.88	2237.09	SOL3	GB/HV	
Congress and Nearmont Landfills										
WR-350B	7/24/2014	959	155.59	0	155.59	2353.40	2197.81	SOL3	GB/HV	
WR-351A	7/24/2014	913	139.28	0	139.28	2355.83	2216.55	SOL3	GB/HV	
WR-429A	7/24/2014	1002	152.58	0	152.58	2350.88	2198.30	SOL3	GB/HV	
RNM-542	7/24/2014	1013	159.19	0	159.19	2350.47	2191.28	SOL3	GB/HV	
WR-349A	7/24/2014	1025	152.88	0	152.88	2341.96	2189.08	SOL3	GB/HV	
Wells East of Santa Cruz River										
SS-019A	7/24/2014	855	111.55	0	111.55	2373.49	2261.94	SOL3	GB/HV	
WR-248A	7/24/2014	1047	127.08	0.80	127.88	2350.10	2222.22	SOL3	GB/HV	
WR-249A	7/24/2014	1040	132.08	0.27	132.35	2350.80	2218.45	SOL3	GB/HV	
WR-271B	7/24/2014	1100	126.09	0	126.09	2354.16	2228.07	SOL3	GB/HV	
WR-345B	7/24/2014	1210	NM	0		2412.80		SOL3	GB/HV	unable to open.
WR-347B	7/24/2014	1200	209.00	0	209.00	2420.24	2211.24	SOL3	GB/HV	
Perched Wells										
A-Mountain Landfill										
WR-364A-1"	7/24/2014	815	Dry	0	Dry	2359.66		SOL3	GB/HV	TD=56.2'
WR-365A	7/24/2014	752	76.75	0	76.75	2368.43	2291.68	SOL3	GB/HV	TD=77'
WR-366A-1"	7/24/2014	745	Dry	0	Dry	2360.85		SOL3	GB/HV	TD=49.65'
Congress and Nearmont Landfills										
CLW-1	7/24/2014	954	Dry	0	Dry	2351.47		SOL3	GB/HV	TD=34.35'
CLW-12	7/24/2014	925	36.09	0	36.09	2356.32	2320.23	SOL3	GB/HV	TD=48.2'
CM-01	7/24/2014	946	Dry	0	Dry			SOL3	GB/HV	TD=43.55'
CM-02	7/24/2014	942	Dry	0	Dry			SOL3	GB/HV	TD=38.75'
CM-03	7/24/2014	939	Dry	0	Dry			SOL3	GB/HV	TD=44.12'
CM-05	7/24/2014	935	Dry	0	Dry			SOL3	GB/HV	TD=49.22'
CM-06	7/24/2014	932	Dry	0	Dry			SOL3	GB/HV	TD=39.89'
CM-08	7/24/2014	919	38.68	0	38.68	2355.64	2316.96	SOL3	GB/HV	TD=42.6'
CM-09	7/24/2014	915	40.52	0	40.52	2353.41	2312.89	SOL3	GB/HV	TD=44.3'
CM-15	7/24/2014	955	42.79	0	42.79	2358.82	2316.03	SOL3	GB/HV	TD=43'
CM-16	7/24/2014	953	Dry	0	Dry	2357.69		SOL3	GB/HV	TD=53.55'
CM-17	7/24/2014	951	Dry	0	Dry	2357.99		SOL3	GB/HV	TD=49.12'
Wells East of Santa Cruz River										
HQUST-525A	7/24/2014	1125	73.88	0	73.88	2391.50	2317.62	INTA	GB/HV	
CEP-527A	7/24/2014	1120	41.82	0	41.82	2357.48	2315.66	INTA	GB/HV	
CEP-528A	7/24/2014	1110	48.68	0	48.68	2359.78	2311.10	INTA	GB/HV	
PPM-529A	7/24/2014	1055	48.49	0.55	49.04	2351.60	2302.56	SOL3	GB/HV	

DTW = Depth to Water
Corr. Factor = Correction Factor
WTE = Water Table Elevation in feet above mean sea level
NM = Not Measured, well inaccessible
TD = Total Depth in feet below top of casing
Alarm water level elevation is 2332 ft amsl

*Measured DTW is assumed to not be correct based on well's TD.

TABLE 5
 Analyte List
 Congress and Nearmont Landfills

Regional Wells

Parameter	EPA Method
VOCs	8260
Bicarbonate Alkalinity	SM2320B
Total Alkalinity	SM2320B
Total Dissolved Solids	SM2540C
Total Organic Carbon	SM5310
Nitrate	300
Nitrite	300
Calcium	200.7
Iron	200.7
Magnesium	200.7
Manganese	200.7
Potassium	200.7
Sodium	200.7
Bromide	300
Chloride	300
Fluoride	300
Phosphate	300
Sulfate	300
Ammonia	350.1

Perched Wells

Parameter	EPA Method
Nitrate	300
Nitrite	300

TABLE 6
Perched Monitor Well
Selected Laboratory Analytical Results
Congress and Nearthmont Landfills

Sample ID Date	AWQS (ug/L)	CM-09 2/26/07	CM-09 1/31/08	CM-09 6/25/08	CM-09 1/27/09	CM-09 7/28/09	CM-09 10/1/09	CM-09 2/2/10	CM-09 8/2/10	CM-09 2/1/11	CM-09 7/28/11	CM-09 1/31/12	CM-09 7/26/12	CM-09 7/26/12 (Duplicate)	CM-09 1/31/13	CM-09 7/30/13	CM-09 1/30/14	CM-09 7/22/14	
Parameter																			
Volatile Organic Compounds (ug/L)																			
1,2,4-Trimethylbenzene		< 0.5	< 0.5	< 0.5	3.3	< 0.5	< 0.5	< 2	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	
1,4-Dichlorobenzene	600	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	
Benzene	5	< 0.5	< 0.5	< 0.5	2.8	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	
Chloroform		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	
Ethylbenzene	700	< 0.5	< 0.5	< 0.5	3.2	< 0.5	< 0.5	< 2	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	
Isopropylbenzene		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	
Naphthalene		< 0.5	< 0.5	< 0.5	1	< 0.5	< 0.5	< 5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	
Sec-Butylbenzene		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	
Total Xylenes	10	< 0.5	< 0.5	< 0.5	16.3	< 0.5	< 0.5	< 3	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	
m/p-Xylenes		< 0.5	< 0.5	< 0.5	10.9	< 0.5	< 0.5	NA	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	
ortho-Xylene		< 0.5	< 0.5	< 0.5	5.4	< 0.5	< 0.5	NA	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	
Toluene	1000	< 0.5	< 0.5	< 0.5	14	< 0.5	< 0.5	< 2	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	
Anions (mg/L)																			
Ammonia As N		< 0.05	< 0.05	NA	NA	NA	< 0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chloride		19	636	1230	571	688	603	532	425	261	176	100	178	170	84	84	54.8	38.5	
Nitrate as N	10	1.1	204	152	156	262	210	226	147	103	58	27	76	72	16	21	8.02	3.0	
Nitrite as N	1	< 0.1	< 1	< 0.1	0.22	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	
Total Kjeldahl Nitrogen as N		.4	NA	NA	NA														
Ortho Phosphate as P		< 0.2	< 0.2	< 2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	
Sulfate		70	972	1990	918	1060	922	814	642	415	282	186	270	259	154	147	116	93.2	
Metals (mg/L)																			
Arsenic, Total	0.05	0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Barium, Total	2	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Bromide		0.21	5.8	11	5.8	6.3	5.4	5.9	4	2.3	1.8	1	1.8	1.8	0.9	0.8	0.612	0.418	
Cadmium, Total		< 0.004	NA	NA	NA	NA	NA												
Chromium, Total	0.1	0.031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Fluoride	4	0.68	< 1	< 0.1	< 1	0.62	0.62	0.58	0.77	0.63	0.68	0.76	0.67	0.69	0.7	0.85	0.77	0.745	
Lead, Total	0.05	0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

TABLE 7
Nitrate and Select Volatile Organic Compounds
Regional Monitor Wells
Congress and Nearmont Landfill

Well ID	Date	NITRATE AS N (mg/L)	PCE	BZ	DCFM	cis 1,2 DCE	Toluene
WR-350A	03/30/00	2.9	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	09/06/00	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	12/12/00	2.9	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	03/21/01	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	06/12/01	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	07/03/01	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	08/01/01	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	09/06/01	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	09/06/01	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	10/02/01	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	12/04/01	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	01/03/02	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	02/04/02	3	< 0.5	0.6	< 0.5	< 0.5	0.6
WR-350A	03/07/02	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	04/02/02	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	05/13/02	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	06/03/02	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	07/03/02	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	08/15/02	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	09/04/02	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	10/03/02	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	11/06/02	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	12/09/02	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	01/07/03	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	02/04/03	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	03/04/03	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	04/01/03	2.9	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	05/07/03	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	06/16/03	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	07/01/03	2.9	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	08/05/03	3.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	09/03/03	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	10/02/03	3.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	01/21/04	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	04/06/04	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	07/14/04	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	10/05/04	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350A	01/20/05	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

TABLE 7
 Nitrate and Select Volatile Organic Compounds
 Regional Monitor Wells
 Congress and Nearmont Landfill

Well ID	Date	NITRATE AS N (mg/L)	PCE	BZ	DCFM	cis 1,2 DCE	Toluene
WR-350A	04/06/05	3.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

WR-350A was abandoned and replaced by WR-350B in 2006

WR-350B	09/27/05	3.3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350B	10/04/05	3.4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350B	01/24/06	3.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350B	04/20/06	3.4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350B	07/24/06	3.4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350B	10/02/06	3.4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350B	01/25/07	3.4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350B	04/12/07	3.3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350B	07/30/07	3.4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350B	10/02/07	3.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350B	06/04/08	3.4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350B	07/28/08	3.4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350B	10/01/08	3.3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350B	01/28/09	3.4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350B	04/21/09	3.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350B	07/27/09	3.3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350B	10/01/09	3.3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350B	02/01/10	3.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350B	07/29/10	3.3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350B	01/31/11	3.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350B	01/30/12	3.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350B	07/30/13	3.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-350B	07/22/14	3.07	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

WR-351A	03/30/00	3.2	0.9	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	09/06/00	3.3	0.6	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	12/12/00	3.2	0.7	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	03/21/01	3.1	0.8	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	06/12/01	3	0.8	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	07/03/01	3.1	0.9	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	08/01/01	3	0.9	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	09/05/01	3	0.8	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	10/02/01	3.1	NS	NS	NS	NS	< 0.5
WR-351A	11/05/01	3	0.9	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	12/04/01	3	0.8	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	01/03/02	3	0.6	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	02/04/02	3	0.8	< 0.5	< 0.5	< 0.5	< 0.5

TABLE 7
Nitrate and Select Volatile Organic Compounds
Regional Monitor Wells
Congress and Nearmont Landfill

Well ID	Date	NITRATE AS N (mg/L)	PCE	BZ	DCFM	cis 1,2 DCE	Toluene
WR-351A	03/07/02	3	0.69	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	04/02/02	3	0.9	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	05/08/02	3	1	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	06/03/02	3	0.7	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	07/03/02	2.9	0.8	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	08/07/02	2.9	0.8	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	09/04/02	2.9	0.8	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	10/01/02	2.9	0.7	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	11/06/02	2.9	0.6	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	12/09/02	3	0.7	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	01/07/03	3	0.8	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	02/04/03	3	0.6	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	03/04/03	3	0.6	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	04/01/03	2.9	0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	05/07/03	3	0.7	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	06/16/03	3	0.6	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	07/01/03	2.9	0.6	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	08/05/03	3.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	09/03/03	3.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	10/02/03	3.1	0.6	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	11/04/03	3.2	0.6	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	12/03/03	3.1	0.6	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	01/05/04	3.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	02/02/04	3.1	0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	03/01/04	3.1	0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	04/06/04	3.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	07/14/04	3.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	10/05/04	3.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	01/18/05	3.3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	04/06/05	3.4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	07/20/05	3.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	10/04/05	3.6	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	01/23/06	3.7	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	04/20/06	3.6	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	07/24/06	3.8	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	10/02/06	3.7	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	01/24/07	3.8	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	04/12/07	3.6	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	07/30/07	3.8	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	10/02/07	3.8	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

TABLE 7
Nitrate and Select Volatile Organic Compounds
Regional Monitor Wells
Congress and Nearmont Landfill

Well ID	Date	NITRATE AS N (mg/L)	PCE	BZ	DCFM	cis 1,2 DCE	Toluene
WR-351A	01/30/08	3.8	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	04/17/08	3.7	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	07/28/08	3.7	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	10/01/08	3.6	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	01/28/09	3.7	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	04/21/09	3.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	07/27/09	3.6	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	10/01/09	3.6	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	02/01/10	3.7	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	02/01/10	3.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	07/29/10	3.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	01/31/11	3.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	01/30/12	3.3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	07/30/13	3.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	07/30/13	3.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-351A	07/22/14	3.14	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-428A	06/11/01	0.77	< 0.5	< 0.5	< 0.5	< 0.5	1
WR-428A	09/10/01	0.87	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-428A	06/03/02	0.93	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-428A	12/10/02	0.96	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-428A	06/17/03	1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-428A	06/17/03	1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-428A	01/26/04	1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-428A	07/15/04	1.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-428A	07/15/04	1.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-428A	01/20/05	1.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-428A	07/20/05	1.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-428A	01/24/06	1.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-428A	01/25/07	1.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-428A	01/31/08	1.3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

WR-428A was abandoned and replaced by RNM-542 in November 2009.

RNM-542	02/01/10	0.3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
RNM-542	07/29/10	0.32	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
RNM-542	07/29/10	0.31	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
RNM-542	01/31/11	0.33	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
RNM-542	01/31/11	0.32	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

WR-429A	06/11/01	2.7	0.6	< 0.5	< 0.5	< 0.5	1.9
WR-429A	09/06/01	2.9	0.8	< 0.5	< 0.5	< 0.5	0.8

TABLE 7
Nitrate and Select Volatile Organic Compounds
Regional Monitor Wells
Congress and Nearmont Landfill

Well ID	Date	NITRATE AS N (mg/L)	PCE	BZ	DCFM	cis 1,2 DCE	Toluene
WR-429A	12/04/01	2.9	0.7	0.9	0.5	< 0.5	1.3
WR-429A	01/03/02	2.9	0.6	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	02/04/02	2.9	0.7	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	03/07/02	2.9	0.59	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	04/02/02	2.9	0.8	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	05/13/02	2.9	1	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	06/04/02	2.9	0.7	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	07/03/02	2.9	0.8	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	08/07/02	2.9	0.8	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	09/04/02	2.8	0.9	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	10/01/02	2.8	0.8	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	11/06/02	2.9	0.8	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	12/10/02	2.9	1	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	01/07/03	2.9	0.9	< 0.5	0.5	0.6	< 0.5
WR-429A	02/04/03	2.9	1	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	03/04/03	2.9	0.9	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	04/01/03	2.8	0.9	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	05/07/03	2.9	0.9	< 0.5	< 0.5	0.5	< 0.5
WR-429A	06/17/03	2.9	0.9	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	07/01/03	2.7	0.8	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	08/05/03	2.9	0.9	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	09/03/03	2.8	0.8	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	10/02/03	2.9	0.8	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	01/26/04	2.8	0.8	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	04/06/04	2.8	0.8	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	07/14/04	2.8	0.8	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	10/05/04	2.8	0.8	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	01/19/05	2.8	0.8	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	04/06/05	2.9	0.8	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	07/21/05	2.8	0.8	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	10/05/05	2.5	0.6	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	01/26/06	2.9	0.7	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	04/20/06	2.8	0.6	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	07/24/06	2.9	0.7	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	10/02/06	2.6	0.6	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	01/25/07	2.8	0.6	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	04/12/07	2.8	0.6	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	10/02/07	3.0	0.6	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	01/31/08	3.0	0.6	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	04/17/08	2.9	0.5	< 0.5	< 0.5	< 0.5	< 0.5

TABLE 7
 Nitrate and Select Volatile Organic Compounds
 Regional Monitor Wells
 Congress and Nearmont Landfill

Well ID	Date	NITRATE AS N (mg/L)	PCE	BZ	DCFM	cis 1,2 DCE	Toluene
WR-429A	07/28/08	2.9	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	10/01/08	2.9	0.6	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	01/28/09	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	04/21/09	2.8	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	07/27/09	2.9	0.7	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	10/01/09	3	0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	02/01/10	3.1	0.6	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	08/02/10	3	0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	01/31/11	3	0.6	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	01/30/12	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	01/30/12 ^d	2.54	< 0.5	< 0.5	< 2	< 0.5	< 2
WR-429A	07/30/13	2.9	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	07/22/14	2.91	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
WR-429A	07/22/14	2.91	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

Notes:

<0.5 = Not Detected above level shown

^d Duplicate sample analyzed by Xenco

PCE = Tetrachloroethene

BZ = Benzene

DCFM = Dichlorodifluoromethane

cis 1,2-DCE = cis 1,2-dichloroethene

Table 8
Future Monitoring Schedule
Congress and Nearmont Landfills

Methane Monitoring

Well ID	Type of Well	Schedule
CM-1, CM-2, CM-3, CM-5, CM-6, CM-8, CM-9, CM-11, CM-15, CM-16, CM-17, NM-9, NM-10, NM-11, NM-12, NM-13	Methane Monitoring Wells	Quarterly

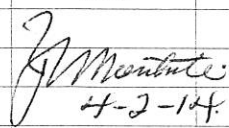
Dewatering was discontinued for the Congress and Nearmont Landfills after November 2012.
Water quality sampling for Congress and Nearmont Landfills was discontinued after July 2014.

APPENDIX A
LANDFILL GAS MONITORING RESULTS

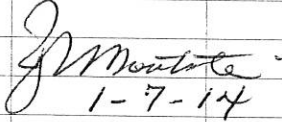
Congress Landfill
Methane Monitoring
(CM-all)
QUARTERLY MONITORING

Device ID	Date/Time	CH4	CO2	O2	Balance	Baro. Press.	Rel. Pressure
LGGAM 3.01L	16/10/07	%	%	%	%	inches Hg	inches H2O
calibIDS	7/2/2014 6:42	15.0	14.9	0.0	70.1	27.32	n/a
calizero	7/2/2014 7:19	0.0	0.0	20.8	79.2	27.51	n/a
CM000001	7/2/2014 12:07	0.0	6.3	13.6	80.1	27.39	0.01
CM000002	7/2/2014 12:03	0.0	7.0	12.9	80.1	27.39	0.01
CM000003	7/2/2014 12:00	0.0	4.7	15.4	79.9	27.40	0.01
CM000005	7/2/2014 11:56	0.0	0.0	21.2	78.8	27.39	0.01
CM000006	7/2/2014 11:53	0.0	3.6	17.2	79.2	27.39	0.00
CM000008	7/2/2014 11:50	0.0	0.8	20.2	79.0	27.40	0.03
CM000009	7/2/2014 11:48	0.0	7.0	12.8	80.2	27.40	0.01
CM000011	7/2/2014 11:45	0.0	2.4	18.1	79.5	27.41	0.04
CM000015	7/2/2014 12:16	0.0	3.6	15.4	81.0	27.39	0.01
CM000016	7/2/2014 12:14	0.0	4.1	16.2	79.7	27.39	0.01
CM000017	7/2/2014 12:11	0.0	12.8	6.5	80.7	27.39	0.01
Note: GEM2000 ID: 11158		Monitored by: G. Bejarano					
GEM2000 was calibrated using 15% methane (see G. B. calibration sheet on this date)							<i>G. Bejarano</i> 7/2/14
Pressure readings were taken using Dwyer Series Mark III "A" digital manometer							
Note: calibIDS is calibration gas being used a machine calibration check.							<i>G. Bejarano</i> 7/2/14
calibIDS zero is ambient air also can be used a machine calibration check.							
Note: Accuracy of the machine is +/- 0.3% at methane concentrations of less than < 5.0%							
GAS record	LOT 43218-04 EXP 08 2016						

Congress Landfill
Methane Monitoring
Wells (all, Quarterly)

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	Baro. Press. inches Hg	Rel. Pressure inches H2O
CM000001	4/2/2014 7:42	0.0	5.5	15.9	78.6	27.5	0.00
CM000002	4/2/2014 7:44	0.0	0.3	20.8	78.9	27.5	0.00
CM000003	4/2/2014 7:47	0.0	0.1	20.9	79.0	27.5	0.01
CM000005	4/2/2014 7:50	0.0	0.0	20.9	79.1	27.5	0.02
CM000006	4/2/2014 8:00	0.0	0.0	20.8	79.2	27.5	0.05
CM000008	4/2/2014 8:04	0.0	0.0	20.8	79.2	27.5	0.06
CM000009	4/2/2014 8:06	0.0	0.0	20.8	79.2	27.5	0.01
CM000011	4/2/2014 8:09	0.0	0.0	20.6	79.4	27.5	0.05
CM000015	4/2/2014 8:12	0.0	4.3	16.4	79.3	27.5	0.02
CM000016	4/2/2014 8:15	0.0	0.8	13.9	85.3	27.5	0.04
CM000017	4/2/2014 8:18	0.0	2.3	15.9	81.8	27.5	0.07
Note: GEM2000 ID: 11159		Monitored by: J. Montante					
GEM2000 was calibrated using 15% methane (see J.M. calibration sheet on this date).							
Pressure readings were taken with the Dwyer Series Mark III "D" digital manometer.							
Accuracy of the machine is +/- 0.3% at methane concentrations of less than <5.0%.							

Congress Landfill
Methane Monitoring
Wells (1-3,5,6,8,9,11,15-17 Quarterly)

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	Baro. Press. inches Hg	Rel. Pressure inches H2O		
CM000001	1/7/2014 9:13	0.0	1.0	19.7	79.3	27.7	0.09		
CM000002	1/7/2014 9:16	0.0	0.6	19.6	79.8	27.7	0.07		
CM000003	1/7/2014 9:18	0.0	0.6	19.7	79.7	27.7	0.05		
CM000005	1/7/2014 9:20	0.0	1.0	19.7	79.3	27.7	0.06		
CM000006	1/7/2014 9:24	0.0	0.1	19.6	80.3	27.7	0.07		
CM000008	1/7/2014 9:26	0.0	0.5	16.5	83.0	27.7	0.08		
CM000009	1/7/2014 9:29	0.0	1.5	14.1	84.4	27.7	0.01		
CM000011	1/7/2014 9:32	0.0	0.2	15.5	84.3	27.7	0.02		
CM000015	1/7/2014 9:35	0.0	4.8	16.5	78.7	27.7	0.04		
CM000016	1/7/2014 9:38	0.0	0.0	20.8	79.2	27.7	0.05		
CM000017	1/7/2014 9:40	0.0	10.3	9.5	80.2	27.7	0.03		
Note: GEM2000 ID: 11159		Monitored by: J. Montante							
GEM2000 was calibrated using 15% methane (see J.M. calibration sheet on this date).									
Pressure readings were taken with the Dwyer Series Mark III "L" digital manometer.									
Accuracy of the machine is +/- 0.3% at methane concentrations of less than <5.0%.									

Congress Landfill
Methane Monitoring
(CM-all)
QUARTERLY MONITORING

Device ID	Date/Time	CH4	CO2	O2	Balance	Baro. Press.	Rel. Pressure
LGGAM 3.01L 16/10/07		%	%	%	%	inches Hg	inches H2O
calibIDS	10/2/2013 6:45	15.1	15.0	0.0	69.9	27.46	n/a
calizero	10/2/2013 13:52	0	0	20.9	79.1	27.38	n/a
CM000001	10/2/2013 8:27	0.0	7.6	13.8	78.6	27.60	0.01
CM000002	10/2/2013 8:22	0.0	2.6	18.0	79.4	27.59	0.01
CM000003	10/2/2013 8:20	0.0	5.1	15.4	79.5	27.59	0.01
CM000005	10/2/2013 8:03	0.0	0.0	20.5	79.5	27.59	0.01
CM000006	10/2/2013 7:59	0.0	0.0	20.5	79.5	27.59	0.01
CM000008	10/2/2013 7:52	0.0	8.5	12.6	78.9	27.59	0.01
CM000009	10/2/2013 7:49	0.0	0.0	20.6	79.4	27.59	0.01
CM000011	10/2/2013 7:45	0.0	3.0	17.5	79.5	27.59	0.01
CM000015	10/2/2013 8:35	0.0	3.5	17.0	79.5	27.60	0.00
CM000016	10/2/2013 8:32	0.0	1.6	18.8	79.6	27.60	0.01
CM000017	10/2/2013 8:30	0.0	6.0	14.3	79.7	27.60	0.00
Note: GEM2000 ID: 11158		Monitored by: G. Bejarano					
GEM2000 was calibrated using 15% methane (see G. B. calibration sheet on this date)							
Pressure readings were taken using Dwyer Series Mark III "A" digital manometer							
Note: calibIDS is calibration gas being used a machine calibration check.							
calibIDS zero is ambient air also can be used a machine calibration check.							
Note: Accuracy of the machine is +/- 0.3% at methane concentrations of less than < 5.0%							
GAS record	LOT 43004 02, EXP 01 2016,						

G. Bejarano
10/2/13

Congress Landfill
Methane Monitoring
(CM-all)
QUARTERLY MONITORING

Device ID	Date/Time	CH4	CO2	O2	Balance	Baro. Press.	Rel. Pressure
LGGAM 3.01L 16/10/07		%	%	%	%	inches Hg	inches H2O
CM000001	7/8/2013 11:48	0.0	1.4	18.3	80.3	27.58	0.01
CM000002	7/8/2013 11:45	0.0	0.0	19.2	80.8	27.57	0.01
CM000003	7/8/2013 11:43	0.0	4.1	15.3	80.6	27.58	0.00
CM000005	7/8/2013 11:36	0.0	0.0	20.3	79.7	27.57	0.00
CM000006	7/8/2013 11:33	0.0	2.6	17.4	80.0	27.57	0.01
CM000008	7/8/2013 11:30	0.0	8.3	11.1	80.6	27.57	0.01
CM000009	7/8/2013 11:27	0.0	3.8	15.8	80.4	27.57	0.00
CM000011	7/8/2013 11:24	0.0	5.9	12.6	81.5	27.57	0.02
CM000015	7/8/2013 11:13	0.0	10.8	8.0	81.2	27.56	0.00
CM000016	7/8/2013 11:11	0.0	5.8	14.2	80.0	27.56	0.00
CM000017	7/8/2013 11:08	0.0	3.0	16.5	80.5	27.56	0.00

Note: GEM2000 ID: 11159

Monitored by: G. Bejarano

GEM2000 was calibrated using 15% methane (see G. B. calibration sheet on this date)

Pressure readings were taken using Dwyer Series Mark III "A" digital manometer

Note: calibIDS is calibration gas being used a machine calibration check.

calibIDS zero is ambient air also can be used a machine calibration check.

Note: Accuracy of the machine is +/- 0.3% at methane concentrations of less than < 5.0%

G. Bejarano
7/8/13

Congress Landfill
Methane Monitoring
(CM all)
QUARTERLY MONITORING

Device ID	Date/Time	CH4	CO2	O2	Balance	Baro. Press.	Rel. Pressure
LGGAM 3.01L 16/10/07		%	%	%	%	inches Hg	inches H2O
calibIDS	4/3/2013 6:27	15.0	15.0	0.0	70.0	27.47	n/a
calizero	4/3/2013 6:28	0.0	0.0	20.7	79.3	27.46	n/a
CM000001	4/3/2013 8:36	0.0	0.0	20.4	79.6	27.59	0.00
CM000002	4/3/2013 8:33	0.0	2.4	18.2	79.4	27.59	0.00
CM000003	4/3/2013 8:31	0.0	4.2	15.9	79.9	27.60	0.00
CM000005	4/3/2013 9:13	0.0	0.0	20.3	79.7	27.59	0.01
CM000006	4/3/2013 9:08	0.0	0.0	20.3	79.7	27.59	0.01
CM000008	4/3/2013 9:03	0.0	6.7	13.8	79.5	27.59	0.01
CM000009	4/3/2013 9:00	0.0	0.0	20.5	79.5	27.60	0.00
CM000011	4/3/2013 8:57	0.0	3.9	16.0	80.1	27.59	0.01
CM000015	4/3/2013 8:45	0.0	0.0	20.3	79.7	27.59	0.01
CM000016	4/3/2013 8:42	0.0	0.1	20.0	79.9	27.59	0.01
CM000017	4/3/2013 8:39	0.0	6.6	13.0	80.4	27.60	0.01
Note: GEM2000 ID: 11158		Monitored by: G. Bejarano					
GEM2000 was calibrated using 15% methane (see G. B. calibration sheet on this date)							
Pressure readings were taken using Dwyer Series Mark III "D" digital manometer							
Note: calibIDS is calibration gas being used a machine calibration check.							
calibIDS zero is ambient air also can be used a machine calibration check.							
Note: Accuracy of the machine is +/- 0.3% at methane concentrations of less than < 5.0%							

G. Bejarano
4/3/13

Congress Landfill
Methane Monitoring
Wells (all, Quarterly)

Device ID	Date/Time	CH4	CO2	O2	Balance	Baro. Press.	Rel. Pressure
		%	%	%	%	inches Hg	inches H2O
CM000001	1/2/2013 9:46	0.0	0.0	21.3	78.7	27.6	0.00
CM000002	1/2/2013 9:50	0.0	0.2	21.3	78.5	27.6	0.02
CM000003	1/2/2013 9:55	0.0	4.2	16.5	79.3	27.6	0.01
CM000005	1/2/2013 9:59	0.0	0.0	21.2	78.8	27.6	0.03
CM000006	1/2/2013 10:02	0.0	1.4	20.5	78.1	27.6	0.04
CM000008	1/2/2013 9:33	0.0	3.0	18.8	78.2	27.6	0.00
CM000009	1/2/2013 9:36	0.0	0.0	21.3	78.7	27.6	0.01
CM000011	1/2/2013 9:39	0.0	5.1	15.5	79.4	27.6	0.02
CM000015	1/2/2013 10:07	0.0	0.0	21.2	78.8	27.6	0.00
CM000016	1/2/2013 10:09	0.0	2.5	19.2	78.3	27.6	0.01
CM000017	1/2/2013 10:14	0.0	4.7	15.5	79.8	27.6	0.03

Note: GEM2000 ID: 11158

Monitored by: J. Montante

J. Montante
1-2-2013

GEM2000 was calibrated using 15% methane (see J.M. calibration sheet on this date)

Pressure readings were taken using the Dwyer Series Mark III "D" digital manometer.

