PIMA COUNTY

ANNUAL BIOSOLIDS REPORT

CALENDAR YEAR 2013

REGIONAL WASTEWATER RECLAMATION DEPARTMENT

TREATMENT DIVISION

PIMA COUNTY
TUCSON, ARIZONA

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ANNUAL BIOSOLIDS REPORT 2013

PIMA COUNTY
REGIONAL WASTEWATER RECLAMATION DEPARTMENT
PIMA COUNTY, ARIZONA

Pima County
Regional Wastewater Reclamation Department
201 North Stone Avenue
Tucson, Arizona 85701-1207

Jackson Jenkins
Director

Phone (520)740-6500
Fax (520) 620-0135

February 14, 2014

BIO-SOLIDS COORDINATOR - ADEQ
WATER QUALITY COMPLIANCE ASSURANCE UNIT (MO5415B-1)
1110 West Washington Street
Phoenix, Arizona 85007

Dear Robert Phalen, Biosolids Coordinator, Water Quality Compliance Assurance Unit - ADEQ

RE: BIOSOLIDS ANNUAL REPORT 2013

As required by AAC R18-9-1014(F), and/or in accordance with the Arizona Pollutant Discharge Elimination System (AZPDES) Permits issued to the following facilities, we are transmitting herewith the Pima County Regional Wastewater Reclamation Department's Biosolids Annual Report for Calendar Year 2013.

- Tres Rios (previously, Ina Road) Wastewater Reclamation Facility, AZPDES Permit No. AZ0020001
- Green Valley Biological Nutrient Removal Oxidation Ditch, AZPDES Permit No. AZ0024937
- Avra Valley WRF, AZPDES Permit No. AZ0024121

The Roger Road Wastewater Reclamation Facility (WRF), AZPDES Permit No. AZ0020923, pumped its digested sludge via the sludge pipeline to the Tres Rios Wastewater Reclamation Facility WRF Centrifuge Building for thickening after mixing with the digested sludge from Tres Rios Wastewater Reclamation Facility.

The Avra Valley WRF, AZPDES Permit No. AZ0024121 and the Corona de Tucson WRF, APP Permit No. P-100644 trucked their solids to the Wastewater Collection System of Roger Road WRF. The Randolph Park WRF, APP Permit No. P-100635, discharged its solids into the Collection System of Roger Road WRF.

The Mt. Lemmon WRF, AZPDES Permit No. AZ0022250 trucked its solids to the Wastewater Collection System of Tres Rios WRF. The Town of Marana sent sludge from its WRF to the collection system of Tres Rios WRF during the period January thru April 2013.

The Tres Rios WRF had 10118 dry tons of Biosolids hauled off site to land application on agricultural land; the Green Valley WRF had no Biosolids hauled off the site during calendar year 2013.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for known violations.

As you review this report, if you have any questions, please contact Jeff Prevatt, Program Manager, Compliance and Regulatory Affairs Office at (520)724-6200.

Sincerely,

PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT

Jeff Prevatt, Program Manager
Compliance and Regulatory Affairs Office

FJP: hbe
Attachment – Annual Biosolids Report 2013
Electronic copy:
John Sherlock, Deputy Director, Treatment Division
Charles Wesselhoft, Deputy County Attorney, Civil Division
Frank Gall, Wastewater Treatment Plant Manager, Roger Road WRF
Ken Weber, Wastewater Treatment Plant Manager, Sub-Regional Facilities
Douglas Kirkland, Permit and Regulatory Compliance Officer, IWC

CONTENTS

1. Preparer Forms: Tres Rios WRF AZPDES No. AZ0020001; Roger Road WRF, AZPDES No. AZ0020923; Randolph Park WRF, APP No. P - 100635; Corona de Tucson WRF, APP No. AZ100644; Avra Valley WRF, AZPDES No. AZ0024121; Mt. Lemmon WRF, AZPDES No. AZ0022250

2. Tres Rios WRF and Roger Road WRF Vector Attraction Reduction, Pathogen Reduction and Pollutant Concentration

3. Tres Rios WRF Sampling and Analysis Priority Pollutants, TCLP and Hazardousness

4. Land Application Events, Land Application Contractor

5. Roger Road WRF Quarterly Sludge Sampling and Analyses

6. Avra Valley WRF Sampling and Analyses Priority Pollutants, TCLP and Hazardousness

7. Preparer Form Green Valley BNROD, AZPDES No. AZ0024937

8. Green Valley BNROD Sampling and Analyses Priority Pollutants, TCLP, Hazardousness and Dioxin

BIOSOLIDS ANNUAL REPORT 2013

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ANNUAL BIOSOLIDS REPORT 2013

PIMA COUNTY
REGIONAL WASTEWATER RECLAMATION DEPARTMENT
PIMA COUNTY, ARIZONA

SECTION 1

PREPARER FORMS

TRES RIOS WRF AZPDES NO. AZ0020001

ROGER ROAD WRF, AZPDES NO. AZ0020923

RANDOLPH PARK WRF, APP NO. P - 100635

CORONA DE TUCSON WRF, APP NO. P - 100644

AVRA VALLEY WRF, AZPDES NO. AZ0024121

MT. LEMMON WRF, AZPDES NO. AZ0022250

BIOSOLIDS ANNUAL REPORT 2013

2013 Biosolids or Sewage Sludge Annual Report

Mail signed printout to: Robert Phalen, ADEQ Biosolids Coordinator
1110 W. Washington St.,
Phoenix, AZ 85007
and email file to: biosolids@azdeq.gov

Date signed =date(mm/dd/ year)	NPDES/AZPDES Permit#	APP #	Facility Name	Contact First Name	Contact Last Name	Contact Email	Title	FTE Residents served	Preparer or Applicator (P/A/AP)	Street or P.O. Box #	Street Name or "P.O. Box"
2/14/2014	20001	100630	Pima County Tres Rios WRF	Jeff	Prevatt	jeff.prevatt@wwm.pima.gov	Program Manager	344872	P	3035	W. El Camino del Cerro
										7101	N. Casa Grande Hwy
City	**Zip**	**Phone**	**Lagoons/Tanks or LINED Drying Beds for ALL Sludge (Y/N)**	**Dry Tons Stored 01/01/13**	**Class (A/B/N)**	**Alternative #**	**VAR #**	**Dry Tons stored 12/31/13**	**Class (A/B/N)**	**Alternative #**	**VAR #**
Tucson	85745	5207246200	N	N							
Tucson	85743	5204436100									
Dry Tons stored 01/01/12	**Dry Tons in, from Daily Flow**	**Dry Tons Sludge Received**	**From Facility (Name)**	**Dry Tons Sludge sent away**	**To Facilty (Name)**	**Mark "S" if reporting Short, NOT Metric Tons**	**Dry Tons Additions to Sludge**	**Received / Sent Away Hauler**	**Hauler Phone**		**Follow Up**
	11677										
		3953	Pima County Roger Road WRF					Pipeline			
		0.99	Pima County Mt. Lemmon WRF					Pima County RWRD Truck-	5205498195		
Disposition	**Dry Tons out, weighed**	**Class (A/B/N)**	**Alternative #**	**VAR #**	**Fecal C/ Salm. (F/S)**	**To (Recipient Name)**	**Hauler Name**	**Hauler Phone**	**Application Site**		

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Surface Unit										
Surface Unit										
Landfill										
Landfill										
Landfill										
Composting										
Composting										
Land Apply	10118	B	5	1		Avra Gro Systems, Inc.	Avra Gro Systems, Inc.	5202717736	Kai Farms, TNT Farms,	
Land Apply										
Land Apply										
Land Apply										
Land Apply										
Land Apply										
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Name: **John W. Sherlock** Title: **Deputy Director - Treatment**

3F

Application Site/ Loaction	Field ID	Amount of Biosolids Applied (DT) (MDT)	Preparer	Pathogen Treatment	Vector Attraction Reduction Method	Loading Rate DT/acre Kg/H	Nitrogen Conc lb/a Kg/H	Type of Crop Grown after Application	Agronomic Rate of Crop Grown (lb/acre)	Cumulative Concentration of Pollutants (MG/Kg) in Soil									
										As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn
Kai Farms, Marana, Az	JK-4	271.8	Pima Co.	Class B, Alt 5	Option 1	2.11	147.4	Cotton/Barley	380	0.4119	0.1446	2.1865	27.1835	1.5517	0.1116	0.9775	1.2923	0.3588	55.8064
		246.5				4721	165.27												
Kai Farms, Marana, Az	JK-5	825.53	Pima Co.	Class B, Alt 5	Option 1	3.75	248.8	Cotton/Wheat	360	0.8362	0.3308	4.2354	50.695	3.3358	0.1925	1.861	2.6911	0.7272	93.1489
		748.78				8410	278.87												
Kai Farms, Marana, Az	JK-6	161.56	Pima Co.	Class B, Alt 5	Option 1	2.79	170	Cotton	380	0.5547	0.1828	2.5276	34.6471	2.5313	0.991	1.1773	1.6549	0.4753	65.1481
		146.54				6243	191												
Kai Farms, Marana, Az	JK-7	406.25	Pima Co.	Class B, Alt 5	Option 1	2.13	157.3	Cotton/Wheat	380	0.5474	0.2739	3.6177	48.9805	3.8731	0.1491	1.1964	2.1198	0.4381	99.9255
		399.65				4767	176.35												
Kai Farms, Marana, Az	JK-9	292.52	Pima Co.	Class B, Alt 5	Option 1	1.56	116	Cotton/Barley	380	0.3136	0.1396	2.1095	25.3101	2.0975	0.088	0.5878	1.0282	0.2393	49.7722
		265.30				3506	130												
Kai Farms, Marana, Az	JK-12	256.2	Pima Co.	Class B, Alt 5	Option 1	1.73	107.8	Cotton	380	0.9544	0.3624	4.9855	72.0768	4.5121	0.2416	2.6268	3.2214	0.7839	135.559
		232.36				3879	120												
Kai Farms, Marana, Az	JK-13	372.1	Pima Co.	Class B, Alt 5	Option 1	2.42	169	Cotton	380	1.1259	0.4218	6.1295	68.0633	4.497	0.2391	2.4966	3.4887	0.803	123.045
		337.50				5415	190												
Kai Farms, Marana, Az	JK-14	395.3	Pima Co.	Class B, Alt 5	Option 1	2.8	176	Cotton	380	0.9529	0.4022	5.8064	68.4248	4.9338	0.2316	2.5223	3.188	0.5951	136.608
		358.58				684	197												
Kai Farms, Marana, Az	JK-15	402.8	Pima Co.	Class B, Alt 5	Option 1	1.78	124	Cotton	380	0.9042	0.4234	4.4279	59.6234	4.6783	0.2271	2.0624	2.748	0.6755	99.3856
		365.40				3995	139												
Kai Farms, Marana, Az	JK-16	443.9	Pima Co.	Class B, Alt 5	Option 1	3.89	251.2	Cotton/Wheat	380	0.6024	0.2894	3.2863	44.7554	3.3009	0.1271	1.2344	1.973	0.4241	71.9493
		402.60				8726	281.5												
Kai Farms, Marana, Az	JK-17	290.2	Pima Co.	Class B, Alt 5	Option 1	3.46	240	Cotton	380	0.5399	0.2751	3.5992	48.9794	3.8788	0.148	1.2009	2.1631	0.4483	100.311
		263.30				7743	269												
Kai Farms, Marana, Az	JK-18	357.5	Pima Co.	Class B, Alt 5	Option 1	6.16	399	Wheat, Wheat	720	0.5616	0.2896	3.7521	48.6134	3.2434	0.2472	1.1232	1.9145	0.5216	87.8092
		324.20				13813	448												
Kai Farms, Marana, Az	JK-19	95.85	Pima Co.	Class B, Alt 5	Option 1	0.73	50.6	Cotton	380	0.571	0.3235	4.3794	55.9237	4.9322	0.3317	1.335	2.1223	0.5471	107.781
		86.94				1640	56												
Kai Farms, Marana, Az	JK-21a	298.44	Pima Co.	Class B, Alt 5	Option 1	4.89	322	Wheat	360	1.1027	0.5237	6.8392	95.6989	7.4443	0.4095	3.6464	4.3165	0.6966	169.451
		270.70				10965	361												
Kai Farms, Marana, Az	JK-26	385.5	Pima Co.	Class B, Alt 5	Option 1	1.66	102	Cotton	380	0.4849	0.2501	4.0904	41.4943	2.9639	0.1256	1.3751	2.3036	0.4037	79.4364
		349.70				3724	114												

Application Site/ Loaction	Field ID	Amount of Biosolids Applied (DT) (MDT)	Preparer	Pathogen Treatment	Vector Attraction Reduction Method	Loading Rate DT/acre Kg/H	Nitrogen Conc lb/a Kg/H	Type of Crop Grown after Application	Agronomic Rate of Crop Grown (lb/acre)	Cumulative Concentration of Pollutants (MG/Kg) in Soil									
										As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn
Kai Farms, Marana, Az	JK-27	203.1	Pima Co.	Class B, Alt 5	Option 1	1.1	74.2	Cotton	380	0.6017	0.2355	2.8364	39.96.9	2.9853	0.1458	1.3437	1.9036	0.4439	66.5862
		184.23				2460	83.1												
Kai Farms, Marana, Az	JK-28	335.38	Pima Co.	Class B, Alt 5	Option 1	1.6	115	Cotton	380	0.3617	0.1973	3.007	32.8417	3.0428	0.1049	0.7972	1.5302	0.2906	53.4218
		323.2				3579	129												
Kai Farms, Marana, Az	JK-29	191.3	Pima Co.	Class B, Alt 5	Option 1	1.14	84.7	Cotton	380	0.5165	0.1888	2.7544	37.6321	2.0641	0.1298	1.4516	2.01	0.3881	64.1714
		173.5				2552	73												
Kai Farms, Marana, Az	JK-30	188.6	Pima Co.	Class B, Alt 5	Option 1	1.27	94.8	Cotton	380	0.7162	0.3351	4.735	57.3462	4.2372	0.1784	1.9268	2.5862	0.5301	108.614
		171.1				2857	106												
Kai Farms, Marana, Az	JK-34	83.9	Pima Co.	Class B, Alt 5	Option 1	0.6	41.6	Wheat	360	0.368	0.2932	2.6776	39.4931	3.6379	0.1172	0.7364	1.6647	0.3028	66.529
		76.10				1333	46.6												
Kai Farms, Marana, Az	JK-35	90.1	Pima Co.	Class B, Alt 5	Option 1	2.25	157	Wheat	360	0.2899	0.0617	1.0029	13.5083	0.5124	0.0423	0.4504	0.7695	0.2285	31.0395
		81.70				5050	176												
Kai Farms, Marana, Az	JK-41	836.7	Pima Co.	Class B, Alt 5	Option 1	3.22	225	Cotton/Wheat	380	0.31	0.1381	1.1974	13.9144	0.7728	0.1107	0.8768	0.7719	0.2935	26.8643
		822.40				7212	253												
Kai Farms, Marana, Az	JK-42	782.9	Pima Co.	Class B, Alt 5	Option 1	2.4	174	Cotton/Wheat	380	0.491	0.1595	2.7689	28.0489	1.9453	0.0908	0.9772	1.2948	0.3846	51.612
		710.20				5383	195												
Toone Farms	AJ-1	550.3	Pima Co.	Class B, Alt 5	Option 1	4.4	306	Alfalfa	400	0.7267	0.2412	3.2844	39.1363	2.4845	0.126	1.056	2.1345	0.5491	71.5212
		499.20				9907	343												
Toone Farms	AJ-2	853.5	Pima Co.	Class B, Alt 5	Option 1	5.1	354	Cotton	380	0.5689	0.2267	4.7074	42.4051	2.7815	0.1439	1.2665	2.0663	0.4996	90.4534
		644.20				11500	397												
Tom Hum Farms	TH-11n	333.5	Pima Co.	Class B, Alt 5	Option 1	4.39	272	Wheat	360	0.5499	0.1594	2.3221	31.2736	1.6986	0.0977	1.2489	1.4793	0.4402	58.5476
		302.50				9835	305												
Tom Hum Farms	TH-11s	346.70	Pima Co.	Class B, Alt 5	Option 1	4.8	317	Cotton	380	0.6338	0.3684	2.8576	53.9128	4.7443	0.1881	1.5472	2.2655	0.4268	83.7341
		314.50				10793	355												
TNT Farms	GL-1	425.50	Pima Co.	Class B, Alt 5	Option 1	2.1	119	Cotton	380	0.5091	0.2617	4.0416	42.7826	3.8601	0.1517	1.2215	2.0289	0.37	73.9146
		385.80				4568	134												
Lim Farms	LIM-1	695.50	Pima Co.	Class B, Alt 5	Option 1	4.1	282	Cotton	380	0.5479	0.222	4.6	41.0887	2.7395	0.1406	1.2292	2.001	0.481	87.5357
		630.80				9170	316												

11172.43 DT

10117.48 MDT MDT = metric dry metric tons

2013 Biosolids or Sewage Sludge Annual Report

Mail signed printout to: Robert Phalen, ADEQ Biosolids Coordinator
1110 W. Washington St.,
Phoenix, AZ 85007
and email file to: biosolids@azdeq.gov

Date signed =date(mm/dd/ year)	NPDES/AZPDES Permit#	APP #	Facility Name	Contact First Name	Contact Last Name	Contact Email	Title	FTE Residents served	Preparer or Applicator (P/A/AP)	Street or P.O. Box #	Street Name or "P.O. Box"
2/14/2014	20923	100655	Pima County Roger Road WRF	Jeff	Prevatt	jeff.prevatt@wwm.pima.gov	Program Manager	344872	P	3035	3035 W. El Camino del Cerro
										2600	W. Sweetwater Drive
City	**Zip**	**Phone**	**Lagoons/Tanks or LINED Drying Beds for ALL Sludge (Y/N)**	**Dry Tons Stored 01/01/13**	**Class (A/B/N)**	**Alternative #**	**VAR #**	**Dry Tons stored 12/31/13**	**Class (A/B/N)**	**Alternative #**	**VAR #**
Dry Tons stored 01/01/12	**Dry Tons in, from Daily Flow**	**Dry Tons Sludge Received**	**From Facility (Name)**	**Dry Tons Sludge sent away**	**To Facilty (Name)**	**Mark "S" if reporting Short, NOT Metric Tons**	**Dry Tons Additions to Sludge**	**Received / Sent Away Hauler**	**Hauler Phone**		**Follow Up**
	11258			3953	Pima County Tres Rios			Pipeline			
		432	Pima County Avra Valley WRF					Pima County RWRD Truck-	5204191958		
		85	Pima County Corona de Tucson WRF					Pima County RWRD Truck-	5204191958		
		339	Pima County Randolph Park WRF					Pipeline			
Disposition	**Dry Tons out, weighed**	**Class (A/B/N)**	**Alternative #**	**VAR #**	**Fecal C/ Salm. (F/S)**	**To (Recipient Name)**	**Hauler Name**	**Hauler Phone**	**Application Site**		

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Name: **John W. Sherlock** Title: **Deputy Director - Treatment**

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2/14/2014		100635	Pima County Randolph Park WRF	Jeff	Prevatt	jeff.prevatt@wwm.pima.gov	Program Manager	30011	P	3035	W. El Camino del Cerro
										3755	E. 22nd Street
City	**Zip**	**Phone**	**Lagoons/Tanks or LINED Drying Beds for ALL Sludge (Y/N)**	**Dry Tons Stored 01/01/13**	**Class (A/B/N)**	**Alternative #**	**VAR #**	**Dry Tons stored 12/31/13**	**Class (A/B/N)**	**Alternative #**	**VAR #**
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Corona de Tucson	85711	5204436170									

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	843			339	Pima County Roger Road			Pima County (	5205498195		
Disposition	**Dry Tons out, weighed**	**Class (A/B/N)**	**Alternative #**	**VAR #**	**Fecal C/ Salm. (F/S)**	**To (Recipient Name)**	**Hauler Name**	**Hauler Phone**	**Application Site**		

ADEQ Arizona Department of Environmental Quality

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Name: John W. Sherlock Title: Deputy Director Treatment

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2/14/2014		100644	Pima County Corona de Tucson WRF	Jeff	Prevatt	jeff.prevatt@wwm.pima.gov	Program Manager	3460	P	3035	W. El Camino del Cerro
										1100	W. Sahuarita Road
City	**Zip**	**Phone**	**Lagoons/Tanks or LINED Drying Beds for ALL Sludge (Y/N)**	**Dry Tons Stored 01/01/13**	**Class (A/B/N)**	**Alternative #**	**VAR #**	**Dry Tons stored 12/31/13**	**Class (A/B/N)**	**Alternative #**	**VAR #**
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	88			85	Pima County Roger Road			Pima County	5205498195		
Disposition	**Dry Tons out, weighed**	**Class (A/B/N)**	**Alternative #**	**VAR #**	**Fecal C/ Salm. (F/S)**	**To (Recipient Name)**	**Hauler Name**	**Hauler Phone**	**Application Site**		

2013 Biosolids or Sewage Sludge Annual Report

Mail signed printout to: Robert Phalen, ADEQ Biosolids Coordinator
1110 W. Washington St.,
Phoenix, AZ 85007
and email file to: biosolids@azdeq.gov

Surface Unit										
Surface Unit										
Landfill										
Landfill										
Landfill										
Composting										
Composting										
Land Apply										
Land Apply										
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Land Apply										

I certify, under penalty of law, that the information and descriptions have been made under my direction and supervision and under a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine whether the applicable biosolids requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

Name: John W. Sherlock Title: Deputy Director - Treatment

2013 Biosolids or Sewage Sludge Annual Report

Mail signed printout to: Robert Phalen, ADEQ Biosolids Coordinator
1110 W. Washington St.,
Phoenix, AZ 85007
and email file to: biosolids@azdeq.gov

Date signed =date(mm/dd/ year)	NPDES/AZPDES Permit#	APP #	Facility Name	Contact First Name	Contact Last Name	Contact Email	Title	FTE Residents served	Preparer or Applicator (P/A/AP)	Street or P.O. Box #	Street Name or "P.O. Box"
2/14/2014	24121	100642	Pima County Avra Valley WRF	Jeff	Prevatt	jeff.prevatt@wwm.pima.gov	Program Manager	12319	P	3035	W. El Camino del Cerro
										10000	W. Snyder Hill Road
City	**Zip**	**Phone**	**Lagoons/Tanks or LINED Drying Beds for ALL Sludge (Y/N)**	**Dry Tons Stored 01/01/13**	**Class (A/B/N)**	**Alternative #**	**VAR #**	**Dry Tons stored 12/31/13**	**Class (A/B/N)**	**Alternative #**	**VAR #**
Tucson	85745	5207246200	N	N							
Tucson	85735	5204436170									
Dry Tons stored 01/01/12	**Dry Tons in, from Daily Flow**	**Dry Tons Sludge Received**	**From Facility (Name)**	**Dry Tons Sludge sent away**	**To Facilty (Name)**	**Mark "S" if reporting Short, NOT Metric Tons**	**Dry Tons Additions to Sludge**	**Received / Sent Away Hauler**	**Hauler Phone**		**Follow Up**
	699			432	Pima County Roger Road			Pima County	5205498195		
Disposition	**Dry Tons out, weighed**	**Class (A/B/N)**	**Alternative #**	**VAR #**	**Fecal C/ Salm. (F/S)**	**To (Recipient Name)**	**Hauler Name**	**Hauler Phone**	**Application Site**		

2013 Biosolids or Sewage Sludge Annual Report

ADEQ Arizona Department of Environmental Quality

Mail signed printout to: Robert Phalen, ADEQ Biosolids Coordinator
1110 W. Washington St.,
Phoenix, AZ 85007
and email file to: biosolids@azdeq.gov

Surface Unit											
Surface Unit											
Landfill											
Landfill											
Landfill											
Composting											
Composting											
Land Apply											
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Land Apply											

I certify, under penalty of law, that the information and descriptions have been made under my direction and supervision and under a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine whether the applicable biosolids requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

Name: John W. Sherlock Title: Deputy Director - Treatment

2013 Biosolids or Sewage Sludge Annual Report

Mail signed printout to: Robert Phalen, ADEQ Biosolids Coordinator
1110 W. Washington St.,
Phoenix, AZ 85007
and email file to: biosolids@azdeq.gov

Date signed =date(mm/dd/ year)	NPDES/AZPDES Permit#	APP #	Facility Name	Contact First Name	Contact Last Name	Contact Email	Title	FTE Residents served	Preparer or Applicator (P/A/AP)	Street or P.O. Box #	Street Name or "P.O. Box"
2/14/2014	22250	100345	Pima County Mt. Lemmon WRF	Jeff	Prevatt	jeff.prevatt@wwm.pima.gov	Program Manager	22	P	3035	W. El Camino Del Cerro
										12633	N Sabino Canyon Park
City	**Zip**	**Phone**	**Lagoons/Tanks or LINED Drying Beds for ALL Sludge (Y/N)**	**Dry Tons Stored 01/01/13**	**Class (A/B/N)**	**Alternative #**	**VAR #**	**Dry Tons stored 12/31/13**	**Class (A/B/N)**	**Alternative #**	**VAR #**
Tucson	85745	5207246200	N	N							
Corona de Tucson	85711	5204436170									
Dry Tons stored 01/01/12	**Dry Tons in, from Daily Flow**	**Dry Tons Sludge Received**	**From Facility (Name)**	**Dry Tons Sludge sent away**	**To Facilty (Name)**	**Mark "S" if reporting Short, NOT Metric Tons**	**Dry Tons Additions to Sludge**	**Received / Sent Away Hauler**	**Hauler Phone**		**Follow Up**
	1.14			0.99	Pima County Tres Rios			Pima County	5205498195		
Disposition	**Dry Tons out, weighed**	**Class (A/B/N)**	**Alternative #**	**VAR #**	**Fecal C/ Salm. (F/S)**	**To (Recipient Name)**	**Hauler Name**	**Hauler Phone**	**Application Site**		

2013 Biosolids or Sewage Sludge Annual Report

Mail signed printout to: Robert Phalen, ADEQ Biosolids Coordinator
1110 W. Washington St.,
Phoenix, AZ 85007
and email file to: biosolids@azdeq.gov

Surface Unit										
Surface Unit										
Landfill										
Landfill										
Landfill										
Composting										
Composting										
Land Apply										
Land Apply										
Land Apply										
Land Apply										
Land Apply										
Land Apply										
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Land Apply										
Land Apply										

I certify, under penalty of law, that the information and descriptions have been made under my direction and supervision and under a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine whether the applicable biosolids requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

Name: **John W. Sherlock** Title: **Deputy Director - Treatment**

ANNUAL BIOSOLIDS REPORT 2013; PIMA COUNTY RWRD

SECTION 2

PREPARATION OF BIOSOLIDS

TRES RIOS WRF AZPDES NO. AZ0020001
ROGER ROAD WRF, AZPDES NO. AZ0020923

VECTOR ATTRACTION REDUCTION

A.A.C. RULE 18.9.1010.A.1

PATHOGEN REDUCTION

A.A.C. RULE 18.9.1006.E ALTERNATIVE 5

POLLUTANT CONCENTRATION

A.A.C. RULE 18.9.1005 METALS

ANNUAL BIOSOLIDS REPORT 2013

VECTOR ATTRACTION REDUCTION - LAND APPLICATION
ALTERNATIVE 1 IN 40 CFR 503.33(b)(1)
R18-9-1010-A.1

Facility Name: Pima County Regional Biosolids Management Facility
Address: 7101 North Casa Grande Highway
Tucson, Arizona 85743

Facility Owner's Name: Pima County Regional Wastewater Reclamation Department
Address: 201 North Stone Avenue
Tucson, Arizona 85701

Monitoring Period: From 12/01/13 Through 12/31/13

Reporting Period: From 12/01/13 Through 12/31/13

NPDES Permit Number: AZ0020001/AZ0020923 Sludge Permit Number: N/A

Facility Latitude: 32° 20' 06" N Facility Longitude: 111°04' 16" W

Site Map Attached? ☐ Yes ☒ No

Biosolids generated from the Tres Rios WRF and Roger Road WRF are pumped to the Regional Biosolids Management Facility. After moisture reduction, the biosolids are placed into the temporary storage basin. From the basin, the contractor removes the biosolids for application as soil amendment on local area farms.

Vector attraction reduction is achieved at each wastewater reclamation facility prior to receipt at the Regional Biosolids Management Facility through the use of Alternative 1 [40 CFR 503.33(b)(1)] Method, equivalently R18-9-1010-A.1; the latter states: "Reducing the mass of volatile solids by a minimum of 38% using the calculation procedures established in "Environmental Regulations and Technology—Control of Pathogens and Vector Attraction in Sewage Sludge," EPA/625/R-92-013, published by the U.S. Environmental Protection Agency, Cincinnati, Ohio 45268, 1999 Edition." To demonstrate the achievement of this requirement, biosolids data from both Tres Rios WRF and Roger Road WRF are provided for each plant. Tables 1 and 2 are Volatile Solids Reduction (%) at the Tres Rios WRF and Roger Road WRF.

TABLE 1 - MONTHLY AVERAGE VOLATILE SOLIDS REDUCTION (%) AT TRES RIOS WRF

TRES RIOS WRF YEAR 2013	Volatile Solids Reduction (%)											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Digester #1	O/S	O/S	O/S	O/S	O/S	O/S	71	65	64	65	64	61
Digester #2	42	43	42	45	58	65	64	67	67	64	63	60
Digester #3	O/S	O/S	46	44	53	58	60	63	64	64	63	61
Digester #4	42	46	42	44	60	59	61	65	65	63	63	63
Digester #5	41	44	41	O/S	O/S	O/S	64	64	65	66	66	66
Digester #6	45	46	51	49	61	60	O/S	O/S	O/S	O/S	O/S	64

O/S = Out of Service

The mass of volatile solids of the Tres Rios WRF biosolids was reduced by at least 38 percent.

TABLE 2 – MONTHLY AVERAGE VOLATILE SOLIDS REDUCTION (%) AT ROGER ROAD WRF

ROGER ROAD WRF YEAR 2013	Volatile Solids Reduction (%)											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Digester #1	57.9	54.1	54.9	57.7	54.5	50.5	54.9	56.1	59.7	64.1	O/S	O/S
Digester #2	O/S	50.3	55.5	59.6	53.5	50.2	55.2	57.0	60.7	63.4	62.4	62.5
Digester #3	57.0	55.5	54.8	57.1	55.0	52.4	53.4	54.9	57.8	61.9	59.1	O/S
Digester #5	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S
Digester #6	56.8	55.8	61.2	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S

O/S = Out of Service

The mass of volatile solids of the Roger Road WRF biosolids has been reduced by at least 38 percent.

The volatile solids reduction is greater than 38% at each plant. No further treatment is provided at the Regional Biosolids Management Facility, and the biosolids are routinely applied to the land within 48 hours of discharge from the digester. Therefore, the combined solids will meet Alternative 1.

The volatile solids reduction is measured at least two times per week at each digester.

CERTIFICATION [503.17 (a)(4)(i)(B)]

I certify, under penalty of law, that the information that will be used to determine compliance with the vector attraction reduction requirement in § 503.33(b)(1) was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

Name and Official Title (type or print)	Area Code and Phone
John W. Sherlock, Deputy Director Treatment Division Regional Wastewater Reclamation Department	(520) 724-6100
Signature	Date Signed 2-14-2014

PATHOGEN REDUCTION - CLASS B
ALTERNATIVE 2 IN 40 CFR 503.32(b)(3)
R18-9-1006-E ALTERNATIVE 5

Facility Name: Pima County Regional Biosolids Management Facility
Address: 7101 North Casa Grande Highway
Tucson, Arizona 85743

Facility Owner's Name: Pima County Regional Wastewater Reclamation Department
Address: 201 North Stone Avenue
Tucson, Arizona 85701

Monitoring Period: From 12/01/13 Through 12/31/13

Reporting Period: From 12/01/13 Through 12/31/13

NPDES Permit Number: AZ0020001/AZ0020923 Sludge Permit Number: N/A

Facility Latitude: 32° 20' 06" N Facility Longitude: 111° 04' 16" W

Site Map Attached? ☐ Yes ☒ No

Biosolids generated from the Tres Rios WRF and Roger Road WRF are pumped to the Regional Biosolids Management Facility. After moisture reduction, the biosolids are placed into the temporary storage basin. From the basin, the contractor removes the biosolids for application as soil amendment on local area farms. Biosolids are routinely applied to the land within 48 hours of discharge from the digester.

Pathogen reduction is achieved at each treatment plant prior to transfer to the Regional Biosolids Management Facility through the use of Class B, Alternative 2 [40 CFR 503.32(b)(3) Appendix B, No. 3] Methods equivalently R18-9-1006-E Alternative 5. Pathogen reduction is accomplished by the anaerobic digestion process to achieve a residence time of greater than 15 days at a minimum temperature of 35°C. To demonstrate the achievement of the requirements under this alternative, biosolids data from both Tres Rios WRF and Roger Road WRF are provided for each plant in the following Tables No. 3 and 4.

Other than the exception noted below, the temperature in each digester was greater than or equal to 35°C and the detention time always exceeded 15 days. The operating temperature of the digester is measured at a frequency of at least two (2) times per day. For this reporting period, the average detention time and digester operating temperature are as follows:

TABLE 3 - AVERAGE DIGESTER DETENTION TIME AT TRES RIOS WRF AND ROGER ROAD WRF

TRES RIOS WRF YEAR 2013	AVERAGE DETENTION TIME (Days)											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Digester #1	O/S	O/S	O/S	O/S	O/S	O/S	37.92	44.78	49.13	28.94	27.23	24.59
Digester #2	46.77	32.60	32.86	82.72	52.87	67.81	44.20	53.18	47.80	34.27	26.88	24.34
Digester #3	O/S	O/S	34.89	78.62	53.81	46.34	47.15	57.25	51.80	32.19	28.53	26.57
Digester #4	49.80	33.36	33.21	70.90	54.32	48.03	44.76	54.68	50.25	35.17	24.76	24.17
Digester #5	68.66	40.50	O/S	O/S	O/S	O/S	50.59	66.65	79.35	47.04	50.25	24.47
Digester #6	65.24	39.37	42.19	94.82	59.27	43.48	O/S	O/S	O/S	O/S	O/S	30.37

O/S = Out of Service
Digester #5 was taken out of service on March 18, 2013.

TABLE 3 - AVERAGE DIGESTER DETENTION TIME AT TRES RIOS WRF AND ROGER ROAD WRF (Continued)

ROGER ROAD WRF YEAR 2013	AVERAGE DETENTION TIME (Days)											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Digester #1	21.4	17.6	15.9	15.9	16.0	16.7	21.6	21.0	19.8	36.7	O/S	O/S
Digester #2	O/S	61.7	15.8	15.9	16.2	16.3	21.3	21.1	19.6	26.6	34.0	26.4
Digester #3	20.6	17.5	15.7	15.7	16.3	16.5	21.2	20.9	19.6	26.6	34.8	O/S
Digester #5	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S
Digester #6	22.1	23.2	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S

O/S = Out of Service
Digester #6 was taken out of service on March 18, 2013.
Digester #1 was taken out of service on October 8, 2013.

TABLE 4 - AVERAGE DIGESTER OPERATING TEMPERATURE AT TRES RIOS WRF AND ROGER ROAD WRF

TRES RIOS WRF YEAR 2013	AVERAGE TEMPERATURE (°C)											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Digester #1	O/S	O/S	O/S	O/S	O/S	O/S	36.64	36.77	35.56	34.79	36.11	36.06
Digester #2	36.23	36.54	36.33	36.71	36.69	36.68	36.56	36.87	36.36	36.69	35.71	35.59
Digester #3	O/S	O/S	36.61	36.69	36.72	36.65	36.53	35.34	36.34	36.60	36.06	36.06
Digester #4	36.14	36.60	36.08	36.73	36.28	36.60	36.47	36.61	36.37	36.32	35.96	36.02
Digester #5	36.25	36.35	36.53	O/S	O/S	O/S	36.46	36.27	36.37	36.05	36.53	36.41
Digester #6	36.63	36.71	36.73	36.39	36.44	36.65	O/S	O/S	O/S	O/S	O/S	36.55

O/S = Out of Service

TABLE 4 - AVERAGE DIGESTER OPERATING TEMPERATURE AT TRES RIOS WRF AND ROGER ROAD WRF (cont.)

ROGER ROAD WRF YEAR 2013	AVERAGE TEMPERATURE (°C)											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Digester #1	36.0	36.8	36.6	36.9	37.0	36.9	37.1	37.0	37.1	37.2	O/S	O/S
Digester #2	O/S	36.8	36.1	36.8	36.9	36.9	36.9	37.1	37.0	36.9	36.9	36.7
Digester #3	35.8	36.9	36.7	36.9	37.0	37.2	36.9	36.9	36.9	36.7	36.9	O/S
Digester #5	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S
Digester #6	35.3	36.7	37.1	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S

O/S = Out of Service

CERTIFICATION [503.17 (a)(4)(i)(B)]

I certify, under penalty of law, that the information that will be used to determine compliance with the Class B pathogen requirements in § 503.32(b)(3) was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

Name and Official Title (type or print)	Area Code and Phone
John W. Sherlock, Deputy Director Treatment Division Regional Wastewater Reclamation Department	(520) 724-6100
Signature	Date Signed 2-14-2014

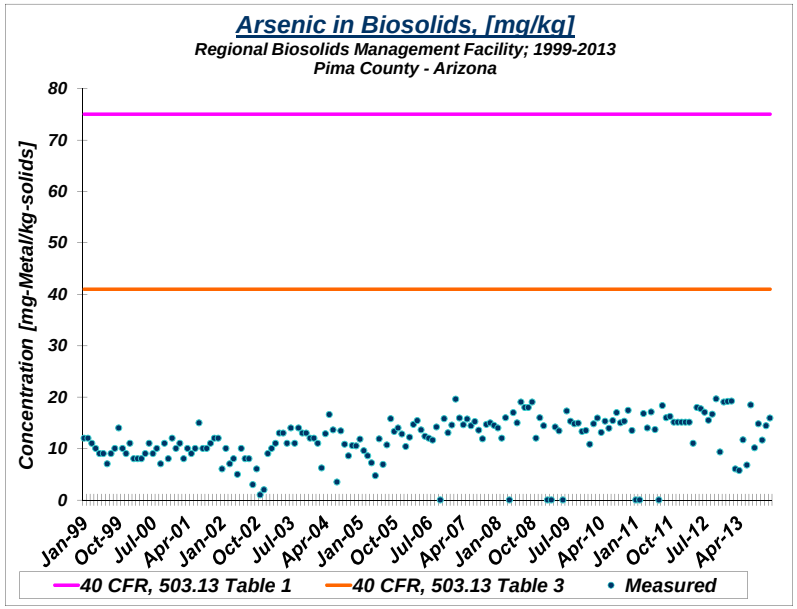
NITROGEN IN BIOSOLIDS

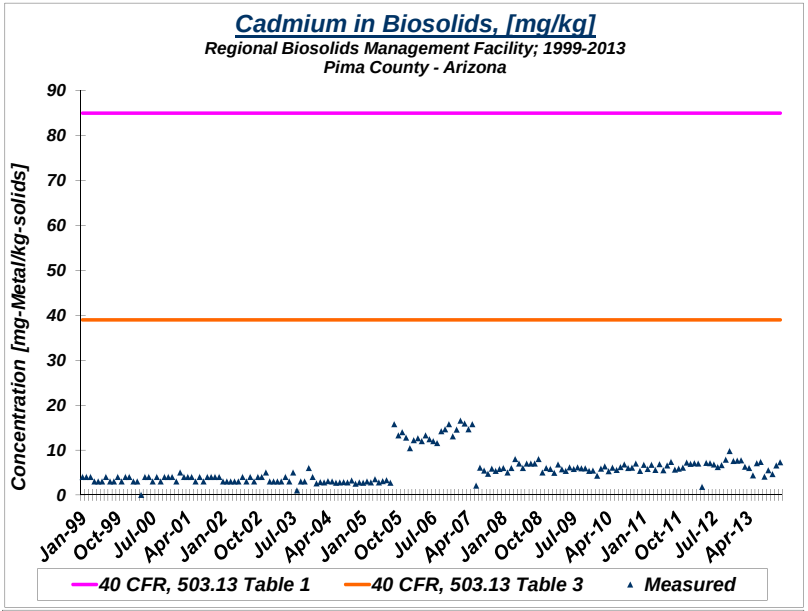
Combined biosolids generated from the Tres Rios WRF and Roger Road WRF is analyzed for Total Nitrogen. Table 5 shows the analyses results of samples collected from the combined biosolids generated from both reclamation facilities.