Note: Accuracy of the machine is +/- 0.3% at methane concentrations of less than < 5.0%.

Congress Landfill
Methane Monitoring
(all)
QUARTERLY MONITORING

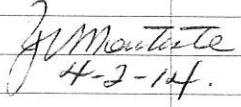
Device ID	Date/Time	CH4	CO2	O2	Balance	Baro. Press.	Rel. Pressure
LGGAM 3.01L	16/10/07	%	%	%	%	inches Hg	inches H2O
calibIDS	10/3/2012 5:50	15.0	15.0	0.1	69.9	27.39	n/a
calizero	10/3/2012 5:52	0.0	0.1	20.7	79.2	27.39	n/a
CM000001	10/3/2012 7:35	0.0	0.0	20.0	80.0	27.54	0.01
CM000002	10/3/2012 7:32	0.0	1.7	18.3	80.0	27.54	0.01
CM000003	10/3/2012 7:29	0.0	4.3	15.7	80.0	27.54	0.01
CM000005	10/3/2012 7:25	0.0	0.0	20.2	79.8	27.54	0.00
CM000006	10/3/2012 7:22	0.0	0.0	20.3	79.7	27.53	0.00
CM000008	10/3/2012 7:16	0.0	7.6	13.4	79.0	27.53	0.01
CM000009	10/3/2012 7:11	0.0	0.0	20.4	79.6	27.53	0.01
CM000011	10/3/2012 7:06	0.0	0.0	20.3	79.7	27.53	0.01
CM000015	10/3/2012 7:47	0.0	0.0	20.1	79.9	27.55	0.00
CM000016	10/3/2012 7:43	0.0	0.0	20.0	80.0	27.54	0.00
CM000017	10/3/2012 7:40	0.0	9.0	11.0	80.0	27.54	-0.01
Note: GEM2000 ID: 11159		Monitored by: G. Bejarano			<i>G. Bejarano</i> 10/3/12		
GEM2000 was calibrated using 15% methane (see G. B. calibration sheet on this date)							
Pressure readings were taken using Dwyer Series Mark III "H" digital manometer							
Note: calibIDS is calibration gas being used a machine calibration check.							
calibIDS zero is ambient air also can be used a machine calibration check.							
Note: Accuracy of the machine is +/- 0.3% at methane concentrations of less than < 5.0%							

Nearmont Landfill
Methane Monitoring
(NM-all)
QUARTERLY MONITORING

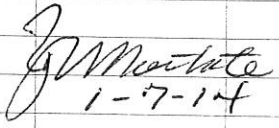
Device ID	Date/Time	CH4	CO2	O2	Balance	Baro. Press.	Rel. Pressure
LGGAM 3.01L	16/10/07	%	%	%	%	inches Hg	inches H2O
calibIDS	7/2/2014 6:42	15.0	14.9	0.0	70.1	27.32	n/a
calizero	7/2/2014 7:19	0.0	0.0	20.8	79.2	27.51	n/a
NM000910	7/2/2014 11:16	0.0	4.1	16.1	79.8	27.42	0.01
NM000920	7/2/2014 11:18	0.0	6.1	14.1	79.8	27.42	0.01
NM000930	7/2/2014 11:21	0.0	8.1	12.6	79.3	27.42	0.01
NM001010	7/2/2014 11:24	0.0	4.0	16.3	79.7	27.42	0.01
NM001020	7/2/2014 11:26	0.0	5.4	15.0	79.6	27.42	0.01
NM001030	7/2/2014 11:28	0.0	7.4	13.0	79.6	27.42	0.01
NM001110	7/2/2014 11:01	0.0	3.1	17.4	79.5	27.42	0.00
NM001120	7/2/2014 11:03	0.0	3.4	17.0	79.6	27.41	0.00
NM001210	7/2/2014 10:49	0.0	14.9	3.5	81.6	27.41	0.00
NM001220	7/2/2014 10:51	0.0	12.6	6.0	81.4	27.42	0.01
NM001310	7/2/2014 11:05	0.0	3.3	16.8	79.9	27.42	0.02
NM001320	7/2/2014 11:07	0.0	4.3	15.9	79.8	27.42	0.02
NM001330	7/2/2014 11:09	0.0	6.5	13.6	79.9	27.42	0.03
Note: GEM2000 ID: 11158		Monitored by: G. Bejarano					
GEM2000 was calibrated using 15% methane (see G. B. calibration sheet on this date)							
Pressure readings were taken using Dwyer Series Mark III "A" digital manometer							
Note: calibIDS is calibration gas being used a machine calibration check.							
calibIDS zero is ambient air also can be used a machine calibration check.							
Note: Accuracy of the machine is +/- 0.3% at methane concentrations of less than < 5.0%							
GAS record	LOT 43218-04						
	EXP 08 2016						

G. Bejarano
7/2/14

Nearmont Landfill
Methane Monitoring
Wells (all, Quarterly)

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	Baro. Press. inches Hg	Rel. Pressure inches H2O
NM000910	4/2/2014 8:34	0.0	2.5	9.0	88.5	27.5	0.00
NM000920	4/2/2014 8:37	0.0	1.4	8.8	89.8	27.5	0.02
NM000930	4/2/2014 8:40	0.0	2.5	9.3	88.2	27.5	0.05
NM001010	4/2/2014 8:44	0.0	1.0	9.3	89.7	27.5	0.00
NM001020	4/2/2014 8:47	0.0	2.2	8.5	89.3	27.5	0.02
NM001030	4/2/2014 8:51	0.0	1.3	9.2	89.5	27.5	0.03
NM001110	4/2/2014 8:54	0.0	4.1	11.4	84.5	27.5	0.02
NM001120	4/2/2014 8:56	0.0	12.4	6.6	81.0	27.5	0.07
NM001210	4/2/2014 8:28	0.0	12.7	6.7	80.6	27.4	0.03
NM001220	4/2/2014 8:31	0.0	12.5	6.9	80.6	27.4	0.04
NM001310	4/2/2014 8:59	0.0	4.5	6.9	88.6	27.5	0.03
NM001320	4/2/2014 9:01	0.0	11.0	6.2	82.8	27.5	0.05
NM001330	4/2/2014 9:04	0.0	10.9	7.2	81.9	27.5	0.08
Note: GEM2000 ID: 11159		Monitored by: J. Montante			 4-2-14.		
GEM2000 was calibrated using 15% methane (see J.M. calibration sheet on this date).							
Pressure readings were taken with the Dwyer Series Mark III "D" digital manometer.							
Accuracy of the machine is +/- 0.3% at methane concentrations of less than <5.0%.							

Nearmont Landfill
Methane Monitoring
Wells (9-13 Quarterly)

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	Baro. Press. inches Hg	Rel. Pressure inches H2O		
NM000910	1/7/2014 9:54	0.0	14.1	5.1	80.8	27.7	0.01		
NM000920	1/7/2014 9:57	0.0	0.1	20.4	79.5	27.7	0.03		
NM000930	1/7/2014 10:00	0.0	2.8	8.9	88.3	27.7	0.05		
NM001010	1/7/2014 10:03	0.0	4.4	6.6	89.0	27.7	0.02		
NM001020	1/7/2014 10:06	0.0	2.6	9.7	87.7	27.7	0.04		
NM001030	1/7/2014 10:10	0.0	0.1	19.8	80.1	27.7	0.06		
NM001110	1/7/2014 10:13	0.0	11.0	7.8	81.2	27.7	0.03		
NM001120	1/7/2014 10:15	0.0	12.3	6.6	81.1	27.7	0.07		
NM001210	1/7/2014 10:28	0.0	12.9	5.7	81.4	27.7	0.08		
NM001220	1/7/2014 10:30	0.0	12.4	6.5	81.1	27.7	0.10		
NM001310	1/7/2014 10:20	0.0	8.9	6.2	84.9	27.7	0.02		
NM001320	1/7/2014 10:23	0.0	4.1	7.2	88.7	27.7	0.03		
NM001330	1/7/2014 10:25	0.0	2.3	7.8	89.9	27.7	0.08		
Note: GEM2000 ID: 11159		Monitored by: J. Montante							
GEM2000 was calibrated using 15% methane (see J.M. calibration sheet on this date).									
Pressure readings were taken with the Dwyer Series Mark III "L" digital manometer.									
Accuracy of the machine is +/- 0.3% at methane concentrations of less than <5.0%.									

Nearmont Landfill
Methane Monitoring
(NM-all)
QUARTERLY MONITORING

Device ID	Date/Time	CH4	CO2	O2	Balance	Baro. Press.	Rel. Pressure
LGGAM 3.01L 16/10/07		%	%	%	%	inches Hg	inches H2O
calibIDS	10/2/2013 6:45	15.1	15.0	0.0	69.9	27.46	n/a
calizero	10/2/2013 13:52	0	0	20.9	79.1	27.38	n/a
NM000910	10/2/2013 8:41	0.0	4.6	16.2	79.2	27.60	0.02
NM000920	10/2/2013 8:43	0.0	0.2	20.1	79.7	27.60	0.03
NM000930	10/2/2013 8:45	0.0	4.0	17.8	78.2	27.61	0.02
NM001010	10/2/2013 8:47	0.0	4.2	16.3	79.5	27.61	0.03
NM001020	10/2/2013 8:49	0.0	0.1	20.1	79.8	27.61	0.02
NM001030	10/2/2013 8:51	0.0	5.3	15.2	79.5	27.61	0.03
NM001110	10/2/2013 8:58	0.0	16.8	2.2	81.0	27.60	0.01
NM001110	10/2/2013 9:28	0.0	2.9	17.1	80.0	27.61	0.01
NM001120	10/2/2013 9:01	0.0	14.1	4.7	81.2	27.61	0.01
NM001120	10/2/2013 9:30	0.0	3.6	16.5	79.9	27.61	0.01
NM001210	10/2/2013 9:03	0.0	16.8	2.1	81.1	27.61	0.01
NM001220	10/2/2013 9:06	0.0	14.3	4.4	81.3	27.61	0.01
NM001310	10/2/2013 9:32	0.0	3.7	16.3	80.0	27.61	0.01
NM001320	10/2/2013 9:35	0.0	4.9	15.3	79.8	27.61	0.02
NM001330	10/2/2013 9:37	0.0	7.4	12.5	80.1	27.61	0.00
e: GEM2000 ID: 11158		Monitored by: G. Bejarano					
GEM2000 was calibrated using 15% methane (see G. B. calibration sheet on this date)							
Pressure readings were taken using Dwyer Series Mark III "A" digital manometer							
Note: calibIDS is calibration gas being used a machine calibration check.							
calibIDS zero is ambient air also can be used a machine calibration check.							
Note: Accuracy of the machine is +/- 0.3% at methane concentrations of less than < 5.0%							
Note: NM1110 was monitored twice: (1x-void misplaced ID)(2x-ok to use)							
Note: NM1120 was monitored twice: (1x-void misplaced ID)(2x-ok to use)							
GAS record	LOT 43004 O2, EXP 01 2016,						

G. Bejarano
10/2/13

Nearmont Landfill
Methane Monitoring
(NM-all)
QUARTERLY MONITORING

Device ID	Date/Time	CH4	CO2	O2	Balance	Baro. Press.	Rel. Pressure
LGGAM 3.01L	16/10/07	%	%	%	%	inches Hg	inches H2O
NM000910	7/8/2013 12:22	0.0	3.8	16.2	80.0	27.58	0.01
NM000920	7/8/2013 12:24	0.0	5.6	14.3	80.1	27.58	0.02
NM000930	7/8/2013 12:26	0.0	7.9	12.0	80.1	27.58	0.03
NM001010	7/8/2013 12:16	0.0	3.6	16.4	80.0	27.57	0.01
NM001020	7/8/2013 12:18	0.0	4.8	15.4	79.8	27.58	0.01
NM001030	7/8/2013 12:20	0.0	6.5	13.3	80.2	27.58	0.01
NM001110	7/8/2013 12:00	0.0	2.8	17.3	79.9	27.58	0.01
NM001120	7/8/2013 12:02	0.0	3.4	16.3	80.3	27.57	0.01
NM001210	7/8/2013 11:17	0.0	16.3	1.4	82.3	27.57	0.00
NM001220	7/8/2013 11:19	0.0	12.9	4.5	82.6	27.57	0.02
NM001310	7/8/2013 12:05	0.0	3.2	16.4	80.4	27.57	0.01
NM001320	7/8/2013 12:07	0.0	4.2	15.5	80.3	27.57	0.01
NM001330	7/8/2013 12:09	0.0	5.7	13.6	80.7	27.58	0.01

Note: GEM2000 ID: 11159

Monitored by: G. Bejarano

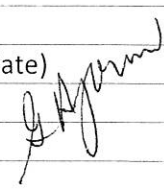
GEM2000 was calibrated using 15% methane (see G. B. calibration sheet on this date)

Pressure readings were taken using Dwyer Series Mark III "A" digital manometer

Note: Accuracy of the machine is +/- 0.3% at methane concentrations of less than < 5.0%

G. Bejarano
7/8/13

Nearmont Landfill
Methane Monitoring
(NM9-13 all)
QUARTERLY MONITORING

Device ID	Date/Time	CH4	CO2	O2	Balance	Baro. Press.	Rel. Pressure
LGGAM 3.01L 16/10/07		%	%	%	%	inches Hg	inches H2O
calibIDS	4/3/2013 6:27	15.0	15.0	0.0	70.0	27.47	n/a
calizero	4/3/2013 6:28	0.0	0.0	20.7	79.3	27.46	n/a
NM000910	4/3/2013 8:20	0.0	4.5	16.0	79.5	27.60	0.01
NM000920	4/3/2013 8:22	0.0	0.0	20.1	79.9	27.60	0.01
NM000930	4/3/2013 8:24	0.0	0.0	20.2	79.8	27.60	0.00
NM001010	4/3/2013 8:13	0.0	4.6	15.3	80.1	27.60	0.01
NM001020	4/3/2013 8:16	0.0	0.1	19.7	80.2	27.60	0.01
NM001030	4/3/2013 8:17	0.0	3.6	16.9	79.5	27.60	0.01
NM001110	4/3/2013 7:56	0.0	3.3	17.0	79.7	27.59	0.03
NM001120	4/3/2013 7:59	0.0	0.1	20.2	79.7	27.60	0.04
NM001210	4/3/2013 7:40	0.0	12.8	6.2	81.0	27.60	0.02
NM001220	4/3/2013 7:43	0.0	10.6	8.5	80.9	27.60	0.02
NM001310	4/3/2013 8:01	0.0	3.4	17.1	79.5	27.60	0.00
NM001320	4/3/2013 8:03	0.0	0.2	20.3	79.5	27.60	0.00
NM001330	4/3/2013 8:05	0.0	0.0	20.4	79.6	27.60	0.00
Note: GEM2000 ID: 11158		Monitored by: G. Bejarano					
GEM2000 was calibrated using 15% methane (see G. B. calibration sheet on this date)							
Pressure readings were taken using Dwyer Series Mark III "D" digital manometer							
Note: calibIDS is calibration gas being used a machine calibration check.							
calibIDS zero is ambient air also can be used a machine calibration check.							
Note: Accuracy of the machine is +/- 0.3% at methane concentrations of less than < 5.0%							

Nearmont Landfill
Methane Monitoring
Wells (all, Quarterly)

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	Baro. Press. inches Hg	Rel. Pressure inches H2O
NM000910	1/2/2013 10:29	0.0	4.6	16.8	78.6	27.6	0.00
NM000920	1/2/2013 10:31	0.0	7.0	15.1	77.9	27.6	0.01
NM000930	1/2/2013 10:33	0.0	11.0	11.1	77.9	27.6	0.03
NM001010	1/2/2013 10:38	0.0	6.0	15.9	78.1	27.6	0.00
NM001020	1/2/2013 10:41	0.0	4.4	16.9	78.7	27.6	0.02
NM001030	1/2/2013 10:43	0.0	0.0	21.3	78.7	27.6	0.03
NM001110	1/2/2013 10:49	0.0	4.1	17.1	78.8	27.6	0.02
NM001120	1/2/2013 10:52	0.0	5.5	15.6	78.9	27.6	0.05
NM001210	1/2/2013 10:20	0.0	14.1	5.0	80.9	27.6	0.01
NM001220	1/2/2013 10:22	0.0	11.0	9.1	79.9	27.6	0.02
NM001310	1/2/2013 10:55	0.0	4.1	17.0	78.9	27.6	0.03
NM001320	1/2/2013 10:57	0.0	5.5	15.5	79.0	27.6	0.07
NM001330	1/2/2013 10:59	0.0	8.5	12.3	79.2	27.6	0.12
Note: GEM2000 ID: 11158		Monitored by: J. Montante				<i>J. Montante</i> 1-2-2013	
GEM2000 was calibrated using 15% methane (see J.M. calibration sheet on this date)							
Pressure readings were taken using the Dwyer Series Mark III "D" digital manometer.							
Note: Accuracy of the machine is +/- 0.3% at methane concentrations of less than < 5.0%.							

Nearmont Landfill
Methane Monitoring
(all)
QUARTERLY MONITORING

Device ID	Date/Time	CH4 %	CO2 %	O2 %	Balance %	Baro. Press. inches Hg	Rel. Pressure inches H2O
LGGAM 3.01L	16/10/07						
calibIDS	10/3/2012 5:50	15.0	15.0	0.1	69.9	27.39	n/a
calizero	10/3/2012 5:52	0.0	0.1	20.7	79.2	27.39	n/a
NM000910	10/3/2012 8:24	0.0	3.8	16.1	80.1	27.57	0.01
NM000920	10/3/2012 8:26	0.0	4.2	16.3	79.5	27.57	0.02
NM000930	10/3/2012 8:28	0.0	0.1	19.7	80.2	27.57	0.01
NM001010	10/3/2012 8:19	0.0	2.8	17.0	80.2	27.56	0.01
NM001020	10/3/2012 8:21	0.0	0.0	19.6	80.4	27.56	0.01
NM001030	10/3/2012 8:22	0.0	3.0	16.6	80.4	27.56	0.00
NM001110	10/3/2012 8:06	0.0	2.7	16.7	80.6	27.56	0.01
NM001120	10/3/2012 8:08	0.0	0.0	19.7	80.3	27.55	0.00
NM001210	10/3/2012 7:51	0.0	10.3	4.9	84.8	27.54	0.01
NM001220	10/3/2012 7:53	0.0	10.4	7.0	82.6	27.55	0.00
NM001310	10/3/2012 8:10	0.0	3.8	15.6	80.6	27.56	0.01
NM001320	10/3/2012 8:12	0.0	3.8	16.0	80.2	27.56	0.02
NM001330	10/3/2012 8:15	0.0	5.8	13.6	80.6	27.56	0.03
Note: GEM2000 ID: 11159		Monitored by: G. Bejarano					
GEM2000 was calibrated using 15% methane (see G. B. calibration sheet on this date)							
Pressure readings were taken using Dwyer Series Mark III "H" digital manometer							
Note: calibIDS is calibration gas being used a machine calibration check.							
calibIDS zero is ambient air also can be used a machine calibration check.							
Note: Accuracy of the machine is +/- 0.3% at methane concentrations of less than < 5.0%							

G. Bejarano
10/3/12

APPENDIX B
WATER LEVEL DATA FIELD FORMS



CITY OF TUCSON

Environmental Management Water Level Data Form

Project: A Mountain/Congress/Nearmont/Pioneer (Annual Event)

Date: 7/24/14

Field Personnel: CB/HV

Well #	Time	DTW	Correction Factor	Date Correction ID	Sounder ID	Well Inspection
<i>A-Mountain</i>						
LM-007	0730	123.05			SOL3	
WR-364 A	0810	113.89			SOL3	
1"	0815	—			SOL3	Measure from 1" casing 56.2'
WR-365A	0752	76.75			SOL3	
WR-366 A	0740	123.74			SOL3	
1"	0745	—			SOL3	Measure from 1" casing bottom 49.65
<i>Arroyo Wells</i>						
WR-345 B	1210	—				Measure from 4" casing foreign lock unable to open
WR-347 B	1200	209.00			SOL3	Measure from 4" casing
<i>CLFI</i>						
SS-019A	0855	111.55			SOL3	Lock C093
<i>Rio Nuevo</i>						
CM-1	0946	DRY			SOL3	bottom 43.57
CM-2	0942	DRY			SOL3	bottom 38.75
CM-3	0939	DRY			SOL3	bottom 44.12
CM-5	0935	DRY			SOL3	bottom 49.22
CM-6	0932	DRY			SOL3	bottom 39.89
CM-8	0919	38.63			SOL3	
CM-9	0915	40.52			SOL3	
CM-15	0955	42.79			SOL3	
CM-16	0953	DRY			SOL3	bottom 53.53
CM-17	0951	DRY			SOL3	bottom 49.12
CLW-1	0954	34.22	DRY 08 7/27/14		SOL3	bottom 34.35
CLW-12	0925	36.09			SOL3	Lock 36.02 A473
WR-349 A	1025	152.88			SOL3	
WR-350 B	0959	155.54			SOL3	— hinge doesn't close
WR-351 A	0913	139.28			SOL3	
WR-429 A	1002	152.58			SOL3	
RNM-542	1013	159.19			SOL3	
<i>Pioneer Paints</i>						
WR-248 A	1047	127.08			SOL3	
WR-249 A	1040	132.08			SOL3	
WR-271 B	1100	126.09			SOL3	
PPM-529A	1055	48.49			SOL3	
<i>TCC Wells</i>						
HQUST-525A	1125	73.88			INTA	
CEP-527A	1120	41.82			INTA	bailed water out of well — some roots
CEP-528A	1110	48.68			INTA	no pdt



CITY OF TUCSON

Environmental Management Water Level Data Form

Project: Congress/Nearmont Monthly

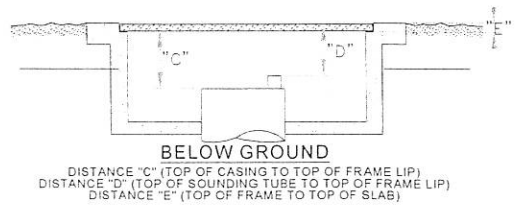
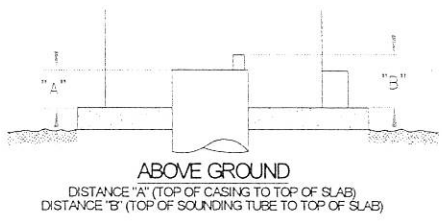
Date: 02/27/14

Field Personnel: JB

Well #	Time	DTW	Correction Factor	Date Correction ID	Sounder ID	Well Inspection
CM-1	1015	DRY			S013	BOTTOM @ 42.59
CM-2	1020	DRY			S013	BOTTOM @ 38.08
CM-3	1024	DRY			S013	BOTTOM @ 43.53
CM-5	1029	DRY			S013	BOTTOM @ 46.60
CM-6	1036	DRY			S013	BOTTOM @ 39.48
CM-8						
CM-9						
CM-15						
CM-16						
CM-17						
CLW-1	1048	DRY			S013	BOTTOM @ 34.88
CLW-12	1049	36.70			S013	BOTTOM @ 34.88 - a/B
Perimeter/ Fencing Check						

Additional Comments: Fence open to MELWOOD AVE
Fence open to pit
Homeless camp @ CLW-12

Correction Factor:





CITY OF TUCSON

Environmental Management Water Level Data Form

Project: Rio Nuevo (Feb. 2014)

Date: 2/25/14

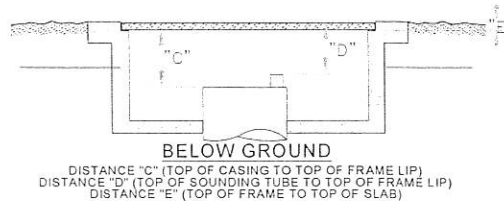
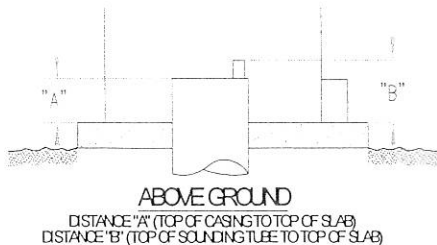
Field Personnel: GB

Well #	Time	DTW	Correction Factor	Date Correction ID	Sounder ID	Well Inspection
WR-287A	0826	35.87			SOL 1	
WR-288 A			Abandoned			
WR-289 A			Abandoned			
WR-290 A			Abandoned			
WR-292 A			Abandoned			
WR-294 A			Dry			
WR-350 A			Abandoned			
WR-350 B	0836	155.18			SOL 1	lid is hard to open, broken lock
WR-351 A	0845	138.86			SOL	variable to close
WR-425 A			Abandoned 2011			
WR-426 A	0915	DRY			SOL 1	bottom = 53.85' cut veg.
WR-427 A	0934	DRY			SOL 1	bottom = 53.35' cut veg.
WR-428 A			Abandoned			
WR-429 A	0957	153.35			SOL 1	
RNM-542	1015	150.72			SOL 1	
CM-8	0859	39.75			SOL 1	
CM-9	0903	40.39			SOL 1	
CM-15	0905	42.86			SOL 1	
CM-16	0907	DRY			SOL 1	bottom 53.61
CM-17	0910	DRY			SOL 1	bottom 48.62

Additional Comments:

Note: pit perimeter fence is complete except for south (gate) opening.
4/2/25/14

Correction Factor:





CITY OF TUCSON

Environmental Management Water Level Data Form

Project: Congress/Nearmont Monthly (January)

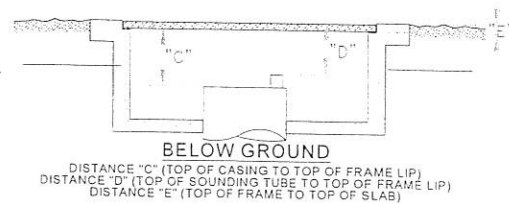
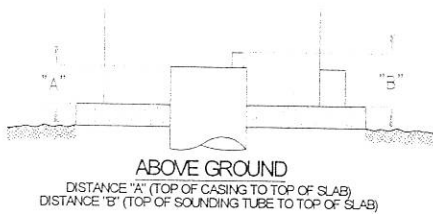
Date: 1/30/14

Field Personnel: CB/JB

Well #	Time	DTW	Correction Factor	Date Correction ID	Sounder ID	Well Inspection
CM-1	0823	DRY			SOL 3	bottom 42.51
CM-2	0827	DRY				bottom 38.21
CM-3	0830	DRY				bottom 43.87
CM-5	0834	DRY				bottom 45.90
CM-6	0840	DRY				bottom 40.51
CM-8	0853	39.26				
CM-9	0850	40.05			SOL 1	
CM-15	0815	42.81			SOL 3	
CM-16	0817	DRY				bottom 53.51
CM-17	0821	DRY				bottom 48.52
CLW-1	0841	DRY				bottom 34.57
CLW-12	0850	36.92				
Perimeter/ Fencing Check						

Additional Comments: _____

Correction Factor:





CITY OF TUCSON

Environmental Management Water Level Data Form

Project: Congress/Nearmont Monthly

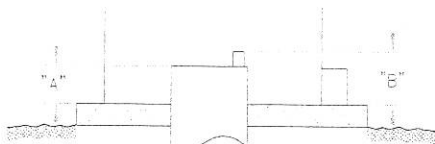
Date: 11-22-13

Field Personnel: JVM

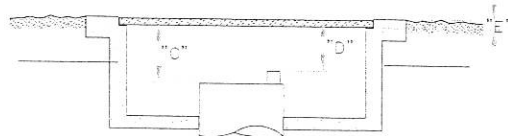
Well #	Time	DTW	Correction Factor	Date Correction ID	Sounder ID	Well Inspection
CM-1	0850	DRY			SOL 4	BOTTOM @ 42.51
CM-2	0900	DRY			SOL 4	BOTTOM @ 37.92
CM-3	0910	DRY			SOL 4	BOTTOM @ 43.35
CM-5	0925	DRY			SOL 4	BOTTOM @ 45.90
CM-6	0935	DRY			SOL 4	BOTTOM @ 39.88
CM-8	0945	38.87			SOL 4	
CM-9	0955	39.05			SOL 4	
CM-15	1005	42.71			SOL 4	
CM-16	1015	DRY			SOL 4	BOTTOM @ 52.60
CM-17	1025	DRY			SOL 4	BOTTOM @ 48.25
CLW-1	1040	DRY			SOL 4	BOTTOM @ 34.91
CLW-12	1050	30.55			SOL 4	
Perimeter/ Fencing Check	WEST PERIMETER FENCE OPEN ENTRANCE FOR CONST VEHICLE					
	WEST PERIMETER FENCE BY HOMES IS SECURE					
	EAST	"	"	N/A		
	NORTH	"	"	N/A		
	SOUTH	"	"	N/A		
	PIT PERIMETER FENCING OPEN @ SOUTH ENTRANCE					

Additional Comments: _____

Correction Factor:



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: Congress/Nearmont Monthly

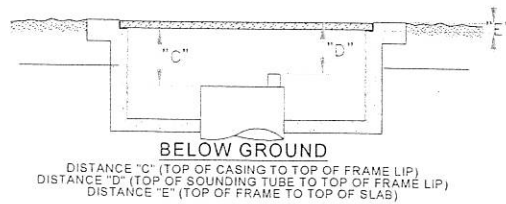
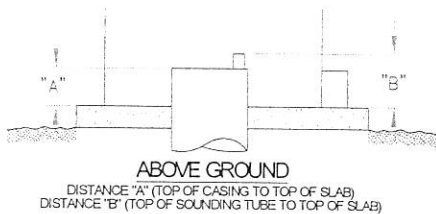
Date: 10/25/13

Field Personnel: JB

Well #	Time	DTW	Correction Factor	Date Correction ID	Sounder ID	Well Inspection
CM-1	0750	DRY			S013	BOTTOM @ 42.90
CM-2	0800	DRY			S013	" " 39.01
CM-3	0815	DRY			S013	" " 41.81
CM-5	0822	DRY			S013	" " 46.21
CM-6	0831	DRY			S013	" " 38.97
CM-8	0837	38.81			S013	
CM-9	0844	39.60			S013	
CM-15	0850	42.62			S013	
CM-16	0901	DRY				BOTTOM @ 52.80
CM-17	0911	DRY				" " 48.38
CLW-1	0919	DRY				" " 35.05
CLW-12	0926	36.42			S013	
Perimeter/ Fencing Check	PIT Fence OPEN WEST FENCE OPEN onto MELWOOD AVE					

Additional Comments: _____

Correction Factor:





CITY OF TUCSON

Environmental Management Water Level Data Form

Project: Congress/Nearmont (Monthly)

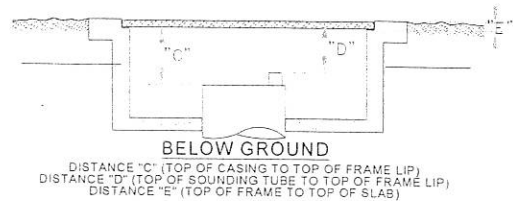
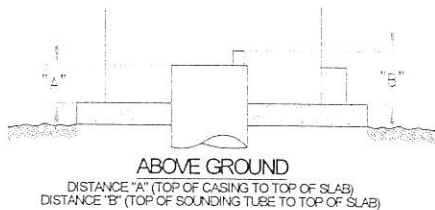
Date: 9-19-2013

Field Personnel: JM/HV

Well #	Time	DTW	Correction Factor	Date Correction ID	Sounder ID	Well Inspection
CM-1	0640	DRY			SOL 4	BOTTOM @ 42.50
CM-2	0650	DRY			SOL 4	BOTTOM @ 37.90
CM-3	0700	DRY			SOL 4	BOTTOM @ 43.35
CM-5	0710	DRY			SOL 4	BOTTOM @ 45.91
CM-6	0725	DRY			SOL 4	BOTTOM @ 39.85
CM-8	0730	38.85			SOL 4	
CM-9	0735	39.64			SOL 4	
CM-15	0740	42.70			SOL 4	
CM-16	0745	DRY			SOL 4	BOTTOM @ 52.55
CM-17	0750	DRY			SOL 4	BOTTOM @ 48.20
CLW-1	0755	DRY			SOL 4	BOTTOM @ 34.85
CLW-12	0800	36.53			SOL 4	
Perimeter/ Fencing Check	WEST PERIMETER FENCE OPEN FOR CONSTRUCTION TRUCKS. WEST PERIMETER FENCE BY HOME IS SECURE. BIG PIT FENCE OPEN NORTH SIDE N/A (NORTHEAST FENCE PANEL DOWN) EAST SIDE N/A SOUTH SIDE N/A					

Additional Comments: _____

Correction Factor:





CITY OF TUCSON

Environmental Management Water Level Data Form

Project: A Mountain/Congress/Nearmont/Pioneer (Annual Event)

Date: 09/05/13 (for Annual event in July) Field Personnel: JB

Well #	Time	DTW	Correction Factor	Date Correction ID	Sounder ID	Well Inspection
<i>A-Mountain</i>						
LM-007						
WR-364 A						
1"	0835	DRY			HER1	BOTTOMED OUT @ 56.95
WR-365A						Measure from 1" casing
WR-366 A						
1"	1205	121.74			HER1	Measure from 1" casing
<i>Arroyo Wells</i>						
WR-345 B	1001	202.32			HER1	Measure from 4" casing
WR-347 B	1017	209.82			HER1	Measure from 4" casing
<i>CLF</i>						
SS-019A						
<i>Rio Nuevo</i>						
CM-1						
CM-2						
CM-3						
CM-5						
CM-6						
CM-8						
CM-9						
CM-15						
CM-16						
CM-17						
CLW-1						
CLW-12						
WR-349 A						
WR-350 B						
WR-351 A						
WR-429 A						
RNM-542						
<i>Pioneer Ponds</i>						
WR-248 A						
WR-249 A						
WR-271 B						
PPM-529A	0853	47.41			HER1	
<i>TCC Wells</i>						
HQUST-525A	0935	73.44			HER1	
CEP-527A	0919	44.59			HER1	
CEP-528A	0911	48.71			HER1	



CITY OF TUCSON

Environmental Management Water Level Data Form

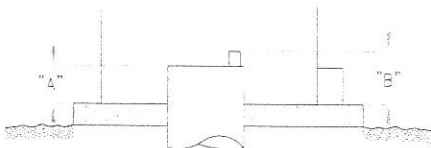
Date: FRI 8/30/13

Project: Congress/Nearmont (Monthly)
Field Personnel: CB

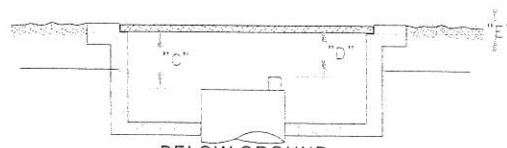
Well #	Time	DTW FT	Correction Factor	Date Correction ID	Sounder ID	Well Inspection approx to bottom
CM-1	0650	DRY			SOL3	43.45
CM-2	0655	DRY			SOL3	38.75
CM-3	0700	DRY			SOL3	44.37
CM-5	0705	DRY			SOL3	44.95
CM-6	0710	DRY			SOL3	40.65
CM-8	0725	38.87			SOL3	
CM-9	0720	39.67			SOL3	
CM-15	0750	42.78			SOL3	
CM-16	0800	DRY			SOL3	53.65
CM-17	0805	DRY			SOL3	49.38
CLW-1	0745	DRY			SOL3	34.52
CLW-12	0735	36.52			SOL3	
Perimeter/ Fencing Check						
PIT FENCE AROUND - OPENED AT TWO GATES ON SOUTHSIDE NORTHSIDE PIT FENCE - OK						

Additional Comments: FENCE AROUND GENERATOR NORTHSIDE - UNBREACHED

Correction Factor:



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: A Mountain/Congress/Nearmont

Date: 7/23/13

Field Personnel: dyman

Well #	Time	DTW	Correction Factor	Date Correction ID	Sounder ID	Well Inspection
CM-1	0720	DRY			HER1	
CM-2	0723	DRY			HER-1	
CM-3	0726	DRY			HER1	
CM-5	0731	DRY			HER1	
CM-6	0736	DRY			HER1	
CM-8	0910	38.78			HER1	
CM-9	0905	40.53			HER1	
CM-15	0935	40.05			HER1	
CM-16	0940	52.45			HER1	
CM-17	0941	47.88			HER1	
CLW-1	0950	33.25			HER-1	BOTTOM OUT @ 34.00
CLW-12	0920	36.18			HER1	KEY - A473
WR-248 A	1125	127.68			HER1	
WR-249 A	1115	130.15			HER1	
WR-271 B	1140	127.00			HER1	
WR-350 B	1020	155.38			HER1	
WR-351 A	0900	139.08			HER1	
WR-429 A	1010	152.35			HER1	
WR-345 B						
WR-347 B	1240	203.49			HER1	
WR-349 BA	1045	152.58			HER1	PK/13th close to Fremont
WR-364 A	0825	114.95			HER1	
WR-366 A	0845	123.10			HER1	
RNM-542	1020	158.95			HER1	
LM-007	6.55	122.75			HER1	
SS-019A	1350	119.91			HER	ON SANTA CRUZ LANE 6/4 22nd/24th NEED WATER LOCK KEY

BN Wrong well
* BONITA

WR-345A is in this well housing but inaccessible

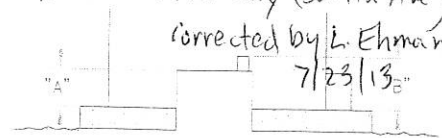
also PER 14

Additional Comments: BIG PIT FENCE OPENED ON SOUTHSIDE ONLY. ALL WESTSIDE FENCE REMOVED. EASTSIDE STILL IN EXISTENCE USED BY SUBCONTRACTOR: GUY CONSTRUCTION

Correction Factor:

Δ wr-345A in WR-345 B place (Santa Rita/12th St)
lock - unfamiliar/no key
OK no WL per Molly 7/23/13

* WR-349A only (Bonita Ave)
corrected by L. Ehman
7/23/13





CITY OF TUCSON

Environmental Management Water Level Data Form

Project: Congress/Nearmont (Monthly)

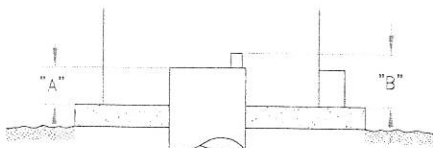
Date: 01/25/13

Field Personnel: Jm

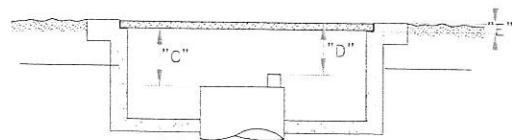
Well #	Time	DTW	Correction Factor	Date Correction ID	Sounder ID	Well Inspection
CM-1	1020	DRY			SOL 4	BOTTOM @ 42.45
CM-2	1030	DRY			SOL 4	BOTTOM @ 37.88
CM-3	1038	DRY			SOL 4	BOTTOM @ 43.20
CM-5	1050	DRY			SOL 4	BOTTOM @ 45.80
CM-6	1100	DRY			SOL 4	BOTTOM @ 39.51
CM-8	1110	40.45			SOL 4	
CM-9	1117	40.21			SOL 4	
CM-15	1123	40.60			SOL 4	
CM-16	1130	DRY			SOL 4	BOTTOM @ 52.37
CM-17	1144	DRY			SOL 4	BOTTOM @ 47.81
CLW-1	1135	33.70			SOL 4	
CLW-12	1155	37.80			SOL 4	
Perimeter/ Fencing Check						
WEST PERIMETER FENCE OPENING FOR CONST. TRUNK ROAD. WEST PERIMETER FENCING BY HOMES IS SECURE. BIG PIT FENCING OPENED FOR DIRT STOCK PILING. NORTH SIDE N/A, EASTSIDE N/A, SOUTHSIDE N/A. Jm 1-25-13						

Additional Comments: _____

Correction Factor:



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)

APPENDIX C
2003 GEOLOGIC CROSS SECTION

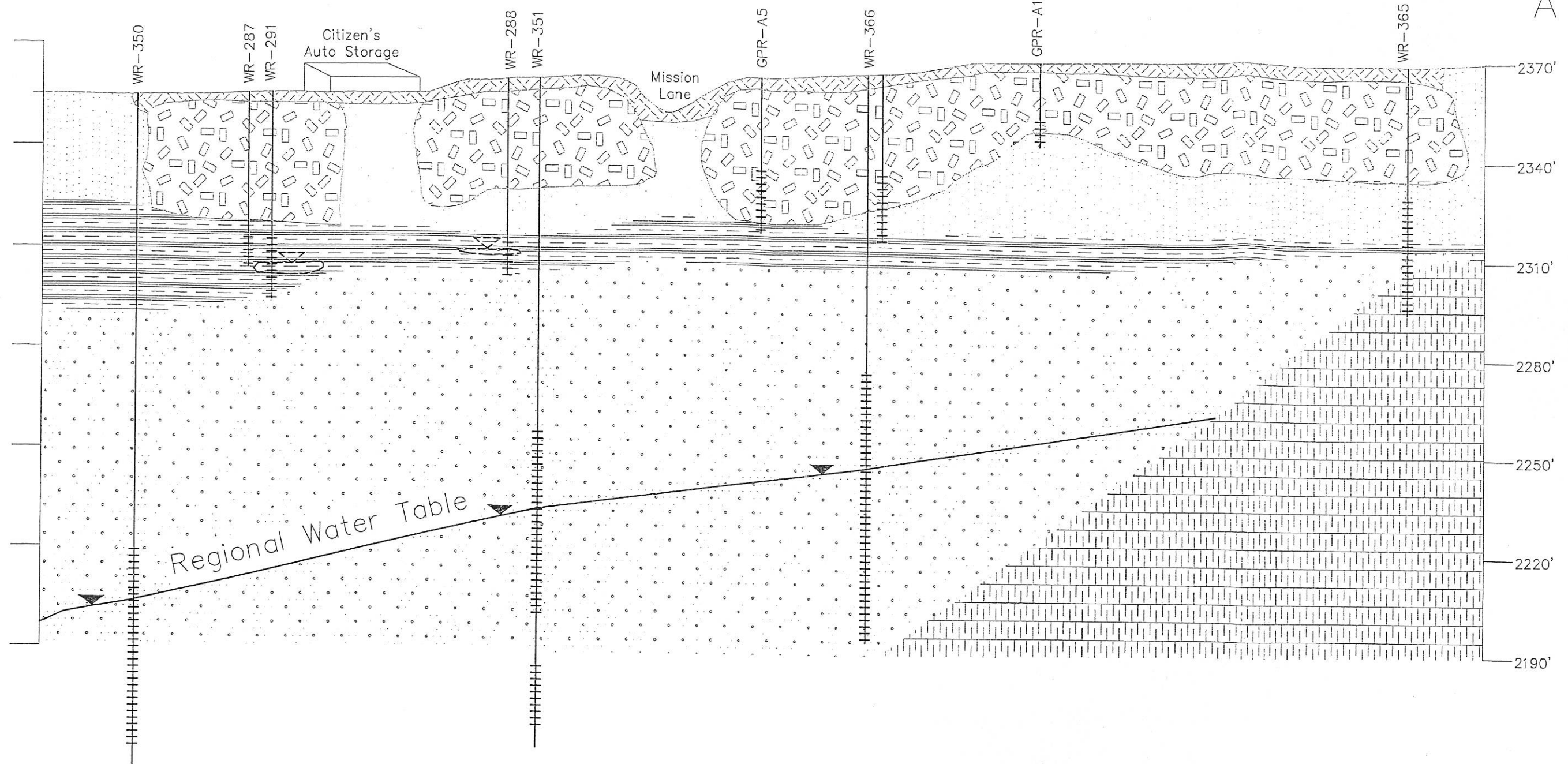
Nearmont

Congress

A-Mountain

A'

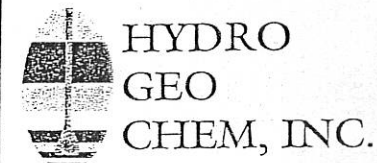
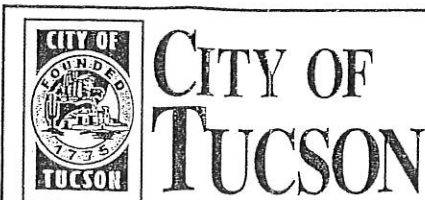
A



EXPLANATION

	FILL		CLAY
	REFUSE		BASALT
	SILTY GRAVEL AND SAND		PERCHED WATER
	SILTY SAND		

Vertical Exaggeration = 7:1



GEOLOGIC CROSS SECTION A-A'
RIO NUEVO LANDFILL STABLIZATION PROJECT

Approved JT	Date 1/29/03	Revised	Date	Reference: 7451003A	FIG. 7
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APPENDIX D
GROUNDWATER FIELD FORMS
AND LABORATORY DATA PACKAGES

Correction factor _____



CITY OF TUCSON

Environmental Services Sampling Data Form

HP _____ BAIL _____

TD _____ 45.6 _____

D (diameter) _____ 2 _____

d factor _____ 0.48 _____

Well Name **CM-09**

Project **Rio Nuevo South Landfill**

Date **Jul 22, 2014**

Field Personnel **GB/JVM**

Weather **SUNNY/WARM**

Static Water Level **40.52**

Time **07:55:00**

Totalizer: End _____

Sounder ID **SOL 3**

Start **0**

Total (gal) **0**

Well Volumes (gallons):

Discharge Rate(GPM) _____

1 1 1.5 2 2 3 2.5 4 3 2 3.5 3 4 4 4.5 5 5 6

Pump Time: Start _____
End _____
Total (min) _____

Meters and Type: YSI #1 YSI #2 YSI QS

Calibration Date: **Jul 22, 2014**

Parameters: (Stable within) +/-0.1 +/-3% +/-3% +/-10% +/-20mv

Gallons	Time (hrs)	pH	SpC (µS/cm)	Temp (C)	DO (mg/l)	ORP	PWL (feet)	Turbidity (ntu)
1	0805	6.44	906	27.13	2.55	165.2	-	145
2								
3								
4								
2								
3								
4								
5								
6								

Sampling:

Samples Collected by: **George Bejarano** Time Started: _____ Dup Time: _____ Time Ended: _____

Transferred to: **TWQL** Relinquished by: **George Bejarano** Date: **Jul 22, 2014**

Reason for Sampling: Monthly Quarterly Semi-Annual Annual Investigation

Duplicate GAC Treatment Grab Sample Bail Sample

Comments: **WATER-LIGHT BROWN COLOR. PURGED BY BAILER 4 TIMES USING 1LITER BAILERS. LAST BAILER ONLY 1/2 FULL.**

Correction factor _____



CITY OF TUCSON

Environmental Services
Sampling Data Form

HP _____ Bail _____

TD _____ 45.6 _____

D (diameter) _____ 2 _____

d factor _____ .48 _____

Well Name CM-09

Project Rio Nuevo South Landfill

Date Jan 30, 2014

Field Personnel GB/JB

Weather sunny/warm

Static Water Level 40.05

Time 08:48:00

Totalizer: End _____

Sounder ID SOL 1

Start 0

Total (gal) 0

Well Volumes (gallons):

Discharge Rate(GPM) _____

1 1 1.5 2 2 3 2.5 4 3 3 3.5 4 4 5 4.5 6 5 7

Pump Time: Start _____

Meters and Type: YSI #1 YSI #2 YSI QS

End _____

Total (min) _____

Calibration Date: Jan 30, 2014

Parameters: (Stable within) +/-0.1 +/-3% +/-3% +/-10% +/-20mv

	Gallons	Time (hrs)	pH	SpC (µS/cm)	Temp (C)	DO (mg/l)	ORP	PWL (feet)	Turbidity (ntu)
1	1								
1.5	2								
2	3								
2.5	4								
3	3	0915	6.79	703	25.61	5.02	277.3		270
3.5	4								
4	5								
4.5	6								
5	7								

Sampling:

Samples Collected by: Jerry Barker Time Started: 09:09:00 Dup Time: _____ Time Ended: 09:13:00

Transferred to: TWQL Relinquished by: Jerry Barker Date: Jan 30, 2014

Reason for Sampling: Monthly Quarterly Semi-Annual Annual Investigation

Duplicate GAC Treatment Grab Sample Bail Sample

Comments: Water grey

Correction factor _____



CITY OF TUCSON

Environmental Services Sampling Data Form

HP	BAIL
TD	45.6
D (diameter)	2
d factor	0.48

Well Name CM-9

Project Rio Nuevo South Landfill

Date Jul 30, 2013

Field Personnel GB/JM

Weather SUNNY/HOT

Static Water Level 39.72

Time 10:07:00

Totalizer: End _____

Sounder ID SOL 4

Start 0

Total (gal) 0

Well Volumes (gallons):

Discharge Rate(GPM) _____

1 1 1.5 2 2 3 2.5 4 3 3 3.5 4 4 5 4.5 6 5 7

Pump Time:

Start _____

Meters and Type:

YSI #1

YSI #2

YSI QS

End _____

Total (min) _____

Calibration Date: Jul 30, 2013

Parameters: (Stable within) +/-0.1 +/-3% +/-3% +/-10% +/-20 mv

	Gallons	Time (hrs)	pH	SpC (µS/cm)	Temp (C)	DO (mg/l)	ORP	PWL (feet)	Turbidity (ntu)
1	1	1010	6.78	649	27.47	5.32	290.2	-	23.5
1.5	2	1013	6.57	702	27.50	4.84	281.7	-	123
2	3	1015	6.61	740	27.59	3.72	290.4	-	158
2.5	4	1017	6.81	687	28.05	4.34	285.2	-	213
3	3	1021	6.97	621	27.68	5.11	281.3	-	198
3.5	4								
4	5								
4.5	6								
5	7								

Sampling:

Samples Collected by: George Bejarano Time Started: 10:21:00 Dup Time: _____ Time Ended: 10:23:00

Transferred to: TWQL Relinquished by: George Bejarano Date: Jul 30, 2013

Reason for Sampling: Monthly Quarterly Semi-Annual Annual Investigation

Duplicate GAC Treatment Grab Sample Bail Sample

Comments: SAMPLES ARE SLIGHT BROWN COLOR. Purged well using a bailer.

Correction factor _____



CITY OF TUCSON

Environmental Services Sampling Data Form

HP _____

TD 45.6

D (diameter) 2

d factor .48

Well Name CM-9

Project Rio Nuevo South Landfill

Date Jan 31, 2013

Field Personnel JB

Weather sunny/cool

Static Water Level 40.21

Time 11:04:00

Totalizer: End 3

Sounder ID SOL 4

Start 0

Total (gal) 0

Well Volumes (gallons):

Discharge Rate(GPM) _____

1 1 1.5 2 2 3 2.5 4 3 3 3.5 4 4 5 4.5 6 5 7

Pump Time:

Start _____

Meters and Type:

YSI #1

YSI #2

YSI QS

End _____

Total (min) _____

Calibration Date: Jan 31, 2013

Parameters: (Stable within) +/-0.1 +/-3% +/-3% +/-10% +/-20 mv

	Gallons	Time (hrs)	pH	SpC (µS/cm)	Temp (C)	DO (mg/l)	ORP	PWL (feet)	Turbidity (ntu)
1	1	1143	6.94	1386	21.31	3.87	232.7		62.8
1.5	2								
2	3								
2.5	4								
3	3								
3.5	4								
4	5								
4.5	6								
5	7								

Sampling:

Samples Collected by: Jerry Barker Time Started: 11:41:00 Dup Time: _____ Time Ended: 11:43:00

Transferred to: TWQL Relinquished by: Jerry Barker Date: Jan 31, 2013

Reason for Sampling: Monthly Quarterly Semi-Annual Annual Investigation

Duplicate GAC Treatment Grab Sample Bail Sample

Comments:

Purged 3 WW's

Correction factor +3.60



CITY OF TUCSON

Environmental Services
Sampling Data Form

HP 3

TD 200

D (diameter) 5

d factor 3.06

Well Name WR-350B

Project Rio Nuevo South Landfill

Date Jul 22, 2014

Field Personnel GB/JVM

Weather SUNNY/WARM

Static Water Level 155.65

Time 08:30:00

Totalizer: End 162.95

Sounder ID SOL 3

Start 0

Total (gal) 162.95

Well Volumes (gallons):

Discharge Rate(GPM) 5.26

1 45 1.5 68 2 91 2.5 114 3 136 3.5 159 4 182 4.5 205 5 228

Pump Time: Start 08:40:00

End 09:11:00

Meters and Type: YSI #1 YSI #2 YSI QS

Total (min) 31

Calibration Date: Jul 22, 2014

Parameters: (Stable within) +/-0.1 +/-3% +/-3% +/-10% +/-20mv

Gallons	Time (hrs)	pH	SpC (µS/cm)	Temp (C)	DO (mg/l)	ORP	PWL (feet)	Turbidity (ntu)
45	0847	7.31	939	25.90	3.40	104.8	169.45	13.6
68	0852	7.29	960	25.81	3.85	109.4	172.10	5.48
91	0857	7.29	963	25.97	3.92	108.7	172.10	4.03
114	0901	7.28	968	25.99	3.94	93.9	174.80	5.80
136	0906	7.27	969	25.90	3.96	103.9	175.45	6.02
159								
182								
205								
228								

Sampling:

Samples Collected by: George Bejarano Time Started: 09:06:00 Dup Time: _____ Time Ended: 09:11:00

Transferred to: TWQL Relinquished by: George Bejarano Date: Jul 22, 2014

Reason for Sampling: Monthly Quarterly Semi-Annual Annual Investigation

Duplicate GAC Treatment Grab Sample Bail Sample

Comments: WATER-CLEAR

Jul 22 14

Correction factor +3.60



CITY OF TUCSON

Environmental Services
Sampling Data Form

HP 3

TD 200

D (diameter) 5

d factor 3.06

Well Name WR-350B

Project Rio Nuevo South Landfill

Date Jul 30, 2013

Field Personnel GB/JM

Weather SUNNY/WARM

Static Water Level 155.61

Time 08:28:00

Totalizer: End 161.29

Sounder ID SOL 4

Start 0

Total (gal) 161.29

Well Volumes (gallons):

Discharge Rate(GPM) 5.76

1 45 1.5 68 2 91 2.5 114 3 136 3.5 159 4 182 4.5 205 5 228

Pump Time: Start 08:31:00

End 08:59:00

Meters and Type: YSI #1 YSI #2 YSI QS

Total (min) 28

Calibration Date: Jul 30, 2013

Parameters: (Stable within) +/-0.1 +/-3% +/-3% +/-10% +/-20 mv

	Gallons	Time (hrs)	pH	SpC (µS/cm)	Temp (C)	DO (mg/l)	ORP	PWL (feet)	Turbidity (ntu)
1	45	0839	7.45	976	25.63	3.39	204.8	168.69	93.1
1.5	68	0843	7.40	977	25.63	3.23	214.8	173.65	15.5
2	91	0847	7.40	975	25.76	3.30	210.3	175.45	4.92
2.5	114	0851	7.40	975	25.85	3.37	222.0	176.70	3.28
3	136	0855	7.41	974	25.97	3.42	229.3	177.70	2.93
3.5	159								
4	182								
4.5	205								
5	228								

Sampling:

Samples Collected by: George Bejarano Time Started: 08:55:00 Dup Time: _____ Time Ended: 08:59:00

Transferred to: TWQL Relinquished by: George Bejarano Date: Jul 30, 2013

Reason for Sampling: Monthly Quarterly Semi-Annual Annual Investigation

Duplicate GAC Treatment Grab Sample Bail Sample

Comments:

Jun 30-13

Correction factor -0.56



CITY OF TUCSON

Environmental Services
Sampling Data Form

HP 3

TD 210

D (diameter) 5

d factor 3.06

Well Name WR-351A

Project Rio Nuevo South Landfill

Date Jul 22, 2014

Field Personnel GB/JVM

Weather SUNNY/WARM

Static Water Level 139.39

Time 07:10:00

Totalizer: End 235.24

Sounder ID SOL 3

Start 0

Total (gal) 235.24

Well Volumes (gallons):

Discharge Rate(GPM) 6.53

1 72 1.5 108 2 144 2.5 180 3 216 3.5 252 4 288 4.5 324 5 360

Pump Time: Start 07:16:00

Meters and Type: YSI #1 YSI #2 YSI QS

End 07:52:00

Total (min) 36

Calibration Date: Jul 22, 2014

Parameters: (Stable within) +/-0.1 +/-3% +/-3% +/-10% +/-20mv

Gallons	Time (hrs)	pH	SpC (µS/cm)	Temp (C)	DO (mg/l)	ORP	PWL (feet)	Turbidity (ntu)
72	0726	7.45	776	25.68	6.39	64.8	160.49	12.1
108	0731	7.45	780	26.00	6.41	79.0	164.25	14.5
144	0735	7.43	780	26.09	6.41	87.9	167.03	9.64
180	0740	7.43	781	26.20	6.34	91.4	168.95	7.83
216	0743	7.44	785	26.02	6.40	95.4	168.97	4.84
252								
288								
324								
360								

Sampling:

Samples Collected by: George Bejarano Time Started: 07:45:00 Dup Time: _____ Time Ended: 07:52:00

Transferred to: TWQL Relinquished by: George Bejarano Date: Jul 22, 2014

Reason for Sampling: Monthly Quarterly Semi-Annual Annual Investigation

Duplicate GAC Treatment Grab Sample Bail Sample

Comments: WATER-CLEAR

Jul 22-14

Correction factor -0.56



CITY OF TUCSON

Environmental Services
Sampling Data Form

HP 3

TD 210

D (diameter) 5

d factor 3.06

Well Name WR-351A

Project Rio Nuevo South Landfill

Date Jul 30, 2013

Field Personnel GB/JM

Weather SUNNY/WARM

Static Water Level 139.30

Time 07:15:00

Totalizer: End 248.94

Sounder ID SOL 4

Start 0

Total (gal) 248.94

Well Volumes (gallons):

Discharge Rate(GPM) 7.11

1 72 1.5 108 2 144 2.5 180 3 216 3.5 252 4 288 4.5 324 5 360

Pump Time: Start 07:31:00

End 08:06:00

Meters and Type: YSI #1 YSI #2 YSI QS

Total (min) 35

Calibration Date: Jul 30, 2013

Parameters: (Stable within) +/-0.1 +/-3% +/-3% +/-10% +/-20 mv

	Gallons	Time (hrs)	pH	SpC (µS/cm)	Temp (C)	DO (mg/l)	ORP	PWL (feet)	Turbidity (ntu)
1	72	0742	7.46	781	25.57	6.42	130.6	159.00	7.81
1.5	108	0747	7.45	780	25.67	6.28	166.0	161.45	5.13
2	144	0752	7.46	777	25.75	6.24	185.3	165.10	2.56
2.5	180	0757	7.47	778	25.80	6.23	194.6	167.30	3.90
3	216	0802	7.49	781	25.82	6.20	200.7	168.15	3.15
3.5	252								
4	288								
4.5	324								
5	360								

Sampling:

Samples Collected by: George Bejarano Time Started: 08:03:00 Dup Time: 08:06:00 Time Ended: 08:06:00

Transferred to: TWQL Relinquished by: George Bejarano Date: Jul 30, 2013

Reason for Sampling: Monthly Quarterly Semi-Annual Annual Investigation

Duplicate GAC Treatment Grab Sample Bail Sample

Comments:

[Empty box for comments]

JM
6-1-13

Correction factor +0.98



CITY OF TUCSON

Environmental Services
Sampling Data Form

HP 1.5

TD 205

D (diameter) 5

d factor 3.06

Well Name WR-429A

Project Rio Nuevo South Landfill

Date Jul 22, 2014

Field Personnel GB/JVM

Weather SUNNY/WARM

Static Water Level 152.80

Time 09:30:00

Totalizer: End 215.56

Sounder ID SOL 3

Start 0

Total (gal) 215.56

Well Volumes (gallons):

Discharge Rate(GPM) 4.40

1 53 1.5 80 2 107 2.5 134 3 160 3.5 187 4 214 4.5 241 5 268

Pump Time: Start 09:35:00

End 10:24:00

Total (min) 49

Meters and Type: YSI #1 YSI #2 YSI QS

Calibration Date: Jul 22, 2014

Parameters: (Stable within) +/-0.1 +/-3% +/-3% +/-10% +/-20mv

Gallons	Time (hrs)	pH	SpC (µS/cm)	Temp (°C)	DO (mg/l)	ORP	PWL (feet)	Turbidity (ntu)
53	0952	7.22	1081	26.69	1.95	133.1	162.73	37.7
80	0959	7.17	1085	26.47	1.97	144.3	165.24	15.4
107	1006	7.14	1085	26.56	2.25	112.4	166.81	7.77
134	1012	7.12	1077	26.79	2.30	98.4	167.69	8.29
160	1018	7.12	1074	26.65	2.39	101.7	168.05	7.26
187								
214								
241								
268								

Sampling:

Samples Collected by: George Bejarano Time Started: 10:18:00 Dup Time: 10:23:00 Time Ended: 10:24:00

Transferred to: TWQL Relinquished by: George Bejarano Date: Jul 22, 2014

Reason for Sampling: Monthly Quarterly Semi-Annual Annual Investigation

Duplicate GAC Treatment Grab Sample Bail Sample

Comments: WATER-CLEAR. RAN GPM SLOWER TO MINIMIZE AERATION OF SAMPLE.