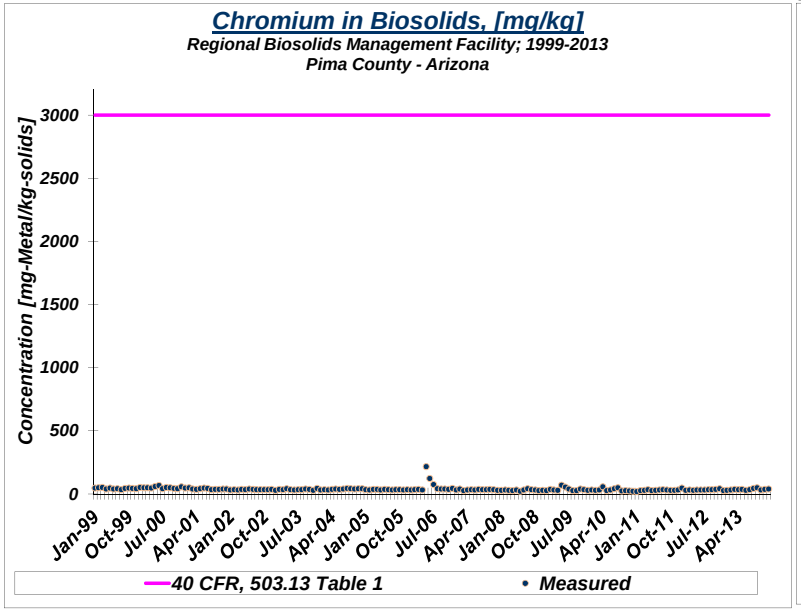
TABLE 5 - TOTAL NITROGEN IN COMBINED BIOSOLIDS (Units in mg/kg)

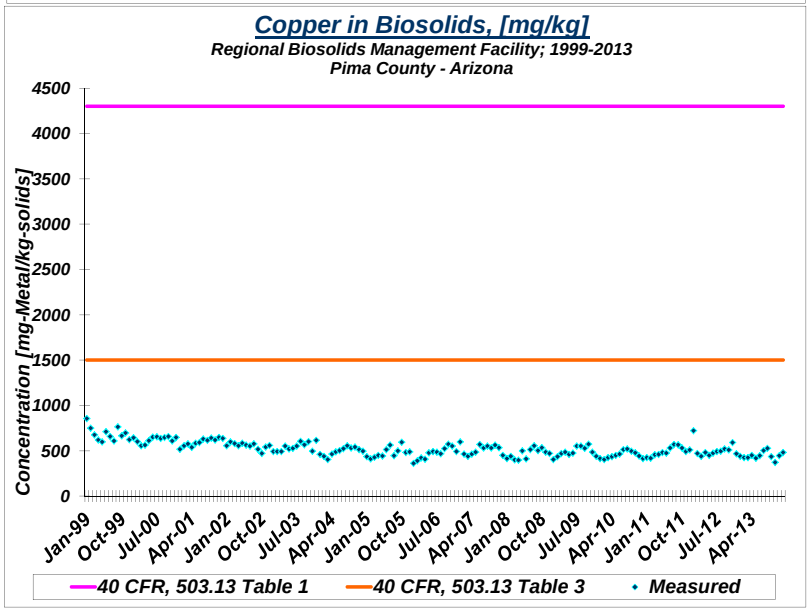
YEAR 2013	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec
Nitrogen (T)	68300	73800	61000	60200	60800	85053	62531	56903	63530	63166	86875	67052

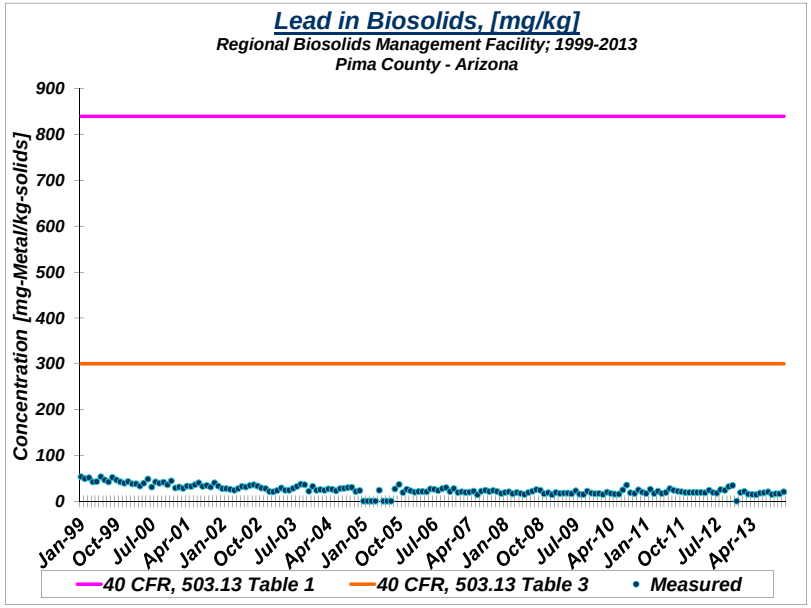
ANNUAL BIOSOLIDS REPORT 2013
POLLUTANT CONCENTRATION, 1999-2013










Lead in Biosolids, [mg/kg]
Regional Biosolids Management Facility; 1999-2013
Pima County - Arizona
Concentration [mg-Metal/kg-solids]
900
800
700
600
500
400
300
200
100
0
Jan-99
Oct-99
Jul-00
Apr-01
Jan-02
Oct-02
Jul-03
Apr-04
Jan-05
Oct-05
Jul-06
Apr-07
Jan-08
Oct-08
Jul-09
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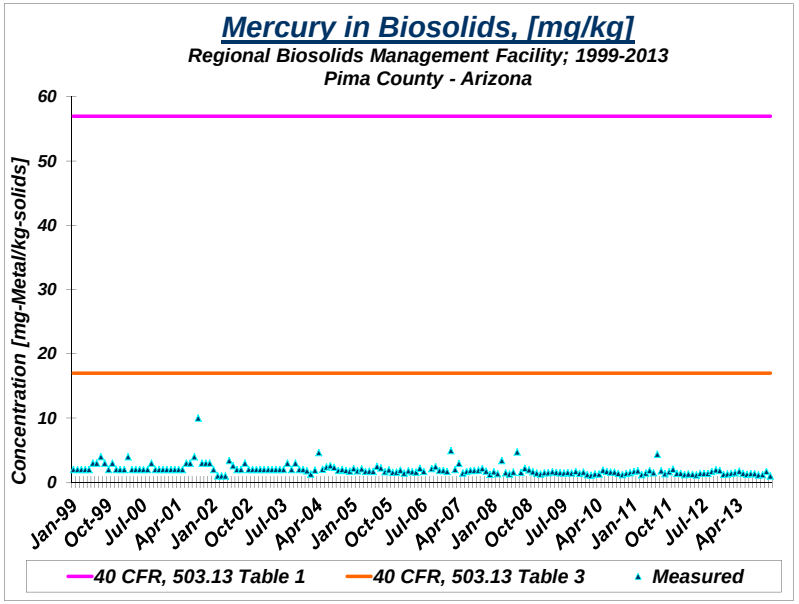
Jan-11
Oct-11
Jul-12
Apr-13
40 CFR, 503.13 Table 1
40 CFR, 503.13 Table 3
Measured


Mercury in Biosolids, [mg/kg]
Regional Biosolids Management Facility; 1999-2013
Pima County - Arizona
Concentration [mg-Metal/kg-solids]
60
50
40
30
20
10
0
Jan-99
Oct-99
Jul-00
Apr-01
Jan-02
Oct-02
Jul-03
Apr-04
Jan-05
Oct-05
Jul-06
Apr-07
Jan-08
Oct-08
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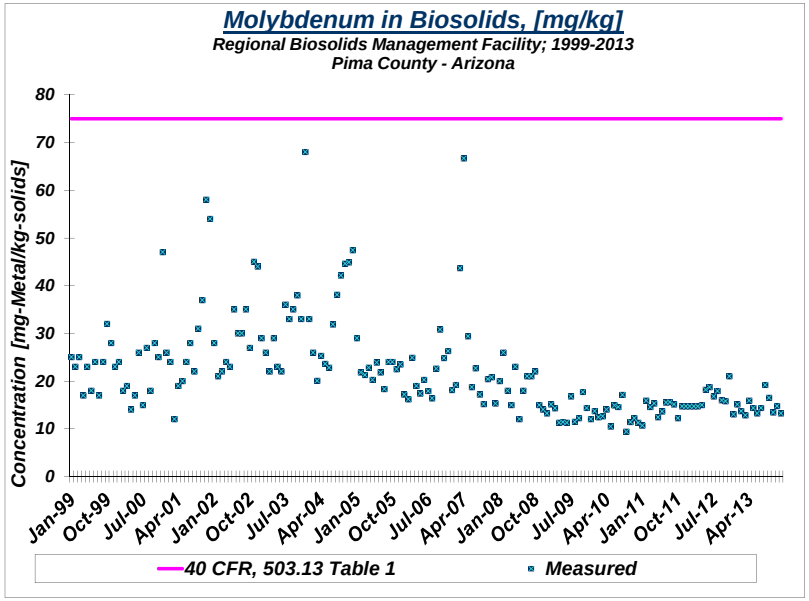
Jan-11
Oct-11
Jul-12
Apr-13
40 CFR, 503.13 Table 1
40 CFR, 503.13 Table 3
Measured


Molybdenum in Biosolids, [mg/kg]
Regional Biosolids Management Facility; 1999-2013
Pima County - Arizona
Concentration [mg-Metal/kg-solids]
80
70
60
50
40
30
20
10
0
Jan-99
Oct-99
Jul-00
Apr-01
Jan-02
Oct-02
Jul-03
Apr-04
Jan-05
Oct-05
Jul-06
Apr-07
Jan-08
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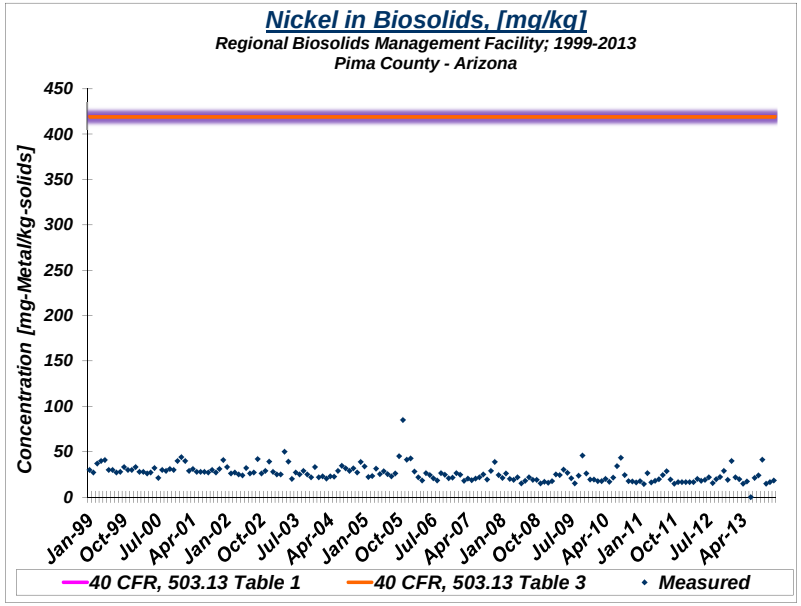
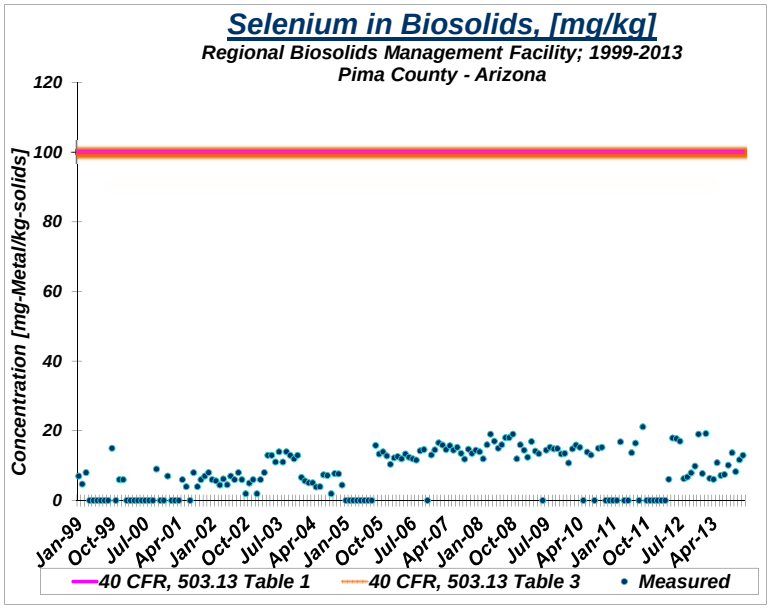
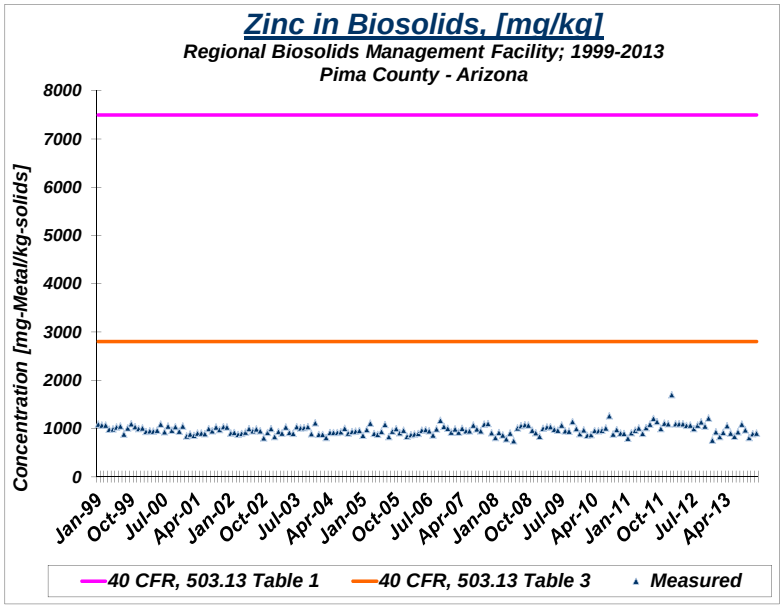
Jul-12
Apr-13
40 CFR, 503.13 Table 1
Measured


Nickel in Biosolids, [mg/kg]
Regional Biosolids Management Facility; 1999-2013
Pima County - Arizona
Concentration [mg-Metal/kg-solids]
450
400
350
300
250
200
150
100
50
0
Jan-99
Oct-99
Jul-00
Apr-01
Jan-02
Oct-02
Jul-03
Apr-04
Jan-05
Oct-05
Jul-06
Apr-07
Jan-08
Oct-08
Jul-09
Apr-10
Jan-11
Oct-11
Jul-12
Apr-13
40 CFR, 503.13 Table 1
40 CFR, 503.13 Table 3
Measured


Selenium in Biosolids, [mg/kg]
Regional Biosolids Management Facility; 1999-2013
Pima County - Arizona
Concentration [mg-Metal/kg-solids]
120
100
80
60
40
20
0
Jan-99
Oct-99
Jul-00
Apr-01
Jan-02
Oct-02
Jul-03
Apr-04
Jan-05
Oct-05
Jul-06
Apr-07
Jan-08
Oct-08
Jul-09
Apr-10
Jan-11
Oct-11
Jul-12
Apr-13
40 CFR, 503.13 Table 1
40 CFR, 503.13 Table 3
Measured


Zinc in Biosolids, [mg/kg]
Regional Biosolids Management Facility; 1999-2013
Pima County - Arizona
Concentration [mg-Metal/kg-solids]
8000
7000
6000
5000
4000
3000
2000
1000
0
Jan-99
Oct-99
Jul-00
Apr-01
Jan-02
Oct-02
Jul-03
Apr-04
Jan-05
Oct-05
Jul-06
Apr-07
Jan-08
Oct-08
Jul-09
Apr-10
Jan-11
Oct-11
Jul-12
Apr-13
40 CFR, 503.13 Table 1
40 CFR, 503.13 Table 3
Measured

BIOSOLIDS POLLUTANT CONCENTRATION AND DIGESTER OPERATING PARAMETERS, 2013

METALS IN BIOSOLIDS PRODUCED AT PIMA COUNTY RBMF, 2013

	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn
Regulatory Requirement, [mg/kg]										
40 CFR, 503.13 Table 1	75	85	3000	4300	840	57	75	420	100	7500
40 CFR, 503.13 Table 3	41	39	N/A *(a)*	1500	300	17	N/A	420	100	2800
R18-9-1005, Table 1	75	85	3000	4300	840	57	75	420	100	7500
R18-9-1005, Table 2	41	39	N/A	1500	300	17	N/A	420	100	2800
Compilation Code *(b)*	12 / 0 / 0	12 / 0 / 0	12 / 0 / 0	12 / 0 / 0	12 / 0 / 0	12 / 0 / 0	12 / 0 / 0	12 / 0 / 0	12 / 0 / 0	12 / 0 / 0
Measured Concentration, [mg/kg]										
	As	**Cd**	**Cr**	**Cu**	**Pb**	**Hg**	**Mo**	**Ni**	**Se**	**Zn**
January-2013	< 19.17	< 7.67	26.9	439	< 19.17	1.27	15.1	40	< 7.76	933
February-2013	< 19.21	< 7.69	29.7	424	20.7	1.37	13.7	22	< 19.21	834
March-2013	< 6.02	< 6.28	34.5	426	< 15.69	1.51	12.8	19.9	< 6.35	923
April-2013	< 5.74	< 5.99	32.8	448	< 14.97	1.75	15.9	< 14.97	< 6.06	1060
May-2013	11.7	< 4.36	35.4	416	14.2	1.37	14.4	17.1	< 10.9	904
June-2013	< 6.8	< 7.10	27.8	446	< 17.74	1.25	13.2	<17.74	< 7.18	839
July-2013	< 18.44	< 7.38	33.0	503	< 18.44	1.33	14.4	21.1	< 7.47	931
August-2013	< 10.15	< 4.06	42.2	527	20.6	1.34	19.2	23.8	< 10.15	1090
September-2013	14.8	< 5.48	46.2	434	14.8	1.12	16.5	41.2	< 13.7	975
October-2013	11.6	< 4.63	30.5	371	16.3	1.19	13.4	14.7	< 8.25	814
November-2013	< 14.4	< 6.57	34.1	446	< 16.42	1.67	14.8	16.5	< 11.7	892
December-2013	< 15.9	< 7.28	36.1	481	20.2	0.982	13.2	< 18.19	< 13.0	907
ANNUAL AVERAGE	*< 12.8*	*< 6.2*	*34.1*	*446.75*	*< 16.6*	*< 1.35*	*< 17.72*	*< 22.3*	*< 10.14*	*925.2*
ANNUAL MAXIMUM	*< 19.2*	*< 7.7*	*46.2*	*527*	*< 20.7*	*1.75*	*< 19.2*	*41.2*	*< 19.21*	*1090*
	As	**Cd**	**Cr**	**Cu**	**Pb**	**Hg**	**Mo**	**Ni**	**Se**	**Zn**

BIOSOLIDS POLLUTANT CONCENTRATION AND DIGESTER OPERATING PARAMETERS, 2013

OPERATING PARAMETERS (c) OF DIGESTERS AT TRES RIOS WRF, 2013

	VOLATILE SOLIDS REDUCTION (%)			DETENTION TIME (Days)			TEMPERATURE (°C)		
Regulatory Requirements	**38%, (d)**			**15 Days, (e)**			**35 - 55 (°C), (e)**		
Measured Parameters	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min
Digester #1	71	65	61	49.1	35.4	24.6	36.8	36.0	34.8
Digester #2	67	57	42	82.7	45.5	24.3	36.9	36.4	35.6
Digester #3	64	58	44	78.6	45.7	26.6	36.7	36.4	35.3
Digester #4	65	56	42	70.9	43.6	24.2	36.7	36.3	36.0
Digester #5	66	57	41	79.4	53.4	24.5	36.5	36.4	36.0
Digester #6	64	54	45	94.8	53.5	30.4	36.7	36.6	36.4

OPERATING PARAMETERS (c) OF DIGESTERS AT ROGER ROAD WRF, 2013

	VOLATILE SOLIDS REDUCTION (%)			DETENTION TIME (Days)			TEMPERATURE (°C)		
Regulatory Requirements	**38%, (d)**			**15 Days, (e)**			**35 - 55 (°C), (e)**		
Measured Parameters	Max	Mean	Min	Max	Mean	Min	**Max**	**Mean**	**Min**
Digester #1	64.1	56.4	50.5	36.7	20.3	15.9	37.2	36.9	36
Digester #2	63.4	57.3	50.2	61.7	25.0	15.8	37.1	36.8	36.1
Digester #3	61.9	56.3	52.4	34.8	20.5	15.7	37.2	36.8	35.8
Digester #5	O/S (f)	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S
Digester #6	61.2	57.9	55.8	23.2	22.7	22.1	37.1	36.4	35.3

(a) N/A means Not Applicable

(b) The data compilation code represents: Number of samples / number of samples above R18-9-1005, Table 1 / number of samples above R18-9-1005, Table 2
The data compilation code represents: Number of samples / number of samples above 40 CFR, 503.13 Table 1 / number
of samples above 40 CFR, 503.13 Table 3

(c) Summary statistics derived from the monthly average results presented in this report

(d) R18-9-1010-A.1; 40 CFR 503.33(b)(1)

(e) R18-9-1006-E Alternative 5; 40 CFR 503.32(b)(3) Appendix B, No. 3

(f) O/S – Out of Service

The high values of MDL and PQL in the first quarter for Arsenic, Lead, Molybdenum and Selenium occurred at the contract laboratory. The actual analysis results of the biosolids sampled by the Land Applier were significantly lower than both the regulatory limits and the MDL and PQL values.

TABLE 6 - LAND APPLICATION POLLUTANT LIMITS

1. Name and Address of Facility: Regional Biosolids Management Facility
7101 North Casa Grande Highway
Tucson, Arizona 85743-9577
Facility Contact: John W. Sherlock, Deputy Director
Phone: (520) 443-6100

2. Name and Address of Facility Owner: Pima County Regional Wastewater Reclamation Department
201 North Stone, Tucson, Arizona 85701
3. Monitoring Period: January 1, 2013 through January 31, 2013
4. NPDES Permit Number: AZ0020001 / AZ0020923
5. Sludge Permit Number: N/A

	Regulatory Requirement		Pollutant Concentration (dry weight)			Frequency of Analysis	Sample Type (Discrete or Composite)	Analytical Method
			Average		Units			
Arsenic	R18-9-1005 40 CFR 503.13	Sample Measurement	**< 19.17**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	75	41	mg/kg	1/60 days		
Cadmium	R18-9-1005 40 CFR 503.13	Sample Measurement	**< 7.67**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	85	39	mg/kg	1/60 days		
Chromium	R18-9-1005	Sample Measurement	**26.9**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1	3000		mg/kg	1/60 days		
Copper	R18-9-1005 40 CFR 503.13	Sample Measurement	**439**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	4300	1500	mg/kg	1/60 days		
Lead	R18-9-1005 40 CFR 503.13	Sample Measurement	**< 19.17**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	840	300	mg/kg	1/60 days		
Mercury	R18-9-1005 40 CFR 503.13	Sample Measurement	**1.27**		mg/kg	1/31 days	Composite	EPA 7471A
		Table 1 / Table 2	57	17	mg/kg	1/60 days		
Molybdenum	R18-9-1005 40 CFR 503.13	Sample Measurement	**15.1**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1	75		mg/kg	1/60 days		
Nickel	R18-9-1005 40 CFR 503.13	Sample Measurement	**40.0**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	420	420	mg/kg	1/60 days		
Selenium	R18-9-1005 40 CFR 503.13	Sample Measurement	**< 7.76**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	100	100	mg/kg	1/60 days		
Zinc	R18-9-1005 40 CFR 503.13	Sample Measurement	**933**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	7500	2800	mg/kg	1/60 days		

R18-9-1005 Table 2 is equivalent to 40 CFR 503.13 Table 3

6. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information submitted, it is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

Name and Official Title (type or print) John W. Sherlock, Deputy Director	Area Code and Phone (520) 443-6100
Signature	Date Signed 3/8/13

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office (CRAO) Laboratory
3035 W. El Camino del Cerro, Tucson Arizona 85745-9750, Phone (520) 724-6200

Report Date: 02/20/2013
Laboratory License: AZO159

Sample Analysis Report

Thickened Sludge to AvraGro

January 2013

Sample Integrity

SAMPLE RECEIPT: Samples were received intact at the required temperature, unless otherwise noted with a data qualifier below. Please refer to the Chain of Custody for sample receipt details.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Pima County CRAO Laboratory Quality Manual.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS:

Notes and Definitions:

See attached

Case Narratives:

See attached

All results on this report intended for compliance submission must have the associated chain(s) of custody attached for the results to meet reporting requirements as per ADHS Laboratory licensure rules. If you have received this report for compliance purposes and it is not complete, please contact the Compliance and Regulatory Affairs Office for a final report in its entirety.

Reviewed By:

Barbara Escobar

02/26/13
Date

Laboratory Director or Designee
Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

Thickened Sludge to AvraGro Storage (20002-0200)

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Dat Quaflfiers	Analyst
1301116-01	C	Ammonia	01/14/13 23:59	EPA 350.1	1/31/13 11:45	**17700**	mg/kg dry	187	851.31		AMK
1301116-01	C	Arsenic	01/14/13 23:59	EPA 6010B	1/25/13 12:31	**13.9**	mg/kg dry	7.35	19.17	J	MLB
1301116-01	C	Cadmium	01/14/13 23:59	EPA 6010B	1/25/13 10:39	**3.02**	mg/kg dry	0.330	7.67	J	MLB
1301116-01	C	Chromium	01/14/13 23:59	EPA 6010B	1/25/13 10:39	**26.9**	mg/kg dry	0.589	19.17		MLB
1301116-01	C	Copper	01/14/13 23:59	EPA 6010B	1/25/13 10:39	**439**	mg/kg dry	1.06	19.17		MLB
1301116-01	C	Lead	01/14/13 23:59	EPA 6010B	1/25/13 14:33	**11.8**	mg/kg dry	6.78	19.17	J	MLB
1301116-01	C	Mercury	01/14/13 23:59	EPA 7471A	1/25/13 10:02	**1.27**	mg/kg dry	0.0644	0.17		DDO
1301116-01	C	Molybdenum	01/14/13 23:59	EPA 6010B	1/25/13 10:39	**15.1**	mg/kg dry	0.942	7.67		MLB
1301116-01	C	Nickel	01/14/13 23:59	EPA 6010B	1/25/13 12:31	**40.0**	mg/kg dry	4.36	19.17		MLB
1301116-01	C	Nitrate/Nitrite	01/14/13 23:59	EPA 353.2	1/16/13 11:18	**2.6**	mg/kg dry	2.2	13.62	J	MGA
1301116-01	C	Nitrite	01/14/13 23:59	SM4500-NO2	1/15/13 14:33	**1.95**	mg/kg dry	1.09	13.62	J	DOB
1301116-01	C	Total Kjeldahl Nitrogen	01/14/13 23:59	EPA 351.2	1/23/13 11:21	**68300**	mg/kg dry	1140	2,398.05		AMK
1301116-01	C	Nitrogen Total Biosolids	01/14/13 23:59	Calculated	1/23/13 11:21	**68300**	mg/kg dry	1140	2,400.00		AMK
1301116-01	C	Selenium	01/14/13 23:59	EPA 6010B	1/25/13 10:39	**ND**	mg/kg dry	7.76	19.17		MLB
1301116-01	C	Silver	01/14/13 23:59	EPA 6010B	1/25/13 10:39	**5.10**	mg/kg dry	0.638	1.92		MLB
1301116-01	C	% Solids	01/14/13 23:59	SM 2540G	1/15/13 12:38	**5.87**	%		0.01		SJD
1301116-01	C	Zinc	01/14/13 23:59	EPA 6010B	1/25/13 14:33	**933**	mg/kg dry	2.14	19.17		MLB

Qualifier Definitions

J	Concentration estimated. Analyte was detected below laboratory minimum reporting limit (MRL) but above MDL.

General Notes and Definitions

C	Sample Type - Composite
D	Sample Type - Discrete
DD	Sample Type - Discrete Duplicate
ND	Analyte NOT DETECTED at or above the reporting limit (MDL)
NR	Not Reported
DET	Analyte DETECTED
DRY	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
Analysis Date	Analysis Date represents the final reading date.
Field Results	Field Results performed by "SMPLR" (Sampler), are not subject to approval of Laboratory Director.
Solids, Total Volatile	Used for process control samples only.
RE	Re-Analysis has been performed.

Case Narrative(s)

None

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1301116-01

SITE & LOCATION: Thickened sludge to AvraGro

SITE-LOCATION NUMBER: 20002-0200 (XXXXX-XXXX)

SAMPLE START DATE: 01/14/2013 (MM / DD / YYYY)

SAMPLE START TIME: 0500 (24 Hour Clock)

SUBMITTER: Deputy Director-Treatment

SAMPLE END DATE: 01/14/2013 (MM / DD / YYYY)

SAMPLE END TIME: 2359 (24 Hour Clock)

SAMPLER: Vasquez, Weber (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ■ 503 ☐ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ■ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	■
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐	**WET METHODS**	D	C
Cobalt	☐	☐	Ammonia as N	☐	■
Copper	☐	☐	Chloride	☐	☐
Hardness	☐	☐	Cyanide, Total	☐	☐
Iron	☐	☐	Cyanide, Amenable	☐	☐
Lead	☐	☐	Fluoride	☐	☐
Magnesium	☐	☐	Ignitability	☐	☐
Manganese	☐	☐	Nitrate as N	☐	■
Mercury	☐	■	Nitrite as N	☐	■
Molybdenum	☐	☐	Nitrate/Nitrite as N	☐	☐
Nickel	☐	☐	Nitrogen, Total Kjeldahl	☐	☐
Potassium	☐	☐	Nitrogen, Total as N	☐	■
Selenium	☐	☐	Orthophosphate as P	☐	☐
Silver	☐	■	Phosphorus, Total as P	☐	☐
Sodium	☐	☐	Sulfate	☐	☐
Strontium	☐	☐	Sulfide	☐	☐
Thallium	☐	☐	Turbidity	☐	☐
Tin	☐	☐			

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐
MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐
EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	■
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐
OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:
Monthly pour off. Poured off the daily sample
1301111-08

# of Bottles Delivered: 2

Transported on Ice: ☐ YES ☒ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
[signature] Refrig.@#23	Refrig.@#23	1/14/13	2359
Refrig.@#23	[signature]	1/15/13	0530
[signature]	Admin. Refrig.	1/15/13	0535
Adm. Refrig	[signature]	01/15/13	0620
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	4.9	°C
Initials:	JH	
Non-Preserved	2	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	✓		
Sample labels match Chain of Custody?	✓		
Correct number of samples were delivered?	✓		
Custody seals intact?			✓
Within holding time?	✓		
Sufficient sample volume for analysis?	✓		
Samples are in proper containers?	✓		
Sample containers damaged/leaking/frozen?		✓	
40 ml vials headspace, > pea-sized air bubble?			✓
Received from a refrigerator?	✓		

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

TABLE 6 - LAND APPLICATION POLLUTANT LIMITS

1. Name and Address of Facility: Regional Biosolids Management Facility
7101 North Casa Grande Highway
Tucson, Arizona 85743-9577

Facility Contact: John W. Sherlock, Deputy Director
Phone: (520) 443-6100

2. Name and Address of Facility Owner: Pima County Regional Wastewater Reclamation Department
201 North Stone, Tucson, Arizona 85701
3. Monitoring Period: February 1, 2013 through February 28, 2013
4. NPDES Permit Number: AZ0020001 / AZ0020923
5. Sludge Permit Number: N/A

	Regulatory Requirement		Pollutant Concentration (dry weight)			Frequency of Analysis	Sample Type (Discrete or Composite)	Analytical Method
			Average		Units			
Arsenic	R18-9-1005 40 CFR 503.13	Sample Measurement	**< 19.21**		mg/kg	1/28 days	Composite	EPA 6010B
		Table 1 / Table 2	75	41	mg/kg	1/60 days		
Cadmium	R18-9-1005 40 CFR 503.13	Sample Measurement	**< 7.69**		mg/kg	1/28 days	Composite	EPA 6010B
		Table 1 / Table 2	85	39	mg/kg	1/60 days		
Chromium	R18-9-1005	Sample Measurement	**29.7**		mg/kg	1/28 days	Composite	EPA 6010B
		Table 1	3000		mg/kg	1/60 days		
Copper	R18-9-1005 40 CFR 503.13	Sample Measurement	**424**		mg/kg	1/28 days	Composite	EPA 6010B
		Table 1 / Table 2	4300	1500	mg/kg	1/60 days		
Lead	R18-9-1005 40 CFR 503.13	Sample Measurement	**20.7**		mg/kg	1/28 days	Composite	EPA 6010B
		Table 1 / Table 2	840	300	mg/kg	1/60 days		
Mercury	R18-9-1005 40 CFR 503.13	Sample Measurement	**1.37**		mg/kg	1/28 days	Composite	EPA 7471A
		Table 1 / Table 2	57	17	mg/kg	1/60 days		
Molybdenum	R18-9-1005 40 CFR 503.13	Sample Measurement	**13.7**		mg/kg	1/28 days	Composite	EPA 6010B
		Table 1	75		mg/kg	1/60 days		
Nickel	R18-9-1005 40 CFR 503.13	Sample Measurement	**22.0**		mg/kg	1/28 days	Composite	EPA 6010B
		Table 1 / Table 2	420	420	mg/kg	1/60 days		
Selenium	R18-9-1005 40 CFR 503.13	Sample Measurement	**< 19.21**		mg/kg	1/28 days	Composite	EPA 6010B
		Table 1 / Table 2	100	100	mg/kg	1/60 days		
Zinc	R18-9-1005 40 CFR 503.13	Sample Measurement	**834**		mg/kg	1/28 days	Composite	EPA 6010B
		Table 1 / Table 2	7500	2800	mg/kg	1/60 days		

R18-9-1005 Table 2 is equivalent to 40 CFR 503.13 Table 3

6. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information submitted, it is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

Name and Official Title (type or print) John W. Sherlock, Deputy Director	Area Code and Phone (520) 443-6100
Signature	Date Signed 3/5/13

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office (CRAO) Laboratory
3035 W. El Camino del Cerro, Tucson Arizona 85745-9750, Phone (520) 724-6200

Report Date: 03/29/2013
Laboratory License: AZO159

Sample Analysis Report

Regional Biosolids Facility Management

February 2013

Sample Integrity

SAMPLE RECEIPT: Samples were received intact at the required temperature, unless otherwise noted with a data qualifier below. Please refer to the Chain of Custody for sample receipt details.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Pima County CRAO Laboratory Quality Manual.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS:

Notes and Definitions:

See attached

Case Narratives:

See attached

All results on this report intended for compliance submission must have the associated chain(s) of custody attached for the results to meet reporting requirements as per ADHS Laboratory licensure rules. If you have received this report for compliance purposes and it is not complete, please contact the Compliance and Regulatory Affairs Office for a final report in its entirety.

Reviewed By:

04/04/13
Date

Laboratory Director or Designee
Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

Thickened Sludge to AvraGro Storage (20002-0200)

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Dat Qualifiers	Analyst
1302164-01	C	Ammonia	02/18/13 23:59	EPA 350.1	2/25/13 12:59	**17800**	mg/kg dry	188	855.41	M5	DDO
1302164-01	C	Arsenic	02/18/13 23:59	EPA 6010B	2/26/13 15:19	**8.35**	mg/kg dry	7.37	19.21	J	MLB
1302164-01	C	Cadmium	02/18/13 23:59	EPA 6010B	2/26/13 15:19	**3.04**	mg/kg dry	0.331	7.69	J	MLB
1302164-01	C	Chromium	02/18/13 23:59	EPA 6010B	2/26/13 15:19	**29.7**	mg/kg dry	0.590	19.21		MLB
1302164-01	C	Copper	02/18/13 23:59	EPA 6010B	2/26/13 15:19	**424**	mg/kg dry	1.07	19.21		MLB
1302164-01	C	Lead	02/18/13 23:59	EPA 6010B	2/26/13 15:19	**20.7**	mg/kg dry	6.80	19.21		MLB
1302164-01	C	Mercury	02/18/13 23:59	EPA 7471A	2/21/13 9:34	**1.37**	mg/kg dry	0.0647	0.17		DDO
1302164-01	C	Molybdenum	02/18/13 23:59	EPA 6010B	2/26/13 15:19	**13.7**	mg/kg dry	0.944	7.69		MLB
1302164-01	C	Nickel	02/18/13 23:59	EPA 6010B	2/26/13 15:19	**22.0**	mg/kg dry	4.37	19.21		MLB
1302164-01	C	Nitrate/Nitrite	02/18/13 23:59	EPA 353.2	2/27/13 14:59	**ND**	mg/kg dry	2.3	13.69		MGA
1302164-01	C	Nitrite	02/18/13 23:59	SM4500-NO2	2/20/13 11:03	**5.42**	mg/kg dry	1.09	13.69	J	AMK
1302164-01	C	Total Kjeldahl Nitrogen	02/18/13 23:59	EPA 351.2	3/1/13 11:01	**73800**	mg/kg dry	1060	2,236.35		AMK
1302164-01	C	Nitrogen Total Biosolids	02/18/13 23:59	Calculated	3/1/13 11:01	**73800**	mg/kg dry	1060	2,240.00		AMK
1302164-01	C	Selenium	02/18/13 23:59	EPA 6010B	2/26/13 16:37	**17.7**	mg/kg dry	7.78	19.21	J	MLB
1302164-01	C	Silver	02/18/13 23:59	EPA 6010B	2/26/13 15:19	**5.15**	mg/kg dry	0.639	1.92		MLB
1302164-01	C	% Solids	02/18/13 23:59	SM 2540G	2/20/13 15:40	**5.85**	%		0.01		SJD
1302164-01	C	Zinc	02/18/13 23:59	EPA 6010B	2/26/13 15:19	**834**	mg/kg dry	2.14	19.21		MLB

Qualifier Definitions

J	Concentration estimated. Analyte was detected below laboratory minimum reporting limit (MRL) but above MDL.
M5	Analyte concentration was determined by the method of standard addition (MSA).

General Notes and Definitions

C	Sample Type - Composite
D	Sample Type - Discrete
DD	Sample Type - Discrete Duplicate
ND	Analyte NOT DETECTED at or above the reporting limit (MDL)
NR	Not Reported
DET	Analyte DETECTED
DRY	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
Analysis Date	Analysis Date represents the final reading date.
Field Results	Field Results performed by "SMPLR" (Sampler), are not subject to approval of Laboratory Director.
Solids, Total Volatile	Used for process control samples only.
RE	Re-Analysis has been performed.

Case Narrative(s)

None

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1302164-01

SITE & LOCATION: Thickened sludge to AvraGro

SITE-LOCATION NUMBER: 20002-0200 (XXXXX-XXXX)

SAMPLE START DATE: 02/18/2013 (MM / DD / YYYY)

SAMPLE START TIME: 0500 (24 Hour Clock)

SUBMITTER: Deputy Director-Treatment

SAMPLE END DATE: 02/18/2013 (MM / DD / YYYY)

SAMPLE END TIME: 2359 (24 Hour Clock)

SAMPLER: Vasquez, Weber (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ■ 503 ☐ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ■ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	■
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐	**WET METHODS**	**D**	**C**
Cobalt	☐	☐	Ammonia as N	☐	■
Copper	☐	☐	Chloride	☐	☐
Hardness	☐	☐	Cyanide, Total	☐	☐
Iron	☐	☐	Cyanide, Amenable	☐	☐
Lead	☐	☐	Fluoride	☐	☐
Magnesium	☐	☐	Ignitability	☐	☐
Manganese	☐	☐	Nitrate as N	☐	■
Mercury	☐	■	Nitrite as N	☐	■
Molybdenum	☐	☐	Nitrate/Nitrite as N	☐	☐
Nickel	☐	☐	Nitrogen, Total Kjeldahl	☐	☐
Potassium	☐	☐	Nitrogen, Total as N	☐	■
Selenium	☐	☐	Orthophosphate as P	☐	☐
Silver	☐	■	Phosphorus, Total as P	☐	☐
Sodium	☐	☐	Sulfate	☐	☐
Strontium	☐	☐	Sulfide	☐	☐
Thallium	☐	☐	Turbidity	☐	☐
Tin	☐	☐			

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐
MISCELLANEOUS METHODS	**D**	**C**
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐
EFFLUENT TOXICITY TESTING	**D**	**C**
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	■
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐
OTHER	**D**	**C**
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:
Monthly pour off. Poured off the daily sample
1302156-03

# of Bottles Delivered: 2

Transported on Ice: ☐ YES ☒ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	Refrig @ Bld 23	2/18/13	2359
Relinquished by: Refrig @ Bld 23	Received by: [signature]	Date: 2/19/13	Time: (24 Hour Clock) 0550
Relinquished by: [signature]	Received by: Admin Refrig	Date: 2/19/13	Time: (24 Hour Clock) 0555
Relinquished by: Admin refrig	Received by: Suzanne Dolitz	Date: 2/19/13	Time: (24 Hour Clock) 0630
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature: 3.8 °C

Initials: SD

Non-Preserved	2	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☒
Received from a refrigerator?	☒	☐	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

TABLE 6 - LAND APPLICATION POLLUTANT LIMITS

1. Name and Address of Facility: Regional Biosolids Management Facility
7101 North Casa Grande Highway
Tucson, Arizona 85743-9577

Facility Contact: John W. Sherlock, Deputy Director
Phone: (520) 443-6100

2. Name and Address of Facility Owner: Pima County Regional Wastewater Reclamation Department
201 North Stone, Tucson, Arizona 85701
3. Monitoring Period: March 1, 2013 through March 31, 2013
4. NPDES Permit Number: AZ0020001 / AZ0020923
5. Sludge Permit Number: N/A

	Regulatory Requirement		Pollutant Concentration (dry weight)			Frequency of Analysis	Sample Type (Discrete or Composite)	Analytical Method
			Average		Units			
Arsenic	R18-9-1005 40 CFR 503.13	Sample Measurement	**< 6.02**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	75	41	mg/kg	1/60 days		
Cadmium	R18-9-1005 40 CFR 503.13	Sample Measurement	**< 6.28**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	85	39	mg/kg	1/60 days		
Chromium	R18-9-1005	Sample Measurement	**34.5**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1	3000		mg/kg	1/60 days		
Copper	R18-9-1005 40 CFR 503.13	Sample Measurement	**426**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	4300	1500	mg/kg	1/60 days		
Lead	R18-9-1005 40 CFR 503.13	Sample Measurement	**< 15.69**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	840	300	mg/kg	1/60 days		
Mercury	R18-9-1005 40 CFR 503.13	Sample Measurement	**1.51**		mg/kg	1/31 days	Composite	EPA 7471A
		Table 1 / Table 2	57	17	mg/kg	1/60 days		
Molybdenum	R18-9-1005 40 CFR 503.13	Sample Measurement	**12.8**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1	75		mg/kg	1/60 days		
Nickel	R18-9-1005 40 CFR 503.13	Sample Measurement	**19.9**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	420	420	mg/kg	1/60 days		
Selenium	R18-9-1005 40 CFR 503.13	Sample Measurement	**< 6.35**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	100	100	mg/kg	1/60 days		
Zinc	R18-9-1005 40 CFR 503.13	Sample Measurement	**923**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	7500	2800	mg/kg	1/60 days		

R18-9-1005 Table 2 is equivalent to 40 CFR 503.13 Table 3

6. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information submitted, it is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

Name and Official Title (type or print) John W. Sherlock, Deputy Director	Area Code and Phone (520) 443-6100
Signature	Date Signed 5/8/13

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office (CRAO) Laboratory
3035 W. El Camino del Cerro, Tucson Arizona 85745-9750, Phone (520) 724-6200

Report Date: 04/30/2013
Laboratory License: AZO159

Sample Analysis Report

Regional Biosolids Facility Management

March 2013

Sample Integrity

SAMPLE RECEIPT: Samples were received intact at the required temperature, unless otherwise noted with a data qualifier below. Please refer to the Chain of Custody for sample receipt details.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Pima County CRAO Laboratory Quality Manual.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS:

Notes and Definitions:

See attached

Case Narratives:

See attached

All results on this report intended for compliance submission must have the associated chain(s) of custody attached for the results to meet reporting requirements as per ADHS Laboratory licensure rules. If you have received this report for compliance purposes and it is not complete, please contact the Compliance and Regulatory Affairs Office for a final report in its entirety.

Reviewed By:

Barbara Rosa

05/01/13
Date

Laboratory Director or Designee
Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

Thickened Sludge to AvraGro Storage (20002-0200)

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1303100-01	C	Arsenic	03/11/13 23:59	EPA 6010B	3/21/13 13:45	**ND**	mg/kg dry	6.02	15.69		MLB
1303100-01	C	Cadmium	03/11/13 23:59	EPA 6010B	3/21/13 12:27	**2.26**	mg/kg dry	0.270	6.28	J	MLB
1303100-01	C	Chromium	03/11/13 23:59	EPA 6010B	3/21/13 12:27	**34.5**	mg/kg dry	0.482	15.69		MLB
1303100-01	C	Copper	03/11/13 23:59	EPA 6010B	3/21/13 12:27	**426**	mg/kg dry	0.870	15.69		MLB
1303100-01	C	Lead	03/11/13 23:59	EPA 6010B	3/21/13 12:27	**14.6**	mg/kg dry	5.55	15.69	J	MLB
1303100-01	C	Mercury	03/11/13 23:59	EPA 7471A	4/1/13 14:16	**1.51**	mg/kg dry	0.0525	0.14		DDO
1303100-01	C	Molybdenum	03/11/13 23:59	EPA 6010B	3/21/13 12:27	**12.8**	mg/kg dry	0.771	6.28		MLB
1303100-01	C	Nickel	03/11/13 23:59	EPA 6010B	3/21/13 12:27	**19.9**	mg/kg dry	3.56	15.69		MLB
1303100-01	C	Nitrate/Nitrite	03/11/13 23:59	EPA 353.2	3/13/13 13:46	**ND**	mg/kg dry	1.8	11.12		MGA
1303100-01	C	Nitrite	03/11/13 23:59	SM4500-NO2	3/12/13 13:19	**4.75**	mg/kg dry	0.89	11.12	J	AMK
1303100-01	C	Total Kjeldahl Nitrogen	03/11/13 23:59	EPA 351.2	3/21/13 13:26	**61000**	mg/kg dry	1280	2,698.11		AMK
1303100-01	C	Nitrogen Total Biosolids	03/11/13 23:59	Calculated	3/21/13 13:26	**61000**	mg/kg dry	1280	2,700.00		AMK
1303100-01	C	Selenium	03/11/13 23:59	EPA 6010B	3/21/13 12:27	**ND**	mg/kg dry	6.35	15.69		MLB
1303100-01	C	Silver	03/11/13 23:59	EPA 6010B	3/21/13 12:27	**8.18**	mg/kg dry	0.522	1.57		MLB
1303100-01	C	% Solids	03/11/13 23:59	SM 2540G	3/12/13 15:22	**7.20**	%		0.01		JVR
1303100-01	C	Zinc	03/11/13 23:59	EPA 6010B	3/21/13 12:27	**923**	mg/kg dry	1.75	15.69		MLB
1303100-01RE	C	Ammonia	03/11/13 23:59	EPA 350.1	3/14/13 13:49	**12600**	mg/kg dry	278	694.76		DDO

Qualifier Definitions

J	Concentration estimated. Analyte was detected below laboratory minimum reporting limit (MRL) but above MDL.

General Notes and Definitions

C	Sample Type - Composite
D	Sample Type - Discrete
DD	Sample Type - Discrete Duplicate
ND	Analyte NOT DETECTED at or above the reporting limit (MDL)
NR	Not Reported
DET	Analyte DETECTED
DRY	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
Analysis Date	Analysis Date represents the final reading date.
Field Results	Field Results performed by "SMPLR" (Sampler), are not subject to approval of Laboratory Director.
Solids, Total Volatile	Used for process control samples only.
RE	Re-Analysis has been performed.

Case Narrative(s)

None

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1303100-01

SITE & LOCATION: Thickened sludge to AvraGro

SITE-LOCATION NUMBER: 20002-0200 (XXXXX-XXXX)

SAMPLE START DATE: 03/11/2013 (MM / DD / YYYY)

SAMPLE START TIME: 0500 (24 Hour Clock)

SUBMITTER: Deputy Director-Treatment

SAMPLE END DATE: 03/11/2013 (MM / DD / YYYY)

SAMPLE END TIME: 2359 (24 Hour Clock)

SAMPLER: Vasquez, Weber (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ■ 503 ☐ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ■ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C
Aluminum	☐	☐
Antimony	☐	☐
Arsenic	☐	☐
Barium	☐	☐
Beryllium	☐	☐
Boron	☐	☐
Cadmium	☐	☐
Calcium	☐	☐
Chromium	☐	☐
Cobalt	☐	☐
Copper	☐	☐
Hardness	☐	☐
Iron	☐	☐
Lead	☐	☐
Magnesium	☐	☐
Manganese	☐	☐
Mercury	☐	■
Molybdenum	☐	☐
Nickel	☐	☐
Potassium	☐	☐
Selenium	☐	☐
Silver	☐	■
Sodium	☐	☐
Strontium	☐	☐
Thallium	☐	☐
Tin	☐	☐

METALS	D	C
Titanium	☐	☐
Vanadium	☐	☐
Zinc	☐	☐
Priority Pollutant Metals *	☐	☐
TCLP Metals	☐	☐
503 Metals **	☐	■
Chromium, Hexavalent	☐	☐
Chromium, Trivalent	☐	☐

WET METHODS	D	C
Ammonia as N	☐	■
Chloride	☐	☐
Cyanide, Total	☐	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	■
Nitrite as N	☐	■
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	■
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	■
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:
Monthly pour off. Poured off the daily sample
1303095-08

# of Bottles Delivered: 2

Transported on Ice: ☐ YES ☒ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	Refrig.@#23	3/11/13	2359
Refrig.@#23	[signature]	3/12/13	0625
[signature]	[signature]	3/12/13	0628
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature: 4.8 °C

Initials: [illegible]

Non-Preserved	2	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☒
Received from a refrigerator?	☐	☒	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

TABLE 6 - LAND APPLICATION POLLUTANT LIMITS

1. Name and Address of Facility: Regional Biosolids Management Facility
7101 North Casa Grande Highway
Tucson, Arizona 85743-9577

Facility Contact: John W. Sherlock, Deputy Director
Phone: (520) 443-6100

2. Name and Address of Facility Owner: Pima County Regional Wastewater Reclamation Department
201 North Stone, Tucson, Arizona 85701
3. Monitoring Period: April 1, 2013 through April 30, 2013
4. NPDES Permit Number: AZ0020001 / AZ0020923
5. Sludge Permit Number: N/A

	Regulatory Requirement		Pollutant Concentration (dry weight)					
			Average		Units	Frequency of Analysis	Sample Type (Discrete or Composite)	Analytical Method
Arsenic	R18-9-1005 40 CFR 503.13	Sample Measurement	**<5.74**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	75	41	mg/kg	1/60 days		
Cadmium	R18-9-1005 40 CFR 503.13	Sample Measurement	**<5.99**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	85	39	mg/kg	1/60 days		
Chromium	R18-9-1005	Sample Measurement	**32.8**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1	3000		mg/kg	1/60 days		
Copper	R18-9-1005 40 CFR 503.13	Sample Measurement	**448**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	4300	1500	mg/kg	1/60 days		
Lead	R18-9-1005 40 CFR 503.13	Sample Measurement	**<14.97**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	840	300	mg/kg	1/60 days		
Mercury	R18-9-1005 40 CFR 503.13	Sample Measurement	**1.75**		mg/kg	1/30 days	Composite	EPA 7471A
		Table 1 / Table 2	57	17	mg/kg	1/60 days		
Molybdenum	R18-9-1005 40 CFR 503.13	Sample Measurement	**15.9**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1	75		mg/kg	1/60 days		
Nickel	R18-9-1005 40 CFR 503.13	Sample Measurement	**<14.97**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	420	420	mg/kg	1/60 days		
Selenium	R18-9-1005 40 CFR 503.13	Sample Measurement	**<6.06**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	100	100	mg/kg	1/60 days		
Zinc	R18-9-1005 40 CFR 503.13	Sample Measurement	**1060**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	7500	2800	mg/kg	1/60 days		

R18-9-1005 Table 2 is equivalent to 40 CFR 503.13 Table 3

6. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information submitted, it is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

Name and Official Title (type or print) John W. Sherlock, Deputy Director	Area Code and Phone (520) 443-6100
Signature	Date Signed 7-9-13

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office (CRAO) Laboratory
3035 W. El Camino del Cerro, Tucson Arizona 85745-9750, Phone (520) 724-6200

Report Date: 06/20/2013
Laboratory License: AZO159

Sample Analysis Report

Regional Biosolids Facility Management

April 2013

Sample Integrity

SAMPLE RECEIPT: Samples were received intact at the required temperature, unless otherwise noted with a data qualifier below. Please refer to the Chain of Custody for sample receipt details.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Pima County CRAO Laboratory Quality Manual.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS:

Notes and Definitions:

See attached

Case Narratives:

See attached

All results on this report intended for compliance submission must have the associated chain(s) of custody attached for the results to meet reporting requirements as per ADHS Laboratory licensure rules. If you have received this report for compliance purposes and it is not complete, please contact the Compliance and Regulatory Affairs Office for a final report in its entirety.