Fin 7-22-14

Correction factor +0.98



CITY OF TUCSON

Environmental Services
Sampling Data Form

HP 1.5

TD 205

D (diameter) 5

d factor 3.06

Well Name WR-429A

Project Rio Nuevo South Landfill

Date Jul 30, 2013

Field Personnel GB/JM

Weather SUNNY/HOT

Static Water Level 152.80

Time 09:10:00

Totalizer: End 204.58

Sounder ID SOL 4

Start 0

Total (gal) 204.58

Well Volumes (gallons):

Discharge Rate(GPM) 5.38

1 53 1.5 80 2 107 2.5 134 3 160 3.5 187 4 214 4.5 241 5 268

Pump Time:

Start 09:13:00

End 09:51:00

Total (min) 38

Meters and Type:

YSI #1

YSI #2

YSI QS

Calibration Date: Jul 30, 2013

Parameters: (Stable within) +/-0.1 +/-3% +/-3% +/-10% +/-20 mv

	Gallons	Time (hrs)	pH	SpC (µS/cm)	Temp (C)	DO (mg/l)	ORP	PWL (feet)	Turbidity (ntu)
1	53	0925	7.18	570	27.14	3.45	171.0	172.00	37.7
1.5	80	0931	7.21	584	26.72	1.89	167.6	188.80	13.5
2	107	0935	7.22	1018	26.73	5.89	185.8	188.89	22.9
2.5	134	0938	7.26	1083	26.70	5.69	242.5	188.90	13.0
3	160	0944	7.28	1080	26.64	6.00	255.6	188.90	58.2
3.5	187	0948	7.27	1080	26.65	6.08	261.8	188.90	4.95
4	214								
4.5	241								
5	268								

Sampling:

Samples Collected by: George Bejarano Time Started: 09:48:00 Dup Time: _____ Time Ended: 09:51:00

Transferred to: TWQL Relinquished by: George Bejarano Date: Jul 30, 2013

Reason for Sampling: Monthly Quarterly Semi-Annual Annual Investigation

Duplicate GAC Treatment Grab Sample Bail Sample

Comments: WELL SURGE AT 2 AND 2.5 WELL VOLUMES REDUCED FLOW. AT 3 WELL VOLUMES- NO SURGING. SAMPLES REACTED WITH ACID IN VIALS CAUSING BUBBLES NOTED ON CHAIN OF CUSTODY.

Handwritten initials and date: GB 7-30-13



4401 S. Tucson Estates Parkway
Tucson, Arizona 85735
520.791.2544 Phone
520.791.5260 Fax

22 August 2014

Lori Ehman
Environmental Services

-

Tucson, AZ 85726

RE: Rio Nuevo Landfill

Enclosed are the results of analyses for samples received by the laboratory on 07/22/2014 11:37. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Michael E. Dew
Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2455

Environmental Services
-
Tucson AZ, 85726

Project: Rio Nuevo Landfill
Project Number: P01071
Project Manager: Lori Ehman

Reported:
08/22/2014 13:35

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WR-351A	L140885-01	Aqueous	07/22/2014 07:45	07/22/2014 11:37
WR-350B	L140885-02	Aqueous	07/22/2014 09:06	07/22/2014 11:37
WR-429A	L140885-03	Aqueous	07/22/2014 10:18	07/22/2014 11:37
WR-429A	L140885-04	Aqueous	07/22/2014 10:23	07/22/2014 11:37
CM-09	L140885-05	Aqueous	07/22/2014 08:00	07/22/2014 11:37
Trip Blank	L140885-06	Aqueous	07/22/2014 07:45	07/22/2014 11:37

All QC results were within QC limits unless otherwise noted.

Ammonia analysis by EPA 350.1 was subcontracted to Eurofins Laboratories.

Ammonia by EPA 350.1 was flagged with the "N1" qualifier.

Samples used for MS/MSD for ammonia analysis were not from this sample set.

See final page for notes and definitions.

Tucson Water Quality Laboratory



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.

Michael E. Dew, Lab Manager

Tucson Water Quality Lab
 4401 S. Tucson Estates Pkwy.
 Tucson, AZ 85735
 (520) 837-2455

Environmental Services - Tucson AZ, 85726	Project: Rio Nuevo Landfill Project Number: P01071 Project Manager: Lori Ehman	Reported: 08/22/2014 13:35
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WR-351A
L140885-01 (Aqueous)

Sampled:
07/22/2014 7:45

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Eurofins Eaton Analytical (AZ0778)

Subcontracted Analyses: Wet Chemistry

AMMONIA AS N	ND	0.05	mg/L	1	'[none]'		07/29/2014	EPA 350.1	N1
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Tucson Water Quality Laboratory

Volatile Organic Compounds by GC/MS

1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	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) 837-2455

Environmental Services - Tucson AZ, 85726	Project: Rio Nuevo Landfill Project Number: P01071 Project Manager: Lori Ehman	Reported: 08/22/2014 13:35
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WR-351A
L140885-01 (Aqueous)

Sampled:
07/22/2014 7:45

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Tucson Water Quality Laboratory

Volatile Organic Compounds by GC/MS

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CHLOROFORM	0.0011	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
DICHLORODIFLUOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	

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Tucson Water Quality Lab
 4401 S. Tucson Estates Pkwy.
 Tucson, AZ 85735
 (520) 837-2455

Environmental Services - Tucson AZ, 85726	Project: Rio Nuevo Landfill Project Number: P01071 Project Manager: Lori Ehman	Reported: 08/22/2014 13:35
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WR-351A
L140885-01 (Aqueous)

Sampled:
07/22/2014 7:45

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Tucson Water Quality Laboratory

Total Metals by ICP

CALCIUM	50.6	2.00	mg/L	1	BH40802	07/31/2014	08/07/2014	EPA 200.7
IRON	3.55	0.0200	mg/L	1	BH40802	07/31/2014	08/07/2014	EPA 200.7
MAGNESIUM	6.87	0.500	mg/L	1	BH40802	07/31/2014	08/07/2014	EPA 200.7
MANGANESE	ND	0.0200	mg/L	1	BH40802	07/31/2014	08/07/2014	EPA 200.7
POTASSIUM	2.66	0.500	mg/L	1	BH40802	07/31/2014	08/07/2014	EPA 200.7
SODIUM	120	2.00	mg/L	1	BH40802	07/31/2014	08/07/2014	EPA 200.7

Wet Chemistry

ALKALINITY, BICARBONATE	254	20.0	mg/L as CaCO3	1	BG42510	07/25/2014	07/25/2014	SM 2320B
ALKALINITY, TOTAL	254	20.0	mg/L as CaCO3	1	BG42510	07/25/2014	07/25/2014	SM 2320B
BROMIDE	0.130	0.100	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
CHLORIDE	17.4	3.00	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
FLUORIDE	0.983	0.100	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
NITRATE AS N	3.14	0.250	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
NITRITE AS N	ND	0.100	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
ORTHO PHOSPHATE AS P	ND	0.200	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
SULFATE	110	5.00	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
TOTAL DISSOLVED SOLIDS	492	10.0	mg/L	1	BG42901	07/25/2014	07/25/2014	SM 2540C
TOTAL ORGANIC CARBON	0.48	0.25	mg/L	1	BG42504	07/26/2014	07/26/2014	SM 5310

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Tucson Water Quality Lab
 4401 S. Tucson Estates Pkwy.
 Tucson, AZ 85735
 (520) 837-2455

Environmental Services - Tucson AZ, 85726	Project: Rio Nuevo Landfill Project Number: P01071 Project Manager: Lori Ehman	Reported: 08/22/2014 13:35
---	--	-------------------------------

WR-351A
L140885-01 (Aqueous)

Sampled:
07/22/2014 7:45

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Tucson Water Quality Laboratory

Volatile Organic Compounds by GC/MS

ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
NAPHTHALENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
TETRACHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
TOTAL TRIHALOMETHANES	0.0011	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
TRICHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
TRICHLOROFLUOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
XYLENES (TOTAL)	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
Surrogate: BROMOFLUOROBENZENE (SURR.)		84 %		70-130	BG42403	07/22/2014	07/22/2014	EPA 8260B	
Surrogate: DIBROMOFLUOROMETHANE (SURR.)		105 %		70-130	BG42403	07/22/2014	07/22/2014	EPA 8260B	
Surrogate: TOLUENE-D8 (SURR.)		96 %		70-130	BG42403	07/22/2014	07/22/2014	EPA 8260B	

Total Metals by ICP

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Tucson Water Quality Lab
 4401 S. Tucson Estates Pkwy.
 Tucson, AZ 85735
 (520) 837-2455

Environmental Services
 -
 Tucson AZ, 85726

Project: Rio Nuevo Landfill
 Project Number: P01071
 Project Manager: Lori Ehman

Reported:
 08/22/2014 13:35

WR-350B
L140885-02 (Aqueous)

Sampled:
 07/22/2014 9:06

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Eurofins Eaton Analytical (AZ0778)

Subcontracted Analyses: Wet Chemistry

AMMONIA AS N	ND	0.05	mg/L	1	'[none]'		07/29/2014	EPA 350.1	NI
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Tucson Water Quality Laboratory

Volatile Organic Compounds by GC/MS

1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	

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Tucson Water Quality Lab
 4401 S. Tucson Estates Pkwy.
 Tucson, AZ 85735
 (520) 837-2455

Environmental Services
 -
 Tucson AZ, 85726

Project: Rio Nuevo Landfill
 Project Number: P01071
 Project Manager: Lori Ehman

Reported:
 08/22/2014 13:35

WR-350B
L140885-02 (Aqueous)

Sampled:
 07/22/2014 9:06

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Tucson Water Quality Laboratory

Volatile Organic Compounds by GC/MS

2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
BENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
BROMOBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
BROMOFORM	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
BROMOMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
CHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
CHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
CHLOROFORM	0.0007	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
CHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
DIBROMOMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
DICHLORODIFLUOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
DICHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
ETHYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B

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Tucson Water Quality Lab
 4401 S. Tucson Estates Pkwy.
 Tucson, AZ 85735
 (520) 837-2455

Environmental Services
 -
 Tucson AZ, 85726

Project: Rio Nuevo Landfill
 Project Number: P01071
 Project Manager: Lori Ehman

Reported:
 08/22/2014 13:35

WR-350B
L140885-02 (Aqueous)

Sampled:
 07/22/2014 9:06

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Tucson Water Quality Laboratory

Volatile Organic Compounds by GC/MS

ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
NAPHTHALENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
TETRACHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
TOTAL TRIHALOMETHANES	0.0007	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
TRICHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
TRICHLOROFUOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
XYLENES (TOTAL)	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
<i>Surrogate: BROMOFLUOROBENZENE (SURR.)</i>		85 %		70-130	BG42403	07/22/2014	07/22/2014	EPA 8260B	
<i>Surrogate: DIBROMOFLUOROMETHANE (SURR.)</i>		101 %		70-130	BG42403	07/22/2014	07/22/2014	EPA 8260B	
<i>Surrogate: TOLUENE-D8 (SURR.)</i>		96 %		70-130	BG42403	07/22/2014	07/22/2014	EPA 8260B	

Total Metals by ICP

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) 837-2455

Environmental Services
 -
 Tucson AZ, 85726

Project: Rio Nuevo Landfill
 Project Number: P01071
 Project Manager: Lori Ehman

Reported:
 08/22/2014 13:35

WR-350B
L140885-02 (Aqueous)

Sampled:
 07/22/2014 9:06

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Tucson Water Quality Laboratory

Total Metals by ICP

CALCIUM	57.0	2.00	mg/L	1	BH40802	07/31/2014	08/07/2014	EPA 200.7
IRON	0.211	0.0200	mg/L	1	BH40802	07/31/2014	08/07/2014	EPA 200.7
MAGNESIUM	9.18	0.500	mg/L	1	BH40802	07/31/2014	08/07/2014	EPA 200.7
MANGANESE	ND	0.0200	mg/L	1	BH40802	07/31/2014	08/07/2014	EPA 200.7
POTASSIUM	2.78	0.500	mg/L	1	BH40802	07/31/2014	08/07/2014	EPA 200.7
SODIUM	150	2.00	mg/L	1	BH40802	07/31/2014	08/07/2014	EPA 200.7

Wet Chemistry

ALKALINITY, BICARBONATE	260	20.0	mg/L as CaCO3	1	BG42510	07/25/2014	07/25/2014	SM 2320B
ALKALINITY, TOTAL	260	20.0	mg/L as CaCO3	1	BG42510	07/25/2014	07/25/2014	SM 2320B
BROMIDE	0.353	0.100	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
CHLORIDE	27.4	3.00	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
FLUORIDE	1.41	0.100	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
NITRATE AS N	3.07	0.250	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
NITRITE AS N	ND	0.100	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
ORTHO PHOSPHATE AS P	ND	0.200	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
SULFATE	190	5.00	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
TOTAL DISSOLVED SOLIDS	667	10.0	mg/L	1	BG42901	07/25/2014	07/25/2014	SM 2540C
TOTAL ORGANIC CARBON	0.36	0.25	mg/L	1	BG42504	07/26/2014	07/26/2014	SM 5310

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Tucson Water Quality Lab
 4401 S. Tucson Estates Pkwy.
 Tucson, AZ 85735
 (520) 837-2455

Environmental Services - Tucson AZ, 85726	Project: Rio Nuevo Landfill Project Number: P01071 Project Manager: Lori Ehman	Reported: 08/22/2014 13:35
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WR-429A
L140885-03 (Aqueous)

Sampled:
07/22/2014 10:18

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Eurofins Eaton Analytical (AZ0778)

Subcontracted Analyses: Wet Chemistry

AMMONIA AS N	ND	0.05	mg/L	1	'[none]'		07/29/2014	EPA 350.1	NI
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Tucson Water Quality Laboratory

Volatile Organic Compounds by GC/MS

1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	

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Tucson Water Quality Lab
 4401 S. Tucson Estates Pkwy.
 Tucson, AZ 85735
 (520) 837-2455

Environmental Services - Tucson AZ, 85726	Project: Rio Nuevo Landfill Project Number: P01071 Project Manager: Lori Ehman	Reported: 08/22/2014 13:35
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WR-429A
L140885-03 (Aqueous)

Sampled:
07/22/2014 10:18

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Tucson Water Quality Laboratory

Volatile Organic Compounds by GC/MS

2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CHLOROFORM	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
DICHLORODIFLUOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	

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Environmental Services - Tucson AZ, 85726	Project: Rio Nuevo Landfill Project Number: P01071 Project Manager: Lori Ehman	Reported: 08/22/2014 13:35
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WR-429A
L140885-03 (Aqueous)

Sampled:
07/22/2014 10:18

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Tucson Water Quality Laboratory

Volatile Organic Compounds by GC/MS

ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
M/P-XYLENES	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
NAPHTHALENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
ORTHO-XYLENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
STYRENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
TETRACHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
TOLUENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
TRICHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
TRICHLOROFLUOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
VINYL CHLORIDE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
XYLENES (TOTAL)	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
<i>Surrogate: BROMOFLUOROBENZENE (SURR.)</i>		84 %	70-130		BG42403	07/22/2014	07/22/2014	EPA 8260B
<i>Surrogate: DIBROMOFLUOROMETHANE (SURR.)</i>		106 %	70-130		BG42403	07/22/2014	07/22/2014	EPA 8260B
<i>Surrogate: TOLUENE-D8 (SURR.)</i>		97 %	70-130		BG42403	07/22/2014	07/22/2014	EPA 8260B

Total Metals by ICP

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 Tucson, AZ 85735
 (520) 837-2455

Environmental Services
 -
 Tucson AZ, 85726

Project: Rio Nuevo Landfill
 Project Number: P01071
 Project Manager: Lori Ehman

Reported:
 08/22/2014 13:35

WR-429A
L140885-03 (Aqueous)

Sampled:
 07/22/2014 10:18

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Tucson Water Quality Laboratory

Total Metals by ICP

CALCIUM	86.6	2.00	mg/L	1	BH40802	07/31/2014	08/07/2014	EPA 200.7
IRON	1.55	0.0200	mg/L	1	BH40802	07/31/2014	08/07/2014	EPA 200.7
MAGNESIUM	17.9	0.500	mg/L	1	BH40802	07/31/2014	08/07/2014	EPA 200.7
MANGANESE	ND	0.0200	mg/L	1	BH40802	07/31/2014	08/07/2014	EPA 200.7
POTASSIUM	3.30	0.500	mg/L	1	BH40802	07/31/2014	08/07/2014	EPA 200.7
SODIUM	134	2.00	mg/L	1	BH40802	07/31/2014	08/07/2014	EPA 200.7

Wet Chemistry

ALKALINITY, BICARBONATE	273	20.0	mg/L as CaCO3	1	BG42510	07/25/2014	07/25/2014	SM 2320B
ALKALINITY, TOTAL	273	20.0	mg/L as CaCO3	1	BG42510	07/25/2014	07/25/2014	SM 2320B
BROMIDE	0.606	0.100	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
CHLORIDE	39.1	3.00	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
FLUORIDE	0.803	0.100	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
NITRATE AS N	2.91	0.250	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
NITRITE AS N	ND	0.100	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
ORTHO PHOSPHATE AS P	ND	0.200	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
SULFATE	232	5.00	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
TOTAL DISSOLVED SOLIDS	724	10.0	mg/L	1	BG42901	07/25/2014	07/25/2014	SM 2540C
TOTAL ORGANIC CARBON	0.69	0.25	mg/L	1	BG42504	07/26/2014	07/26/2014	SM 5310

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Environmental Services
 -
 Tucson AZ, 85726

Project: Rio Nuevo Landfill
 Project Number: P01071
 Project Manager: Lori Ehman

Reported:
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WR-429A
L140885-04 (Aqueous)

Sampled:
 07/22/2014 10:23

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Eurofins Eaton Analytical (AZ0778)

Subcontracted Analyses: Wet Chemistry

AMMONIA AS N	ND	0.05	mg/L	1	'[none]'		07/29/2014	EPA 350.1	NI
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Tucson Water Quality Laboratory

Volatile Organic Compounds by GC/MS

1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	

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Environmental Services - Tucson AZ, 85726	Project: Rio Nuevo Landfill Project Number: P01071 Project Manager: Lori Ehman	Reported: 08/22/2014 13:35
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WR-429A
L140885-04 (Aqueous)

Sampled:
07/22/2014 10:23

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Tucson Water Quality Laboratory

Volatile Organic Compounds by GC/MS

2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
BENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CHLOROFORM	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
DICHLORODIFLUOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	

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Environmental Services - Tucson AZ, 85726	Project: Rio Nuevo Landfill Project Number: P01071 Project Manager: Lori Ehman	Reported: 08/22/2014 13:35
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WR-429A
L140885-04 (Aqueous)

Sampled:
07/22/2014 10:23

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Tucson Water Quality Laboratory

Volatile Organic Compounds by GC/MS

ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
M/P-XYLENES	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
NAPHTHALENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
ORTHO-XYLENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
STYRENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
TETRACHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
TOLUENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
TRICHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
TRICHLOROFLUOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
VINYL CHLORIDE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
XYLENES (TOTAL)	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B
<i>Surrogate: BROMOFLUOROBENZENE (SURR.)</i>		85 %	70-130		BG42403	07/22/2014	07/22/2014	EPA 8260B
<i>Surrogate: DIBROMOFLUOROMETHANE (SURR.)</i>		106 %	70-130		BG42403	07/22/2014	07/22/2014	EPA 8260B
<i>Surrogate: TOLUENE-D8 (SURR.)</i>		95 %	70-130		BG42403	07/22/2014	07/22/2014	EPA 8260B

Total Metals by ICP

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Tucson Water Quality Lab
 4401 S. Tucson Estates Pkwy.
 Tucson, AZ 85735
 (520) 837-2455

Environmental Services - Tucson AZ, 85726	Project: Rio Nuevo Landfill Project Number: P01071 Project Manager: Lori Ehman	Reported: 08/22/2014 13:35
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WR-429A
L140885-04 (Aqueous)

Sampled:
07/22/2014 10:23

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Tucson Water Quality Laboratory

Total Metals by ICP

CALCIUM	84.7	2.00	mg/L	1	BH40802	07/31/2014	08/07/2014	EPA 200.7
IRON	1.20	0.0200	mg/L	1	BH40802	07/31/2014	08/07/2014	EPA 200.7
MAGNESIUM	17.9	0.500	mg/L	1	BH40802	07/31/2014	08/07/2014	EPA 200.7
MANGANESE	ND	0.0200	mg/L	1	BH40802	07/31/2014	08/07/2014	EPA 200.7
POTASSIUM	3.46	0.500	mg/L	1	BH40802	07/31/2014	08/07/2014	EPA 200.7
SODIUM	141	2.00	mg/L	1	BH40802	07/31/2014	08/07/2014	EPA 200.7

Wet Chemistry

ALKALINITY, BICARBONATE	279	20.0	mg/L as CaCO3	1	BG42510	07/25/2014	07/25/2014	SM 2320B
ALKALINITY, TOTAL	279	20.0	mg/L as CaCO3	1	BG42510	07/25/2014	07/25/2014	SM 2320B
BROMIDE	0.601	0.100	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
CHLORIDE	38.8	3.00	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
FLUORIDE	0.810	0.100	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
NITRATE AS N	2.91	0.250	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
NITRITE AS N	ND	0.100	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
ORTHO PHOSPHATE AS P	ND	0.200	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
SULFATE	229	5.00	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0
TOTAL DISSOLVED SOLIDS	719	10.0	mg/L	1	BG42901	07/25/2014	07/25/2014	SM 2540C
TOTAL ORGANIC CARBON	0.60	0.25	mg/L	1	BG42504	07/26/2014	07/26/2014	SM 5310

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Tucson Water Quality Lab
 4401 S. Tucson Estates Pkwy.
 Tucson, AZ 85735
 (520) 837-2455

Environmental Services
 -
 Tucson AZ, 85726

Project: Rio Nuevo Landfill
 Project Number: P01071
 Project Manager: Lori Ehman

Reported:
 08/22/2014 13:35

CM-09
L140885-05 (Aqueous)

Sampled:
 07/22/2014 8:00

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Tucson Water Quality Laboratory

Wet Chemistry

BROMIDE	0.418	0.100	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0	
CHLORIDE	38.5	3.00	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0	
FLUORIDE	0.745	0.100	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0	
NITRATE AS N	3.00	0.250	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0	
NITRITE AS N	ND	0.100	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0	
ORTHO PHOSPHATE AS P	ND	0.200	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0	
SULFATE	93.2	5.00	mg/L	1	BG42303	07/22/2014	07/22/2014	EPA 300.0	

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Tucson Water Quality Lab
 4401 S. Tucson Estates Pkwy.
 Tucson, AZ 85735
 (520) 837-2455

Environmental Services
 -
 Tucson AZ, 85726

Project: Rio Nuevo Landfill
 Project Number: P01071
 Project Manager: Lori Ehman

Reported:
 08/22/2014 13:35

Trip Blank
L140885-06 (Aqueous)

Sampled:
 07/22/2014 7:45

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Tucson Water Quality Laboratory

Volatile Organic Compounds by GC/MS

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1-DICHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1-DICHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,1-DICHLOROPROPENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2-DICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2-DICHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,3-DICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,3-DICHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
1,4-DICHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
2,2-DICHLOROPROPANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
2-CHLOROTOLUENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
4-CHLOROTOLUENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	

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Tucson Water Quality Lab
 4401 S. Tucson Estates Pkwy.
 Tucson, AZ 85735
 (520) 837-2455

Environmental Services - Tucson AZ, 85726	Project: Rio Nuevo Landfill Project Number: P01071 Project Manager: Lori Ehman	Reported: 08/22/2014 13:35
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Trip Blank
L140885-06 (Aqueous)

Sampled:
07/22/2014 7:45

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Tucson Water Quality Laboratory

Volatile Organic Compounds by GC/MS

BENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
BROMOBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
BROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
BROMODICHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
BROMOFORM	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
BROMOMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CARBON TETRACHLORIDE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CHLOROBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CHLOROETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CHLOROFORM	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
DIBROMOMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
DICHLORODIFLUOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
DICHLOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
ETHYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
ETHYLENE DIBROMIDE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
HEXACHLOROBUTADIENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
ISOPROPYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
M/P-XYLENES	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	

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Tucson Water Quality Lab
 4401 S. Tucson Estates Pkwy.
 Tucson, AZ 85735
 (520) 837-2455

Environmental Services - Tucson AZ, 85726	Project: Rio Nuevo Landfill Project Number: P01071 Project Manager: Lori Ehman	Reported: 08/22/2014 13:35
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Trip Blank
L140885-06 (Aqueous)

Sampled:
07/22/2014 7:45

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Tucson Water Quality Laboratory

Volatile Organic Compounds by GC/MS

NAPHTHALENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
N-BUTYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
N-PROPYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
ORTHO-XYLENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
SEC-BUTYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
STYRENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
TERT-BUTYLBENZENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
TETRACHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
TOLUENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
TRICHLOROETHENE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
TRICHLOROFLUOROMETHANE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
VINYL CHLORIDE	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
XYLENES (TOTAL)	ND	0.0005	mg/L	1	BG42403	07/22/2014	07/22/2014	EPA 8260B	
<i>Surrogate: BROMOFLUOROBENZENE (SURR.)</i>		83 %		70-130	BG42403	07/22/2014	07/22/2014	EPA 8260B	
<i>Surrogate: DIBROMOFLUOROMETHANE (SURR.)</i>		107 %		70-130	BG42403	07/22/2014	07/22/2014	EPA 8260B	
<i>Surrogate: TOLUENE-D8 (SURR.)</i>		95 %		70-130	BG42403	07/22/2014	07/22/2014	EPA 8260B	

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Tucson Water Quality Lab
 4401 S. Tucson Estates Pkwy.
 Tucson, AZ 85735
 (520) 837-2455

Environmental Services	Project: Rio Nuevo Landfill	Reported:
-	Project Number: P01071	08/22/2014 13:35
Tucson AZ, 85726	Project Manager: Lori Ehman	

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
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Blank (BG42403-BLK1)

Prepared & Analyzed: 07/22/2014

Batch BG42403 - DEFAULT ORGANIC PREP

1,1,1,2-TETRACHLOROETHANE	ND	0.0005	mg/L							
1,1,1-TRICHLOROETHANE	ND	0.0005	mg/L							
1,1,2,2-TETRACHLOROETHANE	ND	0.0005	mg/L							
1,1,2-TRICHLOROETHANE	ND	0.0005	mg/L							
1,1-DICHLOROETHANE	ND	0.0005	mg/L							
1,1-DICHLOROETHENE	ND	0.0005	mg/L							
1,1-DICHLOROPROPENE	ND	0.0005	mg/L							
1,2,3-TRICHLOROBENZENE	ND	0.0005	mg/L							
1,2,3-TRICHLOROPROPANE	ND	0.0005	mg/L							
1,2,4-TRICHLOROBENZENE	ND	0.0005	mg/L							
1,2,4-TRIMETHYLBENZENE	ND	0.0005	mg/L							
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.0005	mg/L							
1,2-DICHLOROBENZENE	ND	0.0005	mg/L							
1,2-DICHLOROETHANE	ND	0.0005	mg/L							
1,2-DICHLOROPROPANE	ND	0.0005	mg/L							
1,3,5-TRIMETHYLBENZENE	ND	0.0005	mg/L							
1,3-DICHLOROBENZENE	ND	0.0005	mg/L							
1,3-DICHLOROPROPANE	ND	0.0005	mg/L							
1,4-DICHLOROBENZENE	ND	0.0005	mg/L							
2,2-DICHLOROPROPANE	ND	0.0005	mg/L							
2-CHLOROTOLUENE	ND	0.0005	mg/L							
4-CHLOROTOLUENE	ND	0.0005	mg/L							
4-ISOPROPYLTOLUENE	ND	0.0005	mg/L							
BENZENE	ND	0.0005	mg/L							
BROMOBENZENE	ND	0.0005	mg/L							

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Tucson Water Quality Lab
 4401 S. Tucson Estates Pkwy.
 Tucson, AZ 85735
 (520) 837-2455

Environmental Services
 -
 Tucson AZ, 85726

Project: Rio Nuevo Landfill
 Project Number: P01071
 Project Manager: Lori Ehman

Reported:
 08/22/2014 13:35

Volatile Organic Compounds by GC/MS - Quality Control
Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Notes
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Blank (BG42403-BLK1)

Prepared & Analyzed: 07/22/2014

Batch BG42403 - DEFAULT ORGANIC PREP

BROMOCHLOROMETHANE	ND	0.0005	mg/L							
BROMODICHLOROMETHANE	ND	0.0005	mg/L							
BROMOFORM	ND	0.0005	mg/L							
BROMOMETHANE	ND	0.0005	mg/L							
CARBON TETRACHLORIDE	ND	0.0005	mg/L							
CHLOROBENZENE	ND	0.0005	mg/L							
CHLOROETHANE	ND	0.0005	mg/L							
CHLOROFORM	ND	0.0005	mg/L							
CHLOROMETHANE	ND	0.0005	mg/L							
CIS-1,2-DICHLOROETHENE	ND	0.0005	mg/L							
CIS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L							
DIBROMOCHLOROMETHANE	ND	0.0005	mg/L							
DIBROMOMETHANE	ND	0.0005	mg/L							
DICHLORODIFLUOROMETHANE	ND	0.0005	mg/L							
DICHLOROMETHANE	ND	0.0005	mg/L							
ETHYLBENZENE	ND	0.0005	mg/L							
ETHYLENE DIBROMIDE	ND	0.0005	mg/L							
HEXACHLOROBUTADIENE	ND	0.0005	mg/L							
ISOPROPYLBENZENE	ND	0.0005	mg/L							
M/P-XYLENES	ND	0.0005	mg/L							
METHYL-TERT-BUTYL ETHER	ND	0.0005	mg/L							
NAPHTHALENE	ND	0.0005	mg/L							
N-BUTYLBENZENE	ND	0.0005	mg/L							
N-PROPYLBENZENE	ND	0.0005	mg/L							
ORTHO-XYLENE	ND	0.0005	mg/L							
SEC-BUTYLBENZENE	ND	0.0005	mg/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.