Reviewed By:

Barbara A Boulter

06/26/13
Date

Laboratory Director or Designee
Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

Thickened Sludge to AvraGro Storage (20002-0200)

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1304149-01	C	Ammonia	04/15/13 23:59	EPA 350.1	4/19/13 11:52	**7090**	mg/kg dry	271	676.67		AMK
1304149-01	C	Arsenic	04/15/13 23:59	EPA 6010B	4/24/13 12:29	**ND**	mg/kg dry	5.74	14.97		MLB
1304149-01	C	Cadmium	04/15/13 23:59	EPA 6010B	4/24/13 12:29	**2.77**	mg/kg dry	0.258	5.99	J	MLB
1304149-01	C	Chromium	04/15/13 23:59	EPA 6010B	4/24/13 12:29	**32.8**	mg/kg dry	0.460	14.97		MLB
1304149-01	C	Copper	04/15/13 23:59	EPA 6010B	4/24/13 12:29	**448**	mg/kg dry	0.830	14.97		MLB
1304149-01	C	Lead	04/15/13 23:59	EPA 6010B	4/24/13 13:41	**12.7**	mg/kg dry	5.30	14.97	J	MLB
1304149-01	C	Mercury	04/15/13 23:59	EPA 7471A	4/23/13 15:34	**1.75**	mg/kg dry	0.0512	0.14		DDO
1304149-01	C	Molybdenum	04/15/13 23:59	EPA 6010B	4/24/13 12:29	**15.9**	mg/kg dry	0.736	5.99		MLB
1304149-01	C	Nickel	04/15/13 23:59	EPA 6010B	4/24/13 12:29	**14.0**	mg/kg dry	3.40	14.97	J	MLB
1304149-01	C	Nitrate/Nitrite	04/15/13 23:59	EPA 353.2	4/17/13 9:53	**2.8**	mg/kg dry	1.8	10.83	J	KKH
1304149-01	C	Nitrite	04/15/13 23:59	SM4500-NO2	4/16/13 12:47	**6.01**	mg/kg dry	0.87	10.83	J	AMK
1304149-01	C	Total Kjeldahl Nitrogen	04/15/13 23:59	EPA 351.2	5/2/13 11:34	**60200**	mg/kg dry	589	1,790.12		AMK
1304149-01	C	Nitrogen Total Biosolids	04/15/13 23:59	Calculated	5/2/13 11:34	**60200**	mg/kg dry	589	1,790.00		AMK
1304149-01	C	Selenium	04/15/13 23:59	EPA 6010B	4/24/13 13:41	**ND**	mg/kg dry	6.06	14.97		MLB
1304149-01	C	Silver	04/15/13 23:59	EPA 6010B	4/24/13 12:29	**6.24**	mg/kg dry	0.498	1.50		MLB
1304149-01	C	% Solids	04/15/13 23:59	SM 2540G	4/16/13 15:59	**7.39**	%		0.01		SA
1304149-01	C	Zinc	04/15/13 23:59	EPA 6010B	4/24/13 13:41	**1060**	mg/kg dry	1.67	14.97	M5	MLB

Qualifier Definitions

J	Concentration estimated. Analyte was detected below laboratory minimum reporting limit (MRL) but above MDL.
M5	Analyte concentration was determined by the method of standard addition (MSA).

General Notes and Definitions

C	Sample Type - Composite
D	Sample Type - Discrete
DD	Sample Type - Discrete Duplicate
ND	Analyte NOT DETECTED at or above the reporting limit (MDL)
NR	Not Reported
DET	Analyte DETECTED
DRY	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
Analysis Date	Analysis Date represents the final reading date.
Field Results	Field Results performed by "SMPLR" (Sampler), are not subject to approval of Laboratory Director.
Solids, Total Volatile	Used for process control samples only.
RE	Re-Analysis has been performed.

Case Narrative(s)

None

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1304149-01

SITE & LOCATION: Thickened sludge to AvraGro

SITE-LOCATION NUMBER: 20002-0200 (XXXXX-XXXX)

SAMPLE START DATE: 04/15/2013 (MM / DD / YYYY)

SAMPLE START TIME: 0500 (24 Hour Clock)

SUBMITTER: Deputy Director-Treatment

SAMPLE END DATE: 04/15/2013 (MM / DD / YYYY)

SAMPLE END TIME: 2359 (24 Hour Clock)

SAMPLER: Vasquez, Weber (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ■ 503 ☐ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ■ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	■
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐	**WET METHODS**	D	C
Cobalt	☐	☐	Ammonia as N	☐	■
Copper	☐	☐	Chloride	☐	☐
Hardness	☐	☐	Cyanide, Total	☐	☐
Iron	☐	☐	Cyanide, Amenable	☐	☐
Lead	☐	☐	Fluoride	☐	☐
Magnesium	☐	☐	Ignitability	☐	☐
Manganese	☐	☐	Nitrate as N	☐	■
Mercury	☐	■	Nitrite as N	☐	■
Molybdenum	☐	☐	Nitrate/Nitrite as N	☐	☐
Nickel	☐	☐	Nitrogen, Total Kjeldahl	☐	☐
Potassium	☐	☐	Nitrogen, Total as N	☐	■
Selenium	☐	☐	Orthophosphate as P	☐	☐
Silver	☐	■	Phosphorus, Total as P	☐	☐
Sodium	☐	☐	Sulfate	☐	☐
Strontium	☐	☐	Sulfide	☐	☐
Thallium	☐	☐	Turbidity	☐	☐
Tin	☐	☐			

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐
MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐
EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	■
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐
OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:
Monthly pour off. Poured off the daily sample
1304144-08

# of Bottles Delivered: 2

Transported on Ice: ☐ YES ☒ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	Rcfrg @ Bld 23	4/15/13	2359
[signature]	[signature]	041613	0615
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	12.0	°C
Initials:	JH	
Non-Preserved	1	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:

	Yes	No	NA
Chain of Custody Record completed appropriately?	☑	☐	☐
Sample labels match Chain of Custody?	☑	☐	☐
Correct number of samples were delivered?	☑	☐	☐
Custody seals intact?	☐	☐	☑
Within holding time?	☑	☐	☐
Sufficient sample volume for analysis?	☑	☐	☐
Samples are in proper containers?	☑	☐	☐
Sample containers damaged/leaking/frozen?	☐	☑	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☑
Received from a refrigerator?	☐	☑	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

TABLE 6 - LAND APPLICATION POLLUTANT LIMITS

1. Name and Address of Facility: Regional Biosolids Management Facility
7101 North Casa Grande Highway
Tucson, Arizona 85743-9577

Facility Contact: John W. Sherlock, Deputy Director
Phone: (520) 443-6100

2. Name and Address of Facility Owner: Pima County Regional Wastewater Reclamation Department
201 North Stone, Tucson, Arizona 85701
3. Monitoring Period: May 1, 2013 through May 31, 2013
4. NPDES Permit Number: AZ0020001 / AZ0020923
5. Sludge Permit Number: N/A

	Regulatory Requirement		Pollutant Concentration (dry weight)				Frequency of Analysis	Sample Type (Discrete or Composite)	Analytical Method
			Average		Units				
Arsenic	R18-9-1005	Sample Measurement	**11.7**		mg/kg		1/31 days	Composite	EPA 6010B
	40 CFR 503.13	Table 1 / Table 2	75	41	mg/kg		1/60 days		
Cadmium	R18-9-1005	Sample Measurement	**<4.36**		mg/kg		1/31 days	Composite	EPA 6010B
	40 CFR 503.13	Table 1 / Table 2	85	39	mg/kg		1/60 days		
Chromium	R18-9-1005	Sample Measurement	**35.4**		mg/kg		1/31 days	Composite	EPA 6010B
		Table 1	3000		mg/kg		1/60 days		
Copper	R18-9-1005	Sample Measurement	**416**		mg/kg		1/31 days	Composite	EPA 6010B
	40 CFR 503.13	Table 1 / Table 2	4300	1500	mg/kg		1/60 days		
Lead	R18-9-1005	Sample Measurement	**14.2**		mg/kg		1/31 days	Composite	EPA 6010B
	40 CFR 503.13	Table 1 / Table 2	840	300	mg/kg		1/60 days		
Mercury	R18-9-1005	Sample Measurement	**1.37**		mg/kg		1/31 days	Composite	EPA 7471A
	40 CFR 503.13	Table 1 / Table 2	57	17	mg/kg		1/60 days		
Molybdenum	R18-9-1005	Sample Measurement	**14.4**		mg/kg		1/31 days	Composite	EPA 6010B
	40 CFR 503.13	Table 1	75		mg/kg		1/60 days		
Nickel	R18-9-1005	Sample Measurement	**17.1**		mg/kg		1/31 days	Composite	EPA 6010B
	40 CFR 503.13	Table 1 / Table 2	420	420	mg/kg		1/60 days		
Selenium	R18-9-1005	Sample Measurement	**<10.90**		mg/kg		1/31 days	Composite	EPA 6010B
	40 CFR 503.13	Table 1 / Table 2	100	100	mg/kg		1/60 days		
Zinc	R18-9-1005	Sample Measurement	**904**		mg/kg		1/31 days	Composite	EPA 6010B
	40 CFR 503.13	Table 1 / Table 2	7500	2800	mg/kg		1/60 days		

R18-9-1005 Table 2 is equivalent to 40 CFR 503.13 Table 3

6. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information submitted, it is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

Name and Official Title (type or print) John W. Sherlock, Deputy Director	Area Code and Phone (520) 443-6100
Signature	Date Signed 7-9-13

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office (CRAO) Laboratory
3035 W. El Camino del Cerro, Tucson Arizona 85745-9750, Phone (520) 724-6200

Report Date: 06/20/2013
Laboratory License: AZO159

Sample Analysis Report

Regional Biosolids Facility Management

May 2013

Sample Integrity

SAMPLE RECEIPT: Samples were received intact at the required temperature, unless otherwise noted with a data qualifier below. Please refer to the Chain of Custody for sample receipt details.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Pima County CRAO Laboratory Quality Manual.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS:

Notes and Definitions:

See attached

Case Narratives:

See attached

All results on this report intended for compliance submission must have the associated chain(s) of custody attached for the results to meet reporting requirements as per ADHS Laboratory licensure rules. If you have received this report for compliance purposes and it is not complete, please contact the Compliance and Regulatory Affairs Office for a final report in its entirety.

Reviewed By:

Barbara A Lovbre

06/26/13
Date

Laboratory Director or Designee
Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

Sample Qualifiers

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Sample Qualifiers
Thickened Sludge to AvraGro Storage	1305135-01	Biosolids	5/13/2013 23:59:00	5/14/2013 06:25:00	Q6

Thickened Sludge to AvraGro Storage (20002-0200)

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1305135-01	C	Ammonia	05/13/13 23:59	EPA 350.1	5/19/13 13:09	**6640**	mg/kg dry	217	541.85		AMK
1305135-01	C	Arsenic	05/13/13 23:59	EPA 6010B	5/23/13 13:16	**11.7**	mg/kg dry	4.18	10.90		MLB
1305135-01	C	Cadmium	05/13/13 23:59	EPA 6010B	5/23/13 12:11	**2.92**	mg/kg dry	0.188	4.36	J	MLB
1305135-01	C	Chromium	05/13/13 23:59	EPA 6010B	5/23/13 12:11	**35.4**	mg/kg dry	0.334	10.90		MLB
1305135-01	C	Copper	05/13/13 23:59	EPA 6010B	5/23/13 14:12	**416**	mg/kg dry	0.604	10.90		MLB
1305135-01	C	Lead	05/13/13 23:59	EPA 6010B	5/23/13 13:16	**14.2**	mg/kg dry	3.85	10.90		MLB
1305135-01	C	Mercury	05/13/13 23:59	EPA 7471A	5/23/13 10:12	**1.37**	mg/kg dry	0.0410	0.11		DDO
1305135-01	C	Molybdenum	05/13/13 23:59	EPA 6010B	5/23/13 12:11	**14.4**	mg/kg dry	0.535	4.36		MLB
1305135-01	C	Nickel	05/13/13 23:59	EPA 6010B	5/23/13 13:16	**17.1**	mg/kg dry	2.48	10.90		MLB
1305135-01	C	Nitrate/Nitrite	05/13/13 23:59	EPA 353.2	5/15/13 14:58	**1.51**	mg/kg dry	1.43	8.67	J	AMK
1305135-01	C	Nitrite	05/13/13 23:59	SM4500-NO2	5/15/13 10:06	**1.72**	mg/kg dry	0.69	8.67	J	DDO
1305135-01	C	Total Kjeldahl Nitrogen	05/13/13 23:59	EPA 351.2	5/17/13 10:25	**60800**	mg/kg dry	541	1,644.46		AMK
1305135-01	C	Nitrogen Total Biosolids	05/13/13 23:59	Calculated	5/17/13 10:25	**60800**	mg/kg dry	541	1,640.00		AMK
1305135-01	C	Selenium	05/13/13 23:59	EPA 6010B	5/23/13 12:11	**5.67**	mg/kg dry	4.41	10.90	J	MLB
1305135-01	C	Silver	05/13/13 23:59	EPA 6010B	5/23/13 12:11	**8.42**	mg/kg dry	0.362	1.09		MLB
1305135-01	C	% Solids	05/13/13 23:59	SM 2540G	5/14/13 15:34	**9.23**	%		0.01		JAH
1305135-01	C	Zinc	05/13/13 23:59	EPA 6010B	5/23/13 12:11	**904**	mg/kg dry	1.22	10.90		MLB

Qualifier Definitions

J	Concentration estimated. Analyte was detected below laboratory minimum reporting limit (MRL) but above MDL.
Q6	Sample was received above recommended temperature.

General Notes and Definitions

C	Sample Type - Composite
D	Sample Type - Discrete
DD	Sample Type - Discrete Duplicate
ND	Analyte NOT DETECTED at or above the reporting limit (MDL)
NR	Not Reported
DET	Analyte DETECTED
DRY	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
Analysis Date	Analysis Date represents the final reading date.
Field Results	Field Results performed by "SMPLR" (Sampler), are not subject to approval of Laboratory Director.
Solids, Total Volatile	Used for process control samples only.
RE	Re-Analysis has been performed.

Case Narrative(s)

None

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1305135-01

SITE & LOCATION: Thickened sludge to AvraGro

SITE-LOCATION NUMBER: 20002-0200 (XXXXX-XXXX)

SAMPLE START DATE: 05/13/2013 (MM / DD / YYYY)

SAMPLE START TIME: 0500 (24 Hour Clock)

SUBMITTER: Deputy Director-Treatment

SAMPLE END DATE: 05/13/2013 (MM / DD / YYYY)

SAMPLE END TIME: 2359 (24 Hour Clock)

SAMPLER: Vasquez, Symington (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ■ 503 ☐ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ■ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C
Aluminum	☐	☐
Antimony	☐	☐
Arsenic	☐	☐
Barium	☐	☐
Beryllium	☐	☐
Boron	☐	☐
Cadmium	☐	☐
Calcium	☐	☐
Chromium	☐	☐
Cobalt	☐	☐
Copper	☐	☐
Hardness	☐	☐
Iron	☐	☐
Lead	☐	☐
Magnesium	☐	☐
Manganese	☐	☐
Mercury *	☐	■
Molybdenum	☐	☐
Nickel	☐	☐
Potassium	☐	☐
Selenium	☐	☐
Silver *	☐	■
Sodium	☐	☐
Strontium	☐	☐
Thallium	☐	☐
Tin	☐	☐

METALS	D	C
Titanium	☐	☐
Vanadium	☐	☐
Zinc	☐	☐
Priority Pollutant Metals *	☐	☐
TCLP Metals	☐	☐
503 Metals **	☐	■
Chromium, Hexavalent	☐	☐
Chromium, Trivalent	☐	☐

WET METHODS	D	C
Ammonia as N *	☐	■
Chloride	☐	☐
Cyanide, Total	☐	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N *	☐	■
Nitrite as N *	☐	■
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N *	☐	■
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total *	☐	■
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:
Monthly pour off. Poured off the daily sample
LIMS # 1305130-10

# of Bottles Delivered: 2

Transported on Ice: ☐ YES ☒ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
M. S.	Refrig.@#23	5/13/13	2359
Refrig.@#23	[illegible]	5/14/13	0600
[illegible]	Refrig. @ #52	5/14/13	0605
Refrig @ #52	[illegible]	5-14-13	0625
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	8.4	°C
Initials:	JVR	
Non-Preserved	2	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:

	Yes	No	NA
Chain of Custody Record completed appropriately?	☑	☐	☐
Sample labels match Chain of Custody?	☑	☐	☐
Correct number of samples were delivered?	☑	☐	☐
Custody seals intact?	☐	☐	☑
Within holding time?	☑	☐	☐
Sufficient sample volume for analysis?	☑	☐	☐
Samples are in proper containers?	☑	☐	☐
Sample containers damaged/leaking/frozen?	☐	☑	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☑
Received from a refrigerator?	☑	☐	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

TABLE 6 - LAND APPLICATION POLLUTANT LIMITS

1. Name and Address of Facility: Regional Biosolids Management Facility
7101 North Casa Grande Highway
Tucson, Arizona 85743-9577
Facility Contact: John W. Sherlock, Deputy Director
Phone: (520) 443-6100

2. Name and Address of Facility Owner: Pima County Regional Wastewater Reclamation Department
201 North Stone, Tucson, Arizona 85701
3. Monitoring Period: June 1, 2013 through June 30, 2013
4. NPDES Permit Number: AZ0020001 / AZ0020923
5. Sludge Permit Number: N/A

	Regulatory Requirement		Pollutant Concentration (dry weight)				Frequency of Analysis	Sample Type (Discrete or Composite)	Analytical Method
			Average		Units				
Arsenic	R18-9-1005 40 CFR 503.13	Sample Measurement	**<6.8**		mg/kg		1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	75	41	mg/kg		1/60 days		
Cadmium	R18-9-1005 40 CFR 503.13	Sample Measurement	**<7.10**		mg/kg		1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	85	39	mg/kg		1/60 days		
Chromium	R18-9-1005	Sample Measurement	**27.8**		mg/kg		1/30 days	Composite	EPA 6010B
		Table 1	3000		mg/kg		1/60 days		
Copper	R18-9-1005 40 CFR 503.13	Sample Measurement	**446**		mg/kg		1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	4300	1500	mg/kg		1/60 days		
Lead	R18-9-1005 40 CFR 503.13	Sample Measurement	**<17.74**		mg/kg		1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	840	300	mg/kg		1/60 days		
Mercury	R18-9-1005 40 CFR 503.13	Sample Measurement	**1.25**		mg/kg		1/30 days	Composite	EPA 7471A
		Table 1 / Table 2	57	17	mg/kg		1/60 days		
Molybdenum	R18-9-1005 40 CFR 503.13	Sample Measurement	**13.2**		mg/kg		1/30 days	Composite	EPA 6010B
		Table 1	75		mg/kg		1/60 days		
Nickel	R18-9-1005 40 CFR 503.13	Sample Measurement	**<17.74**		mg/kg		1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	420	420	mg/kg		1/60 days		
Selenium	R18-9-1005 40 CFR 503.13	Sample Measurement	**<7.18**		mg/kg		1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	100	100	mg/kg		1/60 days		
Zinc	R18-9-1005 40 CFR 503.13	Sample Measurement	**839**		mg/kg		1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	7500	2800	mg/kg		1/60 days		

R18-9-1005 Table 2 is equivalent to 40 CFR 503.13 Table 3

6. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information submitted, it is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

Name and Official Title (type or print) John W. Sherlock, Deputy Director	Area Code and Phone (520) 443-6100
Signature	Date Signed 8/15/13

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office (CRAO) Laboratory
2955 W. Calle Agua Nueva, Tucson Arizona 85745-9750, Phone (520) 724-6200

Report Date: 08/14/2013
Laboratory License: AZO159

Sample Analysis Report

Regional Biosolids Facility Management

June 2013

Sample Integrity

SAMPLE RECEIPT: Samples were received intact at the required temperature, unless otherwise noted with a data qualifier below. Please refer to the Chain of Custody for sample receipt details.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Pima County CRAO Laboratory Quality Manual.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS:

Notes and Definitions:

See attached

Case Narratives:

See attached

All results on this report intended for compliance submission must have the associated chain(s) of custody attached for the results to meet reporting requirements as per ADHS Laboratory licensure rules. If you have received this report for compliance purposes and it is not complete, please contact the Compliance and Regulatory Affairs Office for a final report in its entirety.

Reviewed By:

Barbara Arsher

08/14/13
Date

Laboratory Director or Designee
Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

Sample Qualifiers

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Sample Qualifiers
Thickened Sludge to AvraGro Storage	1306094-01	Biosolids	6/10/2013 23:59:00	6/11/2013 06:48:00	Q6

Thickened Sludge to AvraGro Storage (20002-0200)

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1306094-01	C	Nitrogen Total Biosolids	06/10/13 23:59	Calculated	6/19/13 11:23	**85053**	mg/kg dry	54.83	166.67		AMK
1306094-01	C	Ammonia	06/10/13 23:59	EPA 350.1	6/17/13 12:44	**13500**	mg/kg dry	305	761.63		DDO
1306094-01	C	Total Kjeldahl Nitrogen	06/10/13 23:59	EPA 351.2	6/19/13 11:23	**85048**	mg/kg dry	835.25	2,538.76	M1	AMK
1306094-01	C	Nitrate/Nitrite	06/10/13 23:59	EPA 353.2	6/18/13 8:48	**4.76**	mg/kg dry	2.01	12.19	J	KKH
1306094-01	C	Arsenic	06/10/13 23:59	EPA 6010B	6/28/13 13:27	**ND**	mg/kg dry	6.80	17.74		MLB
1306094-01	C	Cadmium	06/10/13 23:59	EPA 6010B	6/28/13 13:27	**2.60**	mg/kg dry	0.306	7.10	J	MLB
1306094-01	C	Chromium	06/10/13 23:59	EPA 6010B	6/28/13 13:27	**27.8**	mg/kg dry	0.545	17.74		MLB
1306094-01	C	Copper	06/10/13 23:59	EPA 6010B	6/28/13 15:05	**446**	mg/kg dry	0.984	17.74		MLB
1306094-01	C	Lead	06/10/13 23:59	EPA 6010B	6/28/13 13:27	**12.2**	mg/kg dry	6.27	17.74	J	MLB
1306094-01	C	Molybdenum	06/10/13 23:59	EPA 6010B	6/28/13 13:27	**13.2**	mg/kg dry	0.871	7.10		MLB
1306094-01	C	Nickel	06/10/13 23:59	EPA 6010B	6/28/13 13:27	**17.4**	mg/kg dry	4.03	17.74	J	MLB
1306094-01	C	Selenium	06/10/13 23:59	EPA 6010B	6/28/13 15:05	**ND**	mg/kg dry	7.18	17.74		MLB
1306094-01	C	Silver	06/10/13 23:59	EPA 6010B	6/28/13 13:27	**5.82**	mg/kg dry	0.590	1.77		MLB
1306094-01	C	Zinc	06/10/13 23:59	EPA 6010B	6/28/13 13:27	**839**	mg/kg dry	1.98	17.74		MLB
1306094-01	C	Mercury	06/10/13 23:59	EPA 7471A	6/18/13 12:21	**1.25**	mg/kg dry	0.0576	0.15	M5	DDO
1306094-01	C	Nitrite	06/10/13 23:59	SM4500-NO2	6/11/13 14:33	**7.62**	mg/kg dry	0.97	12.19	J	KKH
1306094-01	C	% Solids	06/10/13 23:59	SM 2540G	6/11/13 13:26	**6.56**	%		0.01		JRV

Qualifier Definitions

J	Concentration estimated. Analyte was detected below laboratory minimum reporting limit (MRL) but above MDL.
M1	Matrix spike recovery was high; the associated blank spike recovery was acceptable.
M5	Analyte concentration was determined by the method of standard addition (MSA).
Q6	Sample was received above recommended temperature.

General Notes and Definitions

C	Sample Type - Composite
D	Sample Type - Discrete
DD	Sample Type - Discrete Duplicate
ND	Analyte NOT DETECTED at or above the reporting limit (MDL)
NR	Not Reported
DET	Analyte DETECTED
DRY	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
Analysis Date	Analysis Date represents the final reading date.
Field Results	Field Results performed by "SMPLR" (Sampler), are not subject to approval of Laboratory Director.
Solids, Total Volatile	Used for process control samples only.
RE	Re-Analysis has been performed.

Case Narrative(s)

None

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1306094-01

SITE & LOCATION: Thickened sludge to AvraGro

SITE-LOCATION NUMBER: 20002-0200 (XXXXX-XXXX)

SAMPLE START DATE: 06/10/2013 (MM / DD / YYYY)

SAMPLE START TIME: 0500 (24 Hour Clock)

SUBMITTER: Deputy Director-Treatment

SAMPLE END DATE: 06/10/2013 (MM / DD / YYYY)

SAMPLE END TIME: 2359 (24 Hour Clock)

SAMPLER: Vasquez, Weber (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ■ 503 ☐ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ■ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C
Aluminum	☐	☐
Antimony	☐	☐
Arsenic	☐	☐
Barium	☐	☐
Beryllium	☐	☐
Boron	☐	☐
Cadmium	☐	☐
Calcium	☐	☐
Chromium	☐	☐
Cobalt	☐	☐
Copper	☐	☐
Hardness	☐	☐
Iron	☐	☐
Lead	☐	☐
Magnesium	☐	☐
Manganese	☐	☐
Mercury *	☐	■
Molybdenum	☐	☐
Nickel	☐	☐
Potassium	☐	☐
Selenium	☐	☐
Silver *	☐	■
Sodium	☐	☐
Strontium	☐	☐
Thallium	☐	☐
Tin	☐	☐

METALS	D	C
Titanium	☐	☐
Vanadium	☐	☐
Zinc	☐	☐
Priority Pollutant Metals *	☐	☐
TCLP Metals	☐	☐
503 Metals **	☐	■
Chromium, Hexavalent	☐	☐
Chromium, Trivalent	☐	☐

WET METHODS	D	C
Ammonia as N *	☐	■
Chloride	☐	☐
Cyanide, Total	☐	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N *	☐	■
Nitrite as N *	☐	■
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N *	☐	■
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total *	☐	■
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:
Monthly pour off. Poured off the daily sample
1306089-10

# of Bottles Delivered: 2

Transported on Ice: ☐ YES ☒ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	Refrig.@#23	6/10/13	2359
Refrig. @#23	[signature]	6/11/13	0640
[signature]	[signature]	6-11-13	0648
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature: 7.2 °C

Initials: SVIZ

Non-Preserved	2	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☑	☐	☐
Sample labels match Chain of Custody?	☑	☐	☐
Correct number of samples were delivered?	☑	☐	☐
Custody seals intact?	☐	☐	☑
Within holding time?	☑	☐	☐
Sufficient sample volume for analysis?	☑	☐	☐
Samples are in proper containers?	☑	☐	☐
Sample containers damaged/leaking/frozen?	☐	☑	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☑
Received from a refrigerator?	☐	☑	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

TABLE 6 - LAND APPLICATION POLLUTANT LIMITS

1. Name and Address of Facility: Regional Biosolids Management Facility
7101 North Casa Grande Highway
Tucson, Arizona 85743-9577

Facility Contact: John W. Sherlock, Deputy Director
Phone: (520) 443-6100

2. Name and Address of Facility Owner: Pima County Regional Wastewater Reclamation Department
201 North Stone, Tucson, Arizona 85701
3. Monitoring Period: July 1, 2013 through July 31, 2013
4. NPDES Permit Number: AZ0020001 / AZ0020923
5. Sludge Permit Number: N/A

	Regulatory Requirement		Pollutant Concentration (dry weight)			Frequency of Analysis	Sample Type (Discrete or Composite)	Analytical Method
			Average		Units			
Arsenic	R18-9-1005 40 CFR 503.13	Sample Measurement	**<18.44**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	75	41	mg/kg	1/60 days		
Cadmium	R18-9-1005 40 CFR 503.13	Sample Measurement	**<7.38**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	85	39	mg/kg	1/60 days		
Chromium	R18-9-1005	Sample Measurement	**33.0**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1	3000		mg/kg	1/60 days		
Copper	R18-9-1005 40 CFR 503.13	Sample Measurement	**503**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	4300	1500	mg/kg	1/60 days		
Lead	R18-9-1005 40 CFR 503.13	Sample Measurement	**<18.44**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	840	300	mg/kg	1/60 days		
Mercury	R18-9-1005 40 CFR 503.13	Sample Measurement	**1.33**		mg/kg	1/31 days	Composite	EPA 7471A
		Table 1 / Table 2	57	17	mg/kg	1/60 days		
Molybdenum	R18-9-1005 40 CFR 503.13	Sample Measurement	**14.4**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1	75		mg/kg	1/60 days		
Nickel	R18-9-1005 40 CFR 503.13	Sample Measurement	**21.1**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	420	420	mg/kg	1/60 days		
Selenium	R18-9-1005 40 CFR 503.13	Sample Measurement	**<7.47**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	100	100	mg/kg	1/60 days		
Zinc	R18-9-1005 40 CFR 503.13	Sample Measurement	**931**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	7500	2800	mg/kg	1/60 days		

R18-9-1005 Table 2 is equivalent to 40 CFR 503.13 Table 3

6. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information submitted, it is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

Name and Official Title (type or print) John W. Sherlock, Deputy Director	Area Code and Phone (520) 443-6100
Signature	Date Signed 9-16-13

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office (CRAO) Laboratory
2955 W. Calle Agua Nueva, Tucson Arizona 85745-9750, Phone (520) 724-6200

Report Date: 09/05/2013
Laboratory License: AZO159

Sample Analysis Report

Regional Biosolids Facility Management

July 2013

Sample Integrity

SAMPLE RECEIPT: Samples were received intact at the required temperature, unless otherwise noted with a data qualifier below. Please refer to the Chain of Custody for sample receipt details.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Pima County CRAO Laboratory Quality Manual.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS:

Notes and Definitions:

See attached

Case Narratives:

See attached

All results on this report intended for compliance submission must have the associated chain(s) of custody attached for the results to meet reporting requirements as per ADHS Laboratory licensure rules. If you have received this report for compliance purposes and it is not complete, please contact the Compliance and Regulatory Affairs Office for a final report in its entirety.

Reviewed By:

Barbara A Esther

09/10/13
Date

Laboratory Director or Designee
Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

Sample Qualifiers

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Sample Qualifiers
Thickened Sludge to AvraGro Storage	1307063-01	Biosolids	7/8/2013 23:59:00	7/9/2013 6:30:00	Q6

Thickened Sludge to AvraGro Storage (20002-0200)

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1307063-01	C	Nitrogen Total Biosolids	07/08/13 23:59	Calculated	7/25/13 9:27	**62531**	mg/kg dry	59.82	181.82		AMK
1307063-01	C	Ammonia	07/08/13 23:59	EPA 350.1	7/11/13 12:12	**7280**	mg/kg dry	216	540.73		AMK
1307063-01	C	Total Kjeldahl Nitrogen	07/08/13 23:59	EPA 351.2	7/25/13 9:27	**62528**	mg/kg dry	646.91	1,966.30	M5	AMK
1307063-01	C	Nitrate/Nitrite	07/08/13 23:59	EPA 353.2	7/9/13 11:35	**2.28**	mg/kg dry	1.43	8.65	J	KB
1307063-01	C	Arsenic	07/08/13 23:59	EPA 6010B	7/24/13 10:19	**13.2**	mg/kg dry	7.08	18.44	J	MLB
1307063-01	C	Cadmium	07/08/13 23:59	EPA 6010B	7/24/13 10:19	**3.69**	mg/kg dry	0.318	7.38	J	MLB
1307063-01	C	Chromium	07/08/13 23:59	EPA 6010B	7/24/13 10:19	**33.0**	mg/kg dry	0.566	18.44		MLB
1307063-01	C	Copper	07/08/13 23:59	EPA 6010B	7/24/13 12:29	**503**	mg/kg dry	1.02	18.44		MLB
1307063-01	C	Lead	07/08/13 23:59	EPA 6010B	7/24/13 11:24	**14.3**	mg/kg dry	6.52	18.44	J	MLB
1307063-01	C	Molybdenum	07/08/13 23:59	EPA 6010B	7/24/13 10:19	**14.4**	mg/kg dry	0.906	7.38		MLB
1307063-01	C	Nickel	07/08/13 23:59	EPA 6010B	7/24/13 10:19	**21.1**	mg/kg dry	4.19	18.44		MLB
1307063-01	C	Selenium	07/08/13 23:59	EPA 6010B	7/24/13 12:29	**ND**	mg/kg dry	7.47	18.44		MLB
1307063-01	C	Silver	07/08/13 23:59	EPA 6010B	7/24/13 11:24	**6.34**	mg/kg dry	0.613	1.84		MLB
1307063-01	C	Zinc	07/08/13 23:59	EPA 6010B	7/24/13 10:19	**931**	mg/kg dry	2.06	18.44		MLB
1307063-01	C	Mercury	07/08/13 23:59	EPA 7471A	7/16/13 14:45	**1.33**	mg/kg dry	0.0409	0.11		AMK
1307063-01	C	Nitrite	07/08/13 23:59	SM4500-NO2	7/9/13 13:49	**2.07**	mg/kg dry	0.69	8.65	J	AMK
1307063-01	C	% Solids	07/08/13 23:59	SM 2540G	7/9/13 16:23	**9.25**	%		0.01		SA

Qualifier Definitions

J	Concentration estimated. Analyte was detected below laboratory minimum reporting limit (MRL) but above MDL.
M5	Analyte concentration was determined by the method of standard addition (MSA).
Q6	Sample was received above recommended temperature.

General Notes and Definitions

C	Sample Type - Composite
D	Sample Type - Discrete
DD	Sample Type - Discrete Duplicate
ND	Analyte NOT DETECTED at or above the reporting limit (MDL)
NR	Not Reported
DET	Analyte DETECTED
DRY	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
Analysis Date	Analysis Date represents the final reading date.
Field Results	Field Results performed by "SMPLR" (Sampler), are not subject to approval of Laboratory Director.
Solids, Total Volatile	Used for process control samples only.
RE	Re-Analysis has been performed.

Case Narrative(s)

None

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1307063-01

SITE & LOCATION: Thickened sludge to AvraGro

SITE-LOCATION NUMBER: 20002-0200 (XXXXX-XXXX)

SAMPLE START DATE: 07/08/2013 (MM / DD / YYYY)

SAMPLE START TIME: 0500 (24 Hour Clock)

SUBMITTER: Deputy Director-Treatment

SAMPLE END DATE: 07/08/2013 (MM / DD / YYYY)

SAMPLE END TIME: 2359 (24 Hour Clock)

SAMPLER: Vasquez, Harris (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ■ 503 ☐ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ■ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C
Aluminum		
Antimony		
Arsenic		
Barium		
Beryllium		
Boron		
Cadmium		
Calcium		
Chromium		
Cobalt		
Copper		
Hardness		
Iron		
Lead		
Magnesium		
Manganese		
Mercury		■
Molybdenum		
Nickel		
Potassium		
Selenium		
Silver		■
Sodium		
Strontium		
Thallium		
Tin		

METALS	D	C
Titanium		
Vanadium		
Zinc		
Priority Pollutant Metals *		
TCLP Metals		
503 Metals **		■
Chromium, Hexavalent		
Chromium, Trivalent		

WET METHODS	D	C
Ammonia as N		■
Chloride		
Cyanide, Total		
Cyanide, Amenable		
Fluoride		
Ignitability		
Nitrate as N		■
Nitrite as N		■
Nitrate/Nitrite as N		
Nitrogen, Total Kjeldahl		
Nitrogen, Total as N		■
Orthophosphate as P		
Phosphorus, Total as P		
Sulfate		
Sulfide		
Turbidity		

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile		
Dioxin GC/SIM/MS Scan		
Organochlorine Pesticides & PCBs		
Purgeable Organics (GCMS)		
Semivolatile Organics (GCMS)		
Other		

MISCELLANEOUS METHODS	D	C
4,4-DDE		
Bis(2-ethylhexyl) phthalate		
Digester Gas		
Oil and Grease		
Organic Carbon, Total		
Organic Carbon, Dissolved		
TCLP Herbicides (Contract Lab)		
TCLP Pesticides		
TCLP Semivolatile Organics		
TCLP Volatile Organics		
Total Petroleum Hydrocarbons		
Volatile Acids		

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*		
Chronic *C. dubia*		
Chronic *Selenastrum capricornutum*		
Other		

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity		
BOD		
COD		
Coliform, Fecal		
Coliform, Total		
Conductivity		
E. coli		
Oxygen, Dissolved		
pH		
Solids, Settleable		
Solids, Total		■
Solids, Total Dissolved		
Solids, Total Suspended		
Solids, Total Volatile		
Solids, Volatile Suspended		
Other		

OTHER	D	C

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:
Monthly pour off. Poured off the daily sample
~~BOS~~ 1307058-10
G5070913

# of Bottles Delivered: 2

Transported on Ice: ☐ YES ☒ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
Mark Harris / Refrigerator @ #23	Refrigerator @ #23	7-8-13	2359
Refrigerator @ #23	[signature]	7/9/13	0625
[signature]	[signature]	7-9-13	0630
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	11.8	°C
Initials:	JVR	
Non-Preserved	2	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☑		
Sample labels match Chain of Custody?	☑		
Correct number of samples were delivered?	☑		
Custody seals intact?			☑
Within holding time?	☑		
Sufficient sample volume for analysis?	☑		
Samples are in proper containers?	☑		
Sample containers damaged/leaking/frozen?		☑	
40 ml vials headspace, > pea-sized air bubble?			☑
Received from a refrigerator?		☑	

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

TABLE 6 - LAND APPLICATION POLLUTANT LIMITS

1. Name and Address of Facility: Regional Biosolids Management Facility
7101 North Casa Grande Highway
Tucson, Arizona 85743-9577

Facility Contact: John W. Sherlock, Deputy Director
Phone: (520) 724-6100

2. Name and Address of Facility Owner: Pima County Regional Wastewater Reclamation Department
201 North Stone, Tucson, Arizona 85701
3. Monitoring Period: August 1, 2013 through August 31, 2013
4. NPDES Permit Number: AZ0020001 / AZ0020923
5. Sludge Permit Number: N/A

	Regulatory Requirement		Pollutant Concentration (dry weight)			Frequency of Analysis	Sample Type (Discrete or Composite)	Analytical Method
			Average		Units			
Arsenic	R18-9-1005 40 CFR 503.13	Sample Measurement	**<10.15**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	75	41	mg/kg	1/60 days		
Cadmium	R18-9-1005 40 CFR 503.13	Sample Measurement	**<4.06**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	85	39	mg/kg	1/60 days		
Chromium	R18-9-1005	Sample Measurement	**42.2**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1	3000		mg/kg	1/60 days		
Copper	R18-9-1005 40 CFR 503.13	Sample Measurement	**527**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	4300	1500	mg/kg	1/60 days		
Lead	R18-9-1005 40 CFR 503.13	Sample Measurement	**20.6**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	840	300	mg/kg	1/60 days		
Mercury	R18-9-1005 40 CFR 503.13	Sample Measurement	**1.34**		mg/kg	1/31 days	Composite	EPA 7471A
		Table 1 / Table 2	57	17	mg/kg	1/60 days		
Molybdenum	R18-9-1005 40 CFR 503.13	Sample Measurement	**19.2**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1	75		mg/kg	1/60 days		
Nickel	R18-9-1005 40 CFR 503.13	Sample Measurement	**23.8**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	420	420	mg/kg	1/60 days		
Selenium	R18-9-1005 40 CFR 503.13	Sample Measurement	**<10.15**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	100	100	mg/kg	1/60 days		
Zinc	R18-9-1005 40 CFR 503.13	Sample Measurement	**1090**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	7500	2800	mg/kg	1/60 days		

R18-9-1005 Table 2 is equivalent to 40 CFR 503.13 Table 3

6. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information submitted, it is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

Name and Official Title (type or print) John W. Sherlock, Deputy Director	Area Code and Phone (520) 724-6100
Signature	Date Signed 10-7-13

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office (CRAO) Laboratory
2955 W. Calle Agua Nueva, Tucson Arizona 85745-9750, Phone (520) 724-6200

Report Date: 09/30/2013
Laboratory License: AZO159

Sample Analysis Report

Regional Biosolids Facility Management

August 2013

Sample Integrity

SAMPLE RECEIPT: Samples were received intact at the required temperature, unless otherwise noted with a data qualifier below. Please refer to the Chain of Custody for sample receipt details.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Pima County CRAO Laboratory Quality Manual.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS:

Notes and Definitions:

See attached

Case Narratives:

See attached

All results on this report intended for compliance submission must have the associated chain(s) of custody attached for the results to meet reporting requirements as per ADHS Laboratory licensure rules. If you have received this report for compliance purposes and it is not complete, please contact the Compliance and Regulatory Affairs Office for a final report in its entirety.

Reviewed By:

10/02/13
Date

Laboratory Director or Designee
Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

Sample Qualifiers

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Sample Qualifiers
Thickened Sludge to AvraGro Storage	1308050-01	Biosolids	8/5/2013 23:59:00	8/6/2013 6:30:00	Q6

Thickened Sludge to AvraGro Storage (20002-0200)

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1308050-01	C	Nitrogen Total Biosolids	08/05/13 23:59	Calculated	8/13/13 12:37	**56903**	mg/kg dry	43.87	666.65		KKH
1308050-01	C	Ammonia	08/05/13 23:59	EPA 350.1	8/8/13 13:08	**4700**	mg/kg dry	94.8	237.09		DDO
1308050-01	C	Total Kjeldahl Nitrogen	08/05/13 23:59	EPA 351.2	8/13/13 12:37	**56902**	mg/kg dry	208.01	3,161.21	D2	KKH
1308050-01	C	Nitrate/Nitrite	08/05/13 23:59	EPA 353.2	8/6/13 12:05	**0.82**	mg/kg dry	0.63	3.79	J	KB
1308050-01	C	Arsenic	08/05/13 23:59	EPA 6010B	8/20/13 13:54	**9.77**	mg/kg dry	8.88	10.15	J	MLB
1308050-01	C	Cadmium	08/05/13 23:59	EPA 6010B	8/20/13 13:54	**3.14**	mg/kg dry	0.330	4.06	J	MLB
1308050-01	C	Chromium	08/05/13 23:59	EPA 6010B	8/20/13 13:54	**42.2**	mg/kg dry	0.352	10.15		MLB
1308050-01	C	Copper	08/05/13 23:59	EPA 6010B	8/20/13 15:36	**527**	mg/kg dry	0.456	10.15		MLB
1308050-01	C	Lead	08/05/13 23:59	EPA 6010B	8/20/13 15:36	**20.6**	mg/kg dry	4.55	10.15		MLB
1308050-01	C	Molybdenum	08/05/13 23:59	EPA 6010B	8/20/13 13:54	**19.2**	mg/kg dry	0.588	4.06		MLB
1308050-01	C	Nickel	08/05/13 23:59	EPA 6010B	8/20/13 13:54	**23.8**	mg/kg dry	4.32	10.15		MLB
1308050-01	C	Selenium	08/05/13 23:59	EPA 6010B	8/20/13 13:54	**9.96**	mg/kg dry	7.24	10.15	J	MLB
1308050-01	C	Silver	08/05/13 23:59	EPA 6010B	8/20/13 13:54	**7.30**	mg/kg dry	0.548	1.02		MLB
1308050-01	C	Mercury	08/05/13 23:59	EPA 7471A	8/14/13 10:29	**1.34**	mg/kg dry	0.0179	0.05		DDO
1308050-01	C	Nitrite	08/05/13 23:59	SM4500-NO2	8/6/13 13:03	**0.78**	mg/kg dry	0.30	3.79	J	DDO
1308050-01RE1	C	Zinc	08/05/13 23:59	EPA 6010B	8/20/13 14:13	**1090**	mg/kg dry	1.70	50.76	D2, D7	MLB
1308050-01	C	% Solids	08/05/13 23:59	SM 2540G	8/7/13 8:38	**21.1**	%		0.01		JAH

Qualifier Definitions

D2	Sample required dilution due to high concentration of target analyte.
D7	Minimum Reporting Limit adjusted to reflect sample dilution.
J	Concentration estimated. Analyte was detected below laboratory minimum reporting limit (MRL) but above MDL.
Q6	Sample was received above recommended temperature.

General Notes and Definitions

C	Sample Type - Composite
D	Sample Type - Discrete
DD	Sample Type - Discrete Duplicate
ND	Analyte NOT DETECTED at or above the reporting limit (MDL)
NR	Not Reported
DET	Analyte DETECTED
DRY	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
Analysis Date	Analysis Date represents the final reading date.
Field Results	Field Results performed by "SMPLR" (Sampler), are not subject to approval of Laboratory Director.
Solids, Total Volatile	Used for process control samples only.
RE	Re-Analysis has been performed.
FD	Field Duplicate

Case Narrative(s)

None

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1308050-01

SITE & LOCATION: Thickened Sludge to Avra-Gro

SITE-LOCATION NUMBER: 20002-0200 (XXXXX-XXXX)

SAMPLE START DATE: 08/05/2013 (MM / DD / YYYY)

SAMPLE START TIME: 0500 (24 Hour Clock)

SUBMITTER: Deputy Director-Treatment

SAMPLE END DATE: 08/05/2013 (MM / DD / YYYY)

SAMPLE END TIME: 2359 (24 Hour Clock)

SAMPLER: Vasquez, Harris (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ■ 503 ☐ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ■ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	■
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐	**WET METHODS**	D	C
Cobalt	☐	☐	Ammonia as N	☐	■
Copper	☐	☐	Chloride	☐	☐
Hardness	☐	☐	Cyanide, Total	☐	☐
Iron	☐	☐	Cyanide, Amenable	☐	☐
Lead	☐	☐	Fluoride	☐	☐
Magnesium	☐	☐	Ignitability	☐	☐
Manganese	☐	☐	Nitrate as N	☐	■
Mercury	☐	☐	Nitrite as N	☐	■
Molybdenum	☐	☐	Nitrate/Nitrite as N	☐	☐
Nickel	☐	☐	Nitrogen, Total Kjeldahl	☐	☐
Potassium	☐	☐	Nitrogen, Total as N	☐	■
Selenium	☐	☐	Orthophosphate as P	☐	☐
Silver	☐	■	Phosphorus, Total as P	☐	☐
Sodium	☐	☐	Sulfate	☐	☐
Strontium	☐	☐	Sulfide	☐	☐
Thallium	☐	☐	Turbidity	☐	☐
Tin	☐	☐			

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐
MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐
EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	■
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐
OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions: Poured off the daily sample 1308045-10 605 08-06-13

# of Bottles Delivered: 1

Transported on Ice: ☐ YES ☐ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
Mark Harris Refrigerator @#23		8-5-13	2359
Refrigerator @#23	Cley Vasquez	8/6/13	0630
Cley Vasquez	[illegible]	08-06-13	0630

LAB USE ONLY

Sample Integrity/Preservation:

Temperature: 12.0 °C

Initials: SA

Non-Preserved	1	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	✓		
Sample labels match Chain of Custody?	✓		
Correct number of samples were delivered?	✓		
Custody seals intact?			✓
Within holding time?	✓		
Sufficient sample volume for analysis?	✓		
Samples are in proper containers?	✓		
Sample containers damaged/leaking/frozen?		✓	
40 ml vials headspace, > pea-sized air bubble?			✓
Received from a refrigerator?		✓	

* Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)
** As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

NUMBER OF BOTTLES: 6

SITE: Ina Road WRF

SITE NUMBER: 20001

ALL SAMPLES START DATE: 08/05/2013 ALL SAMPLES START TIME: 0500 (24 Hour Clock)

SUBMITTER: Ina Road Operations

ALL SAMPLES END DATE: 08/05/2013 ALL SAMPLES END TIME: 2359 (24 Hour Clock)

SAMPLER(S): Vasquez, Harris (Print Last Names Only)

COMMENTS: * Metals and N-forms poured off for 1308050-01 GOS 08-06-13

Location Description / Location Number	D	C	Lab ID: 1308045 (YYYYMM)	Microbiology: Alkalinity	BOD	COD	Conductivity	E. coli	Oxygen, Dissolved	pH	Solids, Settleable	Solids, Total	Solids, Total Grams	Solids, Total Dissolved	Solids, Total Suspended	Solids, Total Volatile	Solids, Volatile Suspended	Inorganic: Air Filter Be or Pb	Ammonia	Chloride	Chromium, Hexavalent	Chromium, Trivalent	Copper, Dissolved	Cyanide, Total	Cyanide, Amenable	Fluoride	Hardness	Ignitability	Metals *	Nitrate and/or Nitrite	Nitrogen, Total Kjeldahl	Nitrogen, Total	Orthophosphate	Phosphorus, Total	Sulfate	Sulfide	Turbidity	Organic: Digester Gas	Oil and Grease	VOA	NOTES or Collection End Dates/ Times	Process Control
Centrifuge Roger Sludge 5200		■	07									■																														☒
Centrifuge Feed Sludge 5300		■	08									■																														☒
Centrifuge Cake Sludge 5600		■	09									■																														☒
Thickened to Avragro * 5701		■	10									■	■																													☐
Centrate 5501		■	11									■																														☒
Flush Water to Headworks 5510		■	12									■																														☒
																																										☐
																																										☐
																																										☐
																																										☐

* Please indicate specific metals request here:

Chain of Custody Record (Signature Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
Mark Harris	Refrigerator @ Bld 23	8/5/13	2359
Refrigerator @ Bld 23	Alex Vasquez	8/6/13	0630
Alex Vasquez	[illegible]	08-06-13	0630
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

Lab Use Only

	Yes	No	N/A
Chain of Custody Record completed appropriately?	☑	☐	☐
Sample Labels match Chain of Custody?	☑	☐	☐
Correct number of samples were delivered?	☑	☐	☐
Custody seals intact?	☐	☐	☑
Within holding time?	☑	☐	☐
Sufficient sample volume for analysis?	☑	☐	☐
Samples are in proper containers?	☑	☐	☐
Sample containers damaged/leaking/frozen?	☐	☑	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☑
Received from a refrigerator?	☐	☑	☐

Temperature: 12.0°C Initials: SA

TABLE 6 - LAND APPLICATION POLLUTANT LIMITS

1. Name and Address of Facility: Regional Biosolids Management Facility
7101 North Casa Grande Highway
Tucson, Arizona 85743-9577

Facility Contact: John W. Sherlock, Deputy Director
Phone: (520) 724-6100

2. Name and Address of Facility Owner: Pima County Regional Wastewater Reclamation Department
201 North Stone, Tucson, Arizona 85701
3. Monitoring Period: September 1, 2013 through September 30, 2013
4. NPDES Permit Number: AZ0020001 / AZ0020923
5. Sludge Permit Number: N/A

	Regulatory Requirement		Pollutant Concentration (dry weight)			Frequency of Analysis	Sample Type (Discrete or Composite)	Analytical Method
			Average		Units			
Arsenic	R18-9-1005 40 CFR 503.13	Sample Measurement	**14.8**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	75	41	mg/kg	1/60 days		
Cadmium	R18-9-1005 40 CFR 503.13	Sample Measurement	**<5.48**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	85	39	mg/kg	1/60 days		
Chromium	R18-9-1005	Sample Measurement	**46.2**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1	3000		mg/kg	1/60 days		
Copper	R18-9-1005 40 CFR 503.13	Sample Measurement	**434**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	4300	1500	mg/kg	1/60 days		
Lead	R18-9-1005 40 CFR 503.13	Sample Measurement	**14.8**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	840	300	mg/kg	1/60 days		
Mercury	R18-9-1005 40 CFR 503.13	Sample Measurement	**1.12**		mg/kg	1/30 days	Composite	EPA 7471A
		Table 1 / Table 2	57	17	mg/kg	1/60 days		
Molybdenum	R18-9-1005 40 CFR 503.13	Sample Measurement	**16.5**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1	75		mg/kg	1/60 days		
Nickel	R18-9-1005 40 CFR 503.13	Sample Measurement	**41.2**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	420	420	mg/kg	1/60 days		
Selenium	R18-9-1005 40 CFR 503.13	Sample Measurement	**<13.7**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	100	100	mg/kg	1/60 days		
Zinc	R18-9-1005 40 CFR 503.13	Sample Measurement	**975**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	7500	2800	mg/kg	1/60 days		

R18-9-1005 Table 2 is equivalent to 40 CFR 503.13 Table 3

6. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information submitted, it is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

Name and Official Title (type or print) John W. Sherlock, Deputy Director	Area Code and Phone (520) 724-6100
Signature For JWS	Date Signed 11-13-2013

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office (CRAO) Laboratory
2955 W. Calle Agua Nueva, Tucson Arizona 85745-9750, Phone (520) 724-6200

Report Date: 11/13/2013
Laboratory License: AZO159

Sample Analysis Report

Regional Biosolids Facility Management

September 2013

Sample Integrity

SAMPLE RECEIPT: Samples were received intact at the required temperature, unless otherwise noted with a data qualifier below. Please refer to the Chain of Custody for sample receipt details.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Pima County CRAO Laboratory Quality Manual.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS:

Notes and Definitions:

See attached

Case Narratives:

See attached

All results on this report intended for compliance submission must have the associated chain(s) of custody attached for the results to meet reporting requirements as per ADHS Laboratory licensure rules. If you have received this report for compliance purposes and it is not complete, please contact the Compliance and Regulatory Affairs Office for a final report in its entirety.

Reviewed By:

Barbara A Coulter

11/13/13
Date

Laboratory Director or Designee
Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

Sample Qualifiers

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Sample Qualifiers
Thickened Sludge to AvraGro Storage	1309019-01	Biosolids	9/2/2013 23:59:00	9/3/2013 6:31:00	Q6

Thickened Sludge to AvraGro Storage (20002-0200)

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1309019-01	C	Nitrogen Total Biosolids	09/02/13 23:59	Calculated	9/15/13 12:33	**63530**	mg/kg dry	32.90	200.00		KKH
1309019-01	C	Ammonia	09/02/13 23:59	EPA 350.1	9/4/13 16:08	**9720**	mg/kg dry	187	467.12		KB
1309019-01	C	Total Kjeldahl Nitrogen	09/02/13 23:59	EPA 351.2	9/15/13 12:33	**63529**	mg/kg dry	307.37	1,868.49	D2	KKH
1309019-01	C	Nitrate/Nitrite	09/02/13 23:59	EPA 353.2	9/3/13 17:15	**ND**	mg/kg dry	1.23	7.47		KB
1309019-01	C	Arsenic	09/02/13 23:59	EPA 6010B	9/10/13 16:25	**14.8**	mg/kg dry	12.0	13.70		MLB
1309019-01	C	Cadmium	09/02/13 23:59	EPA 6010B	9/10/13 14:50	**2.67**	mg/kg dry	0.445	5.48	J	MLB
1309019-01	C	Chromium	09/02/13 23:59	EPA 6010B	9/10/13 14:50	**46.2**	mg/kg dry	0.475	13.70		MLB
1309019-01	C	Copper	09/02/13 23:59	EPA 6010B	9/10/13 14:50	**434**	mg/kg dry	0.616	13.70		MLB
1309019-01	C	Lead	09/02/13 23:59	EPA 6010B	9/10/13 14:50	**14.8**	mg/kg dry	6.14	13.70		MLB
1309019-01	C	Molybdenum	09/02/13 23:59	EPA 6010B	9/10/13 14:50	**16.5**	mg/kg dry	0.794	5.48		MLB
1309019-01	C	Nickel	09/02/13 23:59	EPA 6010B	9/10/13 16:25	**41.2**	mg/kg dry	5.83	13.70		MLB
1309019-01	C	Selenium	09/02/13 23:59	EPA 6010B	9/10/13 14:50	**10.7**	mg/kg dry	9.77	13.70	J	MLB
1309019-01	C	Silver	09/02/13 23:59	EPA 6010B	9/10/13 14:50	**5.88**	mg/kg dry	0.739	1.37		MLB
1309019-01	C	Zinc	09/02/13 23:59	EPA 6010B	9/10/13 14:50	**975**	mg/kg dry	0.459	13.70		MLB
1309019-01	C	Mercury	09/02/13 23:59	EPA 7471A	9/18/13 13:36	**1.12**	mg/kg dry	0.0353	0.09		RAROS
1309019-01	C	Nitrite	09/02/13 23:59	SM4500-NO2	9/3/13 16:28	**2.44**	mg/kg dry	0.60	7.47	J	KKH
1309019-01	C	% Solids	09/02/13 23:59	SM 2540G	9/3/13 15:23	**10.7**	%		0.01		SA

Qualifier Definitions

D2	Sample required dilution due to high concentration of target analyte.
J	Concentration estimated. Analyte was detected below laboratory minimum reporting limit (MRL) but above MDL.
Q6	Sample was received above recommended temperature.

General Notes and Definitions

C	Sample Type - Composite
D	Sample Type - Discrete
DD	Sample Type - Discrete Duplicate
ND	Analyte NOT DETECTED at or above the reporting limit (MDL)
NR	Not Reported
DET	Analyte DETECTED
DRY	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
Analysis Date	Analysis Date represents the final reading date.
Field Results	Field Results performed by "SMPLR" (Sampler), are not subject to approval of Laboratory Director.
Solids, Total Volatile	Used for process control samples only.
RE	Re-Analysis has been performed.
FD	Field Duplicate

Case Narrative(s)

None

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1309019-01

SITE & LOCATION: Thickened sludge to AvraGro

SITE-LOCATION NUMBER: 20002-0200 (XXXXX-XXXX)

SAMPLE START DATE: 09/02/2013 (MM / DD / YYYY)

SAMPLE START TIME: 0500 (24 Hour Clock)

SUBMITTER: Deputy Director-Treatment

SAMPLE END DATE: 09/02/2013 (MM / DD / YYYY)

SAMPLE END TIME: 2359 (24 Hour Clock)

SAMPLER: Vasquez, Harris (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ■ 503 ☐ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ■ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C
Aluminum	☐	☐
Antimony	☐	☐
Arsenic	☐	☐
Barium	☐	☐
Beryllium	☐	☐
Boron	☐	☐
Cadmium	☐	☐
Calcium	☐	☐
Chromium	☐	☐
Cobalt	☐	☐
Copper	☐	☐
Hardness	☐	☐
Iron	☐	☐
Lead	☐	☐
Magnesium	☐	☐
Manganese	☐	☐
Mercury	☐	■
Molybdenum	☐	☐
Nickel	☐	☐
Potassium	☐	☐
Selenium	☐	☐
Silver	☐	■
Sodium	☐	☐
Strontium	☐	☐
Thallium	☐	☐
Tin	☐	☐

METALS	D	C
Titanium	☐	☐
Vanadium	☐	☐
Zinc	☐	☐
Priority Pollutant Metals *	☐	☐
TCLP Metals	☐	☐
503 Metals **	☐	■
Chromium, Hexavalent	☐	☐
Chromium, Trivalent	☐	☐

WET METHODS	D	C
Ammonia as N	☐	■
Chloride	☐	☐
Cyanide, Total	☐	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	■
Nitrite as N	☐	■
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	■
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	■
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:
Monthly pour off. Poured off the daily sample
1309011-10

# of Bottles Delivered: 2

Transported on Ice: ☐ YES ☒ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
Mark Harris	Refrigerator @#23	9-2-13	2359
Refrigerator @#23	Celey Vargas	9/3/13	0600
Celey Vargas		9/3/13	0631

LAB USE ONLY

Sample Integrity/Preservation:

Temperature: 11.7 °C

Initials: JRV JRV 9/3/13

Non-Preserved	+2	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	✓		
Sample labels match Chain of Custody?	✓		
Correct number of samples were delivered?	✓		
Custody seals intact?			✓
Within holding time?	✓		
Sufficient sample volume for analysis?	✓		
Samples are in proper containers?	✓		
Sample containers damaged/leaking/frozen?		✓	
40 ml vials headspace, > pea-sized air bubble?			✓
Received from a refrigerator?		✓	

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

TABLE 6 - LAND APPLICATION POLLUTANT LIMITS

1. Name and Address of Facility: Regional Biosolids Management Facility
7101 North Casa Grande Highway
Tucson, Arizona 85743-9577
Facility Contact: John W. Sherlock, Deputy Director
Phone: (520) 724-6100

2. Name and Address of Facility Owner: Pima County Regional Wastewater Reclamation Department
201 North Stone, Tucson, Arizona 85701
3. Monitoring Period: October 1, 2013 through October 31, 2013
4. NPDES Permit Number: AZ0020001 / AZ0020923
5. Sludge Permit Number: N/A

	Regulatory Requirement			Pollutant Concentration (dry weight)			Frequency of Analysis	Sample Type (Discrete or Composite)	Analytical Method
				Average		Units			
Arsenic	R18-9-1005 40 CFR 503.13	Sample Measurement		**11.6**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1	Table 2	75	41	mg/kg	1/60 days		
Cadmium	R18-9-1005 40 CFR 503.13	Sample Measurement		**<4.63**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1	Table 2	85	39	mg/kg	1/60 days		
Chromium	R18-9-1005	Sample Measurement		**30.5**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1		3000		mg/kg	1/60 days		
Copper	R18-9-1005 40 CFR 503.13	Sample Measurement		**371**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1	Table 2	4300	1500	mg/kg	1/60 days		
Lead	R18-9-1005 40 CFR 503.13	Sample Measurement		**16.3**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1	Table 2	840	300	mg/kg	1/60 days		
Mercury	R18-9-1005 40 CFR 503.13	Sample Measurement		**1.19**		mg/kg	1/31 days	Composite	EPA 7471A
		Table 1	Table 2	57	17	mg/kg	1/60 days		
Molybdenum	R18-9-1005 40 CFR 503.13	Sample Measurement		**13.4**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1		75		mg/kg	1/60 days		
Nickel	R18-9-1005 40 CFR 503.13	Sample Measurement		**14.7**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1	Table 2	420	420	mg/kg	1/60 days		
Selenium	R18-9-1005 40 CFR 503.13	Sample Measurement		**<8.25**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1	Table 2	100	100	mg/kg	1/60 days		
Zinc	R18-9-1005 40 CFR 503.13	Sample Measurement		**814**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1	Table 2	7500	2800	mg/kg	1/60 days		

R18-9-1005 Table 2 is equivalent to 40 CFR 503.13 Table 3

6. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information submitted, it is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

Name and Official Title (type or print) John W. Sherlock, Deputy Director	Area Code and Phone (520) 724-6100
Signature	Date Signed 11/18/13

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office (CRAO) Laboratory
2955 W. Calle Agua Nueva, Tucson Arizona 85745-9750, Phone (520) 724-6200

Report Date: 11/13/2013
Laboratory License: AZO159

Sample Analysis Report

Regional Biosolids Facility Management

October 2013

Sample Integrity

SAMPLE RECEIPT: Samples were received intact at the required temperature, unless otherwise noted with a data qualifier below. Please refer to the Chain of Custody for sample receipt details.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Pima County CRAO Laboratory Quality Manual.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS:

Notes and Definitions:

See attached

Case Narratives:

See attached

All results on this report intended for compliance submission must have the associated chain(s) of custody attached for the results to meet reporting requirements as per ADHS Laboratory licensure rules. If you have received this report for compliance purposes and it is not complete, please contact the Compliance and Regulatory Affairs Office for a final report in its entirety.

Reviewed By:

Barbara A Cooper

Laboratory Director or Designee
Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

11/13/13
Date

Thickened Sludge to AvraGro Storage (20002-0200)

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1310121-01	C	Nitrogen Total Biosolids	10/14/13 23:59	Calculated	10/24/13 11:41	**63166**	mg/kg dry	32.90	200.00		KKH
1310121-01	C	Ammonia	10/14/13 23:59	EPA 350.1	10/16/13 13:27	**9620**	mg/kg dry	194	971.77		KB
1310121-01	C	Total Kjeldahl Nitrogen	10/14/13 23:59	EPA 351.2	10/24/13 11:41	**63165**	mg/kg dry	319.71	1,943.54	D2	KKH
1310121-01	C	Nitrate/Nitrite	10/14/13 23:59	EPA 353.2	10/17/13 11:41	**ND**	mg/kg dry	1.28	7.77		KB
1310121-01	C	Arsenic	10/14/13 23:59	EPA 6010B	11/1/13 12:05	**11.6**	mg/kg dry	10.1	11.57		MLB
1310121-01	C	Cadmium	10/14/13 23:59	EPA 6010B	11/1/13 12:05	**2.21**	mg/kg dry	0.376	4.63	J	MLB
1310121-01	C	Chromium	10/14/13 23:59	EPA 6010B	11/1/13 14:56	**30.5**	mg/kg dry	0.401	11.57		MLB
1310121-01	C	Copper	10/14/13 23:59	EPA 6010B	11/1/13 14:56	**371**	mg/kg dry	0.520	11.57		MLB
1310121-01	C	Lead	10/14/13 23:59	EPA 6010B	11/1/13 14:56	**16.3**	mg/kg dry	5.18	11.57		MLB
1310121-01	C	Molybdenum	10/14/13 23:59	EPA 6010B	11/1/13 12:05	**13.4**	mg/kg dry	0.670	4.63		MLB
1310121-01	C	Nickel	10/14/13 23:59	EPA 6010B	11/1/13 12:05	**14.7**	mg/kg dry	4.92	11.57		MLB
1310121-01	C	Selenium	10/14/13 23:59	EPA 6010B	11/1/13 12:05	**ND**	mg/kg dry	8.25	11.57		MLB
1310121-01	C	Silver	10/14/13 23:59	EPA 6010B	11/1/13 12:05	**4.06**	mg/kg dry	0.624	1.16		MLB
1310121-01	C	Zinc	10/14/13 23:59	EPA 6010B	11/1/13 12:05	**814**	mg/kg dry	0.387	11.57		MLB
1310121-01	C	Mercury	10/14/13 23:59	EPA 7471A	10/28/13 9:46	**1.19**	mg/kg dry	0.184	0.49		KKH
1310121-01	C	Nitrite	10/14/13 23:59	SM4500-NO2	10/15/13 15:25	**0.94**	mg/kg dry	0.62	7.77	J	KB
1310121-01	C	% Solids	10/14/13 23:59	SM 2540G	10/15/13 15:02	**10.3**	%		0.01		ETD

Qualifier Definitions

D2	Sample required dilution due to high concentration of target analyte.
J	Concentration estimated. Analyte was detected below laboratory minimum reporting limit (MRL) but above MDL.

General Notes and Definitions

C	Sample Type - Composite
D	Sample Type - Discrete
DD	Sample Type - Discrete Duplicate
ND	Analyte NOT DETECTED at or above the reporting limit (MDL)
NR	Not Reported
DET	Analyte DETECTED
DRY	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
Analysis Date	Analysis Date represents the final reading date.
Field Results	Field Results performed by "SMPLR" (Sampler), are not subject to approval of Laboratory Director.
Solids, Total Volatile	Used for process control samples only.
RE	Re-Analysis has been performed.
FD	Field Duplicate

Case Narrative(s)

None

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1310121-01

SITE & LOCATION: Thickened sludge to AvraGro

SITE-LOCATION NUMBER: 20002-0200 (XXXXX-XXXX)

SAMPLE START DATE: 10/14/2013 (MM / DD / YYYY)

SAMPLE START TIME: 0500 (24 Hour Clock)

SUBMITTER: Deputy Director-Treatment

SAMPLE END DATE: 10/14/2013 (MM / DD / YYYY)

SAMPLE END TIME: 2359 (24 Hour Clock)

SAMPLER: Vasquez, Harris (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ■ 503 ☐ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ■ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C
Aluminum	☐	☐
Antimony	☐	☐
Arsenic	☐	☐
Barium	☐	☐
Beryllium	☐	☐
Boron	☐	☐
Cadmium	☐	☐
Calcium	☐	☐
Chromium	☐	☐
Cobalt	☐	☐
Copper	☐	☐
Hardness	☐	☐
Iron	☐	☐
Lead	☐	☐
Magnesium	☐	☐
Manganese	☐	☐
Mercury	☐	■
Molybdenum	☐	☐
Nickel	☐	☐
Potassium	☐	☐
Selenium	☐	☐
Silver	☐	■
Sodium	☐	☐
Strontium	☐	☐
Thallium	☐	☐
Tin	☐	☐

METALS	D	C
Titanium	☐	☐
Vanadium	☐	☐
Zinc	☐	☐
Priority Pollutant Metals *	☐	☐
TCLP Metals	☐	☐
503 Metals **	☐	■
Chromium, Hexavalent	☐	☐
Chromium, Trivalent	☐	☐

WET METHODS	D	C
Ammonia as N	☐	■
Chloride	☐	☐
Cyanide, Total	☐	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	■
Nitrite as N	☐	■
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	■
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	■
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:
Monthly pour off. Poured off the daily sample
1310116-10

# of Bottles Delivered: 2

Transported on Ice: ☐ YES ☒ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
Mark Harris	Refrigerator @#23	10-14-13	2359
Refrigerator @#23	Alex Vasquez	10/15/13	0630
Alex Vasquez	Jim Vasquez	10/15/13	0640

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	5.1	°C
Initials:	JVR	
Non-Preserved	2	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☑	☐	☐
Sample labels match Chain of Custody?	☑	☐	☐
Correct number of samples were delivered?	☑	☐	☐
Custody seals intact?	☐	☐	☑
Within holding time?	☑	☐	☐
Sufficient sample volume for analysis?	☑	☐	☐
Samples are in proper containers?	☑	☐	☐
Sample containers damaged/leaking/frozen?	☐	☑	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☑
Received from a refrigerator?	☐	☑	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

TABLE 6 - LAND APPLICATION POLLUTANT LIMITS

1. Name and Address of Facility: Regional Biosolids Management Facility
7101 North Casa Grande Highway
Tucson, Arizona 85743-9577

Facility Contact: John W. Sherlock, Deputy Director
Phone: (520) 724-6100

2. Name and Address of Facility Owner: Pima County Regional Wastewater Reclamation Department
201 North Stone, Tucson, Arizona 85701
3. Monitoring Period: November 1, 2013 through November 30, 2013
4. NPDES Permit Number: AZ0020001 / AZ0020923
5. Sludge Permit Number: N/A

	Regulatory Requirement		Pollutant Concentration (dry weight)			Frequency of Analysis	Sample Type (Discrete or Composite)	Analytical Method
			Average		Units			
Arsenic	R18-9-1005 40 CFR 503.13	Sample Measurement	**<14.4**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	75	41	mg/kg	1/60 days		
Cadmium	R18-9-1005 40 CFR 503.13	Sample Measurement	**<6.57**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	85	39	mg/kg	1/60 days		
Chromium	R18-9-1005	Sample Measurement	**34.1**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1	3000		mg/kg	1/60 days		
Copper	R18-9-1005 40 CFR 503.13	Sample Measurement	**446**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	4300	1500	mg/kg	1/60 days		
Lead	R18-9-1005 40 CFR 503.13	Sample Measurement	**<16.42**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	840	300	mg/kg	1/60 days		
Mercury	R18-9-1005 40 CFR 503.13	Sample Measurement	**1.67**		mg/kg	1/30 days	Composite	EPA 7471A
		Table 1 / Table 2	57	17	mg/kg	1/60 days		
Molybdenum	R18-9-1005 40 CFR 503.13	Sample Measurement	**14.8**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1	75		mg/kg	1/60 days		
Nickel	R18-9-1005 40 CFR 503.13	Sample Measurement	**16.5**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	420	420	mg/kg	1/60 days		
Selenium	R18-9-1005 40 CFR 503.13	Sample Measurement	**<11.7**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	100	100	mg/kg	1/60 days		
Zinc	R18-9-1005 40 CFR 503.13	Sample Measurement	**892**		mg/kg	1/30 days	Composite	EPA 6010B
		Table 1 / Table 2	7500	2800	mg/kg	1/60 days		

R18-9-1005 Table 2 is equivalent to 40 CFR 503.13 Table 3

6. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information submitted, it is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

Name and Official Title (type or print) John W. Sherlock, Deputy Director	Area Code and Phone (520) 724-6100
Signature	Date Signed 12-23-13

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office (CRAO) Laboratory
2955 W. Calle Agua Nueva, Tucson Arizona 85745-9750, Phone (520) 724-6200

Report Date: 12/18/2013
Laboratory License: AZO159

Sample Analysis Report

Regional Biosolids Facility Management

November 2013

Sample Integrity

SAMPLE RECEIPT: Samples were received intact at the required temperature, unless otherwise noted with a data qualifier below. Please refer to the Chain of Custody for sample receipt details.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Pima County CRAO Laboratory Quality Manual.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS:

Notes and Definitions:

See attached

Case Narratives:

See attached

All results on this report intended for compliance submission must have the associated chain(s) of custody attached for the results to meet reporting requirements as per ADHS Laboratory licensure rules. If you have received this report for compliance purposes and it is not complete, please contact the Compliance and Regulatory Affairs Office for a final report in its entirety.

Reviewed By:

Barbara A Eastman

12/20/13
Date

Laboratory Director or Designee
Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

Thickened Sludge to AvraGro Storage (20002-0200)

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1311095-01	C	Nitrogen Total Biosolids	11/11/13 23:59	Calculated	11/21/13 12:53	**86875**	mg/kg dry	32.90	200.00		KKH
1311095-01	C	Ammonia	11/11/13 23:59	EPA 350.1	11/18/13 13:43	**14700**	mg/kg dry	283	706.28		KB
1311095-01	C	Total Kjeldahl Nitrogen	11/11/13 23:59	EPA 351.2	11/21/13 12:53	**86873**	mg/kg dry	464.74	2,825.14	D2	KKH
1311095-01	C	Nitrate/Nitrite	11/11/13 23:59	EPA 353.2	11/17/13 12:59	**2.21**	mg/kg dry	1.86	11.30	J	KKH
1311095-01	C	Arsenic	11/11/13 23:59	EPA 6010B	12/5/13 14:49	**ND**	mg/kg dry	14.4	16.42		MLB
1311095-01	C	Cadmium	11/11/13 23:59	EPA 6010B	12/5/13 14:49	**3.14**	mg/kg dry	0.533	6.57	J	MLB
1311095-01	C	Chromium	11/11/13 23:59	EPA 6010B	12/5/13 14:49	**34.1**	mg/kg dry	0.569	16.42		MLB
1311095-01	C	Copper	11/11/13 23:59	EPA 6010B	12/5/13 14:49	**446**	mg/kg dry	0.738	16.42		MLB
1311095-01	C	Lead	11/11/13 23:59	EPA 6010B	12/5/13 14:49	**11.3**	mg/kg dry	7.36	16.42	J	MLB
1311095-01	C	Molybdenum	11/11/13 23:59	EPA 6010B	12/5/13 14:49	**14.8**	mg/kg dry	0.952	6.57		MLB
1311095-01	C	Nickel	11/11/13 23:59	EPA 6010B	12/5/13 14:49	**16.5**	mg/kg dry	6.99	16.42		MLB
1311095-01	C	Selenium	11/11/13 23:59	EPA 6010B	12/5/13 14:49	**ND**	mg/kg dry	11.7	16.42		MLB
1311095-01	C	Silver	11/11/13 23:59	EPA 6010B	12/5/13 17:40	**5.75**	mg/kg dry	0.886	1.64		MLB
1311095-01	C	Zinc	11/11/13 23:59	EPA 6010B	12/5/13 14:49	**892**	mg/kg dry	0.550	16.42		MLB
1311095-01	C	Mercury	11/11/13 23:59	EPA 7471A	11/21/13 11:32	**1.67**	mg/kg dry	0.0534	0.14		RAROS
1311095-01	C	% Solids	11/11/13 23:59	SM 2540G	11/12/13 14:10	**7.08**	%		0.01		JRV
1311095-01	C	Nitrite as N	11/11/13 23:59	9056	11/16/13 6:26	**2.3**	mg/Kg		2.0		MHH*

* Analysis Performed by:TestAmerica Phoenix - See attached contract lab report for official results.

Qualifier Definitions

D2	Sample required dilution due to high concentration of target analyte.
J	Concentration estimated. Analyte was detected below laboratory minimum reporting limit (MRL) but above MDL.

General Notes and Definitions

C	Sample Type - Composite
D	Sample Type - Discrete
DD	Sample Type - Discrete Duplicate
ND	Analyte NOT DETECTED at or above the reporting limit (MDL)
NR	Not Reported
DET	Analyte DETECTED
DRY	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
Analysis Date	Analysis Date represents the final reading date.
Field Results	Field Results performed by "SMPLR" (Sampler), are not subject to approval of Laboratory Director.
Solids, Total Volatile	Used for process control samples only.
RE	Re-Analysis has been performed.
FD	Field Duplicate

Case Narrative(s)

None

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1311095-01

SITE & LOCATION: Thickened sludge to AvraGro

SITE-LOCATION NUMBER: 20002-0200 (XXXXX-XXXX)

SAMPLE START DATE: 11/11/2013 (MM / DD / YYYY)

SAMPLE START TIME: 0500 (24 Hour Clock)

SUBMITTER: Deputy Director-Treatment

SAMPLE END DATE: 11/11/2013 (MM / DD / YYYY)

SAMPLE END TIME: 2359 (24 Hour Clock)

SAMPLER: Vasquez / Harris (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ■ 503 ☐ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ■ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	■
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐	**WET METHODS**	**D**	**C**
Cobalt	☐	☐	Ammonia as N	☐	■
Copper	☐	☐	Chloride	☐	☐
Hardness	☐	☐	Cyanide, Total	☐	☐
Iron	☐	☐	Cyanide, Amenable	☐	☐
Lead	☐	☐	Fluoride	☐	☐
Magnesium	☐	☐	Ignitability	☐	☐
Manganese	☐	☐	Nitrate as N	☐	■
Mercury	☐	■	Nitrite as N (contract)	☐	■
Molybdenum	☐	☐	Nitrate/Nitrite as N	☐	☐
Nickel	☐	☐	Nitrogen, Total Kjeldahl	☐	☐
Potassium	☐	☐	Nitrogen, Total as N	☐	■
Selenium	☐	☐	Orthophosphate as P	☐	☐
Silver	☐	■	Phosphorus, Total as P	☐	☐
Sodium	☐	☐	Sulfate	☐	☐
Strontium	☐	☐	Sulfide	☐	☐
Thallium	☐	☐	Turbidity	☐	☐
Tin	☐	☐			

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	■
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:
Monthly pour off. Poured off the daily sample
Nitrite sent to Test America. COB 11-12-13
DO#14-15872

# of Bottles Delivered: 2

Transported on Ice: ☐ YES ☒ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
Mark Harris / Refrigerator @#23	Refrigerator @ #23	11-11-13	2359
Refrigerator @#23	[signature]	11/12/13	0630
[signature]	[signature]	11-12-13	0635
[signature]	[signature]	11-12-13	148
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature: 5.2 °C

Initials: JNR

Non-Preserved	2	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☑	☐	☐
Sample labels match Chain of Custody?	☑	☐	☐
Correct number of samples were delivered?	☑	☐	☐
Custody seals intact?	☐	☐	☑
Within holding time?	☑	☐	☐
Sufficient sample volume for analysis?	☑	☐	☐
Samples are in proper containers?	☑	☐	☐
Sample containers damaged/leaking/frozen?	☐	☑	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☑
Received from a refrigerator?	☐	☑	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT
COMPLIANCE AND REGULATORY AFFAIRS OFFICE LABORATORY SERVICES
3035 W. El Camino del Cerro, Tucson, AZ 85745
Telephone: (520) 724-6200, Fax: (520)724-6071

LIMS CHECKLIST FOR SUBCONTRACT DATA

LIMS ID	**1311054-01,-02; 1311066-01; 1311095-01; 1311097-01 thru -08**	**DO**	**14-15872**
CONTRACT LAB	**TestAmerica**	**SAMPLE GROUP**	**Sample Group #1**
ANALYSES	**Nitrite, Cyanide (Tot and Amen), Orthophosphate, LL Hg (Tot and Diss)**	**REPORT ID**	**550-14291-1**

TRANSFER & CONVERT FILES:	
Was the contract lab spreadsheet file saved to \\Splimsapp\elementshare\TransferIn ?	Y
Was the above mentioned file converted from a .xls file to a .mdb file for each WO#, and further, for each subcontract location, or separate analysis (as applicable), on the contract lab report? (Element>Project Management>Reports)	Y
Was the converted file attached to the sample in LIMS?	Y
VALIDATING CONTRACT LAB REPORT , CHAIN OF CUSTODY(S), AND DO#:	
Contract Lab Report signed and dated?	Y
Copy of contract lab COC included with contract Lab Report?	Y
Contract lab COC verified with CRAO COC(s) for Sample ID, Sample Date, Analysis Requested?	Y
Sample dates and received dates on the CL report, match the CL COC?	N
CL report includes all requested analysis?	Y
CL licensed in AZ for reported the reported methods?	Y
Check that DO matches COC in types and number of tests?	NA
DO received in Pima Core?	NA
CONTRACT LAB REPORT, EXCEL SPREADSHEET, and QC:	
CL report and CL spreadsheet report the same sample results, sample date, and analysis date?	Y
Was a Case Narrative Included in Contract Lab report?	Y
Data packet includes QC Report from primary lab and any secondary subcontract labs?	Y
Did CL report list applicable AZ Data Qualifiers?	Y
Were there any dilutions made to samples that were reported as ND?	N
If so, were they qualified due to matrix interference?	NA
Was QC included for every analysis method: typically Blk, LCS, MS, MSD?	Y
Did QC pass stated acceptance limits, or was it qualified?	Y
Were samples analyzed within required holding times?	Y
Check that MDLs are below water quality standards, If not notify Tom Berry? (Cyanide, Hexachlorobenzene)	Y
Semivolatiles & Volatiles: Check that all analytes were delivered?	NA
COMPLIANCE LIMIT REVIEW	
Were results compared to the discharge permit?.	Y
Was Tom Berry notified of any exceedences?	NA
WET TESTING SPECIFIC REQUIREMENTS	
Statement of Pass/Fail reflected in End Points?	NA
Report states if zeolite treatment was utilized?	NA
Survival and Reproduction or Growth Data included (P. promelas or Ceriodaphnia only)?	NA
Chemistry data included?	NA
Reference Toxicant Test Results and Control Chart within limits?	NA
PMSD Determination included and within acceptable range? (minimum acceptable= 13)	NA
End Points include TUc, NOEC, LOEC, and IC25?	NA
Statistics verify endpoints	NA

Reviewer Initials:	**SN**	**Review Date:**	**11-26-13**

PEER/FINAL REVIEW:	PR	FR
LIMS/Excel data matches printed CL report?	✓	
Analysis dates are correct?	✓	
Correct Data Qualifiers included if necessary.	✓	
CRAO report shows result is from Contract Lab?	✓	
CRAO report shows correct Contract Lab (e.g. Test America, Phoenix)?	✓	
DO received in Pima Core	✓	
Analysis set to Reported?		

Peer Reviewer Initials:	[illegible]	**Review Date:**	12-2-13 12-2-13
Final Reviewer Initials:	[illegible]	**Review Date:**	12/02/13

CORRECTIVE ACTION REPORT:			
Preliminary Review:		Date:	
QA/QC Review:		Date:	
Data Entry:		Date:	
Peer Review:		Date:	
Lab Supervisor:		Date:	

LIMS #:	DEVIATION:	CORRECTIVE ACTION:

DEVIATIONS FROM ACCEPTABLE QA/QC:

Missing QC Report/Data
Holding Time for analysis exceeded.
Inappropriate dilution performed.
Missing COC.
Missing Data Qualifiers.
Incorrect Analysis Method.
Incorrect Sample IDs.
Other.

CORRECTIVE ACTION:

Request report correction from Subcontract Lab project manager.
Add missing Data Qualifiers.
Notify data end-user of deviation.
Arrange for resampling.
Other.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Phoenix
4625 East Cotton Ctr Blvd
Suite 189
Phoenix, AZ 85040
Tel: (602)437-3340

TestAmerica Job ID: 550-14291-1
Client Project/Site: Sample Group #1

For:
Pima County WWTP
2955 W. Calle Agua Nueva
Tucson, Arizona 85745

Attn: Nancy Powell

Authorized for release by:
11/23/2013 2:43:39 PM

Kylie Emily, Client Relations Manager
(602)659-7622
kylie.emily@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

General Chemistry

Qualifier	Qualifier Description
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike was acceptable.
N7	Additional analysis was not performed based on the "Total" result which was below the requested analyte's MCL/Action level/Trigger level.
D2	Sample required dilution due to high concentration of analyte.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 550-14291-1

Laboratory: TestAmerica Phoenix

Narrative

CASE NARRATIVE

Client: Pima County WWTP

Project: Sample Group #1

Report Number: 550-14291-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Phoenix attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 11/12/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.9 C.

Sample Summary

Client: Pima County WWTP
Project/Site: Sample Group #1

TestAmerica Job ID: 550-14291-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-14291-1	1311097-01	Water	11/12/13 11:15	11/12/13 14:56
550-14291-2	1311097-02	Water	11/12/13 11:15	11/12/13 14:56
550-14291-3	1311097-03	Water	11/12/13 11:15	11/12/13 14:56
550-14291-4	1311097-04	Water	11/12/13 11:15	11/12/13 14:56
550-14291-5	1311097-05	Water	11/12/13 11:15	11/12/13 14:56
550-14291-6	1311097-06	Water	11/12/13 11:15	11/12/13 14:56
550-14291-7	1311097-07	Water	11/12/13 11:15	11/12/13 14:56
550-14291-8	1311097-08	Water	11/12/13 11:15	11/12/13 14:56
550-14291-9	1311095-01	Solid	11/11/13 23:59	11/12/13 14:56
550-14291-10	1311054-01	Water	11/06/13 15:17	11/12/13 14:56
550-14291-11	1311054-02	Water	11/06/13 13:20	11/12/13 14:56
550-14291-12	1311066-01	Water	11/07/13 14:30	11/12/13 14:56

Detection Summary

Client: Pima County WWTP
Project/Site: Sample Group #1

TestAmerica Job ID: 550-14291-1

Client Sample ID: 1311097-01 — Lab Sample ID: 550-14291-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Orthophosphate as P	1.1		0.20		mg/L	1		300.0	Total/NA
Mercury, Total	0.0015		0.00050		ug/L	1		1631E	Total/NA

Client Sample ID: 1311097-02 — Lab Sample ID: 550-14291-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury, Dissolved	0.0012		0.00050		ug/L	1		1631E	Dissolved

Client Sample ID: 1311097-03 — Lab Sample ID: 550-14291-3

No Detections.

Client Sample ID: 1311097-04 — Lab Sample ID: 550-14291-4

No Detections.

Client Sample ID: 1311097-05 — Lab Sample ID: 550-14291-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Orthophosphate as P	1.1		0.20		mg/L	1		300.0	Total/NA
Mercury, Total	0.00073		0.00050		ug/L	1		1631E	Total/NA

Client Sample ID: 1311097-06 — Lab Sample ID: 550-14291-6

No Detections.

Client Sample ID: 1311097-07 — Lab Sample ID: 550-14291-7

No Detections.

Client Sample ID: 1311097-08 — Lab Sample ID: 550-14291-8

No Detections.

Client Sample ID: 1311095-01 — Lab Sample ID: 550-14291-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrite as N	2.3		2.0		mg/Kg	1		9056	Soluble

Client Sample ID: 1311054-01 — Lab Sample ID: 550-14291-10

No Detections.

Client Sample ID: 1311054-02 — Lab Sample ID: 550-14291-11

No Detections.

Client Sample ID: 1311066-01 — Lab Sample ID: 550-14291-12

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Pima County WWTP
Project/Site: Sample Group #1

TestAmerica Job ID: 550-14291-1

Client Sample ID: 1311097-01

Lab Sample ID: 550-14291-1
Matrix: Water

Date Collected: 11/12/13 11:15
Date Received: 11/12/13 14:56

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Orthophosphate as P	1.1		0.20		mg/L			11/13/13 18:07	1

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Total	0.0015		0.00050		ug/L		11/13/13 17:00	11/19/13 10:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		11/18/13 12:55	11/18/13 16:10	1

Client Sample ID: 1311097-02

Lab Sample ID: 550-14291-2
Matrix: Water

Date Collected: 11/12/13 11:15
Date Received: 11/12/13 14:56

Method: 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	0.0012		0.00050		ug/L		11/13/13 17:00	11/19/13 14:02	1

Client Sample ID: 1311097-03

Lab Sample ID: 550-14291-3
Matrix: Water

Date Collected: 11/12/13 11:15
Date Received: 11/12/13 14:56

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Total	ND		0.00050		ug/L		11/13/13 17:00	11/19/13 10:39	1

Client Sample ID: 1311097-04

Lab Sample ID: 550-14291-4
Matrix: Water

Date Collected: 11/12/13 11:15
Date Received: 11/12/13 14:56

Method: 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00050		ug/L		11/13/13 17:00	11/19/13 14:10	1

Client Sample ID: 1311097-05

Lab Sample ID: 550-14291-5
Matrix: Water

Date Collected: 11/12/13 11:15
Date Received: 11/12/13 14:56

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Orthophosphate as P	1.1		0.20		mg/L			11/13/13 19:03	1

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Total	0.00073		0.00050		ug/L		11/13/13 17:00	11/19/13 10:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		11/18/13 12:55	11/18/13 16:10	1

Client Sample ID: 1311097-06

Lab Sample ID: 550-14291-6
Matrix: Water

Date Collected: 11/12/13 11:15
Date Received: 11/12/13 14:56

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Total	ND		0.00050		ug/L		11/13/13 17:00	11/19/13 10:55	1

Client Sample ID: 1311097-07

Lab Sample ID: 550-14291-7
Matrix: Water

Date Collected: 11/12/13 11:15
Date Received: 11/12/13 14:56

Method: 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00050		ug/L		11/13/13 17:00	11/19/13 14:18	1

Client Sample ID: 1311097-08

Lab Sample ID: 550-14291-8
Matrix: Water

Date Collected: 11/12/13 11:15
Date Received: 11/12/13 14:56

Method: 1631E - Mercury, Low Level (CVAFS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00050		ug/L		11/13/13 17:00	11/19/13 14:39	1

Client Sample ID: 1311095-01

Lab Sample ID: 550-14291-9
Matrix: Solid

Date Collected: 11/11/13 23:59
Date Received: 11/12/13 14:56

Method: 9056 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	2.3		2.0		mg/Kg			11/16/13 06:26	1

Client Sample ID: 1311054-01

Lab Sample ID: 550-14291-10
Matrix: Water

Date Collected: 11/06/13 15:17
Date Received: 11/12/13 14:56

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		11/13/13 16:10	11/14/13 16:44	1
Cyanide, Amenable	ND	N7	0.050		mg/L			11/14/13 16:45	1

Client Sample ID: 1311054-02

Lab Sample ID: 550-14291-11
Matrix: Water

Date Collected: 11/06/13 13:20
Date Received: 11/12/13 14:56

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		11/13/13 16:10	11/14/13 16:44	1
Cyanide, Amenable	ND	N7	0.050		mg/L			11/14/13 16:45	1

Client Sample ID: 1311066-01

Lab Sample ID: 550-14291-12
Matrix: Water

Date Collected: 11/07/13 14:30
Date Received: 11/12/13 14:56

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.050		mg/L		11/18/13 12:55	11/18/13 16:10	1

Certification Summary

Client: Pima County WWTP
Project/Site: Sample Group #1

TestAmerica Job ID: 550-14291-1

Laboratory: TestAmerica Phoenix

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
AIHA	IHLAP		154268	07-01-15
Arizona	State Program	9	AZ0728	06-09-14
California	NELAP	9	01109CA	11-30-13
Nevada	State Program	9	AZ01030	07-31-14
New York	NELAP	2	11898	04-01-14
Oregon	NELAP	10	AZ100001	03-09-14
USDA	Federal		P330-09-00024	06-09-15

Laboratory: TestAmerica Pensacola

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-14
Arizona	State Program	9	AZ0710	01-11-14
Arkansas DEQ	State Program	6	88-0689	09-01-13 *
Florida	NELAP	4	E81010	06-30-14
Georgia	State Program	4	N/A	06-30-14
Iowa	State Program	7	367	08-01-14
Kansas	NELAP	7	E-10253	10-31-14
Kentucky (UST)	State Program	4	53	06-30-14
Louisiana	NELAP	6	30976	06-30-14
Maryland	State Program	3	233	09-30-14
Massachusetts	State Program	1	M-FL094	06-30-14
Michigan	State Program	5	9912	05-04-14
New Jersey	NELAP	2	FL006	06-30-14
North Carolina DENR	State Program	4	314	12-31-13
Oklahoma	State Program	6	9810	08-31-14
Pennsylvania	NELAP	3	68-00467	01-31-14
Rhode Island	State Program	1	LAO00307	12-31-13
South Carolina	State Program	4	96026	06-30-13 *
Tennessee	State Program	4	TN02907	06-30-14
Texas	NELAP	6	T104704286-12-5	09-30-14
USDA	Federal		P330-10-00407	12-10-13
Virginia	NELAP	3	460166	06-14-14
West Virginia DEP	State Program	3	136	06-30-14

* Expired certification is currently pending renewal and is considered valid.