Tucson Water Quality Lab
 4401 S. Tucson Estates Pkwy.
 Tucson, AZ 85735
 (520) 837-2455

Environmental Services
 -
 Tucson AZ, 85726

Project: Rio Nuevo Landfill
 Project Number: P01071
 Project Manager: Lori Ehman

Reported:
 08/22/2014 13:35

Volatile Organic Compounds by GC/MS - Quality Control
Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Notes
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Blank (BG42403-BLK1)

Prepared & Analyzed: 07/22/2014

Batch BG42403 - DEFAULT ORGANIC PREP

STYRENE	ND	0.0005	mg/L							
TERT-BUTYLBENZENE	ND	0.0005	mg/L							
TETRACHLOROETHENE	ND	0.0005	mg/L							
TOLUENE	ND	0.0005	mg/L							
TOTAL TRIHALOMETHANES	ND	0.0005	mg/L							
TRANS-1,2-DICHLOROETHENE	ND	0.0005	mg/L							
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	mg/L							
TRICHLOROETHENE	ND	0.0005	mg/L							
TRICHLOROFLUOROMETHANE	ND	0.0005	mg/L							
VINYL CHLORIDE	ND	0.0005	mg/L							
XYLENES (TOTAL)	ND	0.0005	mg/L							
<i>Surrogate: BROMOFLUOROBENZENE (SURR.)</i>	4.35		ug/L	5.00		87	70-130			
<i>Surrogate: DIBROMOFLUOROMETHANE (SURR.)</i>	5.37		ug/L	5.00		107	70-130			
<i>Surrogate: TOLUENE-D8 (SURR.)</i>	4.84		ug/L	5.00		97	70-130			

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) 837-2455

Environmental Services
 -
 Tucson AZ, 85726

Project: Rio Nuevo Landfill
 Project Number: P01071
 Project Manager: Lori Ehman

Reported:
 08/22/2014 13:35

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
Matrix Spike (BG42403-MS1)		Source: L140885-01		Prepared & Analyzed: 07/22/2014						
Batch BG42403 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	5.93		ug/L	5.00	ND	119	70-130			
1,1,1-TRICHLOROETHANE	5.34		ug/L	5.00	ND	107	70-130			
1,1,2,2-TETRACHLOROETHANE	5.86		ug/L	5.00	ND	117	70-130			
1,1,2-TRICHLOROETHANE	5.37		ug/L	5.00	ND	107	70-130			
1,1-DICHLOROETHANE	5.42		ug/L	5.00	ND	108	70-130			
1,1-DICHLOROETHENE	5.46		ug/L	5.00	ND	109	70-130			
1,1-DICHLOROPROPENE	5.18		ug/L	5.00	ND	104	70-130			
1,2,3-TRICHLOROBENZENE	4.85		ug/L	5.00	ND	97	70-130			
1,2,3-TRICHLOROPROPANE	5.63		ug/L	5.00	ND	113	70-130			
1,2,4-TRICHLOROBENZENE	4.88		ug/L	5.00	ND	98	70-130			
1,2,4-TRIMETHYLBENZENE	5.62		ug/L	5.00	ND	112	70-130			
1,2-DIBROMO-3-CHLOROPROPANE	5.28		ug/L	5.00	ND	106	70-130			
1,2-DICHLOROBENZENE	5.45		ug/L	5.00	ND	109	70-130			
1,2-DICHLOROETHANE	5.56		ug/L	5.00	ND	111	70-130			
1,2-DICHLOROPROPANE	5.34		ug/L	5.00	ND	107	70-130			
1,3,5-TRIMETHYLBENZENE	5.52		ug/L	5.00	ND	110	70-130			
1,3-DICHLOROBENZENE	5.87		ug/L	5.00	ND	117	70-130			
1,3-DICHLOROPROPANE	5.32		ug/L	5.00	ND	106	70-130			
1,4-DICHLOROBENZENE	6.03		ug/L	5.00	ND	121	70-130			
2,2-DICHLOROPROPANE	5.94		ug/L	5.00	ND	119	70-130			
2-CHLOROTOLUENE	5.60		ug/L	5.00	ND	112	70-130			
4-CHLOROTOLUENE	5.62		ug/L	5.00	ND	112	70-130			
4-ISOPROPYLTOLUENE	5.65		ug/L	5.00	ND	113	70-130			
BENZENE	5.05		ug/L	5.00	ND	101	70-130			
BROMOBENZENE	5.47		ug/L	5.00	ND	109	70-130			

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Tucson Water Quality Lab
 4401 S. Tucson Estates Pkwy.
 Tucson, AZ 85735
 (520) 837-2455

Environmental Services
 -
 Tucson AZ, 85726

Project: Rio Nuevo Landfill
 Project Number: P01071
 Project Manager: Lori Ehman

Reported:
 08/22/2014 13:35

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
Matrix Spike (BG42403-MS1)		Source: L140885-01		Prepared & Analyzed: 07/22/2014						
Batch BG42403 - DEFAULT ORGANIC PREP										
BROMOCHLOROMETHANE	5.38		ug/L	5.00	ND	108	70-130			
BROMODICHLOROMETHANE	5.55		ug/L	5.00	ND	111	70-130			
BROMOFORM	5.60		ug/L	5.00	ND	112	70-130			
BROMOMETHANE	4.73		ug/L	5.00	ND	95	70-130			
CARBON TETRACHLORIDE	5.49		ug/L	5.00	ND	110	70-130			
CHLOROBENZENE	5.28		ug/L	5.00	ND	106	70-130			
CHLOROETHANE	5.15		ug/L	5.00	ND	103	70-130			
CHLOROFORM	6.50		ug/L	5.00	1.09	108	70-130			
CHLOROMETHANE	4.84		ug/L	5.00	ND	97	70-130			
CIS-1,2-DICHLOROETHENE	5.18		ug/L	5.00	ND	104	70-130			
CIS-1,3-DICHLOROPROPENE	4.95		ug/L	5.00	ND	99	70-130			
DIBROMOCHLOROMETHANE	5.18		ug/L	5.00	ND	104	70-130			
DIBROMOMETHANE	5.32		ug/L	5.00	ND	106	70-130			
DICHLORODIFLUOROMETHANE	4.25		ug/L	5.00	ND	85	70-130			
DICHLOROMETHANE	5.64		ug/L	5.00	ND	113	70-130			
ETHYLBENZENE	5.20		ug/L	5.00	ND	104	70-130			
ETHYLENE DIBROMIDE	5.09		ug/L	5.00	ND	102	70-130			
HEXACHLOROBUTADIENE	6.03		ug/L	5.00	ND	121	70-130			
ISOPROPYLBENZENE	5.44		ug/L	5.00	ND	109	70-130			
M/P-XYLENES	10.9		ug/L	10.0	ND	109	70-130			
METHYL-TERT-BUTYL ETHER	4.81		ug/L	5.00	ND	96	70-130			
NAPHTHALENE	4.47		ug/L	5.00	ND	89	70-130			
N-BUTYLBENZENE	5.44		ug/L	5.00	ND	109	70-130			
N-PROPYLBENZENE	5.49		ug/L	5.00	ND	110	70-130			
ORTHO-XYLENE	5.37		ug/L	5.00	ND	107	70-130			
SEC-BUTYLBENZENE	5.71		ug/L	5.00	ND	114	70-130			

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Environmental Services
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Project: Rio Nuevo Landfill
 Project Number: P01071
 Project Manager: Lori Ehman

Reported:
 08/22/2014 13:35

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
Matrix Spike (BG42403-MS1)		Source: L140885-01		Prepared & Analyzed: 07/22/2014						
Batch BG42403 - DEFAULT ORGANIC PREP										
STYRENE	5.53		ug/L	5.00	ND	111	70-130			
TERT-BUTYLBENZENE	5.33		ug/L	5.00	ND	107	70-130			
TETRACHLOROETHENE	5.75		ug/L	5.00	ND	115	70-130			
TOLUENE	5.03		ug/L	5.00	ND	101	70-130			
TRANS-1,2-DICHLOROETHENE	5.53		ug/L	5.00	ND	111	70-130			
TRANS-1,3-DICHLOROPROPENE	5.56		ug/L	5.00	ND	111	70-130			
TRICHLOROETHENE	5.33		ug/L	5.00	ND	107	70-130			
TRICHLOROFLUOROMETHANE	5.80		ug/L	5.00	ND	116	70-130			
VINYL CHLORIDE	4.95		ug/L	5.00	ND	99	70-130			
<i>Surrogate: BROMOFLUOROBENZENE (SURR.)</i>	5.00		ug/L	5.00		100	70-130			
<i>Surrogate: DIBROMOFLUOROMETHANE (SURR.)</i>	5.08		ug/L	5.00		102	70-130			
<i>Surrogate: TOLUENE-D8 (SURR.)</i>	4.88		ug/L	5.00		98	70-130			

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Environmental Services
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Reported:
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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
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Matrix Spike Dup (BG42403-MSD1)

Source: L140885-01

Prepared & Analyzed: 07/22/2014

Batch BG42403 - DEFAULT ORGANIC PREP

1,1,1,2-TETRACHLOROETHANE	5.71		ug/L	5.00	ND	114	70-130	4	20	
1,1,1-TRICHLOROETHANE	5.30		ug/L	5.00	ND	106	70-130	0.8	20	
1,1,2,2-TETRACHLOROETHANE	5.78		ug/L	5.00	ND	116	70-130	1	20	
1,1,2-TRICHLOROETHANE	5.28		ug/L	5.00	ND	106	70-130	2	20	
1,1-DICHLOROETHANE	5.28		ug/L	5.00	ND	106	70-130	3	20	
1,1-DICHLOROETHENE	5.45		ug/L	5.00	ND	109	70-130	0.2	20	
1,1-DICHLOROPROPENE	5.11		ug/L	5.00	ND	102	70-130	1	20	
1,2,3-TRICHLOROBENZENE	4.74		ug/L	5.00	ND	95	70-130	2	20	
1,2,3-TRICHLOROPROPANE	5.67		ug/L	5.00	ND	113	70-130	0.7	20	
1,2,4-TRICHLOROBENZENE	4.64		ug/L	5.00	ND	93	70-130	5	20	
1,2,4-TRIMETHYLBENZENE	5.48		ug/L	5.00	ND	110	70-130	3	20	
1,2-DIBROMO-3-CHLOROPROPANE	5.24		ug/L	5.00	ND	105	70-130	0.8	20	
1,2-DICHLOROBENZENE	5.33		ug/L	5.00	ND	107	70-130	2	20	
1,2-DICHLOROETHANE	5.30		ug/L	5.00	ND	106	70-130	5	20	
1,2-DICHLOROPROPANE	5.15		ug/L	5.00	ND	103	70-130	4	20	
1,3,5-TRIMETHYLBENZENE	5.36		ug/L	5.00	ND	107	70-130	3	20	
1,3-DICHLOROBENZENE	5.61		ug/L	5.00	ND	112	70-130	5	20	
1,3-DICHLOROPROPANE	5.12		ug/L	5.00	ND	102	70-130	4	20	
1,4-DICHLOROBENZENE	5.79		ug/L	5.00	ND	116	70-130	4	20	
2,2-DICHLOROPROPANE	5.61		ug/L	5.00	ND	112	70-130	6	20	
2-CHLOROTOLUENE	5.54		ug/L	5.00	ND	111	70-130	1	20	
4-CHLOROTOLUENE	5.65		ug/L	5.00	ND	113	70-130	0.5	20	
4-ISOPROPYLTOLUENE	5.38		ug/L	5.00	ND	108	70-130	5	20	
BENZENE	4.95		ug/L	5.00	ND	99	70-130	2	20	
BROMOBENZENE	5.43		ug/L	5.00	ND	109	70-130	0.7	20	

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Tucson Water Quality Lab
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Environmental Services - Tucson AZ, 85726	Project: Rio Nuevo Landfill Project Number: P01071 Project Manager: Lori Ehman	Reported: 08/22/2014 13:35
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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
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Matrix Spike Dup (BG42403-MSD1) **Source: L140885-01** Prepared & Analyzed: 07/22/2014

Batch BG42403 - DEFAULT ORGANIC PREP

BROMOCHLOROMETHANE	5.24		ug/L	5.00	ND	105	70-130	3	20	
BROMODICHLOROMETHANE	5.39		ug/L	5.00	ND	108	70-130	3	20	
BROMOFORM	5.58		ug/L	5.00	ND	112	70-130	0.4	20	
BROMOMETHANE	4.61		ug/L	5.00	ND	92	70-130	3	20	
CARBON TETRACHLORIDE	5.35		ug/L	5.00	ND	107	70-130	3	20	
CHLOROBENZENE	5.24		ug/L	5.00	ND	105	70-130	0.8	20	
CHLOROETHANE	4.99		ug/L	5.00	ND	100	70-130	3	20	
CHLOROFORM	6.31		ug/L	5.00	1.09	104	70-130	4	20	
CHLOROMETHANE	4.56		ug/L	5.00	ND	91	70-130	6	20	
CIS-1,2-DICHLOROETHENE	4.97		ug/L	5.00	ND	99	70-130	4	20	
CIS-1,3-DICHLOROPROPENE	4.96		ug/L	5.00	ND	99	70-130	0.2	20	
DIBROMOCHLOROMETHANE	5.00		ug/L	5.00	ND	100	70-130	4	20	
DIBROMOMETHANE	5.30		ug/L	5.00	ND	106	70-130	0.4	20	
DICHLORODIFLUOROMETHANE	4.05		ug/L	5.00	ND	81	70-130	5	20	
DICHLOROMETHANE	5.46		ug/L	5.00	ND	109	70-130	3	20	
ETHYLBENZENE	5.16		ug/L	5.00	ND	103	70-130	0.8	20	
ETHYLENE DIBROMIDE	5.12		ug/L	5.00	ND	102	70-130	0.6	20	
HEXACHLOROBUTADIENE	5.95		ug/L	5.00	ND	119	70-130	1	20	
ISOPROPYLBENZENE	5.39		ug/L	5.00	ND	108	70-130	0.9	20	
M/P-XYLENES	10.7		ug/L	10.0	ND	107	70-130	2	20	
METHYL-TERT-BUTYL ETHER	4.88		ug/L	5.00	ND	98	70-130	1	20	
NAPHTHALENE	4.49		ug/L	5.00	ND	90	70-130	0.4	20	
N-BUTYLBENZENE	5.32		ug/L	5.00	ND	106	70-130	2	20	
N-PROPYLBENZENE	5.40		ug/L	5.00	ND	108	70-130	2	20	
ORTHO-XYLENE	5.28		ug/L	5.00	ND	106	70-130	2	20	
SEC-BUTYLBENZENE	5.67		ug/L	5.00	ND	113	70-130	0.7	20	

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Environmental Services
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 Tucson AZ, 85726

Project: Rio Nuevo Landfill
 Project Number: P01071
 Project Manager: Lori Ehman

Reported:
 08/22/2014 13:35

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
Matrix Spike Dup (BG42403-MSD1)		Source: L140885-01		Prepared & Analyzed: 07/22/2014						
Batch BG42403 - DEFAULT ORGANIC PREP										
STYRENE	5.47		ug/L	5.00	ND	109	70-130	1	20	
TERT-BUTYLBENZENE	5.34		ug/L	5.00	ND	107	70-130	0.2	20	
TETRACHLOROETHENE	5.49		ug/L	5.00	ND	110	70-130	5	20	
TOLUENE	4.89		ug/L	5.00	ND	98	70-130	3	20	
TRANS-1,2-DICHLOROETHENE	5.37		ug/L	5.00	ND	107	70-130	3	20	
TRANS-1,3-DICHLOROPROPENE	5.44		ug/L	5.00	ND	109	70-130	2	20	
TRICHLOROETHENE	5.17		ug/L	5.00	ND	103	70-130	3	20	
TRICHLOROFLUOROMETHANE	5.60		ug/L	5.00	ND	112	70-130	4	20	
VINYL CHLORIDE	4.66		ug/L	5.00	ND	93	70-130	6	20	
<i>Surrogate: BROMOFLUOROBENZENE (SURR.)</i>	5.09		ug/L	5.00		102	70-130			
<i>Surrogate: DIBROMOFLUOROMETHANE (SURR.)</i>	5.12		ug/L	5.00		102	70-130			
<i>Surrogate: TOLUENE-D8 (SURR.)</i>	4.82		ug/L	5.00		96	70-130			

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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
Reference (BG42403-SRM1)					Prepared & Analyzed: 07/22/2014					
Batch BG42403 - DEFAULT ORGANIC PREP										
1,1,1,2-TETRACHLOROETHANE	5.49		ug/L	5.00		110	70-130			
1,1,1-TRICHLOROETHANE	4.94		ug/L	5.00		99	70-130			
1,1,2,2-TETRACHLOROETHANE	5.76		ug/L	5.00		115	70-130			
1,1,2-TRICHLOROETHANE	5.05		ug/L	5.00		101	70-130			
1,1-DICHLOROETHANE	5.12		ug/L	5.00		102	70-130			
1,1-DICHLOROETHENE	5.19		ug/L	5.00		104	70-130			
1,1-DICHLOROPROPENE	4.80		ug/L	5.00		96	70-130			
1,2,3-TRICHLOROBENZENE	4.69		ug/L	5.00		94	70-130			
1,2,3-TRICHLOROPROPANE	5.54		ug/L	5.00		111	70-130			
1,2,4-TRICHLOROBENZENE	4.56		ug/L	5.00		91	70-130			
1,2,4-TRIMETHYLBENZENE	5.14		ug/L	5.00		103	70-130			
1,2-DIBROMO-3-CHLOROPROPANE	5.15		ug/L	5.00		103	70-130			
1,2-DICHLOROBENZENE	5.09		ug/L	5.00		102	70-130			
1,2-DICHLOROETHANE	5.28		ug/L	5.00		106	70-130			
1,2-DICHLOROPROPANE	5.15		ug/L	5.00		103	70-130			
1,3,5-TRIMETHYLBENZENE	5.02		ug/L	5.00		100	70-130			
1,3-DICHLOROBENZENE	5.51		ug/L	5.00		110	70-130			
1,3-DICHLOROPROPANE	5.10		ug/L	5.00		102	70-130			
1,4-DICHLOROBENZENE	5.53		ug/L	5.00		111	70-130			
2,2-DICHLOROPROPANE	5.36		ug/L	5.00		107	70-130			
2-CHLOROTOLUENE	5.08		ug/L	5.00		102	70-130			
4-CHLOROTOLUENE	5.17		ug/L	5.00		103	70-130			
4-ISOPROPYLTOLUENE	5.01		ug/L	5.00		100	70-130			
BENZENE	4.68		ug/L	5.00		94	70-130			
BROMOBENZENE	5.19		ug/L	5.00		104	70-130			

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Environmental Services
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 Tucson AZ, 85726

Project: Rio Nuevo Landfill
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 Project Manager: Lori Ehman

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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
Reference (BG42403-SRM1)					Prepared & Analyzed: 07/22/2014					
Batch BG42403 - DEFAULT ORGANIC PREP										
BROMOCHLOROMETHANE	5.24		ug/L	5.00		105	70-130			
BROMODICHLOROMETHANE	5.15		ug/L	5.00		103	70-130			
BROMOFORM	5.34		ug/L	5.00		107	70-130			
BROMOMETHANE	4.06		ug/L	5.00		81	70-130			
CARBON TETRACHLORIDE	4.97		ug/L	5.00		99	70-130			
CHLOROBENZENE	5.01		ug/L	5.00		100	70-130			
CHLOROETHANE	5.18		ug/L	5.00		104	70-130			
CHLOROFORM	4.96		ug/L	5.00		99	70-130			
CHLOROMETHANE	4.60		ug/L	5.00		92	70-130			
CIS-1,2-DICHLOROETHENE	4.69		ug/L	5.00		94	70-130			
CIS-1,3-DICHLOROPROPENE	4.64		ug/L	5.00		93	70-130			
DIBROMOCHLOROMETHANE	5.00		ug/L	5.00		100	70-130			
DIBROMOMETHANE	5.17		ug/L	5.00		103	70-130			
DICHLORODIFLUOROMETHANE	3.80		ug/L	5.00		76	70-130			
DICHLOROMETHANE	5.18		ug/L	5.00		104	70-130			
ETHYLBENZENE	4.79		ug/L	5.00		96	70-130			
ETHYLENE DIBROMIDE	4.97		ug/L	5.00		99	70-130			
HEXACHLOROBUTADIENE	5.33		ug/L	5.00		107	70-130			
ISOPROPYLBENZENE	4.95		ug/L	5.00		99	70-130			
M/P-XYLENES	10.2		ug/L	10.0		102	70-130			
METHYL-TERT-BUTYL ETHER	4.75		ug/L	5.00		95	70-130			
NAPHTHALENE	4.56		ug/L	5.00		91	70-130			
N-BUTYLBENZENE	4.87		ug/L	5.00		97	70-130			
N-PROPYLBENZENE	4.88		ug/L	5.00		98	70-130			
ORTHO-XYLENE	4.91		ug/L	5.00		98	70-130			
SEC-BUTYLBENZENE	5.20		ug/L	5.00		104	70-130			

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Environmental Services - Tucson AZ, 85726	Project: Rio Nuevo Landfill Project Number: P01071 Project Manager: Lori Ehman	Reported: 08/22/2014 13:35
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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
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Reference (BG42403-SRM1)

Prepared & Analyzed: 07/22/2014

Batch BG42403 - DEFAULT ORGANIC PREP

STYRENE	5.25		ug/L	5.00		105	70-130			
TERT-BUTYLBENZENE	4.80		ug/L	5.00		96	70-130			
TETRACHLOROETHENE	5.07		ug/L	5.00		101	70-130			
TOLUENE	4.62		ug/L	5.00		92	70-130			
TRANS-1,2-DICHLOROETHENE	5.05		ug/L	5.00		101	70-130			
TRANS-1,3-DICHLOROPROPENE	5.13		ug/L	5.00		103	70-130			
TRICHLOROETHENE	4.83		ug/L	5.00		97	70-130			
TRICHLOROFLUOROMETHANE	5.27		ug/L	5.00		105	70-130			
VINYL CHLORIDE	4.44		ug/L	5.00		89	70-130			
<i>Surrogate: BROMOFLUOROBENZENE (SURR.)</i>	5.16		ug/L	5.00		103	70-130			
<i>Surrogate: DIBROMOFLUOROMETHANE (SURR.)</i>	5.28		ug/L	5.00		106	70-130			
<i>Surrogate: TOLUENE-D8 (SURR.)</i>	4.87		ug/L	5.00		97	70-130			

Total Metals by ICP - Quality Control
Tucson Water Quality Laboratory

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) 837-2455

Environmental Services
 -
 Tucson AZ, 85726

Project: Rio Nuevo Landfill
 Project Number: P01071
 Project Manager: Lori Ehman

Reported:
 08/22/2014 13:35

Total Metals by ICP - Quality Control
Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Notes
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Blank (BH40802-BLK1)

Prepared: 07/31/2014 Analyzed: 08/07/2014

Batch BH40802 - EPA 200.7/200.8

CALCIUM	ND	2.00	mg/L							
IRON	ND	0.0200	mg/L							
MAGNESIUM	ND	0.500	mg/L							
MANGANESE	ND	0.0200	mg/L							
POTASSIUM	ND	0.500	mg/L							
SODIUM	ND	2.00	mg/L							

LCS (BH40802-BS1)

Prepared: 07/31/2014 Analyzed: 08/07/2014

Batch BH40802 - EPA 200.7/200.8

CALCIUM	20.0	2.00	mg/L	20.0		100	85-115			
IRON	1.02	0.0200	mg/L	1.00		102	85-115			
MAGNESIUM	5.02	0.500	mg/L	5.00		100	85-115			
MANGANESE	0.201	0.0200	mg/L	0.200		100	85-115			
POTASSIUM	1.98	0.500	mg/L	2.00		98.9	85-115			
SODIUM	20.1	2.00	mg/L	20.0		101	85-115			

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 Project Number: P01071
 Project Manager: Lori Ehman

Reported:
 08/22/2014 13:35

Total Metals by ICP - Quality Control
Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Matrix Spike (BH40802-MS1) Source: L140877-02 Prepared: 07/31/2014 Analyzed: 08/07/2014

Batch BH40802 - EPA 200.7/200.8

CALCIUM	117	2.00	mg/L	20.0	97.0	101	70-130			
IRON	1.24	0.0200	mg/L	1.00	0.244	99.1	70-130			
MAGNESIUM	18.3	0.500	mg/L	5.00	13.2	102	70-130			
MANGANESE	0.194	0.0200	mg/L	0.200	0.000301	96.6	70-130			
POTASSIUM	5.27	0.500	mg/L	2.00	3.23	102	70-130			
SODIUM	90.8	2.00	mg/L	20.0	70.6	101	70-130			

Matrix Spike Dup (BH40802-MSD1) Source: L140877-02 Prepared: 07/31/2014 Analyzed: 08/07/2014

Batch BH40802 - EPA 200.7/200.8

CALCIUM	117	2.00	mg/L	20.0	97.0	99.3	70-130	0.246	10	
IRON	1.23	0.0200	mg/L	1.00	0.244	98.8	70-130	0.202	10	
MAGNESIUM	18.3	0.500	mg/L	5.00	13.2	101	70-130	0.310	10	
MANGANESE	0.193	0.0200	mg/L	0.200	0.000301	96.5	70-130	0.181	10	
POTASSIUM	5.21	0.500	mg/L	2.00	3.23	99.1	70-130	1.04	10	
SODIUM	89.7	2.00	mg/L	20.0	70.6	95.7	70-130	1.17	10	

Wet Chemistry - Quality Control
Tucson Water Quality Laboratory

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) 837-2455

Environmental Services
 -
 Tucson AZ, 85726

Project: Rio Nuevo Landfill
 Project Number: P01071
 Project Manager: Lori Ehman

Reported:
 08/22/2014 13:35

Wet Chemistry - Quality Control
Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Matrix Spike (BG42303-MS1)