Method Summary

Client: Pima County WWTP
Project/Site: Sample Group #1

TestAmerica Job ID: 550-14291-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL PHX
9056	Anions, Ion Chromatography	SW846	TAL PHX
1631E	Mercury, Low Level (CVAFS)	EPA	TAL PEN
SM 4500 CN E	Cyanide, Total	SM	TAL PHX
SM 4500 CN G	Cyanide, Amenable	SM	TAL PHX

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TAL PHX = TestAmerica Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

550-14291 Chain of Custody

550-14291

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

11/23/2013

Client Contact	Project Manager: Nancy Powell	Site Contact:	Date:	COC No:
Pima County CRAO Lab	Tel/Fax: 520-724-6183	Lab Contact:	Carrier:	1 of 3 COCs
2955 W Calle Agua Nueva	Analysis Turnaround Time			Job No.
Tucson/AZ/85745	Calendar (C) or Work Days (W) _____			
(520) 724-6183 Phone	TAT if different from Below _____			
(520) 724-6071 FAX	☐ 2 weeks			SDG No.
Project Name: Sample group #1	☐ 1 week			
Site: Various	☐ 2 days			
P O # 14- 15872	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Nitrite	Cyanide, amenable	Cyanide, total	Sample Specific Notes:
Thickened sludge to AvraGro 20002-0200										
1311095-01	11/11/2013	2359	composite	BS	1		1			-09
Tres Rios Well SC-03R 20001-9021										
1311054-01	11/6/2013	1517	discrete	water	1			1	1	-10
Tres Rios Well SC-07R 20001-9061										-11
1311054-02	11/6/2013	1320	discrete	water	1			1	1	
UMC Permitted location #2A 10921-0201										
1311066-01	11/7/13	1430	discrete	WW	1				1	-12

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: BS = biosolids

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Greg Spence for samplers	Pima County CRAO	11-12-13 1450		TA	11-12-13 1456
	TA 11-12-13	1515			
			Anne Yar	TA	11/13/13 0930

Form No. CA-C-WI-002, dated 04/07/2011

3.9 CS 0.6

Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

550-14291

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

11/23/2013

Client Contact	Project Manager: Nancy Powell	Site Contact:	Date:	COC No:
Pima County CRAO Lab	Tel/Fax: 520-724-6183	Lab Contact:	Carrier:	2 of 3 COCs
2955 W Calle Agua Nueva	Analysis Turnaround Time			Job No.
Tucson/AZ/85745	Calendar (C) or Work Days (W) _____			
(520) 724-6183 Phone	TAT if different from Below _____			
(520) 724-6071 FAX	☐ 2 weeks			SDG No.
Project Name: Sample group #1	☐ 1 week			
Site: Various	☐ 2 days			
P O # 14-15872	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Nitrite	Cyanide, amenable	Cyanide, total	Orthophosphate	L.L. Hg	L.L. Hg dissolved	L.L. Hg blank	L.L. Hg dissolved blank	Sample Specific Notes:
Tres Rios River SC-06 20001-9051															
1311097-01	11/12/2013	1115	discrete	water	3				1	1	1				-01
Tres Rios River SC-06 20001-9051															
1311097-02	11/12/2013	1115	discrete	water	1							1			-02
Tres Rios River SC-06 20001-9051															
1311097-03	11/12/2013	1115	discrete	water	1								1		-03 Blanks in with samples.
Tres Rios River SC-06 20001-9051															
1311097-04	11/12/2013	1115	discrete	water	1									1	-04 Blanks in with samples.

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: BS = biosolids

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Greg Spence for samplers	Pima County CRAO	11-12-13 1457		TA	11-12-13 1456
	TA	11-12-13 1515			
				TA	11/13/13 0930

Form No. CA-C-WI-002, dated 04/07/2011

3.9 0.6

Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

550-14291

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

11/23/2013

Client Contact	Project Manager: Nancy Powell	Site Contact:	Date:	COC No:
Pima County CRAO Lab	Tel/Fax: 520-724-6183	Lab Contact:	Carrier:	3 of 3 COCs
2955 W Calle Agua Nueva	Analysis Turnaround Time			Job No.
Tucson/AZ/85745	Calendar (C) or Work Days (W) _____			
(520) 724-6183 Phone	TAT if different from Below _____			
(520) 724-6071 FAX	☐ 2 weeks			SDG No.
Project Name: Sample group #1	☐ 1 week			
Site: Various	☐ 2 days			
P O # 14-15872	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Nitrite	Cyanide, amenable	Cyanide, total	Orthophosphate	L.L. Hg	L.L. Hg dissolved	L.L. Hg blank	L.L. Hg dissolved blank	Sample Specific Notes:
Tres Rios River SC-06 20001-9051															
1311097-05	11/12/2013	1115	discrete	water	3				1	1	1				-05
Tres Rios River SC-06 20001-9051															
1311097-06	11/12/2013	1115	discrete	water	1								1		-06 Blanks in with samples.
Tres Rios River SC-06 20001-9051															
1311097-07	11/12/2013	1115	discrete	water	1									1	-07 Blanks in with samples.
Tres Rios River SC-06 20001-9051															
1311097-08	11/12/2013	1115	discrete	water	1							1			-08

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: BS = biosolids

Relinquished by: Greg Spence for samplers	Company: Pima County CRAO	Date/Time: 11-12-13 1456	Received by:	Company: TA	Date/Time: 11-12-13 1456
Relinquished by:	Company: TA	Date/Time: 11-12-13 1515	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by: Olan Yang	Company: TA	Date/Time: 11/13/13 0930

3.9 0.6

Form No. CA-C-WI-002, dated 04/07/2011

Login Sample Receipt Checklist

Client: Pima County WWTP

Job Number: 550-14291-1

Login Number: 14291
List Number: 1
Creator: Shoemaker, Cory M

List Source: TestAmerica Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: Pima County WWTP

Job Number: 550-14291-1

Login Number: 14291
List Number: 1
Creator: Chea, Vanda L

List Source: TestAmerica Pensacola
List Creation: 11/13/13 05:10 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

TABLE 6 - LAND APPLICATION POLLUTANT LIMITS

1. Name and Address of Facility: Regional Biosolids Management Facility
7101 North Casa Grande Highway
Tucson, Arizona 85743-9577
Facility Contact: John W. Sherlock, Deputy Director
Phone: (520) 724-6100

2. Name and Address of Facility Owner: Pima County Regional Wastewater Reclamation Department
201 North Stone, Tucson, Arizona 85701
3. Monitoring Period: December 1, 2013 through December 31, 2013
4. NPDES Permit Number: AZ0020001 / AZ0020923
5. Sludge Permit Number: N/A

	Regulatory Requirement		Pollutant Concentration (dry weight)			Frequency of Analysis	Sample Type (Discrete or Composite)	Analytical Method
			Average		Units			
Arsenic	R18-9-1005 40 CFR 503.13	Sample Measurement	**<15.9**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	75	41	mg/kg	1/60 days		
Cadmium	R18-9-1005 40 CFR 503.13	Sample Measurement	**<7.28**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	85	39	mg/kg	1/60 days		
Chromium	R18-9-1005	Sample Measurement	**36.1**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1	3000		mg/kg	1/60 days		
Copper	R18-9-1005 40 CFR 503.13	Sample Measurement	**481**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	4300	1500	mg/kg	1/60 days		
Lead	R18-9-1005 40 CFR 503.13	Sample Measurement	**20.2**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	840	300	mg/kg	1/60 days		
Mercury	R18-9-1005 40 CFR 503.13	Sample Measurement	**0.982**		mg/kg	1/31 days	Composite	EPA 7471A
		Table 1 / Table 2	57	17	mg/kg	1/60 days		
Molybdenum	R18-9-1005 40 CFR 503.13	Sample Measurement	**13.2**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1	75		mg/kg	1/60 days		
Nickel	R18-9-1005 40 CFR 503.13	Sample Measurement	**<18.19**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	420	420	mg/kg	1/60 days		
Selenium	R18-9-1005 40 CFR 503.13	Sample Measurement	**<13.0**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	100	100	mg/kg	1/60 days		
Zinc	R18-9-1005 40 CFR 503.13	Sample Measurement	**907**		mg/kg	1/31 days	Composite	EPA 6010B
		Table 1 / Table 2	7500	2800	mg/kg	1/60 days		

R18-9-1005 Table 2 is equivalent to 40 CFR 503.13 Table 3

6. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information submitted, it is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

Name and Official Title (type or print) John W. Sherlock, Deputy Director	Area Code and Phone (520) 724-6100
Signature	Date Signed 2/3/14

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office (CRAO) Laboratory
2955 W. Calle Agua Nueva, Tucson Arizona 85745-9750, Phone (520) 724-6200

Report Date: 01/29/2014
Laboratory License: AZO159

Sample Analysis Report

Regional Biosolids Facility Management

December 2013

Sample Integrity

SAMPLE RECEIPT: Samples were received intact at the required temperature, unless otherwise noted with a data qualifier below. Please refer to the Chain of Custody for sample receipt details.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Pima County CRAO Laboratory Quality Manual.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS:

Notes and Definitions:

See attached

Case Narratives:

See attached

All results on this report intended for compliance submission must have the associated chain(s) of custody attached for the results to meet reporting requirements as per ADHS Laboratory licensure rules. If you have received this report for compliance purposes and it is not complete, please contact the Compliance and Regulatory Affairs Office for a final report in its entirety.

Reviewed By:

Barbara A Escobar

01/30/14
Date

Laboratory Director or Designee
Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

Thickened Sludge to AvraGro Storage (20002-0200)

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1312077-01	C	Nitrogen Total Biosolids	12/09/13 23:59	Calculated	12/13/13 13:49	**67052**	mg/kg dry	32.90	200.00		KKH
1312077-01	C	Ammonia	12/09/13 23:59	EPA 350.1	12/11/13 14:24	**11300**	mg/kg dry	276	691.22		KB
1312077-01	C	Total Kjeldahl Nitrogen	12/09/13 23:59	EPA 351.2	12/12/13 14:06	**67048**	mg/kg dry	454.82	2,764.86	D2	KKH
1312077-01	C	Nitrate/Nitrite	12/09/13 23:59	EPA 353.2	12/13/13 13:49	**3.74**	mg/kg dry	1.82	11.06	J	KB
1312077-01	C	Arsenic	12/09/13 23:59	EPA 6010B	12/29/13 11:03	**ND**	mg/kg dry	15.9	18.19		MLB
1312077-01	C	Cadmium	12/09/13 23:59	EPA 6010B	12/29/13 12:54	**3.75**	mg/kg dry	0.591	7.28	J	MLB
1312077-01	C	Chromium	12/09/13 23:59	EPA 6010B	12/29/13 12:54	**36.1**	mg/kg dry	0.630	18.19		MLB
1312077-01	C	Copper	12/09/13 23:59	EPA 6010B	12/29/13 12:54	**481**	mg/kg dry	0.818	18.19		MLB
1312077-01	C	Lead	12/09/13 23:59	EPA 6010B	12/29/13 11:03	**20.2**	mg/kg dry	8.15	18.19		MLB
1312077-01	C	Molybdenum	12/09/13 23:59	EPA 6010B	12/29/13 12:54	**13.2**	mg/kg dry	1.05	7.28		MLB
1312077-01	C	Nickel	12/09/13 23:59	EPA 6010B	12/29/13 11:03	**8.04**	mg/kg dry	7.74	18.19	J	MLB
1312077-01	C	Selenium	12/09/13 23:59	EPA 6010B	12/29/13 12:54	**ND**	mg/kg dry	13.0	18.19		MLB
1312077-01	C	Silver	12/09/13 23:59	EPA 6010B	12/29/13 11:03	**5.91**	mg/kg dry	0.982	1.82		MLB
1312077-01	C	Zinc	12/09/13 23:59	EPA 6010B	12/29/13 12:54	**907**	mg/kg dry	0.609	18.19		MLB
1312077-01	C	Mercury	12/09/13 23:59	EPA 7471A	12/29/13 14:05	**0.982**	mg/kg dry	0.261	0.69		KKH
1312077-01	C	Nitrite	12/09/13 23:59	SM4500-NO2	12/10/13 14:27	**3.16**	mg/kg dry	0.88	11.06	J	KKH
1312077-01	C	% Solids	12/09/13 23:59	SM 2540G	12/10/13 16:12	**7.23**	%		0.01		JAH

Qualifier Definitions

D2	Sample required dilution due to high concentration of target analyte.
J	Concentration estimated. Analyte was detected below laboratory minimum reporting limit (MRL) but above MDL.

General Notes and Definitions

C	Sample Type - Composite
D	Sample Type - Discrete
DD	Sample Type - Discrete Duplicate
ND	Analyte NOT DETECTED at or above the reporting limit (MDL)
NR	Not Reported
DET	Analyte DETECTED
DRY	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
Analysis Date	Analysis Date represents the final reading date.
Field Results	Field Results performed by "SMPLR" (Sampler), are not subject to approval of Laboratory Director.
Solids, Total Volatile	Used for process control samples only.
RE	Re-Analysis has been performed.
FD	Field Duplicate

Case Narrative(s)

None

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1312077-01

SITE & LOCATION: Thickened sludge to AvraGro

SITE-LOCATION NUMBER: 20002-0200 (XXXXX-XXXX)

SAMPLE START DATE: 12/09/2013 (MM / DD / YYYY)

SAMPLE START TIME: 1500 (24 Hour Clock)

SUBMITTER: Deputy Director-Treatment

SAMPLE END DATE: 12/09/2013 (MM / DD / YYYY)

SAMPLE END TIME: 2359 (24 Hour Clock)

SAMPLER: Symington (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ■ 503 ☐ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ■ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	■
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐	**WET METHODS**	D	C
Cobalt	☐	☐	Ammonia as N	☐	■
Copper	☐	☐	Chloride	☐	☐
Hardness	☐	☐	Cyanide, Total	☐	☐
Iron	☐	☐	Cyanide, Amenable	☐	☐
Lead	☐	☐	Fluoride	☐	☐
Magnesium	☐	☐	Ignitability	☐	☐
Manganese	☐	☐	Nitrate as N	☐	■
Mercury	☐	■	Nitrite as N	☐	■
Molybdenum	☐	☐	Nitrate/Nitrite as N	☐	☐
Nickel	☐	☐	Nitrogen, Total Kjeldahl	☐	☐
Potassium	☐	☐	Nitrogen, Total as N	☐	■
Selenium	☐	☐	Orthophosphate as P	☐	☐
Silver	☐	■	Phosphorus, Total as P	☐	☐
Sodium	☐	☐	Sulfate	☐	☐
Strontium	☐	☐	Sulfide	☐	☐
Thallium	☐	☐	Turbidity	☐	☐
Tin	☐	☐			

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐
MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐
EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	■
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐
OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:
Monthly pour off. Poured off the daily sample
1312072-10

# of Bottles Delivered: 1

Transported on Ice: ☐ YES ☒ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
M. S.	Refrigerator @ Bldg 23	12/9/13	2359
Refrigerator @ Bldg 23	Alex Vasquez	12/10/13	0630
Alex Vasquez	[illegible]	12-10-13	0640
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature: 3.3 °C

Initials: SA

Non-Preserved	1	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	✓	☐	☐
Sample labels match Chain of Custody?	✓	☐	☐
Correct number of samples were delivered?	✓	☐	☐
Custody seals intact?	☐	☐	✓
Within holding time?	✓	☐	☐
Sufficient sample volume for analysis?	✓	☐	☐
Samples are in proper containers?	✓	☐	☐
Sample containers damaged/leaking/frozen?	☐	✓	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	✓
Received from a refrigerator?	☐	✓	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

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ANNUAL BIOSOLIDS REPORT 2013

PIMA COUNTY
REGIONAL WASTEWATER RECLAMATION DEPARTMENT
PIMA COUNTY, ARIZONA

SECTION 3

TRES RIOS WRF
AZPDES NO. AZ0020001

SAMPLING AND ANALYSIS

PRIORITY POLLUTANTS

TCLP

HAZARDOUSNESS

ANNUAL BIOSOLIDS REPORT 2013

PIMA COUNTY
REGIONAL WASTEWATER RECLAMATION DEPARTMENT
PIMA COUNTY, ARIZONA

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office (CRAO) Laboratory
3035 W. El Camino del Cerro, Tucson Arizona 85745-9750, Phone (520) 724-6200

Report Date: 07/10/2013
Laboratory License: AZO159

Sample Analysis Report

Ina Road WRF

January 2013

Sample Integrity

SAMPLE RECEIPT: Samples were received intact at the required temperature, unless otherwise noted with a data qualifier below. Please refer to the Chain of Custody for sample receipt details.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Pima County CRAO Laboratory Quality Manual.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS:

Notes and Definitions:

See attached

Case Narratives:

See attached

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Reviewed By:

07/10/13
Date

Laboratory Director or Designee
Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1301089-05	C	bis(2-chloroethoxy)methane	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	1.06	4.00	D1, D7	SJM
1301089-05	C	bis(2-chloroethyl)ether	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	0.99	4.00	D1, D7	SJM
1301089-05	C	bis(2-chloroisopropyl)ether	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	1.14	4.00	D1, D7	SJM
1301089-05	C	bis(2-ethylhexyl)phthalate	01/11/13 6:00	EPA 625	2/27/13 18:54	**4.18**	ug/L	2.67	12.00	B1, D1, D7, J	SJM
1301089-05	C	Butylbenzylphthalate	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	1.53	12.00	D1, D7	SJM
1301089-05	C	Carbazole	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	1.27	4.00	D1, D7	SJM
1301089-05	C	Chrysene	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	1.47	4.00	D1, D7	SJM
1301089-05	C	Dibenzo(a,h)anthracene	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	1.87	4.00	D1, D7	SJM
1301089-05	C	Diethyl phthalate	01/11/13 6:00	EPA 625	2/27/13 18:54	**4.21**	ug/L	1.05	4.00	D1, D7	SJM
1301089-05	C	Dimethyl phthalate	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	0.72	4.00	D1, D7, N1	SJM
1301089-05	C	Di-n-butyl phthalate	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	1.67	4.00	D1, D7, N1	SJM
1301089-05	C	Di-n-octyl phthalate	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	1.83	4.00	D1, D7	SJM
1301089-05	C	Fluoranthene	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	1.45	4.00	D1, D7	SJM
1301089-05	C	Fluorene	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	1.28	4.00	D1, D7	SJM
1301089-05	C	Hexachlorobenzene	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	0.80	4.00	D1, D7	SJM
1301089-05	C	Hexachlorobutadiene	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	1.19	4.00	D7, D1	SJM
1301089-05	C	Hexachlorocyclopentadiene	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	2.59	12.00	D1, D7	SJM
1301089-05	C	Hexachloroethane	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	1.21	4.00	D1, D7	SJM
1301089-05	C	Indeno(1,2,3-cd)pyrene	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	2.25	12.00	D1, D7	SJM
1301089-05	C	Isophorone	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	1.35	4.00	D1, D7	SJM
1301089-05	C	Naphthalene	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	1.26	4.00	D1, D7	SJM
1301089-05	C	n-Decane	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	1.66	4.00	D1, D7	SJM
1301089-05	C	Nitrobenzene	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	2.86	12.00	D1, D7	SJM
1301089-05	C	N-Nitrosodimethylamine	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	4.23	12.00	D1, D7, PC3	SJM
1301089-05	C	N-Nitroso-di-n-propylamine	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	1.13	4.00	D1, D7	SJM
1301089-05	C	N-Nitrosodiphenylamine	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	1.83	4.00	D1, D7	SJM
1301089-05	C	n-Octadecane	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	1.66	4.00	D1, D7	SJM
1301089-05	C	Pentachlorophenol	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	3.20	12.00	D1, D7, N1	SJM
1301089-05	C	Phenanthrene	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	1.15	4.00	D1, D7	SJM
1301089-05	C	Phenol	01/11/13 6:00	EPA 625	2/27/13 18:54	**8.71**	ug/L	2.30	12.00	D1, D7, N1	SJM
1301089-05	C	Pyrene	01/11/13 6:00	EPA 625	2/27/13 18:54	**ND**	ug/L	1.29	4.00	D1, D7	SJM
1301089-05	C	1,2-Diphenylhydrazine	01/11/13 6:00	EPA 8270C	2/27/13 18:54	**ND**	ug/L	1.23	4.00	D1, D7	SJM
1301089-05	C	Silver	01/11/13 6:00	EPA 200.8	2/6/13 15:13	**0.84**	ug/L	0.11	1.00	J	JB
1301089-05	C	Thallium	01/11/13 6:00	EPA 200.8	2/6/13 15:13	**ND**	ug/L	0.13	1.00		JB
1301089-05RE	C	Zinc	01/11/13 6:00	EPA 200.8	2/6/13 17:46	**156**	ug/L	0.90	5.00	D2	JB

Bio-Solids Digester Sample Tap (20001-5000)

1301089-04	C	Acrolein	01/11/13 9:18	EPA 624	1/17/13 17:35	**ND**	mg/kg dry	0.00111	9.95		ev
1301089-04	C	Acrylonitrile	01/11/13 9:18	EPA 624	1/17/13 17:35	**ND**	mg/kg dry	0.00116	9.95		ev
1301089-04	C	Antimony	01/11/13 9:18	EPA 6010B	1/25/13 10:42	**6.85**	mg/kg dry	2.42	9.82	J	MLB
1301089-04	C	Arsenic	01/11/13 9:18	EPA 6010B	1/25/13 12:33	**8.99**	mg/kg dry	3.77	9.82	J	MLB
1301089-04	C	Beryllium	01/11/13 9:18	EPA 6010B	1/25/13 10:42	**0.122**	mg/kg dry	0.0199	1.96	J	MLB
1301089-04	C	Cadmium	01/11/13 9:18	EPA 6010B	1/25/13 10:42	**1.85**	mg/kg dry	0.169	3.93	J	MLB
1301089-04	C	Chromium	01/11/13 9:18	EPA 6010B	1/25/13 10:42	**20.2**	mg/kg dry	0.301	9.82		MLB
1301089-04	C	Copper	01/11/13 9:18	EPA 6010B	1/25/13 10:42	**354**	mg/kg dry	0.545	9.82		MLB
1301089-04	C	Cyanide	01/11/13 9:18	EPA 9010C	1/23/13 15:13	**0.396**	mg/kg dry	0.299	1.24	M5, J	MGA
1301089-04	C	Lead	01/11/13 9:18	EPA 6010B	1/25/13 14:35	**13.0**	mg/kg dry	3.47	9.82		MLB
1301089-04	C	Mercury	01/11/13 9:18	EPA 7471A	1/25/13 9:51	**1.29**	mg/kg dry	0.0941	0.25		DDO
1301089-04	C	Molybdenum	01/11/13 9:18	EPA 6010B	1/25/13 10:42	**11.3**	mg/kg dry	0.482	3.93		MLB
1301089-04	C	Nickel	01/11/13 9:18	EPA 6010B	1/25/13 12:33	**30.4**	mg/kg dry	2.23	9.82		MLB
1301089-04	C	4,4-DDD	01/11/13 9:18	EPA 625	1/24/13 20:58	**ND**	mg/kg dry	0.00006	0.00032	D7	mam-z
1301089-04	C	4,4-DDE	01/11/13 9:18	EPA 625	1/24/13 20:58	**ND**	mg/kg dry	0.00005	0.00032	D7	mam-z
1301089-04	C	4,4-DDT	01/11/13 9:18	EPA 625	1/24/13 20:58	**ND**	mg/kg dry	0.00004	0.00016	D7	mam-z
1301089-04	C	Aldrin	01/11/13 9:18	EPA 625	1/24/13 20:58	**ND**	mg/kg dry	0.00010	0.00080	D7	mam-z
1301089-04	C	alpha-BHC	01/11/13 9:18	EPA 625	1/24/13 20:58	**ND**	mg/kg dry	0.00009	0.00032	D7	mam-z

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1301089-04	C	beta-BHC	01/11/13 9:18	EPA 625	1/24/13 20:58	ND	mg/kg dry	0.00010	0.00080	D7	mam-z
1301089-04	C	Chlordane	01/11/13 9:18	EPA 625	1/24/13 20:58	ND	mg/kg dry	0.00070	0.00320	D7	mam-z
1301089-04	C	delta-BHC	01/11/13 9:18	EPA 625	1/24/13 20:58	ND	mg/kg dry	0.00008	0.00032	D7	mam-z
1301089-04	C	Dieldrin	01/11/13 9:18	EPA 625	1/24/13 20:58	ND	mg/kg dry	0.00007	0.00032	D7	mam-z
1301089-04	C	Endosulfan I	01/11/13 9:18	EPA 625	1/24/13 20:58	ND	mg/kg dry	0.00005	0.00032	D7	mam-z
1301089-04	C	Endosulfan II	01/11/13 9:18	EPA 625	1/24/13 20:58	ND	mg/kg dry	0.00003	0.00080	D7	mam-z
1301089-04	C	Endosulfan sulfate	01/11/13 9:18	EPA 625	1/24/13 20:58	ND	mg/kg dry	0.00005	0.00032	D7	mam-z
1301089-04	C	Endrin	01/11/13 9:18	EPA 625	1/24/13 20:58	ND	mg/kg dry	0.00010	0.00080	D7	mam-z
1301089-04	C	Endrin aldehyde	01/11/13 9:18	EPA 625	1/24/13 20:58	ND	mg/kg dry	0.00007	0.00032	D7	mam-z
1301089-04	C	gamma-BHC (Lindane)	01/11/13 9:18	EPA 625	1/24/13 20:58	ND	mg/kg dry	0.00009	0.00032	D7	mam-z
1301089-04	C	Heptachlor	01/11/13 9:18	EPA 625	1/24/13 20:58	ND	mg/kg dry	0.00010	0.00080	D7	mam-z
1301089-04	C	Heptachlor Epoxide	01/11/13 9:18	EPA 625	1/24/13 20:58	ND	mg/kg dry	0.00011	0.00080	D7	mam-z
1301089-04	C	PCB 1016	01/11/13 9:18	EPA 625	1/24/13 20:58	ND	mg/kg dry	0.00010	0.00080	D7	mam-z
1301089-04	C	PCB 1221	01/11/13 9:18	EPA 625	1/24/13 20:58	ND	mg/kg dry	0.00009	0.00096	D7	mam-z
1301089-04	C	PCB 1232	01/11/13 9:18	EPA 625	1/24/13 20:58	ND	mg/kg dry	0.00016	0.00096	D7	mam-z
1301089-04	C	PCB 1242	01/11/13 9:18	EPA 625	1/24/13 20:58	ND	mg/kg dry	0.00010	0.00096	D7	mam-z
1301089-04	C	PCB 1248	01/11/13 9:18	EPA 625	1/24/13 20:58	ND	mg/kg dry	0.00016	0.00096	D7	mam-z
1301089-04	C	PCB 1254	01/11/13 9:18	EPA 625	1/24/13 20:58	ND	mg/kg dry	0.00007	0.00096	D7	mam-z
1301089-04	C	PCB 1260	01/11/13 9:18	EPA 625	1/24/13 20:58	ND	mg/kg dry	0.00025	0.00096	D7	mam-z
1301089-04	C	Total PCBs	01/11/13 9:18	EPA 625	1/24/13 20:58	ND	mg/kg dry	0.00030	0.00096	D7	mam-z
1301089-04	C	Toxaphene	01/11/13 9:18	EPA 625	1/24/13 20:58	ND	mg/kg dry	0.00508	0.03	D7	mam-z
1301089-04	C	Methoxychlor	01/11/13 9:18	EPA 8270C	1/24/13 20:58	ND	mg/kg dry	0.00006	0.00032	D7	mam-z
1301089-04	C	1,1,1-Trichloroethane	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.00005	0.00050		dlc
1301089-04	C	1,1,2,2-Tetrachloroethane	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.00009	0.00050		dlc
1301089-04	C	1,1,2-Trichloroethane	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.0001	0.00050	M1	dlc
1301089-04	C	1,1-Dichloroethane	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.00006	0.00050		dlc
1301089-04	C	1,1-Dichloroethene	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.00007	0.00050		dlc
1301089-04	C	1,2-Dichlorobenzene	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.0002	0.00050		dlc
1301089-04	C	1,2-Dichloroethane	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.0001	0.00050		dlc
1301089-04	C	1,2-Dichloropropane	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.0001	0.00050	M2	dlc
1301089-04	C	1,3-Dichlorobenzene	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.0001	0.00050		dlc
1301089-04	C	1,4-Dichlorobenzene	01/11/13 9:18	EPA 624	1/16/13 16:47	**0.169**	mg/kg dry	0.0002	0.00050		dlc
1301089-04	C	2-Chloroethyl vinyl ether	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.0002	0.00050		dlc
1301089-04	C	Benzene	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.0001	0.00050		dlc
1301089-04	C	Bromodichloromethane	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.0002	0.00050		dlc
1301089-04	C	Bromoform	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.00008	0.00050		dlc
1301089-04	C	Bromomethane	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.00009	0.00050		dlc
1301089-04	C	Carbon Tetrachloride	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.00006	0.00050		dlc
1301089-04	C	Chlorobenzene	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.0001	0.00050		dlc
1301089-04	C	Chloroethane	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.0002	0.00050		dlc
1301089-04	C	Chloroform	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.0001	0.00050		dlc
1301089-04	C	Chloromethane	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.00008	0.00050	M2, R1	dlc
1301089-04	C	cis-1,3-Dichloropropene	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.0001	0.00050		dlc
1301089-04	C	Dibromochloromethane	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.0001	0.00050		dlc
1301089-04	C	Ethyl Benzene	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.00008	0.00050		dlc
1301089-04	C	Methylene Chloride	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.0001	0.00050		dlc
1301089-04	C	Tetrachloroethene	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.00006	0.00050		dlc
1301089-04	C	Toluene	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.00008	0.00050		dlc
1301089-04	C	Total Trihalomethanes	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.00009	0.00050		dlc
1301089-04	C	trans-1,2-Dichloroethene	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.00009	0.00050		dlc
1301089-04	C	trans-1,3-Dichloropropene	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.0001	0.00050		dlc
1301089-04	C	Trichloroethene	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.00009	0.00050		dlc
1301089-04	C	Trichlorofluoromethane	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.00005	0.00050	M2	dlc
1301089-04	C	Vinyl chloride	01/11/13 9:18	EPA 624	1/16/13 16:47	ND	mg/kg dry	0.00005	0.00050	M2	dlc
1301089-04	C	1,2,4-Trichlorobenzene	01/11/13 9:18	EPA 8260	1/16/13 16:47	ND	mg/kg dry	0.0003	0.00050		dlc
1301089-04	C	1,2-Dibromo-3-chloropropane	01/11/13 9:18	EPA 8260	1/16/13 16:47	ND	mg/kg dry	0.0002	0.00100		dlc

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1301089-04	C	1,2-Dibromoethane	01/11/13 9:18	EPA 8260	1/16/13 16:47	**ND**	mg/kg dry	0.0001	0.00050		dlc
1301089-04	C	cis-1,2-Dichloroethene	01/11/13 9:18	EPA 8260	1/16/13 16:47	**ND**	mg/kg dry	0.0001	0.00050		dlc
1301089-04	C	m,p-Xylenes	01/11/13 9:18	EPA 8260	1/16/13 16:47	**ND**	mg/kg dry	0.0001	0.00100		dlc
1301089-04	C	o-Xylene	01/11/13 9:18	EPA 8260	1/16/13 16:47	**ND**	mg/kg dry	0.00007	0.00050		dlc
1301089-04	C	Styrene	01/11/13 9:18	EPA 8260	1/16/13 16:47	**ND**	mg/kg dry	0.0001	0.00050		dlc
1301089-04	C	Xylenes, total	01/11/13 9:18	EPA 8260	1/16/13 16:47	**ND**	mg/kg dry	0.0001	0.00100		dlc
1301089-04	C	Selenium	01/11/13 9:18	EPA 6010B	1/25/13 10:42	**ND**	mg/kg dry	3.98	9.82		MLB
1301089-04	C	1,2,4-Trichlorobenzene	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7, S7	SJM
1301089-04	C	1,2-Diphenylhydrazine	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7, S7	SJM
1301089-04	C	2,3-Dichloroaniline	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7, S7	SJM
1301089-04	C	2,4,6-Trichlorophenol	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7, N1, S7	SJM
1301089-04	C	2,4-Dichlorophenol	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	S7, D1, D7, N1	SJM
1301089-04	C	2,4-Dimethylphenol	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.003	11.94	D1, D7, S7	SJM
1301089-04	C	2,4-Dinitrophenol	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.009	19.90	D1, D7, N1, S7	SJM
1301089-04	C	2,4-Dinitrotoluene	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7, S7	SJM
1301089-04	C	2,6-Dinitrotoluene	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.002	3.98	D1, D7, S7	SJM
1301089-04	C	2-Chloronaphthalene	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7, S7	SJM
1301089-04	C	2-Chlorophenol	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.002	3.98	D1, D7, N1	SJM
1301089-04	C	2-Methyl-4,6-dinitrophenol	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.004	11.94	D1, D7, S7	SJM
1301089-04	C	2-Methylphenol	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.002	3.98	D1, D7	SJM
1301089-04	C	2-Nitrophenol	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.002	11.94	D1, D7, N1, S7	SJM
1301089-04	C	3,3-Dichlorobenzidine	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.002	29.85	D1, D7, S7, V9	SJM
1301089-04	C	4-Bromophenyl phenyl ether	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7	SJM
1301089-04	C	4-Chloro-3-methylphenol	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7, S7	SJM
1301089-04	C	4-Chlorophenyl phenyl ether	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7, S7	SJM
1301089-04	C	4-Methylphenol	01/11/13 9:18	EPA 625	2/27/13 18:16	**6.01**	mg/kg dry	0.003	11.94	D1, D7	SJM
1301089-04	C	4-Nitrophenol	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.005	11.94	S7, D1, D7	SJM
1301089-04	C	Acenaphthene	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7, S7	SJM
1301089-04	C	Acenaphthylene	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.0008	3.98	D1, D7, S7	SJM
1301089-04	C	Anthracene	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7	SJM
1301089-04	C	Benzidine	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.02	69.65	D1, D7, N1, V9	SJM
1301089-04	C	Benzo[a]anthracene	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7, S7	SJM
1301089-04	C	Benzo[a]pyrene	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.002	11.94	D1, D7, S7	SJM
1301089-04	C	Benzo[b]fluoranthene	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.002	3.98	D1, D7, S7	SJM
1301089-04	C	Benzo[ghi]perylene	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.002	3.98	S7, D1, D7	SJM
1301089-04	C	Benzo[k]fluoranthene	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.002	11.94	D1, D7, S7	SJM
1301089-04	C	bis(2-chloroethoxy)methane	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7, S7	SJM
1301089-04	C	bis(2-chloroethyl)ether	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7	SJM
1301089-04	C	bis(2-chloroisopropyl)ether	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7	SJM
1301089-04	C	bis(2-ethylhexyl)phthalate	01/11/13 9:18	EPA 625	2/27/13 18:16	**8.12**	mg/kg dry	0.003	11.94	B1, D1, D7, S7	SJM
1301089-04	C	Butylbenzylphthalate	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.002	11.94	D1, D7, S7	SJM
1301089-04	C	Carbazole	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7	SJM
1301089-04	C	Chrysene	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	S7, D1, D7	SJM
1301089-04	C	Dibenzo(a,h)anthracene	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.002	3.98	D1, D7, S7	SJM
1301089-04	C	Diethyl phthalate	01/11/13 9:18	EPA 625	2/27/13 18:16	**2.65**	mg/kg dry	0.001	3.98	D1, D7, S7	SJM
1301089-04	C	Dimethyl phthalate	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.0007	3.98	D1, D7, N1, S7	SJM
1301089-04	C	Di-n-butyl phthalate	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.002	3.98	D1, D7, N1	SJM
1301089-04	C	Di-n-octyl phthalate	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.002	3.98	D1, D7, S7	SJM
1301089-04	C	Fluoranthene	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7	SJM
1301089-04	C	Fluorene	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7, S7	SJM
1301089-04	C	Hexachlorobenzene	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.0008	3.98	D7, D1	SJM
1301089-04	C	Hexachlorobutadiene	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7, S7	SJM
1301089-04	C	Hexachlorocyclopentadiene	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.003	11.94	D1, D7, S7	SJM
1301089-04	C	Hexachloroethane	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7	SJM
1301089-04	C	Indeno(1,2,3-cd)pyrene	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.002	11.94	D1, D7, S7	SJM
1301089-04	C	Isophorone	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7, S7	SJM

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1301089-04	C	Naphthalene	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7, S7	SJM
1301089-04	C	n-Decane	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.002	3.98	D1, D7	SJM
1301089-04	C	Nitrobenzene	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.003	11.94	D1, D7, S7	SJM
1301089-04	C	N-Nitrosodimethylamine	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.004	11.94	D1, D7, PC3	SJM
1301089-04	C	N-Nitroso-di-n-propylamine	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7	SJM
1301089-04	C	N-Nitrosodiphenylamine	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.002	3.98	D1, D7, S7	SJM
1301089-04	C	n-Octadecane	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.002	3.98	D1, D7	SJM
1301089-04	C	Pentachlorophenol	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.003	11.94	D1, D7, N1	SJM
1301089-04	C	Phenanthrene	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7	SJM
1301089-04	C	Phenol	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.002	11.94	D1, D7, N1	SJM
1301089-04	C	Pyrene	01/11/13 9:18	EPA 625	2/27/13 18:16	**ND**	mg/kg dry	0.001	3.98	D1, D7, S7	SJM
1301089-04	C	1,2-Diphenylhydrazine	01/11/13 9:18	EPA 8270C	2/27/13 18:16	**ND**	mg/kg dry	0.06	198.10	D7, PC3, D1	SJM
1301089-04	C	Silver	01/11/13 9:18	EPA 6010B	1/25/13 10:42	**4.46**	mg/kg dry	0.327	0.98		MLB
1301089-04	C	% Solids	01/11/13 9:18	SM 2540G	1/12/13 12:47	**2.01**	%		0.01		JVR
1301089-04	C	Thallium	01/11/13 9:18	EPA 6010B	1/25/13 15:44	**ND**	mg/kg dry	5.59	9.82		MLB
1301089-04	C	Zinc	01/11/13 9:18	EPA 6010B	1/25/13 14:35	**688**	mg/kg dry	1.10	9.82		MLB

Thickener to AvraGro (20001-5701)

1301089-06	C	Acrolein	01/11/13 6:00	EPA 624	1/17/13 17:03	**ND**	mg/kg dry	0.00111	3.04		ev
1301089-06	C	Acrylonitrile	01/11/13 6:00	EPA 624	1/17/13 17:03	**ND**	mg/kg dry	0.00116	3.04		ev
1301089-06	C	Antimony	01/11/13 6:00	EPA 6010B	1/25/13 10:53	**7.41**	mg/kg dry	4.21	17.11	J	MLB
1301089-06	C	Arsenic	01/11/13 6:00	EPA 6010B	1/25/13 12:43	**14.7**	mg/kg dry	6.56	17.11	J	MLB
1301089-06	C	Beryllium	01/11/13 6:00	EPA 6010B	1/25/13 10:53	**0.139**	mg/kg dry	0.0347	3.42	J	MLB
1301089-06	C	Cadmium	01/11/13 6:00	EPA 6010B	1/25/13 10:53	**2.86**	mg/kg dry	0.295	6.84	J	MLB
1301089-06	C	Chromium	01/11/13 6:00	EPA 6010B	1/25/13 10:53	**28.2**	mg/kg dry	0.525	17.11		MLB
1301089-06	C	Copper	01/11/13 6:00	EPA 6010B	1/25/13 10:53	**430**	mg/kg dry	0.949	17.11		MLB
1301089-06	C	Cyanide	01/11/13 6:00	EPA 9010C	1/23/13 15:15	**1.03**	mg/kg dry	0.183	0.76		MGA
1301089-06	C	Lead	01/11/13 6:00	EPA 6010B	1/25/13 14:44	**14.9**	mg/kg dry	6.05	17.11	J	MLB
1301089-06	C	Mercury	01/11/13 6:00	EPA 7471A	1/25/13 10:01	**1.39**	mg/kg dry	0.0576	0.15		DDO
1301089-06	C	Molybdenum	01/11/13 6:00	EPA 6010B	1/25/13 10:53	**16.2**	mg/kg dry	0.840	6.84		MLB
1301089-06	C	Nickel	01/11/13 6:00	EPA 6010B	1/25/13 12:43	**47.0**	mg/kg dry	3.89	17.11		MLB
1301089-06	C	4,4-DDD	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00006	0.00030	D1, D7	mam-z
1301089-06	C	4,4-DDE	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00005	0.00030	D1, D7	mam-z
1301089-06	C	4,4-DDT	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00004	0.00015	D1, D7	mam-z
1301089-06	C	Aldrin	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00010	0.00075	D1, D7	mam-z
1301089-06	C	alpha-BHC	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00009	0.00030	D1, D7	mam-z
1301089-06	C	beta-BHC	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00010	0.00075	D1, D7	mam-z
1301089-06	C	Chlordane	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00070	0.00300	D1, D7	mam-z
1301089-06	C	delta-BHC	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00008	0.00030	D1, D7	mam-z
1301089-06	C	Dieldrin	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00007	0.00030	D1, D7	mam-z
1301089-06	C	Endosulfan I	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00005	0.00030	D1, D7	mam-z
1301089-06	C	Endosulfan II	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00003	0.00075	D1, D7	mam-z
1301089-06	C	Endosulfan sulfate	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00005	0.00030	D1, D7	mam-z
1301089-06	C	Endrin	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00010	0.00075	D1, D7	mam-z
1301089-06	C	Endrin aldehyde	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00007	0.00030	D1, D7	mam-z
1301089-06	C	gamma-BHC (Lindane)	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00009	0.00030	D1, D7	mam-z
1301089-06	C	Heptachlor	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00010	0.00075	D1, D7	mam-z
1301089-06	C	Heptachlor Epoxide	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00011	0.00075	D1, D7	mam-z
1301089-06	C	PCB 1016	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00010	0.00075	D7, D1	mam-z
1301089-06	C	PCB 1221	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00009	0.00090	D7, D1	mam-z
1301089-06	C	PCB 1232	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00016	0.00090	D7, D1	mam-z
1301089-06	C	PCB 1242	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00010	0.00090	D1, D7	mam-z
1301089-06	C	PCB 1248	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00016	0.00090	D1, D7	mam-z
1301089-06	C	PCB 1254	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00007	0.00090	D1, D7	mam-z
1301089-06	C	PCB 1260	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00025	0.00090	D1, D7	mam-z
1301089-06	C	Total PCBs	01/11/13 6:00	EPA 625	2/6/13 16:27	**ND**	mg/kg dry	0.00030	0.00090	D1, D7	mam-z

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1301089-06	C	Toxaphene	01/11/13 6:00	EPA 625	2/6/13 16:27	ND	mg/kg dry	0.00508	0.02	D1, D7	mam-z
1301089-06	C	Methoxychlor	01/11/13 6:00	EPA 8270C	2/6/13 16:27	ND	mg/kg dry	0.00006	0.00038	D1, D7	mam-z
1301089-06	C	1,1,1-Trichloroethane	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.00005	0.00015		dlc
1301089-06	C	1,1,2,2-Tetrachloroethane	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.00009	0.00015		dlc
1301089-06	C	1,1,2-Trichloroethane	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.0001	0.00015	M1	dlc
1301089-06	C	1,1-Dichloroethane	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.00006	0.00015		dlc
1301089-06	C	1,1-Dichloroethene	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.00007	0.00015		dlc
1301089-06	C	1,2-Dichlorobenzene	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.0002	0.00015		dlc
1301089-06	C	1,2-Dichloroethane	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.0001	0.00015		dlc
1301089-06	C	1,2-Dichloropropane	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.0001	0.00015	M2	dlc
1301089-06	C	1,3-Dichlorobenzene	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.0001	0.00015		dlc
1301089-06	C	1,4-Dichlorobenzene	01/11/13 6:00	EPA 624	1/16/13 16:17	**0.125**	mg/kg dry	0.0002	0.00015		dlc
1301089-06	C	2-Chloroethyl vinyl ether	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.0002	0.00015		dlc
1301089-06	C	Benzene	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.0001	0.00015		dlc
1301089-06	C	Bromodichloromethane	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.0002	0.00015		dlc
1301089-06	C	Bromoform	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.00008	0.00015		dlc
1301089-06	C	Bromomethane	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.00009	0.00015		dlc
1301089-06	C	Carbon Tetrachloride	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.00006	0.00015		dlc
1301089-06	C	Chlorobenzene	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.0001	0.00015		dlc
1301089-06	C	Chloroethane	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.0002	0.00015		dlc
1301089-06	C	Chloroform	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.0001	0.00015		dlc
1301089-06	C	Chloromethane	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.00008	0.00015	M2, R1	dlc
1301089-06	C	cis-1,3-Dichloropropene	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.0001	0.00015		dlc
1301089-06	C	Dibromochloromethane	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.0001	0.00015		dlc
1301089-06	C	Ethyl Benzene	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.00008	0.00015		dlc
1301089-06	C	Methylene Chloride	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.0001	0.00015		dlc
1301089-06	C	Tetrachloroethene	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.00006	0.00015		dlc
1301089-06	C	Toluene	01/11/13 6:00	EPA 624	1/16/13 16:17	**0.082**	mg/kg dry	0.00008	0.00015		dlc
1301089-06	C	Total Trihalomethanes	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.00009	0.00015		dlc
1301089-06	C	trans-1,2-Dichloroethene	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.00009	0.00015		dlc
1301089-06	C	trans-1,3-Dichloropropene	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.0001	0.00015		dlc
1301089-06	C	Trichloroethene	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.00009	0.00015		dlc
1301089-06	C	Trichlorofluoromethane	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.00005	0.00015	M2	dlc
1301089-06	C	Vinyl chloride	01/11/13 6:00	EPA 624	1/16/13 16:17	ND	mg/kg dry	0.00005	0.00015	M2	dlc
1301089-06	C	1,2,4-Trichlorobenzene	01/11/13 6:00	EPA 8260	1/16/13 16:17	ND	mg/kg dry	0.0003	0.00015		dlc
1301089-06	C	1,2-Dibromo-3-chloropropane	01/11/13 6:00	EPA 8260	1/16/13 16:17	ND	mg/kg dry	0.0002	0.00030		dlc
1301089-06	C	1,2-Dibromoethane	01/11/13 6:00	EPA 8260	1/16/13 16:17	ND	mg/kg dry	0.0001	0.00015		dlc
1301089-06	C	cis-1,2-Dichloroethene	01/11/13 6:00	EPA 8260	1/16/13 16:17	ND	mg/kg dry	0.0001	0.00015		dlc
1301089-06	C	m,p-Xylenes	01/11/13 6:00	EPA 8260	1/16/13 16:17	ND	mg/kg dry	0.0001	0.00030		dlc
1301089-06	C	o-Xylene	01/11/13 6:00	EPA 8260	1/16/13 16:17	ND	mg/kg dry	0.00007	0.00015		dlc
1301089-06	C	Styrene	01/11/13 6:00	EPA 8260	1/16/13 16:17	ND	mg/kg dry	0.0001	0.00015		dlc
1301089-06	C	Xylenes, total	01/11/13 6:00	EPA 8260	1/16/13 16:17	ND	mg/kg dry	0.0001	0.00030		dlc
1301089-06	C	Selenium	01/11/13 6:00	EPA 6010B	1/25/13 10:53	**14.1**	mg/kg dry	6.93	17.11	J	MLB
1301089-06	C	2,3,7,8-TCDD - Dioxin Scan	01/11/13 6:00	EPA 625	2/27/13 21:56	ND	ug/kg dry		380.67		SJM
1301089-06	C	1,2,4-Trichlorobenzene	01/11/13 6:00	EPA 625	2/27/13 19:31	ND	mg/kg dry	0.001	1.22	D1, D7	SJM
1301089-06	C	1,2-Diphenylhydrazine	01/11/13 6:00	EPA 625	2/27/13 19:31	ND	mg/kg dry	0.001	1.22	D1, D7, S7	SJM
1301089-06	C	2,3-Dichloroaniline	01/11/13 6:00	EPA 625	2/27/13 19:31	ND	mg/kg dry	0.001	1.22	D1, D7	SJM
1301089-06	C	2,4,6-Trichlorophenol	01/11/13 6:00	EPA 625	2/27/13 19:31	ND	mg/kg dry	0.001	1.22	D1, D7, N1	SJM
1301089-06	C	2,4-Dichlorophenol	01/11/13 6:00	EPA 625	2/27/13 19:31	ND	mg/kg dry	0.001	1.22	D1, D7, N1	SJM
1301089-06	C	2,4-Dimethylphenol	01/11/13 6:00	EPA 625	2/27/13 19:31	ND	mg/kg dry	0.003	3.66	D1, D7	SJM
1301089-06	C	2,4-Dinitrophenol	01/11/13 6:00	EPA 625	2/27/13 19:31	ND	mg/kg dry	0.009	6.10	D1, D7, N1, S7	SJM
1301089-06	C	2,4-Dinitrotoluene	01/11/13 6:00	EPA 625	2/27/13 19:31	ND	mg/kg dry	0.001	1.22	S7, D1, D7	SJM
1301089-06	C	2,6-Dinitrotoluene	01/11/13 6:00	EPA 625	2/27/13 19:31	ND	mg/kg dry	0.002	1.22	D1, D7, S7	SJM
1301089-06	C	2-Chloronaphthalene	01/11/13 6:00	EPA 625	2/27/13 19:31	ND	mg/kg dry	0.001	1.22	D1, D7, S7	SJM
1301089-06	C	2-Chlorophenol	01/11/13 6:00	EPA 625	2/27/13 19:31	ND	mg/kg dry	0.002	1.22	D1, D7, N1	SJM
1301089-06	C	2-Methyl-4,6-dinitrophenol	01/11/13 6:00	EPA 625	2/27/13 19:31	ND	mg/kg dry	0.004	3.66	D1, D7, S7	SJM

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1301089-06	C	2-Methylphenol	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.002	1.22	D1, D7	SJM
1301089-06	C	2-Nitrophenol	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.002	3.66	D1, D7, N1	SJM
1301089-06	C	3,3-Dichlorobenzidine	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.002	9.15	D1, D7, V9	SJM
1301089-06	C	4-Bromophenyl phenyl ether	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.001	1.22	D1, D7	SJM
1301089-06	C	4-Chloro-3-methylphenol	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.001	1.22	D1, D7	SJM
1301089-06	C	4-Chlorophenyl phenyl ether	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.001	1.22	D1, D7, S7	SJM
1301089-06	C	4-Methylphenol	01/11/13 6:00	EPA 625	2/27/13 19:31	**3.93**	mg/kg dry	0.003	3.66	D1, D7, J	SJM
1301089-06	C	4-Nitrophenol	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.005	3.66	D1, D7, S7	SJM
1301089-06	C	Acenaphthene	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.001	1.22	D1, D7, S7	SJM
1301089-06	C	Acenaphthylene	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.0008	1.22	D1, D7, S7	SJM
1301089-06	C	Anthracene	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.001	1.22	D1, D7	SJM
1301089-06	C	Benzidine	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.02	21.35	D1, D7, N1, V9	SJM
1301089-06	C	Benzo[a]anthracene	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.001	1.22	D7, D1	SJM
1301089-06	C	Benzo[a]pyrene	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM
1301089-06	C	Benzo[b]fluoranthene	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.002	1.22	D1, D7	SJM
1301089-06	C	Benzo[ghi]perylene	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.002	1.22	D1, D7	SJM
1301089-06	C	Benzo[k]fluoranthene	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM
1301089-06	C	bis(2-chloroethoxy)methane	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.001	1.22	D1, D7	SJM
1301089-06	C	bis(2-chloroethyl)ether	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.001	1.22	D1, D7	SJM
1301089-06	C	bis(2-chloroisopropyl)ether	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.001	1.22	D1, D7	SJM
1301089-06	C	bis(2-ethylhexyl)phthalate	01/11/13 6:00	EPA 625	2/27/13 19:31	**2.96**	mg/kg dry	0.003	3.66	B1, D1, D7, J	SJM
1301089-06	C	Butylbenzylphthalate	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM
1301089-06	C	Carbazole	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.001	1.22	D1, D7	SJM
1301089-06	C	Chrysene	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.001	1.22	D1, D7	SJM
1301089-06	C	Dibenzo(a,h)anthracene	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.002	1.22	D1, D7	SJM
1301089-06	C	Diethyl phthalate	01/11/13 6:00	EPA 625	2/27/13 19:31	**0.96**	mg/kg dry	0.001	1.22	D1, D7, S7, J	SJM
1301089-06	C	Dimethyl phthalate	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.0007	1.22	D1, D7, N1, S7	SJM
1301089-06	C	Di-n-butyl phthalate	01/11/13 6:00	EPA 625	2/27/13 19:31	**1.13**	mg/kg dry	0.002	1.22	D1, D7, N1, J	SJM
1301089-06	C	Di-n-octyl phthalate	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.002	1.22	D1, D7	SJM
1301089-06	C	Fluoranthene	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.001	1.22	D1, D7	SJM
1301089-06	C	Fluorene	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.001	1.22	D1, D7, S7	SJM
1301089-06	C	Hexachlorobenzene	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.0008	1.22	D1, D7	SJM
1301089-06	C	Hexachlorobutadiene	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.001	1.22	D1, D7	SJM
1301089-06	C	Hexachlorocyclopentadiene	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.003	3.66	D7, D1	SJM
1301089-06	C	Hexachloroethane	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.001	1.22	D1, D7	SJM
1301089-06	C	Indeno(1,2,3-cd)pyrene	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM
1301089-06	C	Isophorone	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.001	1.22	D1, D7	SJM
1301089-06	C	Naphthalene	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.001	1.22	D1, D7	SJM
1301089-06	C	n-Decane	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.002	1.22	D1, D7	SJM
1301089-06	C	Nitrobenzene	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.003	3.66	D1, D7	SJM
1301089-06	C	N-Nitrosodimethylamine	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.004	3.66	D1, D7	SJM
1301089-06	C	N-Nitroso-di-n-propylamine	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.001	1.22	D1, D7	SJM
1301089-06	C	N-Nitrosodiphenylamine	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.002	1.22	D1, D7, S7	SJM
1301089-06	C	n-Octadecane	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.002	1.22	D1, D7	SJM
1301089-06	C	Pentachlorophenol	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.003	3.66	D1, D7, N1	SJM
1301089-06	C	Phenanthrene	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.001	1.22	D1, D7	SJM
1301089-06	C	Phenol	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.002	3.66	D1, D7, N1	SJM
1301089-06	C	Pyrene	01/11/13 6:00	EPA 625	2/27/13 19:31	**ND**	mg/kg dry	0.001	1.22	D1, D7	SJM
1301089-06	C	1,2-Diphenylhydrazine	01/11/13 6:00	EPA 8270C	2/27/13 19:31	**ND**	mg/kg dry	0.02	19.03	D1	SJM
1301089-06	C	Silver	01/11/13 6:00	EPA 6010B	1/25/13 10:53	**5.94**	mg/kg dry	0.569	1.71		MLB
1301089-06	C	% Solids	01/11/13 6:00	SM 2540G	1/12/13 12:47	**6.57**	%		0.01		JVR
1301089-06	C	Arsenic	01/11/13 6:00	TCLP/EPA 6010B	2/22/13 9:45	**ND**	mg/L	0.0159	0.03		MLB
1301089-06	C	Barium	01/11/13 6:00	TCLP/EPA 6010B	2/22/13 9:45	**0.791**	mg/L	0.000440	0.03		MLB
1301089-06	C	Cadmium	01/11/13 6:00	TCLP/EPA 6010B	2/22/13 9:45	**ND**	mg/L	0.00920	0.01		MLB
1301089-06	C	Chromium	01/11/13 6:00	TCLP/EPA 6010B	2/22/13 9:45	**0.00403**	mg/L	0.00248	0.03	J	MLB
1301089-06	C	Lead	01/11/13 6:00	TCLP/EPA 6010B	2/22/13 12:03	**ND**	mg/L	0.0176	0.03		MLB

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1301089-06	C	Mercury	01/11/13 6:00	TCLP/EPA 7470	2/14/13 9:03	**ND**	mg/L	0.000150	0.00		DDO
1301089-06	C	Chlordane	01/11/13 6:00	TCLP/EPA 8270C	2/6/13 14:41	**ND**	ug/L	1.38	8.00	D1, D7	mam-z
1301089-06	C	Endrin	01/11/13 6:00	TCLP/EPA 8270C	2/6/13 14:41	**ND**	ug/L	0.200	2.00	D1, D7	mam-z
1301089-06	C	gamma-BHC (Lindane)	01/11/13 6:00	TCLP/EPA 8270C	2/6/13 14:41	**ND**	ug/L	0.270	2.00	D1, D7	mam-z
1301089-06	C	Heptachlor	01/11/13 6:00	TCLP/EPA 8270C	2/6/13 14:41	**ND**	ug/L	0.270	2.00	D1, D7	mam-z
1301089-06	C	Heptachlor Epoxide	01/11/13 6:00	TCLP/EPA 8270C	2/6/13 14:41	**ND**	ug/L	0.290	2.00	D1, D7	mam-z
1301089-06	C	Methoxychlor	01/11/13 6:00	TCLP/EPA 8270C	2/6/13 14:41	**ND**	ug/L	0.270	2.00	D1, D7	mam-z
1301089-06	C	Toxaphene	01/11/13 6:00	TCLP/EPA 8270C	2/6/13 14:41	**ND**	ug/L	3.79	24.00	D1, D7	mam-z
1301089-06	C	1,1-Dichloroethene	01/11/13 6:00	TCLP/EPA 8260B	1/25/13 20:11	**ND**	ug/L	0.0700	0.50		DLC
1301089-06	C	1,2-Dichloroethane	01/11/13 6:00	TCLP/EPA 8260B	1/25/13 20:11	**ND**	ug/L	0.120	0.50		DLC
1301089-06	C	1,4-Dichlorobenzene	01/11/13 6:00	TCLP/EPA 8260B	1/25/13 20:11	**0.380**	ug/L	0.170	0.50	J	DLC
1301089-06	C	Benzene	01/11/13 6:00	TCLP/EPA 8260B	1/25/13 20:11	**ND**	ug/L	0.100	0.50		DLC
1301089-06	C	Carbon Tetrachloride	01/11/13 6:00	TCLP/EPA 8260B	1/25/13 20:11	**ND**	ug/L	0.0600	0.50		DLC
1301089-06	C	Chlorobenzene	01/11/13 6:00	TCLP/EPA 8260B	1/25/13 20:11	**ND**	ug/L	0.110	0.50		DLC
1301089-06	C	Chloroform	01/11/13 6:00	TCLP/EPA 8260B	1/25/13 20:11	**ND**	ug/L	0.110	0.50		DLC
1301089-06	C	Hexachlorobutadiene	01/11/13 6:00	TCLP/EPA 8260B	1/25/13 20:11	**ND**	ug/L	0.500	1.00		DLC
1301089-06	C	Methyl Ethyl Ketone	01/11/13 6:00	TCLP/EPA 8260B	1/25/13 20:11	**10.8**	ug/L	0.0600	0.50		DLC
1301089-06	C	Tetrachloroethene	01/11/13 6:00	TCLP/EPA 8260B	1/25/13 20:11	**ND**	ug/L	0.0600	0.50		DLC
1301089-06	C	Trichloroethene	01/11/13 6:00	TCLP/EPA 8260B	1/25/13 20:11	**ND**	ug/L	0.0900	0.50		DLC
1301089-06	C	Vinyl chloride	01/11/13 6:00	TCLP/EPA 8260B	1/25/13 20:11	**ND**	ug/L	0.0500	0.50		DLC
1301089-06	C	Selenium	01/11/13 6:00	TCLP/EPA 6010B	2/22/13 12:03	**0.0181**	mg/L	0.0114	0.03	J	MLB
1301089-06	C	1,4-Dichlorobenzene	01/11/13 6:00	TCLP/EPA 8270C	2/1/13 17:33	**ND**	ug/L	0.810	20.00		SJM
1301089-06	C	2,4,5-Trichlorophenol	01/11/13 6:00	TCLP/EPA 8270C	2/1/13 17:33	**ND**	ug/L	8.64	100.00		SJM
1301089-06	C	2,4,6-Trichlorophenol	01/11/13 6:00	TCLP/EPA 8270C	2/1/13 17:33	**ND**	ug/L	4.72	50.00		SJM
1301089-06	C	2,4-Dinitrotoluene	01/11/13 6:00	TCLP/EPA 8270C	2/1/13 17:33	**ND**	ug/L	7.46	100.00		SJM
1301089-06	C	2-Methylphenol	01/11/13 6:00	TCLP/EPA 8270C	2/1/13 17:33	**ND**	ug/L	0.510	20.00		SJM
1301089-06	C	3 & 4-Methylphenol	01/11/13 6:00	TCLP/EPA 8270C	2/1/13 17:33	**ND**	ug/L	1.81	20.00		SJM
1301089-06	C	Hexachlorobenzene	01/11/13 6:00	TCLP/EPA 8270C	2/1/13 17:33	**ND**	ug/L	1.71	20.00		SJM
1301089-06	C	Hexachlorobutadiene	01/11/13 6:00	TCLP/EPA 8270C	2/1/13 17:33	**ND**	ug/L	1.19	20.00		SJM
1301089-06	C	Hexachloroethane	01/11/13 6:00	TCLP/EPA 8270C	2/1/13 17:33	**ND**	ug/L	0.720	20.00		SJM
1301089-06	C	Nitrobenzene	01/11/13 6:00	TCLP/EPA 8270C	2/1/13 17:33	**ND**	ug/L	0.760	20.00		SJM
1301089-06	C	Pentachlorophenol	01/11/13 6:00	TCLP/EPA 8270C	2/1/13 17:33	**ND**	ug/L	20.2	250.00		SJM
1301089-06	C	Pyridine	01/11/13 6:00	TCLP/EPA 8270C	2/1/13 17:33	**ND**	ug/L	1.62	20.00		SJM
1301089-06	C	Silver	01/11/13 6:00	TCLP/EPA 6010B	2/22/13 9:45	**ND**	mg/L	0.00172	0.00		MLB
1301089-06	C	Thallium	01/11/13 6:00	EPA 6010B	1/25/13 15:51	**ND**	mg/kg dry	9.75	17.11		MLB
1301089-06	C	Zinc	01/11/13 6:00	EPA 6010B	1/25/13 14:44	**939**	mg/kg dry	1.91	17.11		MLB

Final Effluent #3 (20001-7030)

CL Ceriodaphnia dubia Reproduction

1301050-01	C	LOEC % Effluent	01/07/13 9:00	EPA 1002	1/8/13 13:30	**NC**	N/A	1.0	1.0		OTHER
1301050-01	C	NOEC % Effluent	01/07/13 9:00	EPA 1002	1/8/13 13:30	**100**	N/A	1.0	1.0		OTHER
1301050-01	C	TUc (IC25 Based)	01/07/13 9:00	EPA 1002	1/8/13 13:30	**NC**	N/A	1.0	1.0		OTHER
1301050-01	C	TUc (NOEC Based)	01/07/13 9:00	EPA 1002	1/8/13 13:30	**1.0**	N/A	1.0	1.0		OTHER

* Analysis Performed by:Bio-Aquatic Testing, Inc. - See attached contract lab report for official results.

CL Ceriodaphnia dubia Survival

1301050-01	C	LOEC % Effluent	01/07/13 9:00	EPA 1002	1/8/13 13:30	**NC**	N/A	1.0	1.0		OTHER
1301050-01	C	NOEC % Effluent	01/07/13 9:00	EPA 1002	1/8/13 13:30	**100**	N/A	1.0	1.0		OTHER
1301050-01	C	TUc (IC25 Based)	01/07/13 9:00	EPA 1002	1/8/13 13:30	**NC**	N/A	1.0	1.0		OTHER
1301050-01	C	TUc (NOEC Based)	01/07/13 9:00	EPA 1002	1/8/13 13:30	**1.0**	N/A	1.0	1.0		OTHER

* Analysis Performed by:Bio-Aquatic Testing, Inc. - See attached contract lab report for official results.

CL Pimephales promelas Growth

1301050-01	C	LOEC % Effluent	01/07/13 9:00	EPA 1000	1/8/13 15:10	**NC**	N/A	1.0	1.0		OTHER
1301050-01	C	NOEC % Effluent	01/07/13 9:00	EPA 1000	1/8/13 15:10	**100**	N/A	1.0	1.0		OTHER
1301050-01	C	TUc (IC25 Based)	01/07/13 9:00	EPA 1000	1/8/13 15:10	**NC**	N/A	1.0	1.0		OTHER
1301050-01	C	TUc (NOEC Based)	01/07/13 9:00	EPA 1000	1/8/13 15:10	**1.0**	N/A	1.0	1.0		OTHER

* Analysis Performed by:Bio-Aquatic Testing, Inc. - See attached contract lab report for official results.

CL Pimephales promelas Survival

Qualifier Definitions

A	Absent
B1	Target analyte detected in method blank at or above the method reporting limit.
B4	Target analyte detected in blank at or above method acceptance criteria.
D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of target analyte.
D7	Minimum Reporting Limit adjusted to reflect sample dilution.
DRY	Dry Well
J	Concentration estimated. Analyte was detected below laboratory minimum reporting limit (MRL) but above MDL.
L3	Associated LFB recovery above acceptance limits. See case narrative.
L4	Associated LFB recovery below acceptance limits. See case narrative.
M1	Matrix spike recovery was high; the associated blank spike recovery was acceptable.
M1a	MS recovery high, LFB/CCC recovery acceptable.
M2	Matrix spike recovery was low; the associated blank spike recovery was acceptable.
M2a	MS recovery low, LFB/CCC recovery acceptable.
M5	Analyte concentration was determined by the method of standard addition (MSA).
N1	See case narrative.
N7	Additional analysis was not performed based on the "Total" result which was below the requested analyte's MCL/Action level/Trigger Level.
NA	Not Analyzed
NC	Not Calculable
PC3	Semi-quantitation is included in the case narrative.
R1	RDP/RSD exceeded the method acceptance limit. See case narrative.
R13	MS/MSD RPD exceeded method acceptance limit. Matrix spike recovery was outside the acceptance criteria. Batch precision and accuracy were demonstrated.
R4	MS/MSD RPD exceeded the method acceptance limit. Recovery met acceptance criteria.
R8	Sample RPD exceeded the method acceptance limit.
S7	Surrogate recovery was below laboratory and method acceptance limits. Unable to confirm matrix effect.
V1	CCC or CCV recovery above acceptance limits. Analyte not detected in sample.
V9	CCV recovery was below method acceptance limits.

General Notes and Definitions

C	Sample Type - Composite
D	Sample Type - Discrete
DD	Sample Type - Discrete Duplicate
ND	Analyte NOT DETECTED at or above the reporting limit (MDL)
NR	Not Reported
DET	Analyte DETECTED
DRY	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
Analysis Date	Analysis Date represents the final reading date.
Field Results	Field Results performed by "SMPLR" (Sampler), are not subject to approval of Laboratory Director.

Solids, Total Volatile	Used for process control samples only.
RE	Re-Analysis has been performed.

Case Narrative(s)

1301089-05

This sample was extracted for EPA Method 625 Pesticides on 01/15/13. Target analytes flagged with N1 for this method failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample.

1301089-05D
This sample was analyzed for EPA Method 624 and Method 8260. Target compounds flagged with N1 for this method failed precision and/or accuracy due to matrix interferences inherent of the sample.

1301089-06H
This sample was analyzed for EPA Method 624 and Method 8260. Target compounds flagged with N1 for this method failed precision and/or accuracy due to matrix interferences inherent of the sample.

1301089-04F
This sample was analyzed for EPA Method 624 and Method 8260. Target compounds flagged with N1 for this method failed precision and/or accuracy due to matrix interferences inherent of the sample.

1301089-02

This sample was analyzed for EPA Method 625. Target compounds flagged with R1 for this method failed precision due to problems encountered during sample preparation.

1301089-04
1301089-06

This sample was extracted for EPA Method 625 Semi-volatiles on. 01/18/13 Target analytes flagged with N1 failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample.

Semi-Quantitation
Method:
1301089-04

Compound Name	Concentration-mg/kg
Benzeneacetic Acid	20
Tetradecanoic Acid	20
Palmitic Acid	5054
9,12-Octadecadienoic Acid, ZZ-	4
Oleic Acid	2675
Stearic Acid	913
Squalene	10
Cholestanol	18

Semi-Quantitation
Method:
1301089-06

Compound Name	Concentration-mg/kg
Tetradecanoic Acid	12
Palmitic Acid	2838
Oleic Acid	1583
Stearic Acid	460
Squalene	9

1301089-05

This sample was extracted for EPA Method 625 Semi-volatiles on. 01/18/13 Target analytes flagged with N1 failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample.

Semi-Quantitation
Method:

1301089-05

Compound Name	Concentration-ug/L
2-Butoxyethanol	61
Benzyl Alcohol	61
1-(2-Butoxyethoxy)ethanol	11
Benzoic Acid	47
.alpha.-Terpineol	11
Benzeneacetic Acid	54
Indole	9
n-Decanoic Acid	7
Dodecanoic Acid	10
1-Dodecanol	5
Tetradecanoic Acid	19
Caffeine	26
Palmitic Acid	3641
9,12-Octadecadienoic Acid, ZZ-	8
Oleic Acid	4277
Stearic Acid	1396
Squalene	20

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1301082-02

SITE & LOCATION: Ina Road WRF - Raw Influent

SITE-LOCATION NUMBER: 20001-0130 (XXXXX-XXXX)

SAMPLE START DATE: (MM / DD / YYYY)

SAMPLE START TIME: (24 Hour Clock)

SUBMITTER: CRAO/Water Quality

SAMPLE END DATE: 01 / 10 / 2013 (MM / DD / YYYY)

SAMPLE END TIME: 1200 (24 Hour Clock)

SAMPLER: Goodman, Harney (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ☐ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ☐ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐	**WET METHODS**	D	C
Cobalt	☐	☐	Ammonia as N	☐	☐
Copper	☐	☐	Chloride	☐	☐
Hardness	☐	☐	Cyanide, Total	■	☐
Iron	☐	☐	Cyanide, Amenable	☐	☐
Lead	☐	☐	Fluoride	☐	☐
Magnesium	☐	☐	Ignitability	☐	☐
Manganese	☐	☐	Nitrate as N	☐	☐
Mercury	☐	☐	Nitrite as N	☐	☐
Molybdenum	☐	☐	Nitrate/Nitrite as N	☐	☐
Nickel	☐	☐	Nitrogen, Total Kjeldahl	☐	☐
Potassium	☐	☐	Nitrogen, Total as N	☐	☐
Selenium	☐	☐	Orthophosphate as P	☐	☐
Silver	☐	☐	Phosphorus, Total as P	☐	☐
Sodium	☐	☐	Sulfate	☐	☐
Strontium	☐	☐	Sulfide	☐	☐
Thallium	☐	☐	Turbidity	☐	☐
Tin	☐	☐			

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐
MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐
EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐
OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:

# of Bottles Delivered: 1 GOS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	[signature]	01-10-13	1302
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	4	°C
Initials:	GOS	
Non-Preserved		#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH	1	#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:

	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☒
Received from a refrigerator?	☐	☒	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-0013-550 (10/10)

CHAIN OF CUSTODY FORM

[ ] Phoenix - 4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303
[ ] Tucson - 1870 W. Prince Road, Suite 59, Tucson, AZ 85705 (520) 807-3801 FAX (520) 807-3803
[ ] Las Vegas - 6000 S Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

Page 1 of 1

Client Name/Address: Pima County CRAO Lab, 3035 W El Camino Del Cerro, Tucson AZ 85745

Project/PO Number: Ina LL Hg, TO# 13-22441

Project Manager: Nancy Powell

Phone Number: 520-724-6183

Sampler: Andrea Horney

Fax Number: 520-724-6071

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	LL Hg EPA 1631	LL Hg EPA 1631 blank	LL Hg EPA 1631 dissolved	LL Hg EPA 1631 dissolved blank						Special Instructions
Ina Rd WRF - Final effluent 13	WW	clear vials	2 bags	01-10-13	1140	none	1	1	1	1						discrete.
20001-7030 1301082-01																Please filter
																dissolved sample.

Relinquished By:	Date/Time:	Received By:	Date/Time:	Turnaround Time: (Check)
	01-10-13 #1302		01-10-13 1302	same day ____ 72 hours ____
	01-10-13 1450		1-10-13 1450	24 hours ____ 5 days ____
				48 hours ____ normal ✓
Relinquished By:	Date/Time:	Received in Lab By:	Date/Time:	Sample Integrity: (Check)
				intact ____ on ice ____

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-0013-550 (10/10)

CHAIN OF CUSTODY FORM

[ ] Phoenix - 4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303
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[ ] Las Vegas - 6000 S Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

Client Name/Address: Pima County CRAO Lab, 3035 W El Camino Del Cerro, Tucson AZ 85745

Project/PO Number: Ina LL Hg, DO# 13-22441

Project Manager: Nancy Powell

Phone Number: 520-724-6183

Sampler: Andrea Horney

Fax Number: 520-724-6071

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	LL Hg EPA 1631	LL Hg EPA 1631 blank	LL Hg EPA 1631 dissolved	LL Hg EPA 1631 dissolved blank						Special Instructions
Ina Rd WRF - Final effluent B	WW	clear vials	2 bags	01-10-13	1140	none	1	1	1	1						discrete.
20001-7030 1301082-01																Please Filter
																dissolved sample.

Relinquished By: Andrea Horney — Date/Time: 01-10-13 1302 (Received By: 01-10-13 1302)

Relinquished By: 01-10-13 1450 — Received By: 1-10-13 1450

Relinquished By: — Date/Time: — Received in Lab By: — Date/Time:

Turnaround Time: (Check)
same day ____ 72 hours ____
24 hours ____ 5 days ____
48 hours ____ normal ✓

Sample Integrity: (Check)
intact ____ on ice ____

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1301089-05

SITE & LOCATION: Ina Road WPCF - Raw Influent

SITE-LOCATION NUMBER: 20001-0130 (XXXXX-XXXX)

SAMPLE START DATE: 01/10/2013 (MM / DD / YYYY)

SAMPLE START TIME: 0600 (24 Hour Clock)

SUBMITTER: CRAO/Water Quali

SAMPLE END DATE: 01/11/2013 (MM / DD / YYYY)

SAMPLE END TIME: 0600 (24 Hour Clock)

SAMPLER: Goodman, Horney, Goodyear, Spir (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ■ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ☐ Biosolids ☐ Soil ■ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	■
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐	**WET METHODS**	D	C
Cobalt	☐	☐	Ammonia as N	☐	☐
Copper	☐	☐	Chloride	☐	☐
Hardness	☐	☐	Cyanide, Total	☐	☐
Iron	☐	☐	Cyanide, Amenable	☐	☐
Lead	☐	☐	Fluoride	☐	☐
Magnesium	☐	☐	Ignitability	☐	☐
Manganese	☐	☐	Nitrate as N	☐	☐
Mercury	☐	☐	Nitrite as N	☐	☐
Molybdenum	☐	☐	Nitrate/Nitrite as N	☐	☐
Nickel	☐	☐	Nitrogen, Total Kjeldahl	☐	☐
Potassium	☐	☐	Nitrogen, Total as N	☐	☐
Selenium	☐	☐	Orthophosphate as P	☐	☐
Silver	☐	☐	Phosphorus, Total as P	☐	☐
Sodium	☐	☐	Sulfate	☐	☐
Strontium	☐	☐	Sulfide	☐	☐
Thallium	☐	☐	Turbidity	☐	☐
Tin	☐	☐			

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	■
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	■
Purgeable Organics (GCMS)	☐	■
Semivolatile Organics (GCMS)	☐	■
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions: Discrete purgeables and Acrolein/Acrolynitrile will be composited by lab. Acrolein/Acrylonitrile is pH adjusted,4-5 SU.

# of Bottles Delivered: 5 GOS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials: 12-17-12 lej

LAB USE ONLY

Sample Integrity/Preservation:		
Temperature:	4	°C
Initials:	GOS	
Non-Preserved	3	#
HNO_3	1	#
H_2SO_4		#
HCl	1	#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☒	☐
Received from a refrigerator?	☐	☒	☐

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	[signature]	01/10/2013	1530
[signature]	[signature]	01-11-13	1108
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1301089-04

SITE & LOCATION: Ina Road WRF - Bio-Solids Digester Sample Tap

SITE-LOCATION NUMBER: 20001-5000 (XXXXX-XXXX)

SAMPLE START DATE: 01/10/2013 (MM / DD / YYYY)

SAMPLE START TIME: 1230 (24 Hour Clock)

SUBMITTER: CRAO/Water Quality

SAMPLE END DATE: 01/11/2013 (MM / DD / YYYY)

SAMPLE END TIME: 0918 (24 Hour Clock)

SAMPLER: Goodman, Heinz, Goodhew, Speir (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ■ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ■ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	■
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐	**WET METHODS**	D	C
Cobalt	☐	☐	Ammonia as N	☐	☐
Copper	☐	☐	Chloride	☐	☐
Hardness	☐	☐	Cyanide, Total	☐	■
Iron	☐	☐	Cyanide, Amenable	☐	☐
Lead	☐	☐	Fluoride	☐	☐
Magnesium	☐	☐	Ignitability	☐	☐
Manganese	☐	☐	Nitrate as N	☐	☐
Mercury	☐	☐	Nitrite as N	☐	☐
Molybdenum	☐	■	Nitrate/Nitrite as N	☐	☐
Nickel	☐	☐	Nitrogen, Total Kjeldahl	☐	☐
Potassium	☐	☐	Nitrogen, Total as N	☐	☐
Selenium	☐	☐	Orthophosphate as P	☐	☐
Silver	☐	☐	Phosphorus, Total as P	☐	☐
Sodium	☐	☐	Sulfate	☐	☐
Strontium	☐	☐	Sulfide	☐	☐
Thallium	☐	☐	Turbidity	☐	☐
Tin	☐	☐			

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	■
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	■
Purgeable Organics (GCMS)	☐	■
Semivolatile Organics (GCMS)	☐	■
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricomutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	■
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:
The Lab shall composite the Purgeable Organic and Acrolein/Acrylonitrile samples.

# of Bottles Delivered: 7 GOS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials: 01-04-13 LEJ

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	[signature]	01/10/2013	1530
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	[signature]	01/11/2013	0800
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	[signature]	01-11-13	1108
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	8	°C
Initials:	GOS	
Non-Preserved	7	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☒	☐
Received from a refrigerator?	☐	☒	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1301089-06

SITE & LOCATION: Ina Road WRF - Thick to AvraGro

SITE-LOCATION NUMBER: 20001-5701 (XXXXX-XXXX)

SAMPLE START DATE: 01/10/2013 (MM / DD / YYYY)

SAMPLE START TIME: 0600 (24 Hour Clock)

SUBMITTER: CRAO/Water Quality

SAMPLE END DATE: 01/11/2013 (MM / DD / YYYY)

SAMPLE END TIME: 0600 (24 Hour Clock)

SAMPLER: Goodman, Horny, Goodhean, Speir (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ☐ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ■ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	■
Beryllium	☐	☐	TCLP Metals	☐	■
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐	**WET METHODS**	D	C
Cobalt	☐	☐	Ammonia as N	☐	☐
Copper	☐	☐	Chloride	☐	☐
Hardness	☐	☐	Cyanide, Total	☐	■
Iron	☐	☐	Cyanide, Amenable	☐	☐
Lead	☐	☐	Fluoride	☐	☐
Magnesium	☐	☐	Ignitability	☐	☐
Manganese	☐	☐	Nitrate as N	☐	☐
Mercury	☐	☐	Nitrite as N	☐	☐
Molybdenum	☐	■	Nitrate/Nitrite as N	☐	☐
Nickel	☐	☐	Nitrogen, Total Kjeldahl	☐	☐
Potassium	☐	☐	Nitrogen, Total as N	☐	☐
Selenium	☐	☐	Orthophosphate as P	☐	☐
Silver	☐	☐	Phosphorus, Total as P	☐	☐
Sodium	☐	☐	Sulfate	☐	☐
Strontium	☐	☐	Sulfide	☐	☐
Thallium	☐	☐	Turbidity	☐	☐
Tin	☐	☐			

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	■
Dioxin GC/SIM/MS Scan	☐	■
Organochlorine Pesticides & PCBs	☐	■
Purgeable Organics (GCMS)	☐	■
Semivolatile Organics (GCMS)	☐	■
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	■
TCLP Semivolatile Organics	☐	■
TCLP Volatile Organics	☐	■
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	■
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:
The Lab shall composite the Purgeable Organic and Acrolein/Acrylonitrile samples.

# of Bottles Delivered: 12 GOS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials: 12-17-12 lej

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	[signature]	01/10/2013	1530
[signature]	[signature]	01-11-13	1108
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	14	°C
Initials:	GOS	
Non-Preserved	12	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☒	☐
Received from a refrigerator?	☐	☒	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office (CRAO) Laboratory
3035 W. El Camino del Cerro, Tucson Arizona 85745-9750, Phone (520) 724-6200

Report Date: 06/27/2013
Laboratory License: AZO159

Sample Analysis Report

Ina Road WRF

April 2013

Sample Integrity

SAMPLE RECEIPT: Samples were received intact at the required temperature, unless otherwise noted with a data qualifier below. Please refer to the Chain of Custody for sample receipt details.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Pima County CRAO Laboratory Quality Manual.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS:

Notes and Definitions:

See attached

Case Narratives:

See attached

All results on this report intended for compliance submission must have the associated chain(s) of custody attached for the results to meet reporting requirements as per ADHS Laboratory licensure rules. If you have received this report for compliance purposes and it is not complete, please contact the Compliance and Regulatory Affairs Office for a final report in its entirety.

Reviewed By:

06/27/13
Date

Laboratory Director or Designee
Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1304269-01	C	Benzo[b]fluoranthene	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	1.57	4.00	D1, D7, N1	SJM
1304269-01	C	Benzo[ghi]perylene	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	1.78	4.00	D1, D7, N1	SJM
1304269-01	C	Benzo[k]fluoranthene	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	2.28	12.00	D1, D7, N1	SJM
1304269-01	C	bis(2-chloroethoxy)methane	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	1.06	4.00	D1, D7, N1	SJM
1304269-01	C	bis(2-chloroethyl)ether	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	0.99	4.00	D1, D7	SJM
1304269-01	C	bis(2-chloroisopropyl)ether	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	1.14	4.00	D1, D7	SJM
1304269-01	C	bis(2-ethylhexyl)phthalate	04/26/13 6:00	EPA 625	5/22/13 17:28	**7.29**	ug/L	2.67	12.00	D1, D7, N1	SJM
1304269-01	C	Butylbenzylphthalate	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	1.53	4.00	D1, D7, N1	SJM
1304269-01	C	Carbazole	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	1.27	4.00	D1, D7, N1	SJM
1304269-01	C	Chrysene	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	1.47	4.00	D1, D7, N1	SJM
1304269-01	C	Dibenzo(a,h)anthracene	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	1.87	4.00	D1, D7, N1	SJM
1304269-01	C	Diethyl phthalate	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	1.05	4.00	D1, D7, N1	SJM
1304269-01	C	Dimethyl phthalate	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	0.72	4.00	D1, D7, N1	SJM
1304269-01	C	Di-n-butyl phthalate	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	1.67	4.00	D1, D7, N1	SJM
1304269-01	C	Di-n-octyl phthalate	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	1.83	4.00	D1, D7, N1	SJM
1304269-01	C	Fluoranthene	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	1.45	4.00	D1, D7, N1	SJM
1304269-01	C	Fluorene	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	1.28	4.00	D1, D7, N1	SJM
1304269-01	C	Hexachlorobenzene	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	0.80	4.00	D1, D7, N1	SJM
1304269-01	C	Hexachlorobutadiene	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	1.19	4.00	D1, D7, N1	SJM
1304269-01	C	Hexachlorocyclopentadiene	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	2.59	12.00	D1, D7	SJM
1304269-01	C	Hexachloroethane	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	1.21	4.00	D1, D7	SJM
1304269-01	C	Indeno(1,2,3-cd)pyrene	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	2.25	12.00	D1, D7, N1	SJM
1304269-01	C	Isophorone	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	1.35	4.00	D1, D7, N1	SJM
1304269-01	C	Naphthalene	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	1.26	4.00	D1, D7, N1	SJM
1304269-01	C	n-Decane	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	1.66	4.00	D1, D7, N1	SJM
1304269-01	C	Nitrobenzene	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	2.86	12.00	D1, D7, N1	SJM
1304269-01	C	N-Nitrosodimethylamine	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	4.23	12.00	D1, D7	SJM
1304269-01	C	N-Nitroso-di-n-propylamine	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	1.13	4.00	D1, D7, N1	SJM
1304269-01	C	N-Nitrosodiphenylamine	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	1.83	4.00	D1, D7, N1	SJM
1304269-01	C	n-Octadecane	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	1.66	12.00	D1, D7	SJM
1304269-01	C	Pentachlorophenol	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	3.20	12.00	D1, D7, N1	SJM
1304269-01	C	Phenanthrene	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	1.15	4.00	D1, D7, N1	SJM
1304269-01	C	Phenol	04/26/13 6:00	EPA 625	5/22/13 17:28	**17.6**	ug/L	2.30	12.00	D1, D7, N1	SJM
1304269-01	C	Pyrene	04/26/13 6:00	EPA 625	5/22/13 17:28	**ND**	ug/L	1.29	4.00	D1, D7, N1	SJM
1304269-01	C	1,2-Diphenylhydrazine	04/26/13 6:00	EPA 8270C	5/22/13 17:28	**ND**	ug/L	1.23	4.00	D1, D7	SJM
1304269-01	C	Silver	04/26/13 6:00	EPA 200.8	4/30/13 17:08	**0.89**	ug/L	0.11	1.00	J	JB
1304269-01	C	Thallium	04/26/13 6:00	EPA 200.8	4/30/13 17:08	**ND**	ug/L	0.13	1.00		JB
1304269-01RE	C	Zinc	04/26/13 6:00	EPA 200.8	4/30/13 18:47	**122**	ug/L	0.90	5.00	D1	JB

Bio-Solids Digester Sample Tap (20001-5000)

1304252-01	D	Acrolein	04/25/13 10:10	EPA 624	4/25/13 15:21	**ND**	mg/kg dry	0.00111	10.75		ev
1304252-01	D	Acrylonitrile	04/25/13 10:10	EPA 624	4/25/13 15:21	**ND**	mg/kg dry	0.00116	10.75		ev
1304252-01	D	Antimony	04/25/13 10:10	EPA 6010B	5/3/13 12:10	**2.37**	mg/kg dry	1.66	6.73	J	MLB
1304252-01	D	Arsenic	04/25/13 10:10	EPA 6010B	5/2/13 15:46	**5.88**	mg/kg dry	2.58	6.73	J	MLB
1304252-01	D	Beryllium	04/25/13 10:10	EPA 6010B	5/2/13 15:46	**0.123**	mg/kg dry	0.0136	1.35	J	MLB
1304252-01	D	Cadmium	04/25/13 10:10	EPA 6010B	5/2/13 17:30	**1.41**	mg/kg dry	0.116	2.69	J	MLB
1304252-01	D	Chromium	04/25/13 10:10	EPA 6010B	5/2/13 15:46	**19.7**	mg/kg dry	0.206	6.73		MLB
1304252-01	D	Copper	04/25/13 10:10	EPA 6010B	5/3/13 11:30	**389**	mg/kg dry	0.373	6.73		MLB
1304252-01	D	Cyanide	04/25/13 10:10	EPA 9010C	5/1/13 8:35	**1.84**	mg/kg dry	0.323	1.34	M5	KKH
1304252-01	D	Lead	04/25/13 10:10	EPA 6010B	5/2/13 15:46	**8.60**	mg/kg dry	2.38	6.73		MLB
1304252-01	D	Mercury	04/25/13 10:10	EPA 7471A	5/7/13 9:41	**0.898**	mg/kg dry	0.102	0.27		DDO
1304252-01	D	Molybdenum	04/25/13 10:10	EPA 6010B	5/2/13 15:46	**10.1**	mg/kg dry	0.330	2.69		MLB
1304252-01	D	Nickel	04/25/13 10:10	EPA 6010B	5/2/13 15:46	**12.4**	mg/kg dry	1.53	6.73		MLB
1304252-01	D	4,4-DDD	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00006	0.0007	D1, D7	mam-z
1304252-01	D	4,4-DDE	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00005	0.0007	D1, D7	mam-z

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1304252-01	D	4,4-DDT	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00004	0.0014	D1, D7	mam-z
1304252-01	D	Aldrin	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00010	0.0007	D1, D7, L4, N1	mam-z
1304252-01	D	alpha-BHC	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00009	0.0007	D1, D7	mam-z
1304252-01	D	beta-BHC	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00010	0.0007	D1, D7	mam-z
1304252-01	D	Chlordane	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00070	0.01	D1, D7	mam-z
1304252-01	D	delta-BHC	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00008	0.0007	D1, D7	mam-z
1304252-01	D	Dieldrin	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00007	0.0007	D1, D7	mam-z
1304252-01	D	Endosulfan I	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00005	0.0007	D1, D7	mam-z
1304252-01	D	Endosulfan II	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00003	0.0003	D1, D7	mam-z
1304252-01	D	Endosulfan sulfate	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00005	0.0014	D1, D7	mam-z
1304252-01	D	Endrin	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00010	0.0007	D1, D7	mam-z
1304252-01	D	Endrin aldehyde	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00007	0.0007	D1, D7, N1	mam-z
1304252-01	D	gamma-BHC (Lindane)	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00009	0.0007	D1, D7	mam-z
1304252-01	D	Heptachlor	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00010	0.0007	D1, D7, N1	mam-z
1304252-01	D	Heptachlor Epoxide	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00011	0.0007	D1, D7, N1	mam-z
1304252-01	D	PCB 1016	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00010	0.0017	D1, D7	mam-z
1304252-01	D	PCB 1221	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00009	0.0017	D1, D7	mam-z
1304252-01	D	PCB 1232	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00016	0.0017	D1, D7	mam-z
1304252-01	D	PCB 1242	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00010	0.0017	D1, D7	mam-z
1304252-01	D	PCB 1248	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00016	0.0017	D1, D7	mam-z
1304252-01	D	PCB 1254	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00007	0.0017	D1, D7	mam-z
1304252-01	D	PCB 1260	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00025	0.0017	D1, D7	mam-z
1304252-01	D	Total PCBs	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00030	0.0017	D1, D7	mam-z
1304252-01	D	Toxaphene	04/25/13 10:10	EPA 625	5/3/13 18:29	**ND**	mg/kg dry	0.00508	0.03	D1, D7	mam-z
1304252-01	D	Methoxychlor	04/25/13 10:10	EPA 8270C	5/3/13 18:29	**ND**	mg/kg dry	0.00006	0.0007	D1, D7	mam-z
1304252-01	D	1,1,1-Trichloroethane	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.00006	0.0005	N1	DLC
1304252-01	D	1,1,2,2-Tetrachloroethane	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.00005	0.0005		DLC
1304252-01	D	1,1,2-Trichloroethane	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.00004	0.0005	N1	DLC
1304252-01	D	1,1-Dichloroethane	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.00005	0.0005		DLC
1304252-01	D	1,1-Dichloroethene	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.0002	0.0005		DLC
1304252-01	D	1,2-Dichlorobenzene	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.00006	0.0005		DLC
1304252-01	D	1,2-Dichloroethane	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.00006	0.0005		DLC
1304252-01	D	1,2-Dichloropropane	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.00007	0.0005		DLC
1304252-01	D	1,3-Dichlorobenzene	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.00006	0.0005		DLC
1304252-01	D	1,4-Dichlorobenzene	04/25/13 10:10	EPA 624	4/29/13 20:39	**0.172**	mg/kg dry	0.00006	0.0005		DLC
1304252-01	D	2-Chloroethyl vinyl ether	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.00006	0.0011		DLC
1304252-01	D	Benzene	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.00003	0.0005		DLC
1304252-01	D	Bromodichloromethane	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.00006	0.0005		DLC
1304252-01	D	Bromoform	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.00007	0.0005		DLC
1304252-01	D	Bromomethane	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.0001	0.0005		DLC
1304252-01	D	Carbon Tetrachloride	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.00009	0.0005	N1	DLC
1304252-01	D	Chlorobenzene	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.00002	0.0005		DLC
1304252-01	D	Chloroethane	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.0001	0.0005		DLC
1304252-01	D	Chloroform	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.00003	0.0005		DLC
1304252-01	D	Chloromethane	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.0001	0.0005		DLC
1304252-01	D	cis-1,3-Dichloropropene	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.00007	0.0005		DLC
1304252-01	D	Dibromochloromethane	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.00009	0.0005		DLC
1304252-01	D	Ethyl Benzene	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.00003	0.0005		DLC
1304252-01	D	Methylene Chloride	04/25/13 10:10	EPA 624	4/29/13 20:39	**0.258**	mg/kg dry	0.00005	0.0005		DLC
1304252-01	D	Tetrachloroethene	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.00005	0.0005		DLC
1304252-01	D	Toluene	04/25/13 10:10	EPA 624	4/29/13 20:39	**0.129**	mg/kg dry	0.00006	0.0005		DLC
1304252-01	D	Total Trihalomethanes	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.00009	0.0005		DLC
1304252-01	D	trans-1,2-Dichloroethene	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.0001	0.0005		DLC
1304252-01	D	trans-1,3-Dichloropropene	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.00006	0.0005		DLC
1304252-01	D	Trichloroethene	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.00005	0.0005		DLC
1304252-01	D	Trichlorofluoromethane	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.00007	0.0005	N1	DLC