Source: L140880-01

Prepared & Analyzed: 07/22/2014

Batch BG42303 - Default Prep - Wet Chemistry

BROMIDE	0.9	0.104	mg/L	0.833	0.02	108	80-120			
CHLORIDE	119	3.12	mg/L	41.7	76.8	101	80-120			
FLUORIDE	1.2	0.104	mg/L	0.833	0.4	95.7	80-120			
NITRATE AS N	5.0	0.260	mg/L	4.17	0.7	103	80-120			
NITRITE AS N	1.3	0.104	mg/L	1.56	ND	86.0	80-120			
ORTHO PHOSPHATE AS P	0.8	0.208	mg/L	0.833	ND	96.3	80-120			
SULFATE	209	5.21	mg/L	41.7	168	98.3	80-120			

Matrix Spike Dup (BG42303-MSD1)

Source: L140880-01

Prepared & Analyzed: 07/22/2014

Batch BG42303 - Default Prep - Wet Chemistry

BROMIDE	0.9	0.104	mg/L	0.833	0.02	105	80-120	2.73	10	
CHLORIDE	119	3.12	mg/L	41.7	76.8	101	80-120	0.0558	10	
FLUORIDE	1.2	0.104	mg/L	0.833	0.4	96.0	80-120	0.199	10	
NITRATE AS N	5.0	0.260	mg/L	4.17	0.7	103	80-120	0.271	10	
NITRITE AS N	1.3	0.104	mg/L	1.56	ND	85.7	80-120	0.373	10	
ORTHO PHOSPHATE AS P	0.9	0.208	mg/L	0.833	ND	102	80-120	6.05	10	
SULFATE	209	5.21	mg/L	41.7	168	98.9	80-120	0.138	10	

Blank (BG42504-BLK1)

Prepared & Analyzed: 07/25/2014

Batch BG42504 - DEFAULT ORGANIC PREP

TOTAL ORGANIC CARBON	ND	0.25	mg/L							
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 4401 S. Tucson Estates Pkwy.
 Tucson, AZ 85735
 (520) 837-2455

Environmental Services
 -
 Tucson AZ, 85726

Project: Rio Nuevo Landfill
 Project Number: P01071
 Project Manager: Lori Ehman

Reported:
 08/22/2014 13:35

Wet Chemistry - Quality Control
Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BG42504-BLK2)				Prepared & Analyzed: 07/25/2014						
Batch BG42504 - DEFAULT ORGANIC PREP										
TOTAL ORGANIC CARBON	ND	0.25	mg/L							
Blank (BG42504-BLK3)				Prepared & Analyzed: 07/25/2014						
Batch BG42504 - DEFAULT ORGANIC PREP										
TOTAL ORGANIC CARBON	ND	0.25	mg/L							
Blank (BG42504-BLK4)				Prepared & Analyzed: 07/26/2014						
Batch BG42504 - DEFAULT ORGANIC PREP										
TOTAL ORGANIC CARBON	ND	0.25	mg/L							
Blank (BG42504-BLK5)				Prepared & Analyzed: 07/26/2014						
Batch BG42504 - DEFAULT ORGANIC PREP										
TOTAL ORGANIC CARBON	ND	0.25	mg/L							
LCS (BG42504-BS1)				Prepared & Analyzed: 07/25/2014						
Batch BG42504 - DEFAULT ORGANIC PREP										
TOTAL ORGANIC CARBON	4.83		mg/L	5.00		97	90-110			

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 Tucson, AZ 85735
 (520) 837-2455

Environmental Services
 -
 Tucson AZ, 85726

Project: Rio Nuevo Landfill
 Project Number: P01071
 Project Manager: Lori Ehman

Reported:
 08/22/2014 13:35

Wet Chemistry - Quality Control
Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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LCS (BG42504-BS2)

Prepared & Analyzed: 07/25/2014

Batch BG42504 - DEFAULT ORGANIC PREP

TOTAL ORGANIC CARBON	9.30		mg/L	10.0		93	90-110			
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LCS (BG42504-BS3)

Prepared & Analyzed: 07/25/2014

Batch BG42504 - DEFAULT ORGANIC PREP

TOTAL ORGANIC CARBON	4.83		mg/L	5.00		97	90-110			
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LCS (BG42504-BS4)

Prepared & Analyzed: 07/26/2014

Batch BG42504 - DEFAULT ORGANIC PREP

TOTAL ORGANIC CARBON	9.33		mg/L	10.0		93	90-110			
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LCS (BG42504-BS5)

Prepared & Analyzed: 07/26/2014

Batch BG42504 - DEFAULT ORGANIC PREP

TOTAL ORGANIC CARBON	4.89		mg/L	5.00		98	90-110			
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MRL Check (BG42504-MRL1)

Prepared & Analyzed: 07/25/2014

Batch BG42504 - DEFAULT ORGANIC PREP

TOTAL ORGANIC CARBON	0.235		mg/L	0.250		94	50-150			
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Tucson Water Quality Lab
 4401 S. Tucson Estates Pkwy.
 Tucson, AZ 85735
 (520) 837-2455

Environmental Services - Tucson AZ, 85726	Project: Rio Nuevo Landfill Project Number: P01071 Project Manager: Lori Ehman	Reported: 08/22/2014 13:35
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**Wet Chemistry - Quality Control
 Tucson Water Quality Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Notes
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Matrix Spike (BG42504-MS1) Source: L140871-04 Prepared & Analyzed: 07/25/2014

Batch BG42504 - DEFAULT ORGANIC PREP

TOTAL ORGANIC CARBON	1.44		mg/L	0.900	0.502	105	70-121			
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Matrix Spike (BG42504-MS2) Source: L140885-01 Prepared & Analyzed: 07/26/2014

Batch BG42504 - DEFAULT ORGANIC PREP

TOTAL ORGANIC CARBON	1.27		mg/L	0.900	0.482	88	70-121			
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Duplicate (BG42510-DUP1) Source: L140891-04 Prepared & Analyzed: 07/25/2014

Batch BG42510 - Default Prep - Wet Chemistry

ALKALINITY, TOTAL	134	20.0	mg/L as CaCO3		132			1.41	10	
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Matrix Spike (BG42510-MS1) Source: L140891-04 Prepared & Analyzed: 07/25/2014

Batch BG42510 - Default Prep - Wet Chemistry

ALKALINITY, TOTAL	192	20.0	mg/L as CaCO3	59.0	132	102	80-120			
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Duplicate (BG42901-DUP1) Source: L140885-01 Prepared & Analyzed: 07/25/2014

Batch BG42901 - Default Prep - Wet Chemistry

TOTAL DISSOLVED SOLIDS	498	10.0	mg/L		492			1.21	5	
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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2455

Environmental Services
-
Tucson AZ, 85726

Project: Rio Nuevo Landfill
Project Number: P01071
Project Manager: Lori Ehman

Reported:
08/22/2014 13:35

Certified Analyses included in this Report

Analyte

Certifications

Code

Description

Number

Expires

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) 837-2455

Environmental Services

Project: Rio Nuevo Landfill

-

Project Number: P01071

Reported:

Tucson AZ, 85726

Project Manager: Lori Ehman

08/22/2014 13:35

Notes and Definitions

NI Associated Matrix spike recovery outside acceptance limits.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

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.



4401 S. Tucson Estates Parkway
Tucson, Arizona 85735
520.791.2544 Phone
520.791.5260 Fax

08 May 2014

Lori Ehman
Environmental Services

-

Tucson, AZ 85726

RE: Rio Nuevo

Enclosed are the results of analyses for samples received by the laboratory on 01/30/2014 12:55. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Michael E. Dew
Lab Manager

Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2455

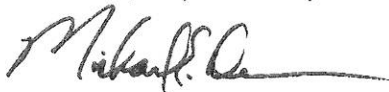
Environmental Services - Tucson AZ, 85726	Project: Rio Nuevo Project Number: P01071 Project Manager: Lori Ehman	Reported: 04/18/2014 13:28
---	---	--------------------------------------

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CM-09	L140134-01	Aqueous	01/30/2014 09:09	01/30/2014 12:55

All QC results were within QC limits unless otherwise noted.

Tucson Water Quality Laboratory



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Michael E. Dew, Lab Manager

Tucson Water Quality Lab
 4401 S. Tucson Estates Pkwy.
 Tucson, AZ 85735
 (520) 837-2455

Environmental Services
 -
 Tucson AZ, 85726

Project: Rio Nuevo
 Project Number: P01071
 Project Manager: Lori Ehman

Reported:
 04/18/2014 13:28

CM-09
L140134-01 (Aqueous)

Sampled:
 01/30/2014 9:09

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Tucson Water Quality Laboratory

Wet Chemistry

BROMIDE	0.612	0.100	mg/L	1	BA43102	01/31/2014	01/31/2014	EPA 300.0
CHLORIDE	58.4	3.00	mg/L	1	BA43102	01/31/2014	01/31/2014	EPA 300.0
FLUORIDE	0.770	0.100	mg/L	1	BA43102	01/31/2014	01/31/2014	EPA 300.0
NITRATE AS N	8.02	0.250	mg/L	1	BA43102	01/31/2014	01/31/2014	EPA 300.0
NITRITE AS N	ND	0.100	mg/L	1	BA43102	01/31/2014	01/31/2014	EPA 300.0
ORTHO PHOSPHATE AS P	ND	0.200	mg/L	1	BA43102	01/31/2014	01/31/2014	EPA 300.0
SULFATE	116	5.00	mg/L	1	BA43102	01/31/2014	01/31/2014	EPA 300.0

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 Tucson, AZ 85735
 (520) 837-2455

Environmental Services
 -
 Tucson AZ, 85726

Project: Rio Nuevo
 Project Number: P01071
 Project Manager: Lori Ehman

Reported:
 04/18/2014 13:28

Wet Chemistry - Quality Control
Tucson Water Quality Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Matrix Spike (BA43102-MS1)

Source: L140131-07

Prepared & Analyzed: 01/30/2014

Batch BA43102 - Default Prep - Wet Chemistry

BROMIDE	0.9		mg/L	0.800	ND	109	80-120			
CHLORIDE	75.3		mg/L	40.0	34.2	103	80-120			
FLUORIDE	1.4		mg/L	0.800	0.5	102	80-120			
NITRATE AS N	5.9		mg/L	4.00	1.9	101	80-120			
NITRITE AS N	1.4		mg/L	1.50	ND	92.1	80-120			
ORTHO PHOSPHATE AS P	0.8		mg/L	0.800	ND	96.3	80-120			
SULFATE	150		mg/L	40.0	110	98.8	80-120			

Matrix Spike Dup (BA43102-MSD1)

Source: L140131-07

Prepared & Analyzed: 01/30/2014

Batch BA43102 - Default Prep - Wet Chemistry

BROMIDE	0.9		mg/L	0.800	ND	111	80-120	1.81	10	
CHLORIDE	75.4		mg/L	40.0	34.2	103	80-120	0.193	10	
FLUORIDE	1.3		mg/L	0.800	0.5	98.3	80-120	2.35	10	
NITRATE AS N	6.0		mg/L	4.00	1.9	102	80-120	0.573	10	
NITRITE AS N	1.4		mg/L	1.50	ND	90.5	80-120	1.83	10	
ORTHO PHOSPHATE AS P	0.7		mg/L	0.800	ND	91.9	80-120	4.67	10	
SULFATE	150		mg/L	40.0	110	99.6	80-120	0.213	10	

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Tucson, AZ 85735
(520) 837-2455

Environmental Services

-

Tucson AZ, 85726

Project: Rio Nuevo

Project Number: P01071

Project Manager: Lori Ehman

Reported:

04/18/2014 13:28

Certified Analyses included in this Report

Analyte	Certifications
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Code	Description	Number	Expires
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Tucson Water Quality Lab
4401 S. Tucson Estates Pkwy.
Tucson, AZ 85735
(520) 837-2455

Environmental Services

Project: Rio Nuevo

-

Project Number: P01071

Tucson AZ, 85726

Project Manager: Lori Ehman

Reported:

04/18/2014 13:28

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
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.

TUCSON WATER CHAIN OF CUSTODY

LOGIN ID: L29359 / L140134 CLIENT: ES PROJECT NAME/FREQUENCY: RIO NUEVO Landfill PROJECT #: P01071 SAMPLING DATE: 01/30/14 SAMPLED BY: ALFRED J. BARKER, Sr. <i>Alfred J. Barker</i>	PRESERVATIVE (Na2S2O3) (Unpreserved) (HNO3) (H2SO4) (Na2O3/H2SO4) (Unpreserved) (Na2O3/H2SO4) (H2SO4) (HCl) NP (Na2S2O3) (Unpreserved) (H2SO4) (NaOH/Zinc Acetate)	NUMBER OF CONTAINERS (HNO3) (H2SO4) (Na2O3/H2SO4) (Unpreserved) (Na2O3/H2SO4) (H2SO4) (HCl) NP (Na2S2O3) (Unpreserved) (H2SO4) (NaOH/Zinc Acetate)	COMMENTS TB# - 5P 1/30/14
SAMPLE # -01	TIME 0909	LOCATION CM-09	SITE well
SPECIAL TURNAROUND TIME:			
COMMENTS:			
RELINQUISHED BY: <i>Alfred J. Barker</i>		SIGNATURE: <i>Alfred J. Barker</i>	
DATE/TIME: 01/30/14 1251		DATE/TIME: 1/30/14 1255	
RECEIVED BY:		RECEIVED BY:	

RECEIVING TEMPERATURE = 5.8 °C

Tucson Water Quality Laboratory Report

License # AZ0038

Login Number: L28575

Date Collected: July 30, 2013

Project Number: P01071

Project Name: Rio Nuevo South Landfill Stabilization Prog

Data reported herein is certified to be true, accurate and complete as indicated by the signature of the Laboratory Manager or his Designee.

Laboratory Manager's Signature:

A handwritten signature in black ink, appearing to read "Michael P. O.", is written over a horizontal line.

Case Narrative

Rio Nuevo LF, Project #P01071

Sampled 07-30-13

Samples were analyzed in accordance with the methods listed in the text of this data report.

All Quality Control Parameters were within control limits.

The following analyses were subcontracted to MWH Laboratories:

- 1) Ammonia Nitrogen – EPA Method 350.1

Rio Nuevo South Landfill Stabilization Program

Location: WR-350B

Site: WELL

Log-in Number: L28575-01

Sample Date: 07/30/2013 08:55:00 AM

Collected By: G. BEJARANO

Results from Tucson Water LIMS, Tucson Water Quality Lab, 4401 S. Tucson Estates Parkway, Tucson, AZ 85735 (520) 791-5256
License # AZ0038

Parameter	Value	Qualifier	Method	RDL	Analysis Date
Calcium, Total	61 mg/L		EPA 200.7	2 mg/L	08/13/2013 08:46:00 AM
Iron, Total	.22 mg/L		EPA 200.7	.02 mg/L	08/13/2013 08:46:00 AM
Magnesium, Total	9.7 mg/L		EPA 200.7	.5 mg/L	08/13/2013 08:46:00 AM
Manganese, Total	<.02 mg/L		EPA 200.7	.02 mg/L	08/13/2013 08:46:00 AM
Potassium, Total	2.9 mg/L		EPA 200.7	.5 mg/L	08/13/2013 08:46:00 AM
Sodium, Total	151 mg/L		EPA 200.7	2 mg/L	08/13/2013 08:46:00 AM
Bromide	.31 mg/L		EPA 300.0	.1 mg/L	07/30/2013 05:13:00 PM
Chloride	27 mg/L		EPA 300.0	3 mg/L	07/30/2013 05:13:00 PM
Fluoride	1.5 mg/L		EPA 300.0	.1 mg/L	07/30/2013 05:13:00 PM
Nitrate as N	3.1 mg/L		EPA 300.0	.25 mg/L	07/30/2013 05:13:00 PM
Nitrite as N	<.1 mg/L		EPA 300.0	.1 mg/L	07/30/2013 05:13:00 PM
Ortho Phosphate as P	<.2 mg/L		EPA 300.0	.2 mg/L	07/30/2013 05:13:00 PM
Sulfate	200 mg/L		EPA 300.0	5 mg/L	07/30/2013 05:13:00 PM
Ammonia As N	<.05 mg/L		EPA 350.1	.05 mg/L	08/05/2013 01:19:00 PM
Lab ID	EEA AZ0778		EPA 350.1		08/05/2013 01:19:00 PM
1,1,1,2-Tetrachloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
1,1,1-Trichloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
1,1,2,2-Tetrachloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
1,1,2-Trichloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
1,1-Dichloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
1,1-Dichloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
1,1-Dichloropropene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
1,2,3-Trichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
1,2,3-Trichloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM

Rio Nuevo South Landfill Stabilization Program

Location: WR-350B

Site: WELL

Log-in Number: L28575-01

Sample Date: 07/30/2013 08:55:00 AM

Collected By: G. BEJARANO

Results from Tucson Water LIMS, Tucson Water Quality Lab, 4401 S. Tucson Estates Parkway, Tucson, AZ 85735 (520) 791-5256

Parameter	Value	Qualifier	Method	RDL	Analysis Date
1,2,4-Trichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
1,2,4-Trimethylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
1,2-Dibromo-3-chloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
1,2-Dibromoethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
1,2-Dichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
1,2-Dichloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
1,2-Dichloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
1,3,5-Trimethylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
1,3-Dichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
1,3-Dichloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
1,4-Dichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
2,2-Dichloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
2-Chlorotoluene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
4-Chlorotoluene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
4-Isopropyltoluene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Benzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Bromobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Bromochloromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Bromodichloromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Bromofluorobenzene (Surr.)	92.8 % recovery		EPA 8260	%	08/01/2013 05:02:00 PM
Bromoform	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Bromomethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Carbon Tetrachloride	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Chlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM

Rio Nuevo South Landfill Stabilization Program

Location: WR-350B

Site: WELL

Log-in Number: L28575-01

Sample Date: 07/30/2013 08:55:00 AM

Collected By: G. BEJARANO

Results from Tucson Water LIMS, Tucson Water Quality Lab, 4401 S. Tucson Estates Parkway, Tucson, AZ 85735 (520) 791-5256

Parameter	Value	Qualifier	Method	RDL	Analysis Date
Chloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Chloroform	.0006 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Chloromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Dibromochloromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Dibromofluoromethane (Surr.)	107.4 % recovery		EPA 8260	%	08/01/2013 05:02:00 PM
Dibromomethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Dichlorodifluoromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Ethylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Hexachlorobutadiene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Isopropylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Methyl tert-butyl ether	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Methylene Chloride	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Naphthalene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Sec-Butylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Styrene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Tetrachloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Toluene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Toluene-d8 (Surr.)	97.8 % recovery		EPA 8260	%	08/01/2013 05:02:00 PM
Total Trihalomethanes	.0006 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Total Xylenes	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Trichloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Trichlorofluoromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Vinyl Chloride	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
cis-1,2-Dichloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM

Rio Nuevo South Landfill Stabilization Program

Location: WR-350B

Site WELL

Log-in Number: L28575-01

Sample Date: 07/30/2013 08:55:00 AM

Collected By: G. BEJARANO

Results from Tucson Water LIMS, Tucson Water Quality Lab, 4401 S. Tucson Estates Parkway, Tucson, AZ 85735 (520) 791-5256

Parameter	Value	Qualifier	Method	RDL	Analysis Date
cis-1,3-Dichloropropene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
m/p-Xylenes	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
n-Butylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
n-Propylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
ortho-Xylene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
tert-Butylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
trans-1,2-Dichloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
trans-1,3-Dichloropropene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:02:00 PM
Bicarbonate Alkalinity	227 mg/L		SM 2320B	20 mg/L	07/31/2013 10:42:00 AM
Total Alkalinity	227 mg/L		SM 2320B	20 mg/L	07/31/2013 10:42:00 AM
Total Dissolved Solids	640 mg/L		SM 2540C	10 mg/L	07/31/2013 04:30:00 PM
Total Organic Carbon	.42 mg/L		SM 5310	.25 mg/L	08/01/2013 09:17:00 PM

Rio Nuevo South Landfill Stabilization Program

Location: WR-351A

Site: WELL

Log-in Number: L28575-02

Sample Date: 07/30/2013 08:03:00 AM

Collected By: G. BEJARANO

Results from Tucson Water LIMS, Tucson Water Quality Lab, 4401 S. Tucson Estates Parkway, Tucson, AZ 85735 (520) 791-5256
License # AZ0038

Parameter	Value	Qualifier	Method	RDL	Analysis Date
Calcium, Total	53 mg/L		EPA 200.7	2 mg/L	08/13/2013 08:51:00 AM
Iron, Total	.22 mg/L		EPA 200.7	.02 mg/L	08/13/2013 08:51:00 AM
Magnesium, Total	7.1 mg/L		EPA 200.7	.5 mg/L	08/13/2013 08:51:00 AM
Manganese, Total	<.02 mg/L		EPA 200.7	.02 mg/L	08/13/2013 08:51:00 AM
Potassium, Total	2.8 mg/L		EPA 200.7	.5 mg/L	08/13/2013 08:51:00 AM
Sodium, Total	119 mg/L		EPA 200.7	2 mg/L	08/13/2013 08:51:00 AM
Bromide	.14 mg/L		EPA 300.0	.1 mg/L	07/30/2013 05:41:00 PM
Chloride	18 mg/L		EPA 300.0	3 mg/L	07/30/2013 05:41:00 PM
Fluoride	1 mg/L		EPA 300.0	.1 mg/L	07/30/2013 05:41:00 PM
Nitrate as N	3.2 mg/L		EPA 300.0	.25 mg/L	07/30/2013 05:41:00 PM
Nitrite as N	<.1 mg/L		EPA 300.0	.1 mg/L	07/30/2013 05:41:00 PM
Ortho Phosphate as P	<.2 mg/L		EPA 300.0	.2 mg/L	07/30/2013 05:41:00 PM
Sulfate	113 mg/L		EPA 300.0	5 mg/L	07/30/2013 05:41:00 PM
Ammonia As N	<.05 mg/L		EPA 350.1	.05 mg/L	08/05/2013 01:20:00 PM
Lab ID	EEA AZ0778		EPA 350.1		08/05/2013 01:20:00 PM
1,1,1,2-Tetrachloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
1,1,1-Trichloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
1,1,2,2-Tetrachloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
1,1,2-Trichloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
1,1-Dichloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
1,1-Dichloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
1,1-Dichloropropene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
1,2,3-Trichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
1,2,3-Trichloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM

Rio Nuevo South Landfill Stabilization Program

Location: WR-351A

Site: WELL

Log-in Number: L28575-02

Sample Date: 07/30/2013 08:03:00 AM

Collected By: G. BEJARANO

Results from Tucson Water LIMS, Tucson Water Quality Lab, 4401 S. Tucson Estates Parkway, Tucson, AZ 85735 (520) 791-5256

Parameter	Value	Qualifier	Method	RDL	Analysis Date
1,2,4-Trichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
1,2,4-Trimethylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
1,2-Dibromo-3-chloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
1,2-Dibromoethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
1,2-Dichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
1,2-Dichloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
1,2-Dichloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
1,3,5-Trimethylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
1,3-Dichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
1,3-Dichloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
1,4-Dichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
2,2-Dichloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
2-Chlorotoluene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
4-Chlorotoluene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
4-Isopropyltoluene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Benzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Bromobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Bromochloromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Bromodichloromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Bromofluorobenzene (Surr.)	92 % recovery		EPA 8260	%	08/01/2013 05:34:00 PM
Bromoform	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Bromomethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Carbon Tetrachloride	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Chlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM

Rio Nuevo South Landfill Stabilization Program

Location: WR-351A

Site: WELL

Log-in Number: L28575-02

Sample Date: 07/30/2013 08:03:00 AM

Collected By: G. BEJARANO

Results from Tucson Water LIMS, Tucson Water Quality Lab, 4401 S. Tucson Estates Parkway, Tucson, AZ 85735 (520) 791-5256

Parameter	Value	Qualifier	Method	RDL	Analysis Date
Chloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Chloroform	.0013 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Chloromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Dibromochloromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Dibromofluoromethane (Surr.)	104.4 % recovery		EPA 8260	%	08/01/2013 05:34:00 PM
Dibromomethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Dichlorodifluoromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Ethylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Hexachlorobutadiene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Isopropylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Methyl tert-butyl ether	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Methylene Chloride	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Naphthalene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Sec-Butylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Styrene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Tetrachloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Toluene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Toluene-d8 (Surr.)	100.6 % recovery		EPA 8260	%	08/01/2013 05:34:00 PM
Total Trihalomethanes	.0013 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Total Xylenes	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Trichloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Trichlorofluoromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Vinyl Chloride	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
cis-1,2-Dichloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM

Rio Nuevo South Landfill Stabilization Program

Location: WR-351A

Site WELL

Log-in Number: L28575-02

Sample Date: 07/30/2013 08:03:00 AM

Collected By: G. BEJARANO

Results from Tucson Water LIMS, Tucson Water Quality Lab, 4401 S. Tucson Estates Parkway, Tucson, AZ 85735 (520) 791-5256

Parameter	Value	Qualifier	Method	RDL	Analysis Date
cis-1,3-Dichloropropene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
m/p-Xylenes	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
n-Butylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
n-Propylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
ortho-Xylene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
tert-Butylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
trans-1,2-Dichloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
trans-1,3-Dichloropropene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 05:34:00 PM
Bicarbonate Alkalinity	238 mg/L		SM 2320B	20 mg/L	07/31/2013 12:20:00 PM
Total Alkalinity	238 mg/L		SM 2320B	20 mg/L	07/31/2013 12:20:00 PM
Total Dissolved Solids	496 mg/L		SM 2540C	10 mg/L	07/31/2013 04:30:00 PM
Total Organic Carbon	.49 mg/L		SM 5310	.25 mg/L	08/01/2013 09:47:00 PM

Rio Nuevo South Landfill Stabilization Program

Location: WR-351A

Site: DUPL

Log-in Number: L28575-03

Sample Date: 07/30/2013 08:06:00 AM

Collected By: G. BEJARANO

Results from Tucson Water LIMS, Tucson Water Quality Lab, 4401 S. Tucson Estates Parkway, Tucson, AZ 85735 (520) 791-5256
License # AZ0038

Parameter	Value	Qualifier	Method	RDL	Analysis Date
Calcium, Total	53 mg/L		EPA 200.7	2 mg/L	08/13/2013 08:56:00 AM
Iron, Total	.23 mg/L		EPA 200.7	.02 mg/L	08/13/2013 08:56:00 AM
Magnesium, Total	7.1 mg/L		EPA 200.7	.5 mg/L	08/13/2013 08:56:00 AM
Manganese, Total	<.02 mg/L		EPA 200.7	.02 mg/L	08/13/2013 08:56:00 AM
Potassium, Total	2.8 mg/L		EPA 200.7	.5 mg/L	08/13/2013 08:56:00 AM
Sodium, Total	118 mg/L		EPA 200.7	2 mg/L	08/13/2013 08:56:00 AM
Bromide	.12 mg/L		EPA 300.0	.1 mg/L	07/30/2013 06:08:00 PM
Chloride	18 mg/L		EPA 300.0	3 mg/L	07/30/2013 06:08:00 PM
Fluoride	1.1 mg/L		EPA 300.0	.1 mg/L	07/30/2013 06:08:00 PM
Nitrate as N	3.2 mg/L		EPA 300.0	.25 mg/L	07/30/2013 06:08:00 PM
Nitrite as N	<.1 mg/L		EPA 300.0	.1 mg/L	07/30/2013 06:08:00 PM
Ortho Phosphate as P	<.2 mg/L		EPA 300.0	.2 mg/L	07/30/2013 06:08:00 PM
Sulfate	113 mg/L		EPA 300.0	5 mg/L	07/30/2013 06:08:00 PM
Ammonia As N	<.05 mg/L		EPA 350.1	.05 mg/L	08/05/2013 01:21:00 PM
Lab ID	EEA AZ0778		EPA 350.1		08/05/2013 01:21:00 PM
1,1,1,2-Tetrachloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
1,1,1-Trichloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
1,1,2,2-Tetrachloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
1,1,2-Trichloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
1,1-Dichloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
1,1-Dichloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
1,1-Dichloropropene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
1,2,3-Trichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
1,2,3-Trichloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM

Rio Nuevo South Landfill Stabilization Program

Location: WR-351A

Site: DUPL

Log-in Number: L28575-03

Sample Date: 07/30/2013 08:06:00 AM

Collected By: G. BEJARANO

Results from Tucson Water LIMS, Tucson Water Quality Lab, 4401 S. Tucson Estates Parkway, Tucson, AZ 85735 (520) 791-5256

Parameter	Value	Qualifier	Method	RDL	Analysis Date
1,2,4-Trichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
1,2,4-Trimethylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
1,2-Dibromo-3-chloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
1,2-Dibromoethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
1,2-Dichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
1,2-Dichloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
1,2-Dichloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
1,3,5-Trimethylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
1,3-Dichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
1,3-Dichloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
1,4-Dichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
2,2-Dichloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
2-Chlorotoluene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
4-Chlorotoluene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
4-Isopropyltoluene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Benzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Bromobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Bromochloromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Bromodichloromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Bromofluorobenzene (Surr.)	86.8 % recovery		EPA 8260	%	08/01/2013 06:04:00 PM
Bromoform	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Bromomethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Carbon Tetrachloride	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Chlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM

Rio Nuevo South Landfill Stabilization Program

Location: WR-351A

Site: DUPL

Log-in Number: L28575-03

Sample Date: 07/30/2013 08:06:00 AM

Collected By: G. BEJARANO

Results from Tucson Water LIMS, Tucson Water Quality Lab, 4401 S. Tucson Estates Parkway, Tucson, AZ 85735 (520) 791-5256