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1304252-01	D	Vinyl chloride	04/25/13 10:10	EPA 624	4/29/13 20:39	**ND**	mg/kg dry	0.00005	0.0005		DLC
1304252-01	D	1,2,4-Trichlorobenzene	04/25/13 10:10	EPA 8260	4/29/13 20:39	**ND**	mg/kg dry	0.0003	0.0005		DLC
1304252-01	D	1,2-Dibromo-3-chloropropane	04/25/13 10:10	EPA 8260	4/29/13 20:39	**ND**	mg/kg dry	0.0002	0.0005		DLC
1304252-01	D	1,2-Dibromoethane	04/25/13 10:10	EPA 8260	4/29/13 20:39	**ND**	mg/kg dry	0.0001	0.0005		DLC
1304252-01	D	cis-1,2-Dichloroethene	04/25/13 10:10	EPA 8260	4/29/13 20:39	**ND**	mg/kg dry	0.0001	0.0005		DLC
1304252-01	D	m,p-Xylenes	04/25/13 10:10	EPA 8260	4/29/13 20:39	**ND**	mg/kg dry	0.0001	0.0005		DLC
1304252-01	D	o-Xylene	04/25/13 10:10	EPA 8260	4/29/13 20:39	**ND**	mg/kg dry	0.00007	0.0005		DLC
1304252-01	D	Styrene	04/25/13 10:10	EPA 8260	4/29/13 20:39	**ND**	mg/kg dry	0.0001	0.0005		DLC
1304252-01	D	Xylenes, total	04/25/13 10:10	EPA 8260	4/29/13 20:39	**ND**	mg/kg dry	0.0001	0.0005		DLC
1304252-01	D	Selenium	04/25/13 10:10	EPA 6010B	5/2/13 17:30	**4.43**	mg/kg dry	2.72	6.73	J	MLB
1304252-01	D	1,2,4-Trichlorobenzene	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7	SJM
1304252-01	D	1,2-Diphenylhydrazine	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7	SJM
1304252-01	D	2,3-Dichloroaniline	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7	SJM
1304252-01	D	2,4,6-Trichlorophenol	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7	SJM
1304252-01	D	2,4-Dichlorophenol	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7	SJM
1304252-01	D	2,4-Dimethylphenol	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.003	12.90	D1, D7, N1	SJM
1304252-01	D	2,4-Dinitrophenol	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.009	21.50	D1, D7, N1	SJM
1304252-01	D	2,4-Dinitrotoluene	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7	SJM
1304252-01	D	2,6-Dinitrotoluene	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.002	4.30	D1, D7	SJM
1304252-01	D	2-Chloronaphthalene	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7	SJM
1304252-01	D	2-Chlorophenol	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.002	4.30	D1, D7	SJM
1304252-01	D	2-Methyl-4,6-dinitrophenol	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.004	12.90	D1, D7, N1	SJM
1304252-01	D	2-Methylphenol	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.002	4.30	D1, D7, N1	SJM
1304252-01	D	2-Nitrophenol	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.002	12.90	D1, D7	SJM
1304252-01	D	3,3-Dichlorobenzidine	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.002	21.50	D1, D7	SJM
1304252-01	D	4-Bromophenyl phenyl ether	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7	SJM
1304252-01	D	4-Chloro-3-methylphenol	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7	SJM
1304252-01	D	4-Chlorophenyl phenyl ether	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7	SJM
1304252-01	D	4-Methylphenol	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.003	12.90	D1, D7, N1	SJM
1304252-01	D	4-Nitrophenol	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.005	12.90	D1, D7	SJM
1304252-01	D	Acenaphthene	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7	SJM
1304252-01	D	Acenaphthylene	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.0008	4.30	D1, D7	SJM
1304252-01	D	Anthracene	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7	SJM
1304252-01	D	Benzidine	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.02	75.25	D1, D7, N1	SJM
1304252-01	D	Benzo[a]anthracene	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7	SJM
1304252-01	D	Benzo[a]pyrene	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.002	4.30	D1, D7	SJM
1304252-01	D	Benzo[b]fluoranthene	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.002	4.30	D1, D7	SJM
1304252-01	D	Benzo[ghi]perylene	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.002	4.30	D1, D7	SJM
1304252-01	D	Benzo[k]fluoranthene	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.002	12.90	D1, D7	SJM
1304252-01	D	bis(2-chloroethoxy)methane	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7	SJM
1304252-01	D	bis(2-chloroethyl)ether	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7, N1	SJM
1304252-01	D	bis(2-chloroisopropyl)ether	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7, N1	SJM
1304252-01	D	bis(2-ethylhexyl)phthalate	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.003	12.90	D1, D7	SJM
1304252-01	D	Butylbenzylphthalate	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.002	4.30	D1, D7	SJM
1304252-01	D	Carbazole	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7, N1	SJM
1304252-01	D	Chrysene	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7	SJM
1304252-01	D	Dibenzo(a,h)anthracene	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.002	4.30	D1, D7	SJM
1304252-01	D	Diethyl phthalate	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7	SJM
1304252-01	D	Dimethyl phthalate	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.0007	4.30	D1, D7, N1	SJM
1304252-01	D	Di-n-butyl phthalate	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.002	4.30	D1, D7	SJM
1304252-01	D	Di-n-octyl phthalate	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.002	4.30	D1, D7	SJM
1304252-01	D	Fluoranthene	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7	SJM
1304252-01	D	Fluorene	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7	SJM
1304252-01	D	Hexachlorobenzene	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.0008	4.30	D1, D7	SJM
1304252-01	D	Hexachlorobutadiene	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7	SJM
1304252-01	D	Hexachlorocyclopentadiene	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.003	12.90	D1, D7	SJM

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1304252-01	D	Hexachloroethane	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7, N1	SJM
1304252-01	D	Indeno(1,2,3-cd)pyrene	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.002	12.90	D1, D7	SJM
1304252-01	D	Isophorone	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7	SJM
1304252-01	D	Naphthalene	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7	SJM
1304252-01	D	n-Decane	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.002	4.30	D1, D7, N1	SJM
1304252-01	D	Nitrobenzene	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.003	12.90	D1, D7	SJM
1304252-01	D	N-Nitrosodimethylamine	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.004	12.90	D1, D7, N1	SJM
1304252-01	D	N-Nitroso-di-n-propylamine	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7	SJM
1304252-01	D	N-Nitrosodiphenylamine	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.002	4.30	D1, D7	SJM
1304252-01	D	n-Octadecane	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.002	12.90	D1, D7, N1	SJM
1304252-01	D	Pentachlorophenol	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.003	12.90	D1, D7	SJM
1304252-01	D	Phenanthrene	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7	SJM
1304252-01	D	Phenol	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.002	12.90	D1, D7	SJM
1304252-01	D	Pyrene	04/25/13 10:10	EPA 625	5/22/13 16:51	**ND**	mg/kg dry	0.001	4.30	D1, D7	SJM
1304252-01	D	1,2-Diphenylhydrazine	04/25/13 10:10	EPA 8270C	5/22/13 16:51	**ND**	mg/kg dry	0.07	231.16	D1, D7	SJM
1304252-01	D	Silver	04/25/13 10:10	EPA 6010B	5/2/13 15:46	**5.62**	mg/kg dry	0.224	0.67		MLB
1304252-01	D	% Solids	04/25/13 10:10	SM 2540G	4/26/13 13:24	**1.86**	%		0.01		ETD
1304252-01	D	Thallium	04/25/13 10:10	EPA 6010B	5/2/13 17:30	**ND**	mg/kg dry	3.83	6.73		MLB
1304252-01	D	Zinc	04/25/13 10:10	EPA 6010B	5/2/13 15:46	**613**	mg/kg dry	0.750	6.73		MLB

Final Effluent #3 (20001-7030)

1304118-01	D	Ammonia	04/12/13 8:40	SM4500-NH3-D	4/12/13 13:10	**0.15**	mg/L	0.02	0.50	J	DDO
1304118-01	D	Temperature	04/12/13 8:40	SM2550B	4/12/13 8:40	**27.2**	°C		0.01		SMPLR
1304118-01	D	pH	04/12/13 8:40	SM4500 H B	4/12/13 8:40	**7.32**	pH Units				SMPLR
1304118-01	D	Temp at time of pH, °C	04/12/13 8:40	SM4500 H B	4/12/13 8:40	**26.5**	°C				SMPLR
CL Ceriodaphnia dubia Reproduction											
1304213-01	C	LOEC % Effluent	04/22/13 9:00	EPA 1002	4/23/13 11:45	**NC**	N/A	1.0	1.0		OTHER
1304213-01	C	NOEC % Effluent	04/22/13 9:00	EPA 1002	4/23/13 11:45	**100**	N/A	1.0	1.0		OTHER
1304213-01	C	TUc (IC25 Based)	04/22/13 9:00	EPA 1002	4/23/13 11:45	**NC**	N/A	1.0	1.0		OTHER
1304213-01	C	TUc (NOEC Based)	04/22/13 9:00	EPA 1002	4/23/13 11:45	**1.0**	N/A	1.0	1.0		OTHER
* Analysis Performed by:Bio-Aquatic Testing, Inc. - See attached contract lab report for official results.											
CL Ceriodaphnia dubia Survival											
1304213-01	C	LOEC % Effluent	04/22/13 9:00	EPA 1002	4/23/13 11:45	**NC**	N/A	1.0	1.0		OTHER
1304213-01	C	NOEC % Effluent	04/22/13 9:00	EPA 1002	4/23/13 11:45	**100**	N/A	1.0	1.0		OTHER
1304213-01	C	TUc (IC25 Based)	04/22/13 9:00	EPA 1002	4/23/13 11:45	**NC**	N/A	1.0	1.0		OTHER
1304213-01	C	TUc (NOEC Based)	04/22/13 9:00	EPA 1002	4/23/13 11:45	**1.0**	N/A	1.0	1.0		OTHER
* Analysis Performed by:Bio-Aquatic Testing, Inc. - See attached contract lab report for official results.											
CL Pimephales promelas Growth											
1304213-01	C	LOEC % Effluent	04/22/13 9:00	EPA 1000	4/23/13 17:45	**NC**	N/A	1.0	1.0		OTHER
1304213-01	C	NOEC % Effluent	04/22/13 9:00	EPA 1000	4/23/13 17:45	**100**	N/A	1.0	1.0		OTHER
1304213-01	C	TUc (IC25 Based)	04/22/13 9:00	EPA 1000	4/23/13 17:45	**NC**	N/A	1.0	1.0		OTHER
1304213-01	C	TUc (NOEC Based)	04/22/13 9:00	EPA 1000	4/23/13 17:45	**1.0**	N/A	1.0	1.0		OTHER
* Analysis Performed by:Bio-Aquatic Testing, Inc. - See attached contract lab report for official results.											
CL Pimephales promelas Survival											
1304213-01	C	LOEC % Effluent	04/22/13 9:00	EPA 1000	4/23/13 17:45	**NC**	N/A	1.0	1.0		OTHER
1304213-01	C	NOEC % Effluent	04/22/13 9:00	EPA 1000	4/23/13 17:45	**100**	N/A	1.0	1.0		OTHER
1304213-01	C	TUc (IC25 Based)	04/22/13 9:00	EPA 1000	4/23/13 17:45	**NC**	N/A	1.0	1.0		OTHER
1304213-01	C	TUc (NOEC Based)	04/22/13 9:00	EPA 1000	4/23/13 17:45	**1.0**	N/A	1.0	1.0		OTHER
* Analysis Performed by:Bio-Aquatic Testing, Inc. - See attached contract lab report for official results.											
CL Selenastrum capricornutum											
1304213-01	C	LOEC % Effluent	04/22/13 9:00	EPA 1003	4/23/13 18:50	**NC**	N/A	1.0	1.0		OTHER
1304213-01	C	NOEC % Effluent	04/22/13 9:00	EPA 1003	4/23/13 18:50	**100**	N/A	1.0	1.0		OTHER
1304213-01	C	TUc (IC25 Based)	04/22/13 9:00	EPA 1003	4/23/13 18:50	**NC**	N/A	1.0	1.0		OTHER
1304213-01	C	TUc (NOEC Based)	04/22/13 9:00	EPA 1003	4/23/13 18:50	**1.0**	N/A	1.0	1.0		OTHER
* Analysis Performed by:Bio-Aquatic Testing, Inc. - See attached contract lab report for official results.											

Qualifier Definitions

A	Absent
B4	Target analyte detected in blank at or above method acceptance criteria.
D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of target analyte.
D4	Minimum Reporting Limit (MRL) adjusted to reflect sample amount received and analyzed.
D7	Minimum Reporting Limit adjusted to reflect sample dilution.
DRY	Dry Well
J	Concentration estimated. Analyte was detected below laboratory minimum reporting limit (MRL) but above MDL.
L4	The associated blank spike recovery was below method acceptance limits.
M1	Matrix spike recovery was high; the associated blank spike recovery was acceptable.
M2	Matrix spike recovery was low; the associated blank spike recovery was acceptable.
M5	Analyte concentration was determined by the method of standard addition (MSA).
N1	See case narrative.
NC	Not Calculable
R1	RDP/RSD exceeded the method acceptance limit. See case narrative.
R4	MS/MSD RPD exceeded the method acceptance limit. Recovery met acceptance criteria.

General Notes and Definitions

C	Sample Type - Composite
D	Sample Type - Discrete
DD	Sample Type - Discrete Duplicate
ND	Analyte NOT DETECTED at or above the reporting limit (MDL)
NR	Not Reported
DET	Analyte DETECTED
DRY	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
Analysis Date	Analysis Date represents the final reading date.
Field Results	Field Results performed by "SMPLR" (Sampler), are not subject to approval of Laboratory Director.
Solids, Total Volatile	Used for process control samples only.
RE	Re-Analysis has been performed.

Case Narrative(s)

1304252-01D

This sample was analyzed for EPA Method 624 and Method 8260 on 04/29/13. Target compounds flagged with N1 for this method failed matrix spike from the same analytical batch but the spike was performed on a different sample. DLC

1304252-01
This sample was extracted for EPA Method 625 Pesticides on 04/28/13. Target analytes flagged with N1 for this method failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. MAM-Z.

1304252-01

This sample was extracted for EPA Method 625 Semi-volatiles on. 04/30/13 Target analytes flagged with N1 failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample.
SJM

1304269-01E

This sample was analyzed for EPA Method 624 and Method 8260 on 04/29/13. Target compounds flagged with N1 for this method failed matrix spike from the same analytical batch but the spike was performed on a different sample. DLC

1304269-01 and 1304269-02
This sample was extracted for EPA Method 625 Pesticides on 04/28/13. Target analytes flagged with N1 for this method failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. MAM-Z.

1304269-02

This sample was analyzed for EPA Method 625. Target compounds flagged with R1 for this method failed precision due to problems encountered during sample preparation.
SJM

1304269-01

This sample was extracted for EPA Method 625 Semi-volatiles on. 05/02/13 Target analytes flagged with N1 failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample.
SJM

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1304252-01

SITE & LOCATION: Ina Road WRF - Digester Bio-Solids Sample Tap

SITE-LOCATION NUMBER: 20001-5000 (XXXXX-XXXX)

SAMPLE START DATE: — (MM / DD / YYYY)

SAMPLE START TIME: — (24 Hour Clock)

SUBMITTER: CRAO/Water Quality

SAMPLE END DATE: 04/25/2013 (MM / DD / YYYY)

SAMPLE END TIME: 1010 (24 Hour Clock)

SAMPLER: Goodman, Guebara (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ■ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ■ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C
Aluminum	☐	☐
Antimony	☐	☐
Arsenic	☐	☐
Barium	☐	☐
Beryllium	☐	☐
Boron	☐	☐
Cadmium	☐	☐
Calcium	☐	☐
Chromium	☐	☐
Cobalt	☐	☐
Copper	☐	☐
Hardness	☐	☐
Iron	☐	☐
Lead	☐	☐
Magnesium	☐	☐
Manganese	☐	☐
Mercury	☐	☐
Molybdenum *	■	☐
Nickel	☐	☐
Potassium	☐	☐
Selenium	☐	☐
Silver	☐	☐
Sodium	☐	☐
Strontium	☐	☐
Thallium	☐	☐
Tin	☐	☐

METALS	D	C
Titanium	☐	☐
Vanadium	☐	☐
Zinc	☐	☐
Priority Pollutant Metals *	■	☐
TCLP Metals	☐	☐
503 Metals **	☐	☐
Chromium, Hexavalent	☐	☐
Chromium, Trivalent	☐	☐

WET METHODS	D	C
Ammonia as N	☐	☐
Chloride	☐	☐
Cyanide, Total *	■	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	☐
Nitrite as N	☐	☐
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	☐
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile *	■	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs *	■	☐
Purgeable Organics (GCMS) *	■	☐
Semivolatile Organics (GCMS) *	■	☐
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricomutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total *	■	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:

# of Bottles Delivered: 7 (GS)

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials: 04-01-2013 | lej

Chain of Custody Record (Signatures Only)

Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	[signature]	04-25-13	1040

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	11	°C
Initials:	GS	
Non-Preserved	7	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☒	☐	☐
Received from a refrigerator?	☐	☒	☐

* Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)
** As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office (CRAO) Laboratory
2955 W. Calle Agua Nueva, Tucson Arizona 85745-9750, Phone (520) 724-6200

Report Date: 11/01/2013
Laboratory License: AZO159

Sample Analysis Report

Tres Rios WRF

August 2013

Sample Integrity

SAMPLE RECEIPT: Samples were received intact at the required temperature, unless otherwise noted with a data qualifier below. Please refer to the Chain of Custody for sample receipt details.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Pima County CRAO Laboratory Quality Manual.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS:

Notes and Definitions:

See attached

Case Narratives:

See attached

All results on this report intended for compliance submission must have the associated chain(s) of custody attached for the results to meet reporting requirements as per ADHS Laboratory licensure rules. If you have received this report for compliance purposes and it is not complete, please contact the Compliance and Regulatory Affairs Office for a final report in its entirety.

Reviewed By:

11/13/13
Date

Laboratory Director or Designee
Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

Sample Qualifiers

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Sample Qualifiers
Bio-Solids Digester Sample Tap	1308054-03	Biosolids	8/6/2013 12:05:00	8/6/2013 13:09:00	Q6
Final Effluent #3	1308054-02	Water	8/6/2013 11:10:00	8/6/2013 13:09:00	Q6
Final Effluent #3	1308042-01	Water	8/5/2013 8:30:00	8/5/2013 10:25:00	Q6
Final Effluent #3	1308052-04	Water	8/6/2013 11:10:00	8/6/2013 13:09:00	Q6
Final Effluent #3	1308052-03	Water	8/6/2013 11:10:00	8/6/2013 13:09:00	Q6
Final Effluent #3	1308052-02	Water	8/6/2013 11:10:00	8/6/2013 13:09:00	Q6
Final Effluent #3	1308052-01	Water	8/6/2013 11:10:00	8/6/2013 13:09:00	Q6
Well SC-07	1308173-02	Water	8/21/2013 9:25:00	8/21/2013 10:29:00	Q6
Raw Influent	1308054-01	Water	8/6/2013 10:30:00	8/6/2013 13:09:00	Q6

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1308078-03	C	1,2,4-Trichlorobenzene	08/09/13 6:00	EPA 8260B	8/13/13 16:49	ND	ug/L	0.08	0.50		dlc
1308078-03	C	1,2-Dibromo-3-chloropropane	08/09/13 6:00	EPA 8260B	8/13/13 16:49	ND	ug/L	0.09	0.50		dlc
1308078-03	C	1,2-Dibromoethane	08/09/13 6:00	EPA 8260B	8/13/13 16:49	ND	ug/L	0.04	0.50		dlc
1308078-03	C	cis-1,2-Dichloroethene	08/09/13 6:00	EPA 8260B	8/13/13 16:49	ND	ug/L	0.06	0.50		dlc
1308078-03	C	Styrene	08/09/13 6:00	EPA 8260B	8/13/13 16:49	ND	ug/L	0.18	2.00		dlc
1308078-03	C	Xylenes, total	08/09/13 6:00	EPA 8260B	8/13/13 16:49	ND	ug/L	0.06	4.00		dlc
1308078-03	C	Methoxychlor	08/09/13 6:00	EPA 8270C	8/30/13 16:39	ND	ug/L	0.0600	1.00	D7	mam-z
1308078-03	C	1,2-Diphenylhydrazine	08/09/13 6:00	EPA 8270C	9/12/13 18:12	ND	ug/L	1.23	4.00	D7	SJM

Bio-Solids Digester Sample Tap (20001-5000)

1308054-03	D	Antimony	08/06/13 12:05	EPA 6010B	8/20/13 14:00	ND	mg/kg dry	8.76	17.80		MLB
1308054-03	D	Arsenic	08/06/13 12:05	EPA 6010B	8/20/13 14:00	ND	mg/kg dry	15.6	17.80		MLB
1308054-03	D	Beryllium	08/06/13 12:05	EPA 6010B	8/20/13 14:00	0.160	mg/kg dry	0.0349	3.56	J	MLB
1308054-03	D	Cadmium	08/06/13 12:05	EPA 6010B	8/20/13 14:00	2.30	mg/kg dry	0.578	7.12	J	MLB
1308054-03	D	Chromium	08/06/13 12:05	EPA 6010B	8/20/13 14:00	31.0	mg/kg dry	0.617	17.80		MLB
1308054-03	D	Copper	08/06/13 12:05	EPA 6010B	8/20/13 15:41	484	mg/kg dry	0.801	17.80		MLB
1308054-03	D	Lead	08/06/13 12:05	EPA 6010B	8/20/13 15:41	16.3	mg/kg dry	7.97	17.80	J	MLB
1308054-03	D	Molybdenum	08/06/13 12:05	EPA 6010B	8/20/13 14:00	13.3	mg/kg dry	1.03	7.12		MLB
1308054-03	D	Nickel	08/06/13 12:05	EPA 6010B	8/20/13 14:00	20.4	mg/kg dry	7.58	17.80		MLB
1308054-03	D	Selenium	08/06/13 12:05	EPA 6010B	8/20/13 14:00	ND	mg/kg dry	12.7	17.80		MLB
1308054-03	D	Silver	08/06/13 12:05	EPA 6010B	8/20/13 14:00	4.81	mg/kg dry	0.961	1.78		MLB
1308054-03	D	Thallium	08/06/13 12:05	EPA 6010B	8/20/13 15:41	ND	mg/kg dry	10.7	17.80		MLB
1308054-03	D	Zinc	08/06/13 12:05	EPA 6010B	8/20/13 14:00	797	mg/kg dry	0.596	17.80		MLB
1308054-03	D	Mercury	08/06/13 12:05	EPA 7471A	8/14/13 10:32	1.15	mg/kg dry	0.121	0.32		DDO
1308054-03	D	Cyanide	08/06/13 12:05	EPA 9010C	8/8/13 12:34	1.28	mg/kg dry	0.383	1.60	J	KB
1308054-03	D	% Solids	08/06/13 12:05	SM 2540G	8/7/13 16:18	1.57	%		0.01		JAH
1308054-03	D	Acrolein	08/06/13 12:05	EPA 624	8/7/13 15:32	ND	mg/kg dry	0.00111	12.74		ev
1308054-03	D	Acrylonitrile	08/06/13 12:05	EPA 624	8/7/13 15:32	ND	mg/kg dry	0.00116	12.74		ev
1308054-03	D	1,3-Dichlorobenzene	08/06/13 12:05	EPA 624	8/9/13 22:58	0.140	mg/kg dry	0.00006	0.00064	D1, D7	DLC
1308054-03	D	1,4-Dichlorobenzene	08/06/13 12:05	EPA 624	8/9/13 22:58	0.345	mg/kg dry	0.00006	0.00064	D1, D7	DLC
1308054-03	D	Bromomethane	08/06/13 12:05	EPA 624	8/9/13 22:58	0.421	mg/kg dry	0.0001	0.00255	D1, D7	DLC
1308054-03	D	Toluene	08/06/13 12:05	EPA 624	8/9/13 22:58	0.421	mg/kg dry	0.00006	0.00064	D1, D7	DLC
1308054-03	D	1,1,1-Trichloroethane	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.00006	0.00064	D1, D7	DLC
1308054-03	D	1,1,2,2-Tetrachloroethane	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.00005	0.00064	D1, D7	DLC
1308054-03	D	1,1,2-Trichloroethane	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.00004	0.00064	D1, D7, N1	DLC
1308054-03	D	1,1-Dichloroethane	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.00005	0.00064	D1, D7	DLC
1308054-03	D	1,1-Dichloroethene	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.0002	0.00064	D1, D7	DLC
1308054-03	D	1,2-Dichlorobenzene	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.00006	0.00064	D1, D7	DLC
1308054-03	D	1,2-Dichloroethane	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.00006	0.00064	D1, D7	DLC
1308054-03	D	1,2-Dichloropropane	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.00007	0.00064	D1, D7	DLC
1308054-03	D	2-Chloroethyl vinyl ether	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.00006	0.00064	D1, D7	DLC
1308054-03	D	Benzene	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.00003	0.00064	D1, D7	DLC
1308054-03	D	Bromodichloromethane	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.00006	0.00064	D1, D7	DLC
1308054-03	D	Bromoform	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.00007	0.00064	D1, D7	DLC
1308054-03	D	Carbon Tetrachloride	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.00009	0.00064	D1, D7	DLC
1308054-03	D	Chlorobenzene	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.00002	0.00064	D1, D7	DLC
1308054-03	D	Chloroethane	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.0001	0.00064	D1, D7	DLC
1308054-03	D	Chloroform	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.00003	0.00064	D1, D7	DLC
1308054-03	D	Chloromethane	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.0001	0.00064	D1, D7	DLC
1308054-03	D	cis-1,3-Dichloropropene	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.00007	0.00064	D1, D7	DLC
1308054-03	D	Dibromochloromethane	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.00009	0.00064	D1, D7, N1	DLC
1308054-03	D	Ethyl Benzene	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.00003	0.00064	D1, D7	DLC
1308054-03	D	Methylene Chloride	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.00005	0.00255	D1, D7	DLC
1308054-03	D	Tetrachloroethene	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.00005	0.00064	D1, D7	DLC
1308054-03	D	Total Trihalomethanes	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.00009	0.00064	D1, D7	DLC
1308054-03	D	trans-1,2-Dichloroethene	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.0001	0.00064	D1, D7	DLC
1308054-03	D	trans-1,3-Dichloropropene	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.00006	0.00064	D1, D7	DLC
1308054-03	D	Trichloroethene	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.00005	0.00064	D1, D7	DLC
1308054-03	D	Trichlorofluoromethane	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.00007	0.00064	D1, D7	DLC
1308054-03	D	Vinyl chloride	08/06/13 12:05	EPA 624	8/9/13 22:58	ND	mg/kg dry	0.00005	0.00064	D1, D7	DLC
1308054-03	D	4,4-DDD	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00006	0.00061	D7	mam-z
1308054-03	D	4,4-DDE	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00005	0.00061	D7	mam-z
1308054-03	D	4,4-DDT	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00004	0.00061	D7	mam-z
1308054-03	D	Aldrin	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00010	0.00061	D7	mam-z
1308054-03	D	alpha-BHC	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00009	0.00061	D7	mam-z
1308054-03	D	beta-BHC	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00010	0.00061	D7	mam-z
1308054-03	D	Chlordane	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00070	0.01	D7	mam-z

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1308054-03	D	delta-BHC	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00008	0.00061	D7	mam-z
1308054-03	D	Dieldrin	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00007	0.00061	D7	mam-z
1308054-03	D	Endosulfan I	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00005	0.00061	D7	mam-z
1308054-03	D	Endosulfan II	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00003	0.00061	D7	mam-z
1308054-03	D	Endosulfan sulfate	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00005	0.00061	D7	mam-z
1308054-03	D	Endrin	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00010	0.00061	D7	mam-z
1308054-03	D	Endrin aldehyde	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00007	0.00061	D7	mam-z
1308054-03	D	gamma-BHC (Lindane)	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00009	0.00061	D7, N1	mam-z
1308054-03	D	Heptachlor	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00010	0.00061	D7	mam-z
1308054-03	D	Heptachlor Epoxide	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00011	0.00061	D7	mam-z
1308054-03	D	PCB 1016	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00010	0.00147	D7	mam-z
1308054-03	D	PCB 1221	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00009	0.00147	D7	mam-z
1308054-03	D	PCB 1232	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00016	0.00147	D7	mam-z
1308054-03	D	PCB 1242	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00010	0.00245	D7	mam-z
1308054-03	D	PCB 1248	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00016	0.00245	D7	mam-z
1308054-03	D	PCB 1254	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00007	0.00147	D7	mam-z
1308054-03	D	PCB 1260	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00025	0.00147	D7	mam-z
1308054-03	D	Total PCBs	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00030	0.00245	D7	mam-z
1308054-03	D	Toxaphene	08/06/13 12:05	EPA 625	8/30/13 19:11	ND	mg/kg dry	0.00508	0.03	D7	mam-z
1308054-03	D	1,2,4-Trichlorobenzene	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7, N1	SJM
1308054-03	D	1,2-Diphenylhydrazine	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7	SJM
1308054-03	D	2,3-Dichloroaniline	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7	SJM
1308054-03	D	2,4,6-Trichlorophenol	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7	SJM
1308054-03	D	2,4-Dichlorophenol	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7	SJM
1308054-03	D	2,4-Dimethylphenol	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.003	15.30	D1, D7, N1	SJM
1308054-03	D	2,4-Dinitrophenol	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.009	25.50	D1, D7, N1	SJM
1308054-03	D	2,4-Dinitrotoluene	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7	SJM
1308054-03	D	2,6-Dinitrotoluene	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.002	5.10	D1, D7	SJM
1308054-03	D	2-Chloronaphthalene	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7	SJM
1308054-03	D	2-Chlorophenol	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.002	5.10	D1, D7	SJM
1308054-03	D	2-Methyl-4,6-dinitrophenol	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.004	15.30	D1, D7, N1	SJM
1308054-03	D	2-Methylphenol	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.002	5.10	D1, D7	SJM
1308054-03	D	2-Nitrophenol	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.002	15.30	D1, D7	SJM
1308054-03	D	3,3-Dichlorobenzidine	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.002	15.30	D1, D7	SJM
1308054-03	D	4-Bromophenyl phenyl ether	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7	SJM
1308054-03	D	4-Chloro-3-methylphenol	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7	SJM
1308054-03	D	4-Chlorophenyl phenyl ether	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7	SJM
1308054-03	D	4-Methylphenol	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.003	15.30	D1, D7, L4, N1	SJM
1308054-03	D	4-Nitrophenol	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.005	15.30	D1, D7	SJM
1308054-03	D	Acenaphthene	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7	SJM
1308054-03	D	Acenaphthylene	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.0008	5.10	D1, D7	SJM
1308054-03	D	Anthracene	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7	SJM
1308054-03	D	Benzidine	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.02	89.25	D1, D7, N1	SJM
1308054-03	D	Benzo[a]anthracene	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7	SJM
1308054-03	D	Benzo[a]pyrene	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.002	5.10	D1, D7	SJM
1308054-03	D	Benzo[b]fluoranthene	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.002	5.10	D1, D7	SJM
1308054-03	D	Benzo[ghi]perylene	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.002	5.10	D1, D7	SJM
1308054-03	D	Benzo[k]fluoranthene	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.002	15.30	D1, D7	SJM
1308054-03	D	bis(2-chloroethoxy)methane	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7, N1	SJM
1308054-03	D	bis(2-chloroethyl)ether	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7, N1	SJM
1308054-03	D	bis(2-chloroisopropyl)ether	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7, N1	SJM
1308054-03	D	bis(2-ethylhexyl)phthalate	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.003	15.30	D1, D7	SJM
1308054-03	D	Butylbenzylphthalate	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.002	5.10	D1, D7	SJM
1308054-03	D	Carbazole	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7	SJM
1308054-03	D	Chrysene	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7	SJM
1308054-03	D	Dibenzo(a,h)anthracene	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.002	5.10	D1, D7	SJM
1308054-03	D	Diethyl phthalate	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7	SJM
1308054-03	D	Dimethyl phthalate	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.0007	5.10	D1, D7, N1	SJM
1308054-03	D	Di-n-butyl phthalate	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.002	5.10	D1, D7	SJM
1308054-03	D	Di-n-octyl phthalate	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.002	5.10	D1, D7	SJM
1308054-03	D	Fluoranthene	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7	SJM
1308054-03	D	Fluorene	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7	SJM
1308054-03	D	Hexachlorobenzene	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.0008	5.10	D1, D7	SJM
1308054-03	D	Hexachlorobutadiene	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7, N1	SJM
1308054-03	D	Hexachlorocyclopentadiene	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.003	15.30	D1, D7	SJM
1308054-03	D	Hexachloroethane	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7, N1	SJM
1308054-03	D	Indeno(1,2,3-cd)pyrene	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.002	15.30	D1, D7	SJM
1308054-03	D	Isophorone	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7, N1	SJM
1308054-03	D	Naphthalene	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.001	5.10	D1, D7	SJM
1308054-03	D	n-Decane	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.002	5.10	D1, D7, N1	SJM
1308054-03	D	Nitrobenzene	08/06/13 12:05	EPA 625	9/12/13 19:46	ND	mg/kg dry	0.003	15.30	D1, D7, N1	SJM

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1308054-03	D	N-Nitrosodimethylamine	08/06/13 12:05	EPA 625	9/12/13 19:46	**ND**	mg/kg dry	0.004	15.30	D1, D7, N1	SJM
1308054-03	D	N-Nitroso-di-n-propylamine	08/06/13 12:05	EPA 625	9/12/13 19:46	**ND**	mg/kg dry	0.001	5.10	D1, D7	SJM
1308054-03	D	N-Nitrosodiphenylamine	08/06/13 12:05	EPA 625	9/12/13 19:46	**ND**	mg/kg dry	0.002	5.10	D1, D7	SJM
1308054-03	D	n-Octadecane	08/06/13 12:05	EPA 625	9/12/13 19:46	**ND**	mg/kg dry	0.002	5.10	D1, D7	SJM
1308054-03	D	Pentachlorophenol	08/06/13 12:05	EPA 625	9/12/13 19:46	**ND**	mg/kg dry	0.003	15.30	D1, D7	SJM
1308054-03	D	Phenanthrene	08/06/13 12:05	EPA 625	9/12/13 19:46	**ND**	mg/kg dry	0.001	5.10	D1, D7	SJM
1308054-03	D	Phenol	08/06/13 12:05	EPA 625	9/12/13 19:46	**ND**	mg/kg dry	0.002	15.30	D1, D7, N1	SJM
1308054-03	D	Pyrene	08/06/13 12:05	EPA 625	9/12/13 19:46	**ND**	mg/kg dry	0.001	5.10	D1, D7	SJM
1308054-03	D	1,2,4-Trichlorobenzene	08/06/13 12:05	EPA 8260	8/9/13 22:58	**0.332**	mg/kg dry	0.0003	0.00064	D1, D7	DLC
1308054-03	D	1,2-Dibromo-3-chloropropane	08/06/13 12:05	EPA 8260	8/9/13 22:58	**ND**	mg/kg dry	0.0002	0.00064	D1, D7	DLC
1308054-03	D	1,2-Dibromoethane	08/06/13 12:05	EPA 8260	8/9/13 22:58	**ND**	mg/kg dry	0.0001	0.00064	D1, D7	DLC
1308054-03	D	cis-1,2-Dichloroethene	08/06/13 12:05	EPA 8260	8/9/13 22:58	**ND**	mg/kg dry	0.0001	0.00064	D1, D7	DLC
1308054-03	D	m,p-Xylenes	08/06/13 12:05	EPA 8260	8/9/13 22:58	**ND**	mg/kg dry	0.0001	0.00064	D1, D7	DLC
1308054-03	D	o-Xylene	08/06/13 12:05	EPA 8260	8/9/13 22:58	**ND**	mg/kg dry	0.00007	0.00064	D1, D7	DLC
1308054-03	D	Styrene	08/06/13 12:05	EPA 8260	8/9/13 22:58	**ND**	mg/kg dry	0.0001	0.00255	D1, D7	DLC
1308054-03	D	Xylenes, total	08/06/13 12:05	EPA 8260	8/9/13 22:58	**ND**	mg/kg dry	0.0001	0.01	D1, D7	DLC
1308054-03	D	Methoxychlor	08/06/13 12:05	EPA 8270C	8/30/13 19:11	**ND**	mg/kg dry	0.00006	0.00123	D7, N1	mam-z
1308054-03	D	1,2-Diphenylhydrazine	08/06/13 12:05	EPA 8270C	9/12/13 19:46	**ND**	mg/kg dry	0.08	325.42	D1, D7	SJM

Final Effluent #3 (20001-7030)

1308052-01	D	Temperature	08/06/13 11:10	SM2550B	8/6/13 11:10	**33.1**	°C		0.01		SMPLR
1308052-01	D	pH	08/06/13 11:10	SM4500 H B	8/6/13 11:10	**7.48**	pH Units				SMPLR
1308052-01	D	Temp at time of pH, °C	08/06/13 11:10	SM4500 H B	8/6/13 11:10	**32.7**	°C				SMPLR
1308052-01	D	Dissolved Oxygen	08/06/13 11:10	SM4500 O G	8/6/13 11:10	**6.8**	mg/L		0.10		SMPLR
1308190-01	D	Temperature	08/23/13 8:45	SM2550B	8/23/13 8:45	**31.5**	°C		0.01		SMPLR
1308190-01	D	pH	08/23/13 8:45	SM4500 H B	8/23/13 8:45	**7.49**	pH Units				SMPLR
1308190-01	D	Temp at time of pH, °C	08/23/13 8:45	SM4500 H B	8/23/13 8:45	**31**	°C				SMPLR
1308052-01	D	Chromium, Hexavalent	08/06/13 11:10	EPA 200.8		**NA**	ug/L		1.00	N7	
1308052-01	D	Mercury	08/06/13 11:10	EPA 245.7	8/16/13 10:53	**ND**	ng/L		5.00		DDO
1308052-01	D	Sulfide	08/06/13 11:10	Hach 8131	8/8/13 13:50	**ND**	mg/L	0.007	0.10		KKH
1308052-01	D	Cyanide	08/06/13 11:10	SM4500-CN-E	8/8/13 10:39	**3.99**	ug/L	1.20	5.00	J	KB
1308052-01	D	Ammonia	08/06/13 11:10	SM4500-NH3-D	8/7/13 14:51	**0.11**	mg/L	0.08	0.50	B4, J	KKH
1308052-02	D	Chromium (Dissolved)	08/06/13 11:10	EPA 200.8	8/19/13 16:24	**0.99**	ug/L	0.40	1.00	H6, J	JB
1308052-02	D	Mercury (Dissolved)	08/06/13 11:10	EPA 245.7	8/16/13 11:00	**ND**	ng/L		5.00	H6	DDO
1308052-03	FB	Mercury	08/06/13 11:10	EPA 245.7	8/16/13 10:48	**ND**	ng/L		5.00		DDO
1308052-04	FB	Mercury (Dissolved)	08/06/13 11:10	EPA 245.7	8/16/13 10:50	**ND**	ng/L		5.00	H6	DDO
1308054-02	D	Nitrate	08/06/13 11:10	Calculated	8/9/13 11:49	**3.05**	mg/L	0.05	0.20		DDO
1308054-02	D	Nitrogen Total Water	08/06/13 11:10	Calculated	8/13/13 11:50	**4.96**	mg/L	0.26	0.80		KKH
1308054-02	D	Antimony	08/06/13 11:10	EPA 200.8	8/22/13 14:36	**0.38**	ug/L	0.17	1.00	J	JB
1308054-02	D	Arsenic	08/06/13 11:10	EPA 200.8	8/22/13 14:36	**3.05**	ug/L	0.13	1.00		JB
1308054-02	D	Barium	08/06/13 11:10	EPA 200.8	8/22/13 14:36	**48.0**	ug/L	0.26	1.00		JB
1308054-02	D	Beryllium	08/06/13 11:10	EPA 200.8	8/22/13 14:36	**ND**	ug/L	0.22	1.00		JB
1308054-02	D	Cadmium	08/06/13 11:10	EPA 200.8	8/22/13 14:36	**ND**	ug/L	0.41	1.00		JB
1308054-02	D	Chromium	08/06/13 11:10	EPA 200.8	8/22/13 14:36	**0.44**	ug/L	0.40	1.00	J	JB
1308054-02	D	Copper	08/06/13 11:10	EPA 200.8	8/22/13 14:36	**4.23**	ug/L	0.66	1.00		JB
1308054-02	D	Lead	08/06/13 11:10	EPA 200.8	8/22/13 14:36	**0.18**	ug/L	0.11	1.00	J	JB
1308054-02	D	Nickel	08/06/13 11:10	EPA 200.8	8/22/13 14:36	**1.99**	ug/L	0.29	1.00		JB
1308054-02	D	Selenium	08/06/13 11:10	EPA 200.8	8/22/13 14:36	**ND**	ug/L	0.50	1.00		JB
1308054-02	D	Silver	08/06/13 11:10	EPA 200.8	8/22/13 14:36	**ND**	ug/L	0.11	1.00		JB
1308054-02	D	Thallium	08/06/13 11:10	EPA 200.8	8/22/13 14:36	**0.17**	ug/L	0.13	1.00	J	JB
1308054-02	D	Mercury	08/06/13 11:10	EPA 245.1	8/13/13 12:07	**ND**	ug/L	0.111	0.20		DDO
1308054-02	D	Total Kjeldahl Nitrogen	08/06/13 11:10	EPA 351.2	8/13/13 11:50	**1.91**	mg/L	0.26	0.80		KKH
1308054-02	D	Nitrate/Nitrite	08/06/13 11:10	EPA 353.2	8/9/13 11:49	**3.05**	mg/L	0.05	0.20		KB
1308054-02	D	Cyanide Amenable	08/06/13 11:10	SM 4500-CN-G	8/8/13 10:44	**NA**	ug/L	1.20	5.00	N7	KB
1308054-02	D	Cyanide	08/06/13 11:10	SM4500-CN-E	8/8/13 10:44	**1.61**	ug/L	1.20	5.00	J	KB
1308054-02	D	Fluoride	08/06/13 11:10	SM4500-F-C	8/26/13 14:35	**0.462**	mg/L	0.010	0.10		KKH
1308054-02	D	Nitrite	08/06/13 11:10	SM4500-NO2 B	8/7/13 13:32	**ND**	mg/L	0.02	0.20		DDO
1308054-02RE1	D	Zinc	08/06/13 11:10	EPA 200.8	8/22/13 18:09	**51.5**	ug/L	0.90	2.00	D1	JB
1308078-01	C	Nitrogen Total Water	08/09/13 6:00	Calculated	8/13/13 12:14	**10.0**	mg/L	0.26	0.80		KKH
1308078-01	C	Calcium	08/09/13 6:00	EPA 200.7	8/16/13 12:08	**62.9**	mg/L	0.04	4.00		MLB
1308078-01	C	Iron	08/09/13 6:00	EPA 200.7	8/23/13 15:39	**44.9**	ug/L	7.17	25.00		MLB
1308078-01	C	Magnesium	08/09/13 6:00	EPA 200.7	8/16/13 12:08	**10.8**	mg/L	0.002	2.00		MLB
1308078-01	C	Antimony	08/09/13 6:00	EPA 200.8	8/22/13 15:24	**0.44**	ug/L	0.17	1.00	J	JB
1308078-01	C	Arsenic	08/09/13 6:00	EPA 200.8	8/22/13 15:24	**3.13**	ug/L	0.13	1.00		JB
1308078-01	C	Beryllium	08/09/13 6:00	EPA 200.8	8/22/13 15:24	**ND**	ug/L	0.22	1.00		JB
1308078-01	C	Cadmium	08/09/13 6:00	EPA 200.8	8/22/13 15:24	**ND**	ug/L	0.41	1.00		JB
1308078-01	C	Chromium	08/09/13 6:00	EPA 200.8	8/22/13 15:24	**0.45**	ug/L	0.40	1.00	J	JB
1308078-01	C	Copper	08/09/13 6:00	EPA 200.8	8/22/13 15:24	**7.16**	ug/L	0.66	1.00		JB

Qualifier Definitions

A	Absent
B4	Target analyte detected in blank at or above method acceptance criteria.
D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of target analyte.
D7	Minimum Reporting Limit adjusted to reflect sample dilution.
H6	The filtration was not done within the required 15 minutes of sampling, the sample was filtered in the laboratory.
J	Concentration estimated. Analyte was detected below laboratory minimum reporting limit (MRL) but above MDL.
K6	Glucose/glutamic acid BOD/CBOD was below method acceptance criteria.
L4	The associated blank spike recovery was below method acceptance limits.
M1	Matrix spike recovery was high; the associated blank spike recovery was acceptable.
M2	Matrix spike recovery was low, the associated blank spike recovery was acceptable.
N1	See case narrative.
N7	Additional analysis was not performed based on the "Total" result which was below the requested analyte's MCL/Action level/Trigger Level.
NA	Not Analyzed
NC	Not Calculable
P	Present
Q2	Sample received with head space.
Q5	Sample received with inadequate chemical preservation, but preserved by the laboratory.
Q6	Sample was received above recommended temperature.
R1	RDP/RSD exceeded the method acceptance limit. See case narrative.
R4	MS/MSD RPD exceeded the method acceptance limit. Recovery met acceptance criteria.
S6	Surrogate recovery was below laboratory and method acceptance limits. Reextraction and/or reanalysis confirms low recovery caused by matrix effect.
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.

General Notes and Definitions

C	Sample Type - Composite
D	Sample Type - Discrete
DD	Sample Type - Discrete Duplicate
ND	Analyte NOT DETECTED at or above the reporting limit (MDL)
NR	Not Reported
DET	Analyte DETECTED
DRY	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
Analysis Date	Analysis Date represents the final reading date.
Field Results	Field Results performed by "SMPLR" (Sampler), are not subject to approval of Laboratory Director.
Solids, Total Volatile	Used for process control samples only.
RE	Re-Analysis has been performed.
FD	Field Duplicate

Case Narrative(s)

1308054-03
This sample was analyzed for EPA Method 624 and Method 8260 Volatiles on 08/09/13. Target analytes flagged with N1 failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. DLC

This sample was extracted for EPA Method 625 Pesticides on 08/12/13. Target analytes flagged with N1 for this method failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. MAM-Z. 09/05/13

This sample was extracted for EPA Method 625 Semi-volatiles on. 08/13/13 Target analytes flagged with N1 failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. In Addition, Benzidine and Hexachloroethane failed the matrix spike and blank spike. These analytes pass the calibration verification check and not detected in the sample.SJM

This sample was analyzed for EPA Method 625. Target compounds flagged with R1 for this method failed precision due to problems encountered during sample preparation. SJM

1308078-03
This sample was analyzed for EPA Method 624 VolatilesAcrolein on. 08/13/2013 Target analytes flagged with N1 failed the Matrix Spike from the same analysis batch but the spike was performed on a different sample.

This sample was extracted for EPA Method 625 Pesticides on 08/12/13. Target analytes flagged with N1 for this method failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. MAM-Z. 09/05/13

1308078-01 & 1308078-03
This sample was extracted for EPA Method 625 Semi-volatiles on. 08/13/13 Target analytes flagged with N1 failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. In Addition, Benzidine and Hexachloroethane failed the matrix spike and blank spike. These analytes pass the calibration verification check and not detected in the sample.SJM

1308078-01 & 1308078-03
This sample was analyzed for EPA Method 625. Target compounds flagged with R1 for this method failed precision due to

1308153-01
CCB's were not performed in the set for mercury but the data was bracketed by a valid ICB and a final BLK1. All samples in the set were ND or Trace so lack of carryover was demonstrated. 8/29/13 RA

1308153-01
This sample was analyzed for EPA Method 624 Volatiles on 8/26/13. Target analytes flagged with N1 failed the Matrix Spike from the same analysis batch but the spike was performed on a different sample.
DLC .

1308160-01 & 1308160-02
CCB's were not performed in the set for mercury but the data was bracketed by a valid ICB and a final BLK1. All samples in the set were ND or Trace so lack of carryover was demonstrated. 8/29/13 RA

1308160-01
This sample was extracted for EPA Method 625 Pesticides on 08/27/13. Target analytes flagged with N1 for this method failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. MAM-Z.