Parameter	Value	Qualifier	Method	RDL	Analysis Date
Chloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Chloroform	.0014 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Chloromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Dibromochloromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Dibromofluoromethane (Surr.)	102.4 % recovery		EPA 8260	%	08/01/2013 06:04:00 PM
Dibromomethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Dichlorodifluoromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Ethylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Hexachlorobutadiene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Isopropylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Methyl tert-butyl ether	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Methylene Chloride	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Naphthalene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Sec-Butylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Styrene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Tetrachloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Toluene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Toluene-d8 (Surr.)	100 % recovery		EPA 8260	%	08/01/2013 06:04:00 PM
Total Trihalomethanes	.0014 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Total Xylenes	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Trichloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Trichlorofluoromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Vinyl Chloride	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
cis-1,2-Dichloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM

Rio Nuevo South Landfill Stabilization Program

Location: WR-351A

Site: DUPL

Log-in Number: L28575-03

Sample Date: 07/30/2013 08:06:00 AM

Collected By: G. BEJARANO

Results from Tucson Water LIMS, Tucson Water Quality Lab, 4401 S. Tucson Estates Parkway, Tucson, AZ 85735 (520) 791-5256

Parameter	Value	Qualifier	Method	RDL	Analysis Date
cis-1,3-Dichloropropene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
m/p-Xylenes	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
n-Butylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
n-Propylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
ortho-Xylene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
tert-Butylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
trans-1,2-Dichloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
trans-1,3-Dichloropropene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:04:00 PM
Bicarbonate Alkalinity	238 mg/L		SM 2320B	20 mg/L	07/31/2013 12:44:00 PM
Total Alkalinity	238 mg/L		SM 2320B	20 mg/L	07/31/2013 12:44:00 PM
Total Dissolved Solids	501 mg/L		SM 2540C	10 mg/L	07/31/2013 04:30:00 PM
Total Organic Carbon	.46 mg/L		SM 5310	.25 mg/L	08/01/2013 10:17:00 PM

Rio Nuevo South Landfill Stabilization Program

Location: WR-429A

Site: WELL

Log-in Number: L28575-04

Sample Date: 07/30/2013 09:48:00 AM

Collected By: G. BEJARANO

Results from Tucson Water LIMS, Tucson Water Quality Lab, 4401 S. Tucson Estates Parkway, Tucson, AZ 85735 (520) 791-5256
License # AZ0038

Parameter	Value	Qualifier	Method	RDL	Analysis Date
Calcium, Total	88 mg/L		EPA 200.7	2 mg/L	08/13/2013 09:00:00 AM
Iron, Total	1.1 mg/L		EPA 200.7	.02 mg/L	08/13/2013 09:00:00 AM
Magnesium, Total	18 mg/L		EPA 200.7	.5 mg/L	08/13/2013 09:00:00 AM
Manganese, Total	<.02 mg/L		EPA 200.7	.02 mg/L	08/13/2013 09:00:00 AM
Potassium, Total	3.4 mg/L		EPA 200.7	.5 mg/L	08/13/2013 09:00:00 AM
Sodium, Total	138 mg/L		EPA 200.7	2 mg/L	08/13/2013 09:00:00 AM
Bromide	.58 mg/L		EPA 300.0	.1 mg/L	07/30/2013 06:36:00 PM
Chloride	39 mg/L		EPA 300.0	3 mg/L	07/30/2013 06:36:00 PM
Fluoride	.95 mg/L		EPA 300.0	.1 mg/L	07/30/2013 06:36:00 PM
Nitrate as N	2.9 mg/L		EPA 300.0	.25 mg/L	07/30/2013 06:36:00 PM
Nitrite as N	<.1 mg/L		EPA 300.0	.1 mg/L	07/30/2013 06:36:00 PM
Ortho Phosphate as P	<.2 mg/L		EPA 300.0	.2 mg/L	07/30/2013 06:36:00 PM
Sulfate	229 mg/L		EPA 300.0	5 mg/L	07/30/2013 06:36:00 PM
Ammonia As N	<.05 mg/L		EPA 350.1	.05 mg/L	08/05/2013 01:22:00 PM
Lab ID	EEA AZ0778		EPA 350.1		08/05/2013 01:22:00 PM
1,1,1,2-Tetrachloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
1,1,1-Trichloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
1,1,2,2-Tetrachloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
1,1,2-Trichloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
1,1-Dichloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
1,1-Dichloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
1,1-Dichloropropene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
1,2,3-Trichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
1,2,3-Trichloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM

Rio Nuevo South Landfill Stabilization Program

Location: WR-429A

Site: WELL

Log-in Number: L28575-04

Sample Date: 07/30/2013 09:48:00 AM

Collected By: G. BEJARANO

Results from Tucson Water LIMS, Tucson Water Quality Lab, 4401 S. Tucson Estates Parkway, Tucson, AZ 85735 (520) 791-5256

Parameter	Value	Qualifier	Method	RDL	Analysis Date
1,2,4-Trichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
1,2,4-Trimethylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
1,2-Dibromo-3-chloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
1,2-Dibromoethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
1,2-Dichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
1,2-Dichloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
1,2-Dichloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
1,3,5-Trimethylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
1,3-Dichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
1,3-Dichloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
1,4-Dichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
2,2-Dichloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
2-Chlorotoluene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
4-Chlorotoluene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
4-Isopropyltoluene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Benzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Bromobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Bromochloromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Bromodichloromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Bromofluorobenzene (Surr.)	92.8 % recovery		EPA 8260	%	08/01/2013 06:36:00 PM
Bromoform	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Bromomethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Carbon Tetrachloride	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Chlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM

Rio Nuevo South Landfill Stabilization Program

Location: WR-429A

Site: WELL

Log-in Number: L28575-04

Sample Date: 07/30/2013 09:48:00 AM

Collected By: G. BEJARANO

Results from Tucson Water LIMS, Tucson Water Quality Lab, 4401 S. Tucson Estates Parkway, Tucson, AZ 85735 (520) 791-5256

Parameter	Value	Qualifier	Method	RDL	Analysis Date
Chloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Chloroform	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Chloromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Dibromochloromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Dibromofluoromethane (Surr.)	107.2 % recovery		EPA 8260	%	08/01/2013 06:36:00 PM
Dibromomethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Dichlorodifluoromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Ethylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Hexachlorobutadiene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Isopropylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Methyl tert-butyl ether	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Methylene Chloride	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Naphthalene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Sec-Butylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Styrene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Tetrachloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Toluene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Toluene-d8 (Surr.)	99.4 % recovery		EPA 8260	%	08/01/2013 06:36:00 PM
Total Trihalomethanes	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Total Xylenes	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Trichloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Trichlorofluoromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Vinyl Chloride	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
cis-1,2-Dichloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM

Rio Nuevo South Landfill Stabilization Program

Location: WR-429A

Site: WELL

Log-in Number: L28575-04

Sample Date: 07/30/2013 09:48:00 AM

Collected By: G. BEJARANO

Results from Tucson Water LIMS, Tucson Water Quality Lab, 4401 S. Tucson Estates Parkway, Tucson, AZ 85735 (520) 791-5256

Parameter	Value	Qualifier	Method	RDL	Analysis Date
cis-1,3-Dichloropropene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
m/p-Xylenes	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
n-Butylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
n-Propylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
ortho-Xylene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
tert-Butylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
trans-1,2-Dichloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
trans-1,3-Dichloropropene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 06:36:00 PM
Bicarbonate Alkalinity	256 mg/L		SM 2320B	20 mg/L	08/08/2013 03:41:00 PM
Total Alkalinity	256 mg/L		SM 2320B	20 mg/L	08/08/2013 03:41:00 PM
Total Dissolved Solids	716 mg/L		SM 2540C	10 mg/L	07/31/2013 04:30:00 PM
Total Organic Carbon	.57 mg/L		SM 5310	.25 mg/L	08/01/2013 10:47:00 PM

Location: CM-09

Site: WELL

Log-in Number: L28575-05

Sample Date: 07/30/2013 10:21:00 AM

Collected By: G. BEJARANO

Results from Tucson Water LIMS, Tucson Water Quality Lab, 4401 S. Tucson Estates Parkway, Tucson, AZ 85735 (520) 791-5256
License # AZ0038

Parameter	Value	Qualifier	Method	RDL	Analysis Date
Bromide	.8 mg/L		EPA 300.0	.1 mg/L	07/30/2013 07:03:00 PM
Chloride	84 mg/L		EPA 300.0	3 mg/L	07/30/2013 07:03:00 PM
Fluoride	.85 mg/L		EPA 300.0	.1 mg/L	07/30/2013 07:03:00 PM
Nitrate as N	21 mg/L		EPA 300.0	2.5 mg/L	07/30/2013 07:31:00 PM
Nitrite as N	<.1 mg/L		EPA 300.0	.1 mg/L	07/30/2013 07:03:00 PM
Ortho Phosphate as P	<.2 mg/L		EPA 300.0	.2 mg/L	07/30/2013 07:03:00 PM
Sulfate	147 mg/L		EPA 300.0	5 mg/L	07/30/2013 07:03:00 PM

Rio Nuevo South Landfill Stabilization Program

Location: TRIP BLANK
Sample Date: 07/30/2013 08:03:00 AM

Site TWQL

Log-in Number: L28575-06
Collected By: TWQL

Results from Tucson Water LIMS, Tucson Water Quality Lab, 4401 S. Tucson Estates Parkway, Tucson, AZ 85735 (520) 791-5256
 License # AZ0038

Parameter	Value	Qualifier	Method	RDL	Analysis Date
1,1,1,2-Tetrachloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
1,1,1-Trichloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
1,1,2,2-Tetrachloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
1,1,2-Trichloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
1,1-Dichloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
1,1-Dichloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
1,1-Dichloropropene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
1,2,3-Trichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
1,2,3-Trichloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
1,2,4-Trichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
1,2,4-Trimethylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
1,2-Dibromo-3-chloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
1,2-Dibromoethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
1,2-Dichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
1,2-Dichloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
1,2-Dichloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
1,3,5-Trimethylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
1,3-Dichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
1,3-Dichloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
1,4-Dichlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
2,2-Dichloropropane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
2-Chlorotoluene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
4-Chlorotoluene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
4-Isopropyltoluene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM

Rio Nuevo South Landfill Stabilization Program

Location: TRIP BLANK

Site: TWQL

Log-in Number: L28575-06

Sample Date: 07/30/2013 08:03:00 AM

Collected By: TWQL

Results from Tucson Water LIMS, Tucson Water Quality Lab, 4401 S. Tucson Estates Parkway, Tucson, AZ 85735 (520) 791-5256

Parameter	Value	Qualifier	Method	RDL	Analysis Date
Benzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Bromobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Bromochloromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Bromodichloromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Bromofluorobenzene (Surr.)	73.4 % recovery		EPA 8260	%	08/01/2013 07:07:00 PM
Bromoform	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Bromomethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Carbon Tetrachloride	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Chlorobenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Chloroethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Chloroform	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Chloromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Dibromochloromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Dibromofluoromethane (Surr.)	111.8 % recovery		EPA 8260	%	08/01/2013 07:07:00 PM
Dibromomethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Dichlorodifluoromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Ethylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Hexachlorobutadiene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Isopropylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Methyl tert-butyl ether	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Methylene Chloride	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Naphthalene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Sec-Butylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Styrene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM

Rio Nuevo South Landfill Stabilization Program

Location: TRIP BLANK

Site: TWQL

Log-in Number: L28575-06

Sample Date: 07/30/2013 08:03:00 AM

Collected By: TWQL

Results from Tucson Water LIMS, Tucson Water Quality Lab, 4401 S. Tucson Estates Parkway, Tucson, AZ 85735 (520) 791-5256

Parameter	Value	Qualifier	Method	RDL	Analysis Date
Tetrachloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Toluene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Toluene-d8 (Surr.)	100 % recovery		EPA 8260	%	08/01/2013 07:07:00 PM
Total Trihalomethanes	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Total Xylenes	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Trichloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Trichlorofluoromethane	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
Vinyl Chloride	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
cis-1,2-Dichloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
cis-1,3-Dichloropropene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
m/p-Xylenes	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
n-Butylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
n-Propylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
ortho-Xylene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
tert-Butylbenzene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
trans-1,2-Dichloroethene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM
trans-1,3-Dichloropropene	<.0005 mg/L		EPA 8260	.0005 mg/L	08/01/2013 07:07:00 PM

Tucson Water Quality Laboratory Report

License # AZ0038

Login Number: L27654

Date Collected: January 31, 2013

Project Number: P01071

Project Name: Rio Nuevo South Landfill Stabilization Proj

Data reported herein is certified to be true, accurate and complete as indicated by the signature of the Laboratory Manager or his Designee.

Laboratory Manager's Signature:



Case Narrative

Rio Nuevo LF, Project #P01071

Sampled 01-31-13

Samples were analyzed in accordance with the methods listed in the text of this data report.

All Quality Control Parameters were within control limits.

Rio Nuevo South Landfill Stabilization Program

Location: CM-9

Site WELL

Log-in Number: L27654-01

Sample Date: 01/31/2013 11:41:00 AM

Collected By: A. BARKER

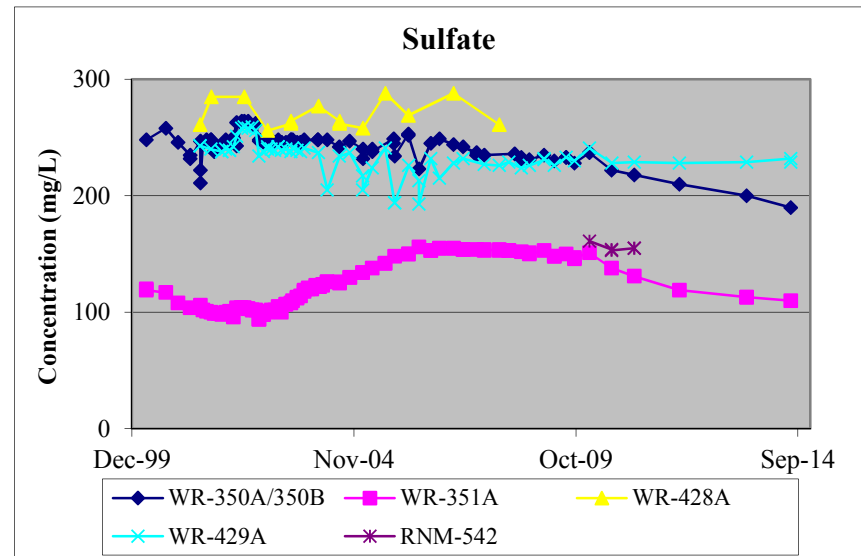
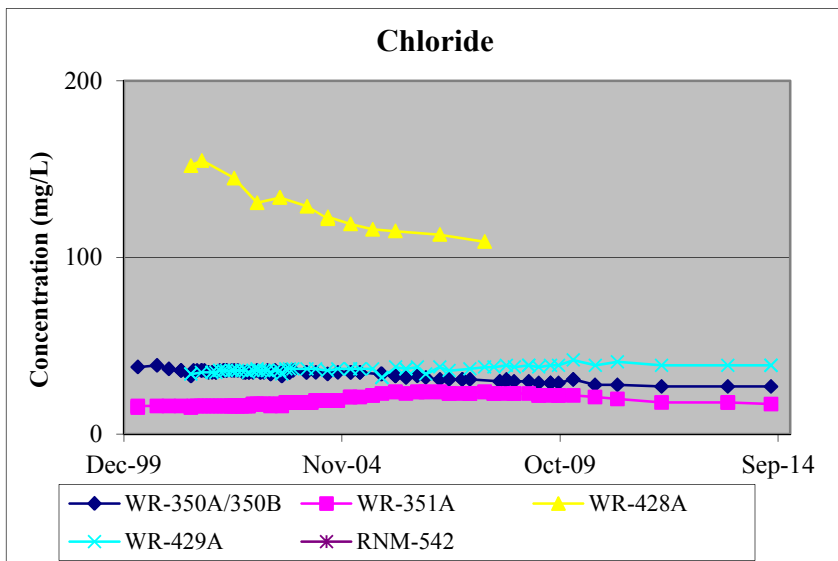
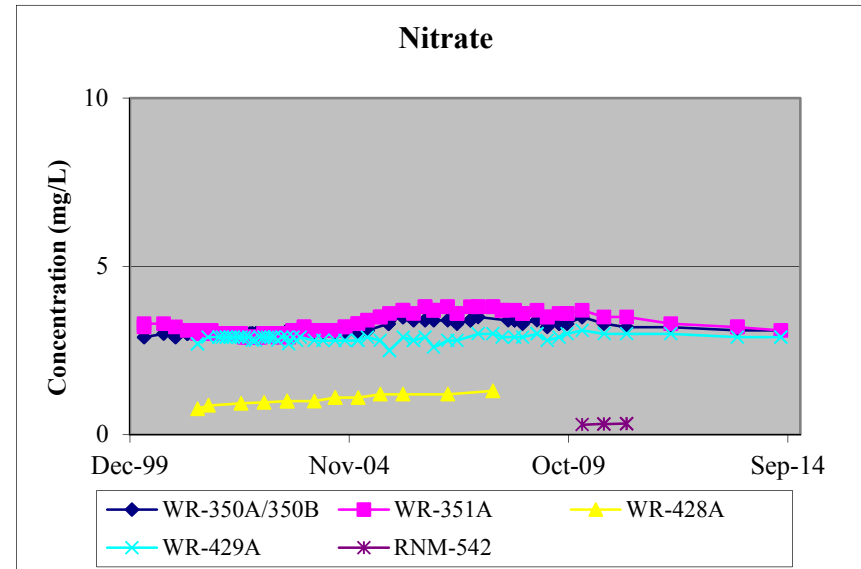
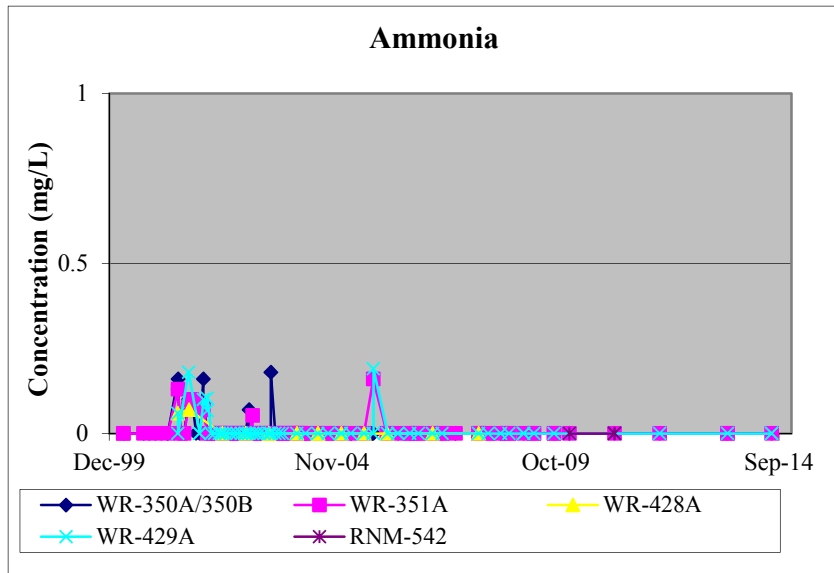
Results from Tucson Water LIMS, Tucson Water Quality Lab, 4401 S. Tucson Estates Parkway, Tucson, AZ 85735 (520) 791-5256
License # AZ0038

Parameter	Value	Qualifier	Method	RDL	Analysis Date
Bromide	.9 mg/L		EPA 300.0	.1 mg/L	01/31/2013 04:57:00 PM
Chloride	84 mg/L		EPA 300.0	3 mg/L	01/31/2013 04:57:00 PM
Fluoride	.7 mg/L		EPA 300.0	.1 mg/L	01/31/2013 04:57:00 PM
Nitrate as N	16 mg/L		EPA 300.0	6.25 mg/L	01/31/2013 05:21:00 PM
Nitrite as N	<.1 mg/L		EPA 300.0	.1 mg/L	01/31/2013 04:57:00 PM
Ortho Phosphate as P	<.2 mg/L		EPA 300.0	.2 mg/L	01/31/2013 04:57:00 PM
Sulfate	154 mg/L		EPA 300.0	5 mg/L	01/31/2013 04:57:00 PM

4

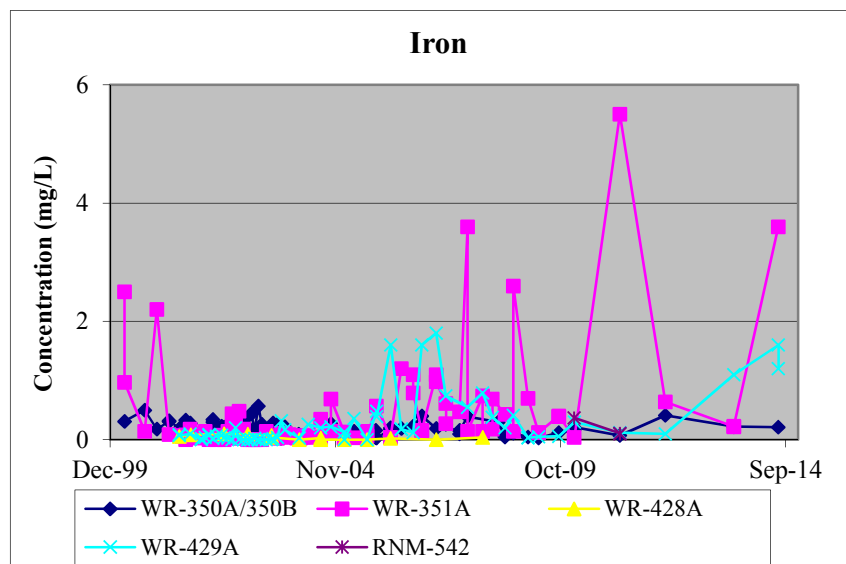
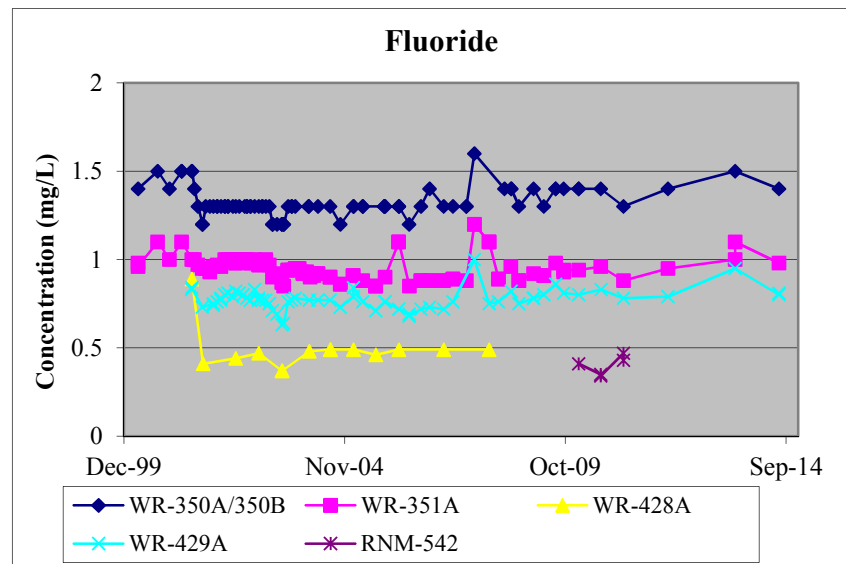
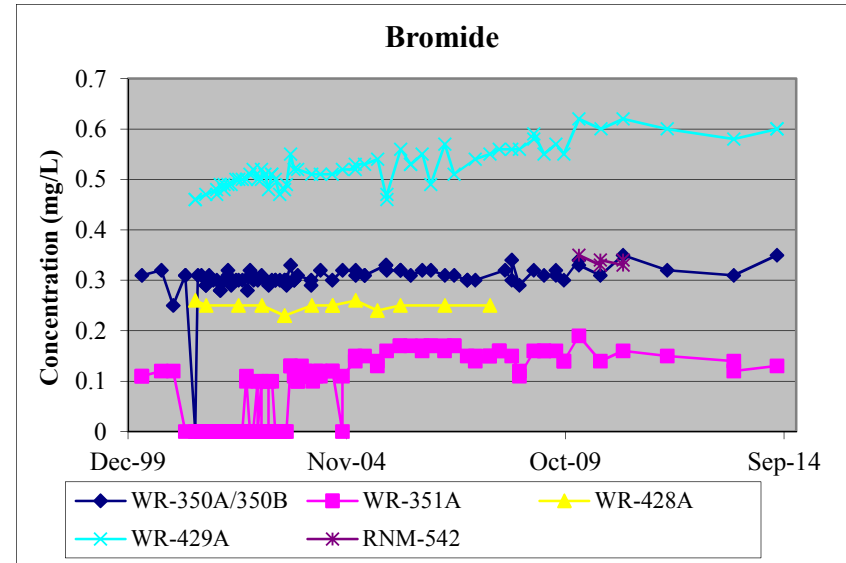
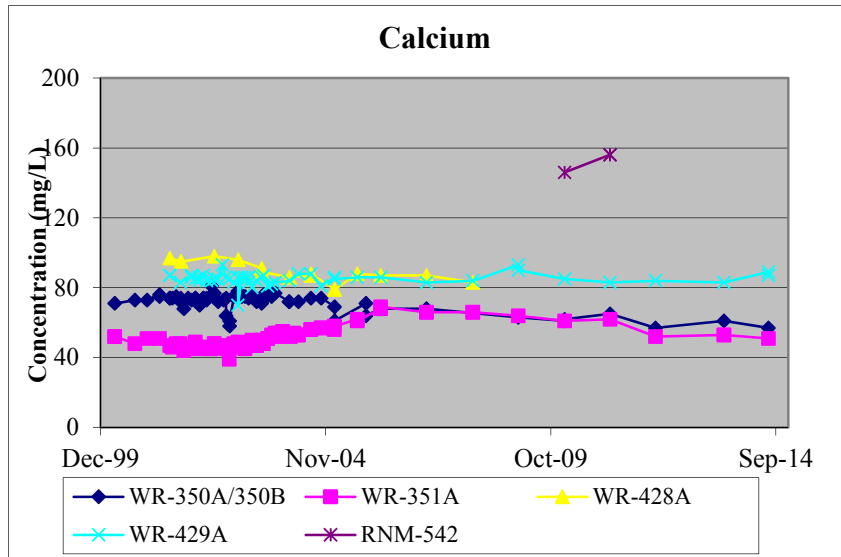
APPENDIX E
REGIONAL WELLS: TREND CHARTS

Congress and Nearmont Landfills
Analytical Data Trend Plots

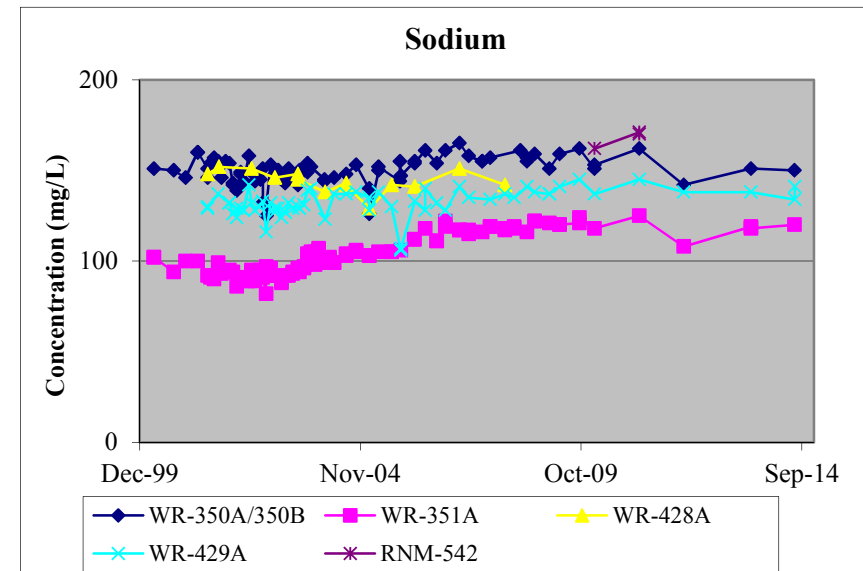
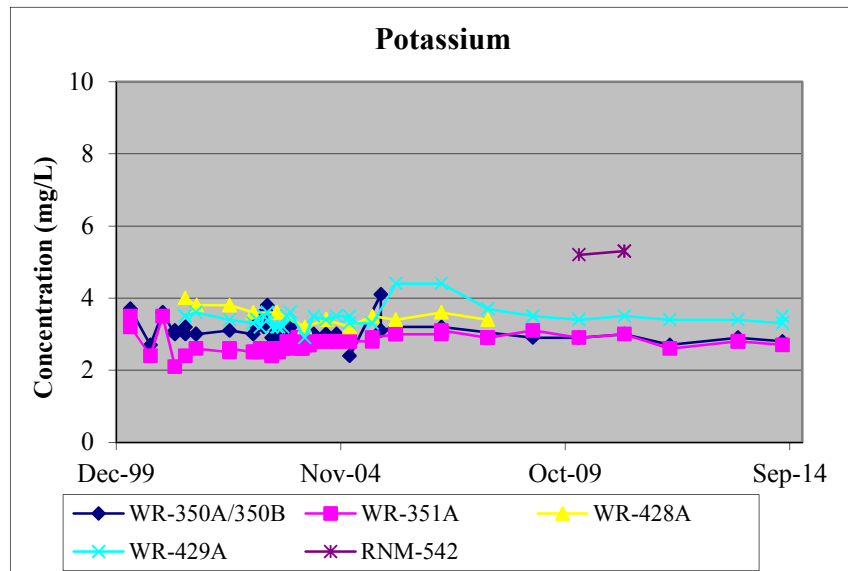
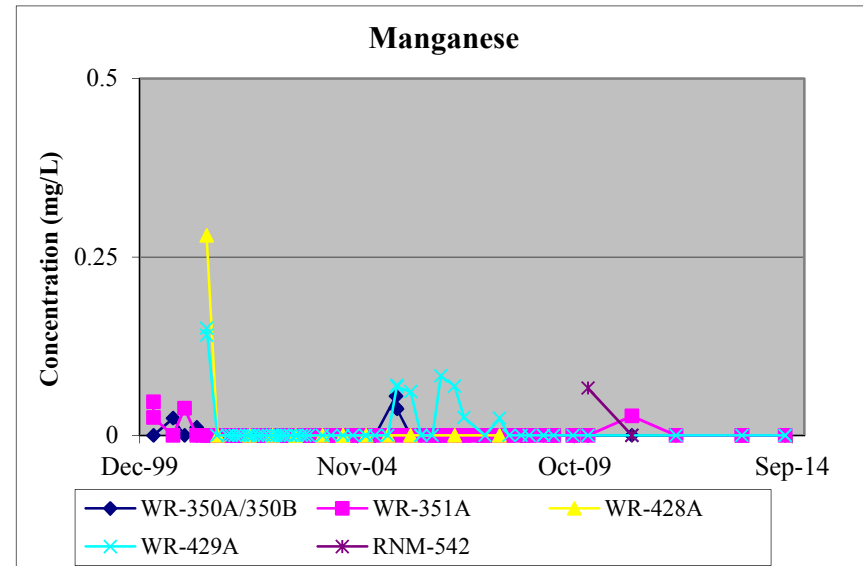
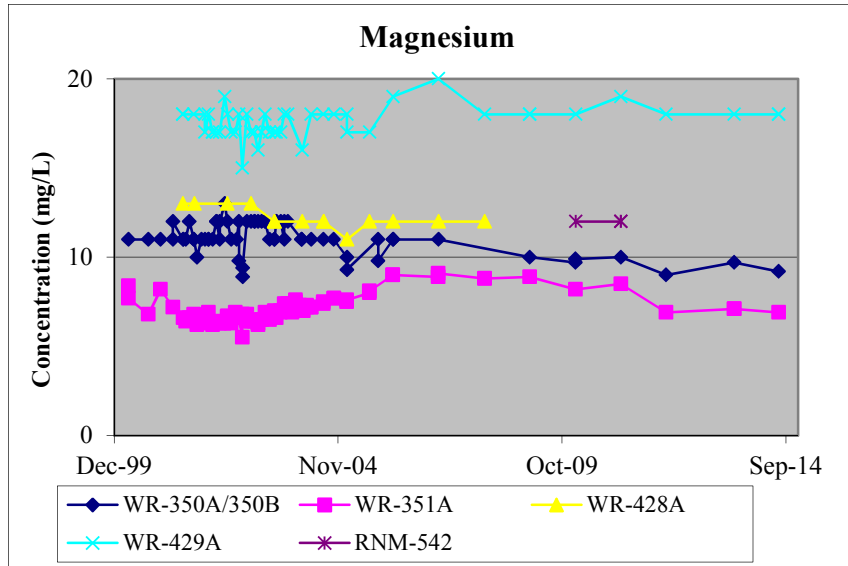


Note: Nitrite has never been detected in the regional wells and is not plotted.

Congress and Nearmont Landfills
Analytical Data Trend Plots

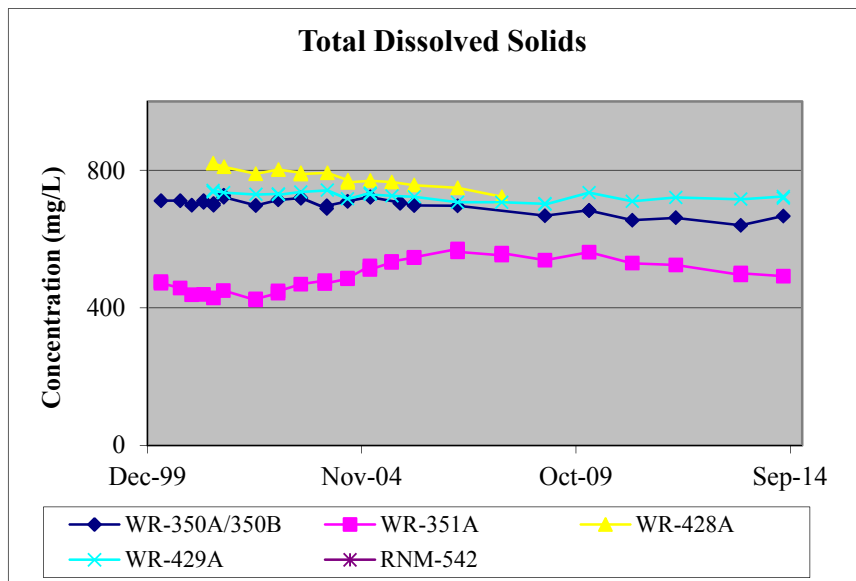
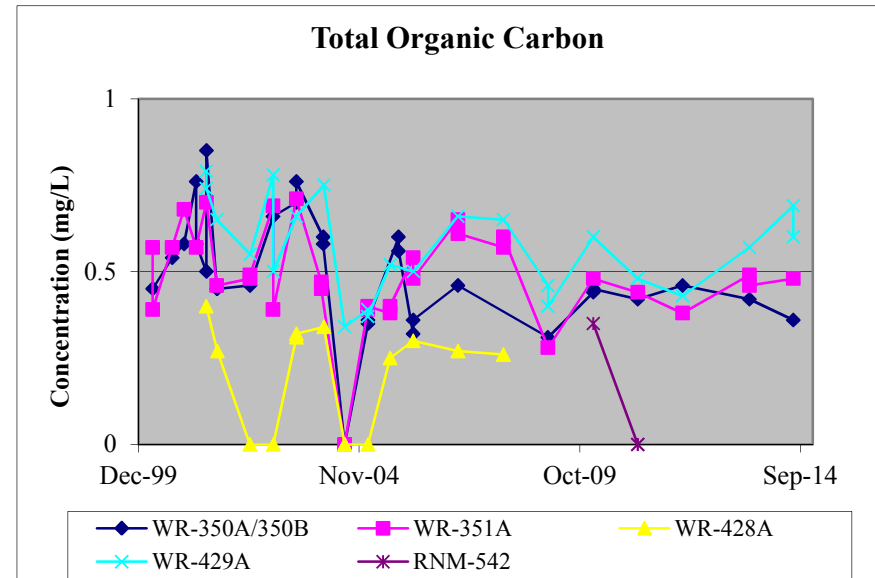
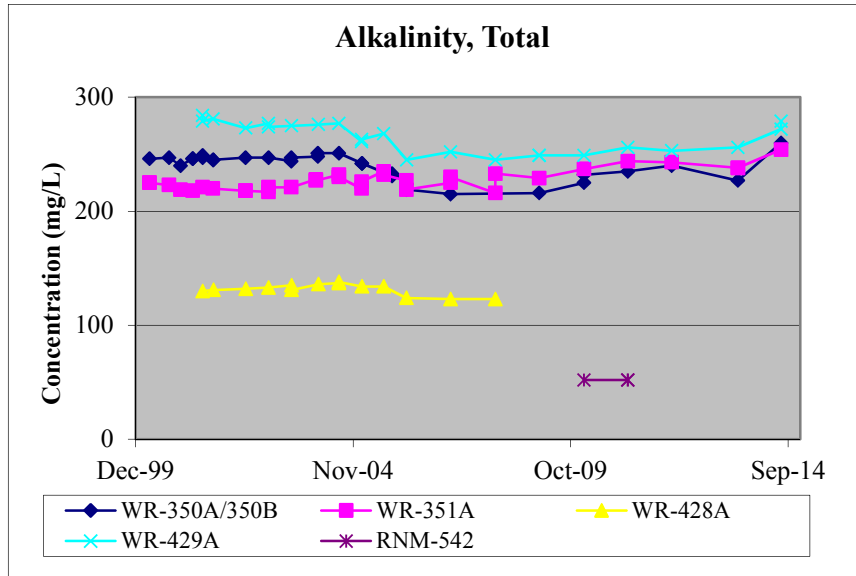


Congress and Nearmont Landfills
Analytical Data Trend Plots



Note: Ortho phosphate has never been detected in the regional wells and is not plotted.

Congress and Nearmont Landfills
Analytical Data Trend Plots



APPENDIX F
DUPLICATE GROUNDWATER
ANALYSIS COMPARISON

Appendix E
Duplicate Groundwater Analysis Comparison
Congress and Nearmont Landfills

Login	Well	Date	Parameter	Prefix	Result	Login	Well	Date	Parameter	Prefix	Result	RPD %
L28575-02	WR-351A	7/30/2013 8:03	1,1,1,2-TETRACHLOROETHANE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	1,1,1,2-TETRACHLOROETHANE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	1,1,1-TRICHLOROETHANE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	1,1,1-TRICHLOROETHANE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	1,1,2,2-TETRACHLOROETHANE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	1,1,2,2-TETRACHLOROETHANE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	1,1,2-TRICHLOROETHANE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	1,1,2-TRICHLOROETHANE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	1,1-DICHLOROETHANE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	1,1-DICHLOROETHANE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	1,1-DICHLOROETHENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	1,1-DICHLOROETHENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	1,1-DICHLOROPROPENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	1,1-DICHLOROPROPENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	1,2,3-TRICHLOROBENZENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	1,2,3-TRICHLOROBENZENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	1,2,3-TRICHLOROPROPANE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	1,2,3-TRICHLOROPROPANE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	1,2,4-TRICHLOROBENZENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	1,2,4-TRICHLOROBENZENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	1,2,4-TRIMETHYLBENZENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	1,2,4-TRIMETHYLBENZENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	1,2-DIBROMO-3-CHLOROPROPANE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	1,2-DIBROMO-3-CHLOROPROPANE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	1,2-DICHLOROBENZENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	1,2-DICHLOROBENZENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	1,2-DICHLOROETHANE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	1,2-DICHLOROETHANE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	1,2-DICHLOROPROPANE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	1,2-DICHLOROPROPANE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	1,3,5-TRIMETHYLBENZENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	1,3,5-TRIMETHYLBENZENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	1,3-DICHLOROBENZENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	1,3-DICHLOROBENZENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	1,3-DICHLOROPROPANE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	1,3-DICHLOROPROPANE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	1,4-DICHLOROBENZENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	1,4-DICHLOROBENZENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	2,2-DICHLOROPROPANE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	2,2-DICHLOROPROPANE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	2-CHLOROTOLUENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	2-CHLOROTOLUENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	4-CHLOROTOLUENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	4-CHLOROTOLUENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	4-ISOPROPYLTOLUENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	4-ISOPROPYLTOLUENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	ALKALINITY, BICARBONATE		238	L28575-03	WR-351A	7/30/2013 8:06	ALKALINITY, BICARBONATE		238	0.0%
L28575-02	WR-351A	7/30/2013 8:03	ALKALINITY, TOTAL		238	L28575-03	WR-351A	7/30/2013 8:06	ALKALINITY, TOTAL		238	0.0%
L28575-02	WR-351A	7/30/2013 8:03	AMMONIA AS N	<	0.05	L28575-03	WR-351A	7/30/2013 8:06	AMMONIA AS N	<	0.05	0.0%
L28575-02	WR-351A	7/30/2013 8:03	BENZENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	BENZENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	BROMIDE		0.14	L28575-03	WR-351A	7/30/2013 8:06	BROMIDE		0.12	15.4%
L28575-02	WR-351A	7/30/2013 8:03	BROMOBENZENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	BROMOBENZENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	BROMOCHLOROMETHANE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	BROMOCHLOROMETHANE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	BROMODICHLOROMETHANE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	BROMODICHLOROMETHANE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	BROMOFORM	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	BROMOFORM	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	BROMOMETHANE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	BROMOMETHANE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	CALCIUM		53	L28575-03	WR-351A	7/30/2013 8:06	CALCIUM		53	0.0%
L28575-02	WR-351A	7/30/2013 8:03	CARBON TETRACHLORIDE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	CARBON TETRACHLORIDE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	CHLORIDE		18	L28575-03	WR-351A	7/30/2013 8:06	CHLORIDE		18	0.0%
L28575-02	WR-351A	7/30/2013 8:03	CHLOROBENZENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	CHLOROBENZENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	CHLORODIBROMOMETHANE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	CHLORODIBROMOMETHANE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	CHLOROETHANE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	CHLOROETHANE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	CHLOROFORM		0.0013	L28575-03	WR-351A	7/30/2013 8:06	CHLOROFORM		0.0014	7.4%
L28575-02	WR-351A	7/30/2013 8:03	CHLOROMETHANE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	CHLOROMETHANE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	CIS-1,2-DICHLOROETHENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	CIS-1,2-DICHLOROETHENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	CIS-1,3-DICHLOROPROPENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	CIS-1,3-DICHLOROPROPENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	DIBROMOMETHANE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	DIBROMOMETHANE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	DICHLORODIFLUOROMETHANE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	DICHLORODIFLUOROMETHANE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	ETHYLBENZENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	ETHYLBENZENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	ETHYLENE DIBROMIDE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	ETHYLENE DIBROMIDE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	FLUORIDE		1	L28575-03	WR-351A	7/30/2013 8:06	FLUORIDE		1.1	9.5%

Appendix E
Duplicate Groundwater Analysis Comparison
Congress and Nearmont Landfills

Login	Well	Date	Parameter	Prefix	Result	Login	Well	Date	Parameter	Prefix	Result	RPD %
L28575-02	WR-351A	7/30/2013 8:03	HEXACHLOROBUTADIENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	HEXACHLOROBUTADIENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	IRON		0.22	L28575-03	WR-351A	7/30/2013 8:06	IRON		0.23	4.4%
L28575-02	WR-351A	7/30/2013 8:03	ISOPROPYLBENZENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	ISOPROPYLBENZENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	M/P-XYLENES	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	M/P-XYLENES	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	MAGNESIUM		7.1	L28575-03	WR-351A	7/30/2013 8:06	MAGNESIUM		7.1	0.0%
L28575-02	WR-351A	7/30/2013 8:03	MANGANESE	<	0.02	L28575-03	WR-351A	7/30/2013 8:06	MANGANESE	<	0.02	0.0%
L28575-02	WR-351A	7/30/2013 8:03	METHYLENE CHLORIDE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	METHYLENE CHLORIDE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	METHYL-TERT-BUTYL ETHER	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	METHYL-TERT-BUTYL ETHER	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	NAPHTHALENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	NAPHTHALENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	N-BUTYLBENZENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	N-BUTYLBENZENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	NITRATE AS N		3.2	L28575-03	WR-351A	7/30/2013 8:06	NITRATE AS N		3.2	0.0%
L28575-02	WR-351A	7/30/2013 8:03	NITRITE AS N	<	0.1	L28575-03	WR-351A	7/30/2013 8:06	NITRITE AS N	<	0.1	0.0%
L28575-02	WR-351A	7/30/2013 8:03	N-PROPYLBENZENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	N-PROPYLBENZENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	ORTHO PHOSPHATE AS P	<	0.2	L28575-03	WR-351A	7/30/2013 8:06	ORTHO PHOSPHATE AS P	<	0.2	0.0%
L28575-02	WR-351A	7/30/2013 8:03	ORTHO-XYLENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	ORTHO-XYLENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	POTASSIUM		2.8	L28575-03	WR-351A	7/30/2013 8:06	POTASSIUM		2.8	0.0%
L28575-02	WR-351A	7/30/2013 8:03	SEC-BUTYLBENZENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	SEC-BUTYLBENZENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	SODIUM		119	L28575-03	WR-351A	7/30/2013 8:06	SODIUM		118	0.8%
L28575-02	WR-351A	7/30/2013 8:03	STYRENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	STYRENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	SULFATE		113	L28575-03	WR-351A	7/30/2013 8:06	SULFATE		113	0.0%
L28575-02	WR-351A	7/30/2013 8:03	TERT-BUTYLBENZENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	TERT-BUTYLBENZENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	TETRACHLOROETHENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	TETRACHLOROETHENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	TOLUENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	TOLUENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	TOTAL DISSOLVED SOLIDS		496	L28575-03	WR-351A	7/30/2013 8:06	TOTAL DISSOLVED SOLIDS		501	1.0%
L28575-02	WR-351A	7/30/2013 8:03	TOTAL ORGANIC CARBON		0.49	L28575-03	WR-351A	7/30/2013 8:06	TOTAL ORGANIC CARBON		0.46	6.3%
L28575-02	WR-351A	7/30/2013 8:03	TOTAL TRIHALOMETHANES		0.0013	L28575-03	WR-351A	7/30/2013 8:06	TOTAL TRIHALOMETHANES		0.0014	7.4%
L28575-02	WR-351A	7/30/2013 8:03	TRANS-1,2-DICHLOROETHENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	TRANS-1,2-DICHLOROETHENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	TRANS-1,3-DICHLOROPROPENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	TRANS-1,3-DICHLOROPROPENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	TRICHLOROETHENE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	TRICHLOROETHENE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	TRICHLOROFLUOROMETHANE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	TRICHLOROFLUOROMETHANE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	VINYL CHLORIDE	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	VINYL CHLORIDE	<	0.0005	0.0%
L28575-02	WR-351A	7/30/2013 8:03	XYLENES (TOTAL)	<	0.0005	L28575-03	WR-351A	7/30/2013 8:06	XYLENES (TOTAL)	<	0.0005	0.0%

L30121-03	WR-429A	7/22/2014 10:18	1,1,1,2-TETRACHLOROETHANE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	1,1,1,2-TETRACHLOROETHANE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	1,1,1-TRICHLOROETHANE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	1,1,1-TRICHLOROETHANE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	1,1,2,2-TETRACHLOROETHANE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	1,1,2,2-TETRACHLOROETHANE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	1,1,2-TRICHLOROETHANE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	1,1,2-TRICHLOROETHANE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	1,1-DICHLOROETHANE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	1,1-DICHLOROETHANE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	1,1-DICHLOROETHENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	1,1-DICHLOROETHENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	1,1-DICHLOROPROPENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	1,1-DICHLOROPROPENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	1,2,3-TRICHLOROBENZENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	1,2,3-TRICHLOROBENZENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	1,2,3-TRICHLOROPROPANE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	1,2,3-TRICHLOROPROPANE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	1,2,4-TRICHLOROBENZENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	1,2,4-TRICHLOROBENZENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	1,2,4-TRIMETHYLBENZENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	1,2,4-TRIMETHYLBENZENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	1,2-DIBROMO-3-CHLOROPROPANE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	1,2-DIBROMO-3-CHLOROPROPANE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	1,2-DICHLOROBENZENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	1,2-DICHLOROBENZENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	1,2-DICHLOROETHANE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	1,2-DICHLOROETHANE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	1,2-DICHLOROPROPANE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	1,2-DICHLOROPROPANE	<	0.0005	0.0%

Appendix E
Duplicate Groundwater Analysis Comparison
Congress and Nearmont Landfills

Login	Well	Date	Parameter	Prefix	Result	Login	Well	Date	Parameter	Prefix	Result	RPD %
L30121-03	WR-429A	7/22/2014 10:18	1,3,5-TRIMETHYLBENZENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	1,3,5-TRIMETHYLBENZENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	1,3-DICHLOROBENZENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	1,3-DICHLOROBENZENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	1,3-DICHLOROPROPANE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	1,3-DICHLOROPROPANE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	1,4-DICHLOROBENZENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	1,4-DICHLOROBENZENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	2,2-DICHLOROPROPANE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	2,2-DICHLOROPROPANE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	2-CHLOROTOLUENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	2-CHLOROTOLUENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	4-CHLOROTOLUENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	4-CHLOROTOLUENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	4-ISOPROPYLTOLUENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	4-ISOPROPYLTOLUENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	ALKALINITY, BICARBONATE		272	L30121-04	WR-429A	7/22/2014 10:23	ALKALINITY, BICARBONATE		279	2.5%
L30121-03	WR-429A	7/22/2014 10:18	ALKALINITY, TOTAL		272	L30121-04	WR-429A	7/22/2014 10:23	ALKALINITY, TOTAL		279	2.5%
L30121-03	WR-429A	7/22/2014 10:18	AMMONIA AS N	<	0.05	L30121-04	WR-429A	7/22/2014 10:23	AMMONIA AS N	<	0.05	0.0%
L30121-03	WR-429A	7/22/2014 10:18	BENZENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	BENZENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	BROMIDE		0.6	L30121-04	WR-429A	7/22/2014 10:23	BROMIDE		0.6	0.0%
L30121-03	WR-429A	7/22/2014 10:18	BROMOBENZENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	BROMOBENZENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	BROMOCHLOROMETHANE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	BROMOCHLOROMETHANE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	BROMODICHLOROMETHANE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	BROMODICHLOROMETHANE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	BROMOFORM	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	BROMOFORM	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	BROMOMETHANE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	BROMOMETHANE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	CALCIUM		87	L30121-04	WR-429A	7/22/2014 10:23	CALCIUM		85	2.3%
L30121-03	WR-429A	7/22/2014 10:18	CARBON TETRACHLORIDE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	CARBON TETRACHLORIDE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	CHLORIDE		39	L30121-04	WR-429A	7/22/2014 10:23	CHLORIDE		39	0.0%
L30121-03	WR-429A	7/22/2014 10:18	CHLOROBENZENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	CHLOROBENZENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	CHLORODIBROMOMETHANE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	CHLORODIBROMOMETHANE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	CHLOROETHANE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	CHLOROETHANE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	CHLOROFORM	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	CHLOROFORM	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	CHLOROMETHANE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	CHLOROMETHANE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	CIS-1,2-DICHLOROETHENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	CIS-1,2-DICHLOROETHENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	CIS-1,3-DICHLOROPROPENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	CIS-1,3-DICHLOROPROPENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	DIBROMOMETHANE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	DIBROMOMETHANE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	DICHLORODIFLUOROMETHANE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	DICHLORODIFLUOROMETHANE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	ETHYLBENZENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	ETHYLBENZENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	ETHYLENE DIBROMIDE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	ETHYLENE DIBROMIDE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	FLUORIDE		0.8	L30121-04	WR-429A	7/22/2014 10:23	FLUORIDE		0.81	1.2%
L30121-03	WR-429A	7/22/2014 10:18	HEXACHLOROBUTADIENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	HEXACHLOROBUTADIENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	IRON		1.6	L30121-04	WR-429A	7/22/2014 10:23	IRON		1.2	28.6%
L30121-03	WR-429A	7/22/2014 10:18	ISOPROPYLBENZENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	ISOPROPYLBENZENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	M/P-XYLENES	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	M/P-XYLENES	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	MAGNESIUM		18	L30121-04	WR-429A	7/22/2014 10:23	MAGNESIUM		18	0.0%
L30121-03	WR-429A	7/22/2014 10:18	MANGANESE	<	0.02	L30121-04	WR-429A	7/22/2014 10:23	MANGANESE	<	0.02	0.0%
L30121-03	WR-429A	7/22/2014 10:18	METHYLENE CHLORIDE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	METHYLENE CHLORIDE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	METHYL-TERT-BUTYL ETHER	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	METHYL-TERT-BUTYL ETHER	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	NAPHTHALENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	NAPHTHALENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	N-BUTYLBENZENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	N-BUTYLBENZENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	NITRATE AS N		2.9	L30121-04	WR-429A	7/22/2014 10:23	NITRATE AS N		2.9	0.0%
L30121-03	WR-429A	7/22/2014 10:18	NITRITE AS N	<	0.1	L30121-04	WR-429A	7/22/2014 10:23	NITRITE AS N	<	0.1	0.0%
L30121-03	WR-429A	7/22/2014 10:18	N-PROPYLBENZENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	N-PROPYLBENZENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	ORTHO PHOSPHATE AS P	<	0.2	L30121-04	WR-429A	7/22/2014 10:23	ORTHO PHOSPHATE AS P	<	0.2	0.0%
L30121-03	WR-429A	7/22/2014 10:18	ORTHO-XYLENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	ORTHO-XYLENE	<	0.0005	0.0%

Appendix E
Duplicate Groundwater Analysis Comparison
Congress and Nearmont Landfills

Login	Well	Date	Parameter	Prefix	Result	Login	Well	Date	Parameter	Prefix	Result	RPD %
L30121-03	WR-429A	7/22/2014 10:18	POTASSIUM		3.3	L30121-04	WR-429A	7/22/2014 10:23	POTASSIUM		3.5	5.9%
L30121-03	WR-429A	7/22/2014 10:18	SEC-BUTYLBENZENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	SEC-BUTYLBENZENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	SODIUM		134	L30121-04	WR-429A	7/22/2014 10:23	SODIUM		141	5.1%
L30121-03	WR-429A	7/22/2014 10:18	STYRENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	STYRENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	SULFATE		232	L30121-04	WR-429A	7/22/2014 10:23	SULFATE		229	1.3%
L30121-03	WR-429A	7/22/2014 10:18	TERT-BUTYLBENZENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	TERT-BUTYLBENZENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	TETRACHLOROETHENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	TETRACHLOROETHENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	TOLUENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	TOLUENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	TOTAL DISSOLVED SOLIDS		724	L30121-04	WR-429A	7/22/2014 10:23	TOTAL DISSOLVED SOLIDS		719	0.7%
L30121-03	WR-429A	7/22/2014 10:18	TOTAL ORGANIC CARBON		0.69	L30121-04	WR-429A	7/22/2014 10:23	TOTAL ORGANIC CARBON		0.6	14.0%
L30121-03	WR-429A	7/22/2014 10:18	TOTAL TRIHALOMETHANES	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	TOTAL TRIHALOMETHANES	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	TRANS-1,2-DICHLOROETHENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	TRANS-1,2-DICHLOROETHENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	TRANS-1,3-DICHLOROPROPENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	TRANS-1,3-DICHLOROPROPENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	TRICHLOROETHENE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	TRICHLOROETHENE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	TRICHLOROFLUOROMETHANE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	TRICHLOROFLUOROMETHANE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	VINYL CHLORIDE	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	VINYL CHLORIDE	<	0.0005	0.0%
L30121-03	WR-429A	7/22/2014 10:18	XYLENES (TOTAL)	<	0.0005	L30121-04	WR-429A	7/22/2014 10:23	XYLENES (TOTAL)	<	0.0005	0.0%

APPENDIX G
DEWATERING SUMMARY AND WEEKLY LOGS

Congress Landfill Data
 October - November 2012

Verdad Group, LLC

Week of:		10/1/2012			
Well ID	Date	Water Level	Volume Purged	Total Depth	Comments
CLW-1	10/5/2012	Dry	N/A		
WR-287A	10/5/2012	33.4	3	47.1	Hand Bailer
CLW-12	10/5/2012	36.89	N/A	48.2	
CM-8	10/5/2012	39.1	N/A	42.6	
CM-9	10/5/2012	39.56	4	44.3	Hand Bailer
Total Purged:			7		

Week of:		10/8/2012			
Well ID	Date	Water Level	Volume Purged	Total Depth	Comments
CLW-1	10/12/2012	Dry	N/A		
WR-287A	10/12/2012	32.7	3.5	47.1	Hand Bailer
CLW-12	10/12/2012	37.04	N/A	48.2	
CM-8	10/12/2012	39.28	N/A	42.6	
CM-9	10/12/2012	39.73	4	44.3	Hand Bailer
Total Purged:			7.5		

Week of:		10/15/2012			
Well ID	Date	Water Level	Volume Purged	Total Depth	Comments
CLW-1	10/19/2012	Dry	N/A		
WR-287A	10/19/2012	32.89	3	47.1	Hand Bailer
CLW-12	10/19/2012	37.01	N/A	48.2	
CM-8	10/19/2012	39.29	N/A	42.6	
CM-9	10/19/2012	39.83	4	44.3	Hand Bailer
Total Purged:			7		

Week of:		10/22/2012			
Well ID	Date	Water Level	Volume Purged	Total Depth	Comments
CLW-1	10/26/2012	Dry	N/A		
WR-287A	10/26/2012	32.3	3.5	47.1	Hand Bailer
CLW-12	10/26/2012	37.2	N/A	48.2	
CM-8	10/26/2012	39.3	N/A	42.6	
CM-9	10/26/2012	39.9	4	44.3	Hand Bailer
Total Purged:			7.5		

Week of:		10/29/2012			
Well ID	Date	Water Level	Volume Purged	Total Depth	Comments
CLW-1	11/2/2012	Dry	N/A		
WR-287A	11/2/2012	32.3	4	47.1	Hand Bailer
CLW-12	11/2/2012	37.3	N/A	48.2	
CM-8	11/2/2012	39.4	N/A	42.6	
CM-9	11/2/2012	39.9	5	44.3	Hand Bailer
Total Purged:			9		

Congress Landfill Data
October - November 2012

Verdad Group, LLC

Week of: 11/5/2012					
Well ID	Date	Water Level	Volume Purged	Total Depth	Comments
CLW-1	11/9/2012	Dry	N/A		
WR-287A	11/9/2012	33.2	4	47.1	Hand Bailer
CLW-12	11/9/2012	37.4	N/A	48.2	
CM-8	11/9/2012	39.7	N/A	42.6	
CM-9	11/9/2012	40.1	6	44.3	Hand Bailer
Total Purged:			10		

Total Quarterly Gallons Purged	48
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