1308173-01 & 1308173-02
CCB's were not performed in the set for mercury but the data was bracketed by a valid ICB and a final BLK1. All samples in the set were ND or Trace so lack of carryover was demonstrated. 8/29/13 RA

1308173-01 & 1308173-02
This sample was extracted for EPA Method 625 Semi-volatiles on. 08/28/13 Target analytes flagged with N1 failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample.SJM

1308173-01 & 1308173-02
This sample was analyzed for EPA Method 625. Target compounds flagged with R1 for this method failed precision due to problems encountered during sample preparation. SJM

1308178-01 & 1308178-02
CCB's were not performed in the set for mercury but the data was bracketed by a valid ICB and a final BLK1. All samples in the set were ND or Trace so lack of carryover was demonstrated. 8/29/13 RA

1308178-01
This sample was analyzed for EPA Method 624 Volatiles on 08/22/13. Target analytes flagged with N1 failed the Matrix Spike from the same analysis batch but the spike was performed on a different sample. SM 09/11/13.
This sample was extracted for EPA Method 625 Pesticides on 08/27/13. Target analytes flagged with N1 for this method failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. MAM-Z. 09/11/13

1308178-01
This sample was extracted for EPA Method 625 Semi-volatiles on. 08/28/13 Target analytes flagged with N1 failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample.SJM

1308178-01
This sample was analyzed for EPA Method 625. Target compounds flagged with R1 for this method failed precision due to problems encountered during sample preparation. SJM

1308183-01 & 1308183-03
CCB's were not performed in the set for mercury but the data was bracketed by a valid ICB and a final BLK1. All samples in the set were ND or Trace so lack of carryover was demonstrated. 8/29/13 RA

1308183-01
This sample was analyzed for EPA Method 624 Volatiles on 08/22/13. Target analytes flagged with N1 failed the Matrix Spike from the same analysis batch but the spike was performed on a different sample.SM 09/11/13
This sample was extracted for EPA Method 625 Pesticides on 08/27/13. Target analytes flagged with N1 for this method failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. MAM-Z. 09/11/13.

1308183-01
This sample was analyzed for EPA Method 625. Target compounds flagged with R1 for this method failed precision due to problems encountered during sample preparation. SJM

1308183-01
EPA 625, Matrix spike and control both fail recovery for Benzidine. CVS passes.SJM

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1308054-03

SITE & LOCATION: Ina Road WRF - Digester Bio-Solids Sample Tap

SITE-LOCATION NUMBER: 20001-5000 (XXXXX-XXXX)

SAMPLE START DATE: (MM / DD / YYYY)

SAMPLE START TIME: (24 Hour Clock)

SUBMITTER: CRAO/Water Quality

SAMPLE END DATE: 8-6-13 (MM / DD / YYYY)

SAMPLE END TIME: 1305 (24 Hour Clock)

SAMPLER: GUEBARA, GROSMAN (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ■ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ■ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	■	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐			
Cobalt	☐	☐			
Copper	☐	☐			
Hardness	☐	☐			
Iron	☐	☐			
Lead	☐	☐			
Magnesium	☐	☐			
Manganese	☐	☐			
Mercury	☐	☐			
Molybdenum	■	☐			
Nickel	☐	☐			
Potassium	☐	☐			
Selenium	☐	☐			
Silver	☐	☐			
Sodium	☐	☐			
Strontium	☐	☐			
Thallium	☐	☐			
Tin	☐	☐			

WET METHODS	D	C
Ammonia as N	☐	☐
Chloride	☐	☐
Cyanide, Total	■	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	☐
Nitrite as N	☐	☐
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	☐
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	■	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	■	☐
Purgeable Organics (GCMS)	■	☐
Semivolatile Organics (GCMS)	■	☐
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	■	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions: TS split from cyanide at SR. GGS 08-06-13

# of Bottles Delivered 7-6 GGS 08-06-13 Transported on Ice ☒ YES ☐ NO

Septum Blank Prep Date & Initials: 7-16-13 KEJ

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
		08-06-13	1309
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	17	°C
Initials:	GGS	
Non-Preserved	7-6	#
HNO_3 GGS 08-06-13		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☒	☐	☐
Received from a refrigerator?	☐	☒	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office (CRAO) Laboratory
2955 W. Calle Agua Nueva, Tucson, Arizona 85745-9750, Phone (520) 724-6200

Report Date: 02/19/2014
Laboratory License: AZO159

Sample Analysis Report

Client:	CRAO	Work Order ID:	1312091
Project:	Tres Rios WRF	Lab Received Date:	12/11/13 12:35
Permit Type:	APP	Project Number:	20001

Sample Integrity

SAMPLE RECEIPT: Samples were received intact at the required temperature, unless otherwise noted with a data qualifier. Please refer to the Chain of Custody for sample receipt details.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Pima County CRAO Laboratory Quality Manual.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS:

All results on this report intended for compliance submission must have the associated chain(s) of custody attached for the results to meet reporting requirements as per ADHS Laboratory Licensure Rules. If you have received this report for compliance purposes and it is not complete, please contact the Compliance and Regulatory Affairs Office for a final report in its entirety.

Reviewed By:

Barbara Alessio

02/19/14

Laboratory Director or Designee
Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

Date

Sample ID: **1312091-01**

Site Location: Biosolids from Digesters

Site Number: 20001-5001

Sample Start Date/Time 12/11/2013 11:50:00

Sample End Date/Time 12/11/2013 11:50:00

Sampled By: Michael Silva

Parameter	Sample Type	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Data Qualifiers	Analyst	SubLab
Antimony	D	EPA 6010B	12/29/13 12:56	**ND**	mg/kg dry	4.73	9.61		MLB	
Arsenic	D	EPA 6010B	12/29/13 11:06	**ND**	mg/kg dry	8.41	9.61		MLB	
Beryllium	D	EPA 6010B	12/29/13 11:06	**0.151**	mg/kg dry	0.0188	1.92	J	MLB	
Cadmium	D	EPA 6010B	12/29/13 12:56	**2.59**	mg/kg dry	0.312	3.84	J	MLB	
Chromium	D	EPA 6010B	12/29/13 12:56	**31.4**	mg/kg dry	0.333	9.61		MLB	
Copper	D	EPA 6010B	12/29/13 12:56	**436**	mg/kg dry	0.432	9.61		MLB	
Lead	D	EPA 6010B	12/29/13 11:06	**18.3**	mg/kg dry	4.30	9.61		MLB	
Molybdenum	D	EPA 6010B	12/29/13 12:56	**12.5**	mg/kg dry	0.557	3.84		MLB	
Nickel	D	EPA 6010B	12/29/13 11:06	**15.5**	mg/kg dry	4.09	9.61		MLB	
Selenium	D	EPA 6010B	12/29/13 12:56	**ND**	mg/kg dry	6.86	9.61		MLB	
Silver	D	EPA 6010B	12/29/13 11:06	**4.83**	mg/kg dry	0.519	0.96		MLB	
Thallium	D	EPA 6010B	12/29/13 11:06	**ND**	mg/kg dry	5.80	9.61		MLB	
Zinc	D	EPA 6010B	12/29/13 12:56	**836**	mg/kg dry	0.322	9.61		MLB	
Mercury	D	EPA 7471A	12/29/13 14:07	**1.33**	mg/kg dry	0.0869	0.23		KKH	
Cyanide	D	EPA 9010C	12/17/13 10:08	**0.784**	mg/kg dry	0.276	1.15	D1, M5, R13, J	KB	
% Solids	D	SM 2540G	12/12/13 13:30	**2.18**	%		0.01		SJD	
Acrolein	D	EPA 624	12/12/13 15:29	**ND**	mg/kg dry	0.00111	10.00		ev	
Acrylonitrile	D	EPA 624	12/12/13 15:29	**ND**	mg/kg dry	0.00116	9.17	V1	ev	
2-Chloroethyl vinyl ether	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.0002	0.00046		sm	
1,2-Dichloroethane	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.0001	0.00046		sm	
1,2-Dichlorobenzene	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.0002	0.00046		sm	
1,1-Dichloroethene	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.00007	0.00046		sm	
1,1,1-Trichloroethane	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.00005	0.00046		sm	
Benzene	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.0001	0.00046		sm	
Carbon Tetrachloride	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.00006	0.00046		sm	
Total Trihalomethanes	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.00009	0.00046		sm	
Bromoform	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.00008	0.00046		sm	
Trichlorofluoromethane	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.00005	0.00046		sm	
Bromomethane	D	EPA 624	12/12/13 16:17	**0.101**	mg/kg dry	0.00009	0.00046		sm	
Toluene	D	EPA 624	12/12/13 16:17	**0.561**	mg/kg dry	0.00008	0.00046		sm	
Ethyl Benzene	D	EPA 624	12/12/13 16:17	**0.037**	mg/kg dry	0.00008	0.00046		sm	
Dibromochloromethane	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.0001	0.00046		sm	
Chloroethane	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.0002	0.00046		sm	
Chlorobenzene	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.0001	0.00046		sm	
Vinyl chloride	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.00005	0.00046		sm	
Bromodichloromethane	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.0002	0.00046		sm	
1,4-Dichlorobenzene	D	EPA 624	12/12/13 16:17	**0.221**	mg/kg dry	0.0002	0.00046		sm	
1,3-Dichlorobenzene	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.0001	0.00046		sm	
1,2-Dichloropropane	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.0001	0.00046		sm	
1,1-Dichloroethane	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.00006	0.00046		sm	
1,1,2-Trichloroethane	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.0001	0.00046		sm	
1,1,2,2-Tetrachloroethane	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.00009	0.00046		sm	
Chloroform	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.0001	0.00046		sm	
Trichloroethene	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.00009	0.00046		sm	
trans-1,3-Dichloropropene	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.0001	0.00046		sm	
trans-1,2-Dichloroethene	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.00009	0.00046		sm	
Tetrachloroethene	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.00006	0.00046		sm	
Methylene Chloride	D	EPA 624	12/12/13 16:17	**0.138**	mg/kg dry	0.0001	0.00046		sm	
cis-1,3-Dichloropropene	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.0001	0.00046		sm	
Chloromethane	D	EPA 624	12/12/13 16:17	**ND**	mg/kg dry	0.00008	0.00046		sm	

Sample ID: **1312091-01** **Sample Start Date/Time** 12/11/2013 11:50:00

Site Location: Biosolids from Digesters **Sample End Date/Time** 12/11/2013 11:50:00

Site Number: 20001-5001 **Sampled By:** Michael Silva

Parameter	Sample Type	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Data Qualifiers	Analyst	SubLab
PCB 1254	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00007	0.00079	D1, D7	mam-z	
Toxaphene	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00508	0.02	D1, D7	mam-z	
PCB 1260	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00025	0.00079	D1, D7	mam-z	
PCB 1248	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00016	0.00079	D1, D7	mam-z	
PCB 1016	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00010	0.00066	D1, D7	mam-z	
Heptachlor Epoxide	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00011	0.00033	D1, D7, N1	mam-z	
Heptachlor	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00010	0.00033	D1, D7	mam-z	
Endosulfan sulfate	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00005	0.00033	D1, D7	mam-z	
Endosulfan II	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00003	0.00033	D1, D7	mam-z	
Endosulfan I	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00005	0.00033	D1, D7, L4	mam-z	
Total PCBs	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00030	0.00079	D1, D7	mam-z	
Aldrin	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00010	0.00033	D1, D7	mam-z	
4,4-DDT	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00004	0.00033	D1, D7	mam-z	
4,4-DDE	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00005	0.00033	D1, D7	mam-z	
4,4-DDD	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00006	0.00033	D1, D7	mam-z	
Chlordane	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00070	0.00264	D1, D7	mam-z	
PCB 1232	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00016	0.00079	D1, D7	mam-z	
alpha-BHC	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00009	0.00033	D1, D7	mam-z	
PCB 1242	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00010	0.00079	D1, D7	mam-z	
beta-BHC	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00010	0.00033	D1, D7	mam-z	
PCB 1221	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00009	0.00079	D1, D7	mam-z	
gamma-BHC (Lindane)	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00009	0.00033	D1, D7	mam-z	
Endrin aldehyde	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00007	0.00033	D1, D7	mam-z	
Endrin	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00010	0.00033	D1, D7	mam-z	
Dieldrin	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00007	0.00033	D1, D7, N1	mam-z	
delta-BHC	D	EPA 625	12/23/13 18:28	**ND**	mg/kg dry	0.00008	0.00013	D1, D7	mam-z	
2,4-Dinitrophenol	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.009	18.30	D1, D7	SJM	
2,4-Dichlorophenol	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
1,2-Diphenylhydrazine	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
1,2,4-Trichlorobenzene	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
Anthracene	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
Di-n-octyl phthalate	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM	
Dibenzo(a,h)anthracene	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM	
Chrysene	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
Carbazole	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
bis(2-chloroethyl)ether	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
bis(2-chloroethoxy)methane	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
Benzo[k]fluoranthene	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.002	10.98	D1, D7	SJM	
Hexachlorocyclopentadiene	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.003	10.98	D1, D7	SJM	
Benzidine	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.02	45.75	D1, D7, N1, V1	SJM	
Hexachloroethane	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
4-Nitrophenol	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.005	10.98	D1, D7	SJM	
4-Methylphenol	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.003	10.98	D1, D7, N1	SJM	
4-Chlorophenyl phenyl ether	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
2-Nitrophenol	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.002	10.98	D1, D7	SJM	
2-Methylphenol	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM	
2-Methyl-4,6-dinitrophenol	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.004	10.98	D1, D7	SJM	
n-Decane	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM	
2,4-Dimethylphenol	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.003	10.98	D1, D7	SJM	
Benzo[a]anthracene	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
n-Octadecane	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM	
Pyrene	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
Phenanthrene	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
Pentachlorophenol	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.003	10.98	D1, D7	SJM	
Fluoranthene	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
Phenol	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.002	10.98	D1, D7	SJM	

Sample ID: **1312091-01** | **Sample Start Date/Time** 12/11/2013 11:50:00

Site Location: Biosolids from Digesters | **Sample End Date/Time** 12/11/2013 11:50:00

Site Number: 20001-5001 | **Sampled By:** Michael Silva

Parameter	Sample Type	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Data Qualifiers	Analyst	SubLab
Fluorene	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
N-Nitrosodiphenylamine	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM	
N-Nitroso-di-n-propylamine	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
N-Nitrosodimethylamine	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.004	10.98	D1, D7, PC3	SJM	
Nitrobenzene	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.003	10.98	D1, D7	SJM	
Isophorone	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
Indeno(1,2,3-cd)pyrene	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.002	10.98	D1, D7	SJM	
Hexachlorobutadiene	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
2,4,6-Trichlorophenol	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
2,3-Dichloroaniline	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
Naphthalene	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
2-Chloronaphthalene	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
Acenaphthylene	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.0008	3.66	D1, D7	SJM	
Hexachlorobenzene	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.0008	3.66	D7, D1	SJM	
Di-n-butyl phthalate	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.002	3.66	D1, D7, N1	SJM	
Dimethyl phthalate	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.0007	3.66	D1, D7	SJM	
Diethyl phthalate	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
Butylbenzylphthalate	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM	
bis(2-ethylhexyl)phthalate	D	EPA 625	12/19/13 16:57	**16.97**	mg/kg dry	0.003	10.98	D1, D7	SJM	
bis(2-chloroisopropyl)ether	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D7, D1	SJM	
Benzo[ghi]perylene	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM	
2,4-Dinitrotoluene	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
Benzo[a]pyrene	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM	
2,6-Dinitrotoluene	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM	
Acenaphthene	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
4-Chloro-3-methylphenol	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
4-Bromophenyl phenyl ether	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM	
3,3-Dichlorobenzidine	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.002	27.45	D1, D7, V1	SJM	
2-Chlorophenol	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.002	3.66	D1, D7, N1	SJM	
Benzo[b]fluoranthene	D	EPA 625	12/19/13 16:57	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM	
Styrene	D	EPA 8260	12/12/13 16:17	**ND**	mg/kg dry	0.0001	0.00046		sm	
o-Xylene	D	EPA 8260	12/12/13 16:17	**0.028**	mg/kg dry	0.00007	0.00046		sm	
1,2,4-Trichlorobenzene	D	EPA 8260	12/12/13 16:17	**ND**	mg/kg dry	0.0003	0.00046		sm	
1,2-Dibromoethane	D	EPA 8260	12/12/13 16:17	**ND**	mg/kg dry	0.0001	0.00046		sm	
Xylenes, total	D	EPA 8260	12/12/13 16:17	**ND**	mg/kg dry	0.0001	0.00092		sm	
m,p-Xylenes	D	EPA 8260	12/12/13 16:17	**ND**	mg/kg dry	0.0001	0.00092		sm	
cis-1,2-Dichloroethene	D	EPA 8260	12/12/13 16:17	**ND**	mg/kg dry	0.0001	0.00046		sm	
1,2-Dibromo-3-chloropropane	D	EPA 8260	12/12/13 16:17	**ND**	mg/kg dry	0.0002	0.00092		sm	
Methoxychlor	D	EPA 8270C	12/23/13 18:28	**ND**	mg/kg dry	0.00006	0.00033	D1, D7	mam-z	
1,2-Diphenylhydrazine	D	EPA 8270C	12/19/13 16:57	**ND**	mg/kg dry	0.06	168.21	D1, D7	SJM	

Qualifier Definitions

D1	Sample required dilution due to matrix.
D7	Minimum Reporting Limit adjusted to reflect sample dilution.
J	Concentration estimated. Analyte was detected below laboratory minimum reporting limit (MRL) but above MDL.
L4	The associated blank spike recovery was below method acceptance limits.
M5	Analyte concentration was determined by the method of standard addition (MSA).
N1	See case narrative.
PC3	Semi-quantitation is included in the case narrative.
R13	MS/MSD RPD exceeded method acceptance limit. Matrix spike recovery was outside the acceptance criteria. Batch precision and accuracy were demonstrated.
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.

General Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit (MDL).
NR	Not Reported
DET	Analyte DETECTED
DRY	Sample results reported on a dry weight basis.
RPD	Relative Percent Difference.
Analysis Date	Analysis Date represents the final reading date.
Field Results	Field Results are not subject to approval of Laboratory Director.
Solids, Total Volatile	Used for process control samples only.
RE	Re-analysis has been performed.
FD	Field Duplicate

Case Narrative(s)

1312091-01
EPA Method 625 Semi-volatiles: Target analytes flagged with N1 failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample.SJM 12/26/13

Semi-Quantitation
Method:625
1312091-01

Compound Name	Concentration-ug/L
Palmitic Acid	2038
Oleic Acid	1830
Stearic Acid	659

SJM 12/26/13

1312091-01
EPA Method 625 Pesticides: Target analytes flagged with N1 for this method failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. MAM-Z 12/30/13

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1312091-01

SITE & LOCATION: Tres Rios WRF - Biosolids from Digesters

SITE-LOCATION NUMBER: 20001-5001 (XXXXX-XXXX)

SAMPLE START DATE: (MM / DD / YYYY)

SAMPLE START TIME: (24 Hour Clock)

SUBMITTER: CRAO/Water Quality

SAMPLE END DATE: 12-11-13 (MM / DD / YYYY)

SAMPLE END TIME: 1150 (24 Hour Clock)

SAMPLER: Silva, Riccabori (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ☐ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ■ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C
Aluminum		
Antimony		
Arsenic		
Barium		
Beryllium		
Boron		
Cadmium		
Calcium		
Chromium		
Cobalt		
Copper		
Hardness		
Iron		
Lead		
Magnesium		
Manganese		
Mercury		
Molybdenum *	■	
Nickel		
Potassium		
Selenium		
Silver		
Sodium		
Strontium		
Thallium		
Tin		

METALS	D	C
Titanium		
Vanadium		
Zinc		
Priority Pollutant Metals *	■	
TCLP Metals		
503 Metals **		
Chromium, Hexavalent		
Chromium, Trivalent		

WET METHODS	D	C
Ammonia as N		
Chloride		
Cyanide, Total *	■	
Cyanide, Amenable		
Fluoride		
Ignitability		
Nitrate as N		
Nitrite as N		
Nitrate/Nitrite as N		
Nitrogen, Total Kjeldahl		
Nitrogen, Total as N		
Orthophosphate as P		
Phosphorus, Total as P		
Sulfate		
Sulfide		
Turbidity		

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile *	■	
Dioxin GC/SIM/MS Scan		
Organochlorine Pesticides & PCBs *	■	
Purgeable Organics (GCMS) *	■	
Semivolatile Organics (GCMS) *	■	
Other		

MISCELLANEOUS METHODS	D	C
4,4-DDE		
Bis(2-ethylhexyl) phthalate		
Digester Gas		
Oil and Grease		
Organic Carbon, Total		
Organic Carbon, Dissolved		
TCLP Herbicides (Contract Lab)		
TCLP Pesticides		
TCLP Semivolatile Organics		
TCLP Volatile Organics		
Total Petroleum Hydrocarbons		
Volatile Acids		

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*		
Chronic *C. dubia*		
Chronic *Selenastrum capricornutum*		
Other		

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity		
BOD		
COD		
Coliform, Fecal		
Coliform, Total		
Conductivity		
E. coli		
Oxygen, Dissolved		
pH		
Solids, Settleable		
Solids, Total *	■	
Solids, Total Dissolved		
Solids, Total Suspended		
Solids, Total Volatile		
Solids, Volatile Suspended		
Other		

OTHER	D	C

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:

Digester #1 online
CN and metals in GP bottles. GOS 12-11-13

# of Bottles Delivered: (7) GOS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials: 10-30-13 DWF

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	[signature]	12-11-13	1235
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	7	°C
Initials:	GOS	
Non-Preserved	7	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:

	Yes	No	NA
Chain of Custody Record completed appropriately?	☒		
Sample labels match Chain of Custody?	☒		
Correct number of samples were delivered?	☒		
Custody seals intact?			☒
Within holding time?	☒		
Sufficient sample volume for analysis?	☒		
Samples are in proper containers? GOS 12-11-13	☒	☒	
Sample containers damaged/leaking/frozen?		☒	
40 ml vials headspace, > pea-sized air bubble?		☒	
Received from a refrigerator?		☒	

* Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)
** As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn

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ANNUAL BIOSOLIDS REPORT 2013

PIMA COUNTY
REGIONAL WASTEWATER RECLAMATION DEPARTMENT
PIMA COUNTY, ARIZONA

SECTION 4

LAND APPLICATION EVENTS LABORATORY ANALYSES

Crop Plant and Harvest Schedule

AVRAGRO SYSTEMS, INC.
LAND APPLICATION CONTRACTOR
2013

PIMA COUNTY
REGIONAL BIOSOLIDS MANAGEMENT FACILITY
TRES RIOS WRF
AZPDES NO. AZ0020001

ANNUAL BIOSOLIDS REPORT 2013

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ANNUAL BIOSOLIDS REPORT 2013

PIMA COUNTY
REGIONAL WASTEWATER RECLAMATION DEPARTMENT
PIMA COUNTY, ARIZONA

ANNUAL BIOSOLIDS REPORT 2013

Crop Plant and Harvest Schedule

PREPARER: PIMA COUNTY REGIONAL BIOSOLIDS MANAGEMENT FACILITY; INA ROAD WRF, AZPDES NO. AZ0020001
LAND APPLIER: AVRAGRO SYSTEMS, INC.

Field ID	CROP	PLANT DATE	HARVEST DATE
JK-4	Cotton/Barley	4/16/13, 2/20/14	12/5/13, 5/12/14
JK-5	Cotton/Wheat	4/17/13, 1/30/14	12/6/13,6/5/14
JK-6	Cotton/Wheat	4/15/2014	12/5/2014
JK-7	Wheat/ Wheat	2/5/13, 2/16/14	6/20/13,6/15/14
JK-9	Cotton/Barley	4/16/13, 2/20/14	12/5/13,5/12/14
JK-12	Cotton	4/15/2014	11/29/2014
JK-13	Cotton	4/15/2014	11/29/2014
JK-14	Cotton	4/15/2013	12/8/2013
JK-15	Cotton	4/15/2013	12/9/2013
JK-16	Cotton/Wheat	4/20/13, 2/5/14	12/4/13, 6/6/14
JK-17	Cotton	5/6/2013	12/15/2013
JK-18	Wheat/Wheat	2/15/13, 2/5/14	6/10/13, 6/5/14
JK-19	Cotton	4/20/2013	12/2/2013
JK-21a	Wheat	1/28/2014	5/30/2014
JK-26	Cotton	4/14/2014	12/1/2014

Field ID	CROP	PLANT DATE	HARVEST DATE
JK-27	Cotton	4/15/2014	12/2/2014
JK-28	Cotton	4/17/2014	12/5/2014
JK-29	Cotton	4/20/2014	12/7/2014
JK-30	Cotton	4/21/2014	12/10/2014
JK-34	Wheat	2/20/2013	6/7/2013
JK-35	Wheat	2/22/2013	6/9/2013
JK-41	Cotton/Wheat	4/30/2013, 2/1/14	12/14/13, 6/2/14
JK-42	Cotton/Wheat	5/20/13, 2/2/14	12/15/13, 6/1/14
GL-1	Cotton	4/20/2014	12/7/2014
LIM-1	Cotton	4/15/2013	12/1/2013
AJ-1	Alfalfa	7/15/2013	6/15/2014
AJ-2	Cotton	4/30/2013	12/10/2013
TH-11N	Wheat	1/30/2014	6/1/2014
TH-11S	Cotton	4/5/2014	12/1/2014

Red - anticipated plant or harvest

AvraGro Systems, Inc.
PO Box 91708
Tucson, AZ 85752
520-990-8888

February 13, 2014

Mr. Jackson Jenkins
Deputy Director
Pima County Wastewater Management
7100 N. Casa Grande Highway
Tucson, AZ 85743

Re: Yearly Biosolids Report for 2013

Dear Mr. Jenkins:

AvraGro Systems is pleased to submit our Annual Report, which includes the following information regarding biosolids management and land application operations for Pima County Wastewater Management, from January 2013 to December 2013.

- Field summaries (total biosolid loading, total nutrient loading, and cumulative metal loading)
- Biosolids analysis laboratory reports

If you should have any questions, please contact me at 520-271-7736.

Sincerely,

Rob Fehrmann
Managing Director

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
Water Quality Compliance Assurance Unit
1110 W. Washington Street, MO5415B-1
Phoenix, Arizona 85007
602-771-4612 (voicemail) 602-771-4505 (fax)

BIOSOLIDS OR SEWAGE SLUDGE ANNUAL REPORT FORM FOR REPORTING YEAR 2013

All Preparers (Generators) and Land Applicators Must Complete the Following:

1. General Information

Date: 2/13/2013	**NPDES Permit # (if applicable):**
Company Name (Preparer/Applicator): Avragro Systems Inc.	
Contact Name: Rob Fehrmann	**Title:** Manager
Address: PO Box 91708., Tucson, AZ 85752	
Phone: (520) 271-7736	**Email:** robfehrmann@comcast.net

Certification: I certify, under penalty of law, that the information and descriptions, have been made under my direction and supervision and under a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine whether the applicable biosolids requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

Signature: Rob Fehrmann	**Title:** Managing Director

2. Who are you? (Check all that apply)

☐ **Preparer.** (A "Preparer is a Generator") The biosolids or sewage sludge prepared at this site are: (select all that apply)

- ☐ Stored onsite
- ☐ Beneficially used for Land Application.
- ☐ Sold/given to a composting operation, a sludge drying operation or to another WWTP for further treatment
- ☐ Disposed of in a "biosolids only" surface disposal site, monofill, designated sludge only area
- ☐ Disposed of in a solid waste landfill - do biosolids go directly into the landfill ? _____
- ☐ Sent out of state for incineration, landfilling, land application, surface disposal, composting or sludge drying

☒ **Applicator.** One who applies biosolids to the land (farms, parks, forests, reclamation sites)

☐ **Owner or Operator** of a surface disposal site including wastewater treatment plants with surface disposal (final disposal) sites for sludge

3. Disposition of Biosolids.

Preparers - wastewater treatment facilities, composting operations and biosolids processing operations. Complete Parts 3.A, 3.B, 3.C, 3.D, and 3.E of this form (if more room is needed, provide additional sheets) for:

- All applicators used to haul and land apply your biosolids and the amount
- All surface disposal sites to which you sent or took biosolids and the amount
- All land application sites (farms, ranches) where biosolids from your facility were applied in 2003 and the amount
- All landfills to which you sent biosolids and the amount
- All composting operations or biosolids processing facilities including "sludge drying operations" to which you sent biosolids and the amount
- All incinerators to which you sent biosolids and the amount

Applicators. Complete Parts 3.C, 3.D, and 3.E. for out of state preparers. Complete Parts 3.F and 3.G of this form. If more room is needed, provide additional sheets) for:

- All preparers (including composting operations, biosolids processing facilities) from which you obtained biosolids
- All application sites (farms, ranches, composting operations) where biosolids were applied in 2003 and the amount.
- All land applicators that are taking biosolids from California generators are required to complete this form and ensure that the California WWTP or preparer is submitting its Annual Report to ADEQ.

Name Of Facility: _____ For Calendar Year: _____

DISPOSITION OF BIOSOLIDS

Do All Reporting In Dry Tons

Arizona Generators and Preparers – Complete Sections 3.A, 3.B, 3.C, and 3.D.
California Generators – Complete Section 3.D only

3.A. Amount Of Biosolids Stored On Site

Are biosolids stored in lined lagoons or impoundments? _____

Are biosolids stored directly on the ground? _____

Are lagoons used in the treatment process of biosolids? _____

	PATHOGEN TREATMENTS			VAR* Option Used
	NONE	CLASS B	CLASS A	
At the beginning of 2004: How much was stored or left over from the previous years? Include any amount that is being stored ANYWHERE - identify the storage of biosolids.	dry tons	dry tons 0	dry tons	
			(Circle one) Fecal coliform Salmonella	
		METHOD #		
At the end of 2004, how much is still stored on site? Where?	dry tons	dry tons 0	dry tons	
			(Circle one) Fecal coliform Salmonella	
		METHOD #		

3.B. Amount of Biosolids or sewage sludge received from another facility during the year, such as another wastewater treatment plant or another APP permitted facility, for further processing?

NAME OF FACILITY	LOCATION	PATHOGEN TREATMENT of the incoming biosolids			VAR* Option Used
		NONE	CLASS B	CLASS A	
1. Pima County Regional Biosolids Management Facility 7101 North Casa Grande Highway Tucson, Arizona 85743		dry tons	dry tons 11172.4	dry tons	1
				(Circle one) Fecal coliform Salmonella	
			METHOD #		
			Alt # 5		
2.		dry tons	dry tons	dry tons	
				(Circle one) Fecal coliform Salmonella	
			METHOD #		

3.C. Total amount of Biosolids "Prepared" at the	PATHOGEN TREATMENT	VAR*

facility during the year based on daily flow	NONE	CLASS B	CLASS A	Option Used
	dry tons	dry tons 0	dry tons	
			(Circle one) Fecal coliform Salmonella	
		METHOD #		

3.D. Amount of Biosolids removed from the facility Name all recipients, include haulers name and phone number, land applicators, composters, landfills, drying facilities, EQB bagging facilities, bulk composting, etc.

NAME OF RECIPIENT	LOCATION	DISPOSITION **	PATHOGEN TREATMENT			VAR* Option Used
			NONE	CLASS B	CLASS A	
1.			tons	dry tons	dry tons	
					(Circle one) Fecal coliform Salmonella	
				METHOD #		
2.			tons	dry tons	dry tons	
					(Circle one) Fecal coliform Salmonella	
				METHOD #		
3.			tons	dry tons	dry tons	
					(Circle one) Fecal coliform Salmonella	
				METHOD #		
4.			tons	dry tons	dry tons	
					(Circle one) Fecal coliform Salmonella	
				METHOD #		

5.			tons	dry tons	dry tons	
					(Circle one)	
					Fecal coliform Salmonella	
				METHOD #		
6.			tons	dry tons	dry tons	
					(Circle one)	
					Fecal coliform Salmonella	
				METHOD #		

* VAR = Vector Attraction Reduction – Which option was used from A.A.C. R18-9-1010 (If Preparer did not perform VAR treatment, then specify "none")

** Disposition: Name the Land application, Surface Disposal, Incineration, Composting Operation, EQB (Exceptional Quality Biosolids) Bagging operation, Landfill, Biosolids Processing facility or sludge drying operation site. Example: Hunt Farm, Flagstaff WWTP Surface Disposal site, Northwest Landfill, Western Organics, etc.

* **3.E. Preparers must attach analytical results for (metals) pollutants according to A.A.C. R18-9-1012 (Self Monitoring), pathogen reduction results according to A.A.C. R18-9-1006 (Class A and Class B Pathogen Reduction Requirements) and Vector Attraction Reduction results according to A.A.C. R18-9-1010. This reporting is required under A.A.C. R18-9-1014(F) for biosolids produced or further treated at site during the year. Report all pollutant and pathogen results on a 100% dry weight basis.**

* **NOTE: If biosolids are going to a landfill – attach Paint Filter Test and Toxicity Characteristic Leaching Procedure test (TCLP test) per 40CFR261.24**

* ********Attn: All Arizona Generators, submit additional testing data/ see requirements under Biosolids Requirements in your AZPDES permit (example: Dioxins/dibenzofurans) with this Annual Report**

Revised July 2004

3F

Application Site/ Loaction	Field ID	Amount of Biosolids Applied (DT) (MDT)	Preparer	Pathogen Treatment	Vector Attraction Reduction Method	Loading Rate DT/acre Kg/H	Nitrogen Conc lb/a Kg/H	Type of Crop Grown after Application	Agronomic Rate of Crop Grown (lb/acre)	Cumulative Concentration of Pollutants (MG/Kg) in Soil									
										As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn
Kai Farms, Marana, Az	JK-4	271.8	Pima Co.	Class B, Alt 5	Option 1	2.11	147.4	Cotton/Barley	380	0.4119	0.1446	2.1865	27.1835	1.5517	0.1116	0.9775	1.2923	0.3588	55.8064
		246.5				4721	165.27												
Kai Farms, Marana, Az	JK-5	825.53	Pima Co.	Class B, Alt 5	Option 1	3.75	248.8	Cotton/Wheat	360	0.8362	0.3308	4.2354	50.695	3.3358	0.1925	1.861	2.6911	0.7272	93.1489
		748.78				8410	278.87												
Kai Farms, Marana, Az	JK-6	161.56	Pima Co.	Class B, Alt 5	Option 1	2.79	170	Cotton	380	0.5547	0.1828	2.5276	34.6471	2.5313	0.991	1.1773	1.6549	0.4753	65.1481
		146.54				6243	191												
Kai Farms, Marana, Az	JK-7	406.25	Pima Co.	Class B, Alt 5	Option 1	2.13	157.3	Cotton/Wheat	380	0.5474	0.2739	3.6177	48.9805	3.8731	0.1491	1.1964	2.1198	0.4381	99.9255
		399.65				4767	176.35												
Kai Farms, Marana, Az	JK-9	292.52	Pima Co.	Class B, Alt 5	Option 1	1.56	116	Cotton/Barley	380	0.3136	0.1396	2.1095	25.3101	2.0975	0.088	0.5878	1.0282	0.2393	49.7722
		265.30				3506	130												
Kai Farms, Marana, Az	JK-12	256.2	Pima Co.	Class B, Alt 5	Option 1	1.73	107.8	Cotton	380	0.9544	0.3624	4.9855	72.0768	4.5121	0.2416	2.6268	3.2214	0.7839	135.559
		232.36				3879	120												
Kai Farms, Marana, Az	JK-13	372.1	Pima Co.	Class B, Alt 5	Option 1	2.42	169	Cotton	380	1.1259	0.4218	6.1295	68.0633	4.497	0.2391	2.4966	3.4887	0.803	123.045
		337.50				5415	190												
Kai Farms, Marana, Az	JK-14	395.3	Pima Co.	Class B, Alt 5	Option 1	2.8	176	Cotton	380	0.9529	0.4022	5.8064	68.4248	4.9338	0.2316	2.5223	3.188	0.5951	136.608
		358.58				684	197												
Kai Farms, Marana, Az	JK-15	402.8	Pima Co.	Class B, Alt 5	Option 1	1.78	124	Cotton	380	0.9042	0.4234	4.4279	59.6234	4.6783	0.2271	2.0624	2.748	0.6755	99.3856
		365.40				3995	139												
Kai Farms, Marana, Az	JK-16	443.9	Pima Co.	Class B, Alt 5	Option 1	3.89	251.2	Cotton/Wheat	380	0.6024	0.2894	3.2863	44.7554	3.3009	0.1271	1.2344	1.973	0.4241	71.9493
		402.60				8726	281.5												
Kai Farms, Marana, Az	JK-17	290.2	Pima Co.	Class B, Alt 5	Option 1	3.46	240	Cotton	380	0.5399	0.2751	3.5992	48.9794	3.8788	0.148	1.2009	2.1631	0.4483	100.311
		263.30				7743	269												
Kai Farms, Marana, Az	JK-18	357.5	Pima Co.	Class B, Alt 5	Option 1	6.16	399	Wheat, Wheat	720	0.5616	0.2896	3.7521	48.6134	3.2434	0.2472	1.1232	1.9145	0.5216	87.8092
		324.20				13813	448												
Kai Farms, Marana, Az	JK-19	95.85	Pima Co.	Class B, Alt 5	Option 1	0.73	50.6	Cotton	380	0.571	0.3235	4.3794	55.9237	4.9322	0.3317	1.335	2.1223	0.5471	107.781
		86.94				1640	56												
Kai Farms, Marana, Az	JK-21a	298.44	Pima Co.	Class B, Alt 5	Option 1	4.89	322	Wheat	360	1.1027	0.5237	6.8392	95.6989	7.4443	0.4095	3.6464	4.3165	0.6966	169.451
		270.70				10965	361												
Kai Farms, Marana, Az	JK-26	385.5	Pima Co.	Class B, Alt 5	Option 1	1.66	102	Cotton	380	0.4849	0.2501	4.0904	41.4943	2.9639	0.1256	1.3751	2.3036	0.4037	79.4364
		349.70				3724	114												

Application Site/ Loaction	Field ID	Amount of Biosolids Applied (DT) (MDT)	Preparer	Pathogen Treatment	Vector Attraction Reduction Method	Loading Rate DT/acre Kg/H	Nitrogen Conc lb/a Kg/H	Type of Crop Grown after Application	Agronomic Rate of Crop Grown (lb/acre)	Cumulative Concentration of Pollutants (MG/Kg) in Soil									
										As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn
Kai Farms, Marana, Az	JK-27	203.1	Pima Co.	Class B, Alt 5	Option 1	1.1	74.2	Cotton	380	0.6017	0.2355	2.8364	39.96.9	2.9853	0.1458	1.3437	1.9036	0.4439	66.5862
		184.23				2460	83.1												
Kai Farms, Marana, Az	JK-28	335.38	Pima Co.	Class B, Alt 5	Option 1	1.6	115	Cotton	380	0.3617	0.1973	3.007	32.8417	3.0428	0.1049	0.7972	1.5302	0.2906	53.4218
		323.2				3579	129												
Kai Farms, Marana, Az	JK-29	191.3	Pima Co.	Class B, Alt 5	Option 1	1.14	84.7	Cotton	380	0.5165	0.1888	2.7544	37.6321	2.0641	0.1298	1.4516	2.01	0.3881	64.1714
		173.5				2552	73												
Kai Farms, Marana, Az	JK-30	188.6	Pima Co.	Class B, Alt 5	Option 1	1.27	94.8	Cotton	380	0.7162	0.3351	4.735	57.3462	4.2372	0.1784	1.9268	2.5862	0.5301	108.614
		171.1				2857	106												
Kai Farms, Marana, Az	JK-34	83.9	Pima Co.	Class B, Alt 5	Option 1	0.6	41.6	Wheat	360	0.368	0.2932	2.6776	39.4931	3.6379	0.1172	0.7364	1.6647	0.3028	66.529
		76.10				1333	46.6												
Kai Farms, Marana, Az	JK-35	90.1	Pima Co.	Class B, Alt 5	Option 1	2.25	157	Wheat	360	0.2899	0.0617	1.0029	13.5083	0.5124	0.0423	0.4504	0.7695	0.2285	31.0395
		81.70				5050	176												
Kai Farms, Marana, Az	JK-41	836.7	Pima Co.	Class B, Alt 5	Option 1	3.22	225	Cotton/Wheat	380	0.31	0.1381	1.1974	13.9144	0.7728	0.1107	0.8768	0.7719	0.2935	26.8643
		822.40				7212	253												
Kai Farms, Marana, Az	JK-42	782.9	Pima Co.	Class B, Alt 5	Option 1	2.4	174	Cotton/Wheat	380	0.491	0.1595	2.7689	28.0489	1.9453	0.0908	0.9772	1.2948	0.3846	51.612
		710.20				5383	195												
Toone Farms	AJ-1	550.3	Pima Co.	Class B, Alt 5	Option 1	4.4	306	Alfalfa	400	0.7267	0.2412	3.2844	39.1363	2.4845	0.126	1.056	2.1345	0.5491	71.5212
		499.20				9907	343												
Toone Farms	AJ-2	853.5	Pima Co.	Class B, Alt 5	Option 1	5.1	354	Cotton	380	0.5689	0.2267	4.7074	42.4051	2.7815	0.1439	1.2665	2.0663	0.4996	90.4534
		644.20				11500	397												
Tom Hum Farms	TH-11n	333.5	Pima Co.	Class B, Alt 5	Option 1	4.39	272	Wheat	360	0.5499	0.1594	2.3221	31.2736	1.6986	0.0977	1.2489	1.4793	0.4402	58.5476
		302.50				9835	305												
Tom Hum Farms	TH-11s	346.70	Pima Co.	Class B, Alt 5	Option 1	4.8	317	Cotton	380	0.6338	0.3684	2.8576	53.9128	4.7443	0.1881	1.5472	2.2655	0.4268	83.7341
		314.50				10793	355												
TNT Farms	GL-1	425.50	Pima Co.	Class B, Alt 5	Option 1	2.1	119	Cotton	380	0.5091	0.2617	4.0416	42.7826	3.8601	0.1517	1.2215	2.0289	0.37	73.9146
		385.80				4568	134												
Lim Farms	LIM-1	695.50	Pima Co.	Class B, Alt 5	Option 1	4.1	282	Cotton	380	0.5479	0.222	4.6	41.0887	2.7395	0.1406	1.2292	2.001	0.481	87.5357
		630.80				9170	316												

11172.43 DT

10117.48 MDT MDT = metric dry metric tons

Report Number: 13-035-0205
Account Number: 16010
Submitted By: ROB FEHRMANN

A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446
www.aleastern.com

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 1/15/2013
AZ#0629

REPORT OF ANALYSIS

Lab Number : 91695
Sample Id : PIMA CO 1/15/13

Date Sampled: 1/15/2013 12:40:00
Date Received: 02/04/2013 00:00
Date Reported: 02/07/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	5.94	59400	100.0	JM	02/04/2013 14:44	SM-2540G
Moisture *	94.06		100.0	JM	02/04/2013 14:44	SM-2540G
Total Kjeldahl Nitrogen	9.88	98800	10.0	JM	02/05/2013 08:39	SM-4500-NH3C-TKN
Total Phosphorus	2.64	26400	100	KM	02/05/2013 12:49	SW-6010B
Total Potassium	0.33	3300	100	KM	02/05/2013 12:49	SW-6010B
Total Sulfur	1.17	11700	100	KM	02/05/2013 12:49	SW-6010B
Total Calcium	4.53	45300	100	KM	02/05/2013 12:49	SW-6010B
Total Magnesium	0.79	7930	100	KM	02/05/2013 12:49	SW-6010B
Total Sodium	0.28	2830	100	KM	02/05/2013 12:49	SW-6010B
Total Iron		8400	100	KM	02/05/2013 12:49	SW-6010B
Total Aluminum		6100	100	KM	02/05/2013 12:49	SW-6010B
Total Manganese		164	5	KM	02/05/2013 12:49	SW-6010B
Total Copper		474	5	KM	02/05/2013 12:49	SW-6010B
Total Zinc		988	5	KM	02/05/2013 12:49	SW-6010B
Ammonia Nitrogen	2.21	22100	10.0	JM	02/05/2013 08:39	SM-4500-NH3C
Organic N	7.67	76700	10.0		02/05/2013 08:39	CALCULATION
Nitrate+Nitrite-N		<2.00	2.00	JM	02/05/2013 08:40	SM-4500NO3F
Total Cadmium		2.0	2.0	KM	02/05/2013 12:49	SW-6010B

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

Report Number: 13-035-0205
Account Number: 16010
Submitted By: ROB FEHRMANN

A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446
www.aleastern.com

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 1/15/2013
AZ#0629

REPORT OF ANALYSIS

Lab Number : 91695
Sample Id : PIMA CO 1/15/13

Date Sampled: 1/15/2013 12:40:00
Date Received: 02/04/2013 00:00
Date Reported: 02/07/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Chromium		31	5	KM	02/05/2013 12:49	SW-6010B
Total Nickel		46	5	KM	02/05/2013 12:49	SW-6010B
Total Lead		17	5	KM	02/05/2013 12:49	SW-6010B
Total Arsenic		9.0	3.0	KM	02/05/2013 12:49	SW-6010B
Total Mercury		1.2	0.4	KM	02/05/2013 09:00	SW-7471A
Total Selenium		9.0	5.0	KM	02/05/2013 12:49	SW-6010B
pH (Standard Units) *	7.27		2.00	JM	02/05/2013 08:39	SW-9045D
Total Molybdenum		15	5	KM	02/05/2013 12:49	SW-6010B
Chloride		2520	200	JM	02/06/2013 09:00	SM-4500Cl-D
Total Boron		68	3	KM	02/05/2013 12:49	SW-6010B
Total Silver		7	5	BKN	02/07/2013 13:06	SW-6010B

Comments:
pH, CHLORIDE, SULFUR, & SILVER NOT FOR COMPLIANCE TESTING

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Debbie Holt

Report Number: 13-035-0206
Account Number: 16010
Submitted By: ROB FEHRMANN

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7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 1/28/2013
AZ#0629

REPORT OF ANALYSIS

Lab Number : 91696
Sample Id : PIMA CO 1/28/2013

Date Sampled: 1/28/2013 09:50:00
Date Received: 02/04/2013 00:00
Date Reported: 02/07/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	4.71	47100	100.0	JM	02/04/2013 14:44	SM-2540G
Moisture *	95.29		100.0	JM	02/04/2013 14:44	SM-2540G
Total Kjeldahl Nitrogen	7.35	73500	10.0	JM	02/05/2013 08:39	SM-4500-NH3C-TKN
Total Phosphorus	2.68	26800	100	KM	02/05/2013 12:49	SW-6010B
Total Potassium	0.28	2790	100	KM	02/05/2013 12:49	SW-6010B
Total Sulfur	1.20	12000	100	KM	02/05/2013 12:49	SW-6010B
Total Calcium	5.07	50700	100	KM	02/05/2013 12:49	SW-6010B
Total Magnesium	0.88	8790	100	KM	02/05/2013 12:49	SW-6010B
Total Sodium	0.33	3260	100	KM	02/05/2013 12:49	SW-6010B
Total Iron		8090	100	KM	02/05/2013 12:49	SW-6010B
Total Aluminum		6600	100	KM	02/05/2013 12:49	SW-6010B
Total Manganese		135	5	KM	02/05/2013 12:49	SW-6010B
Total Copper		500	5	KM	02/05/2013 12:49	SW-6010B
Total Zinc		1100	5	KM	02/05/2013 12:49	SW-6010B
Ammonia Nitrogen	2.23	22300	10.0	JM	02/05/2013 08:39	SM-4500-NH3C
Organic N	5.12	51200	10.0		02/05/2013 08:39	CALCULATION
Nitrate+Nitrite-N		<2.00	2.00	JM	02/05/2013 08:40	SM-4500NO3F
Total Cadmium		2.0	2.0	KM	02/05/2013 12:49	SW-6010B

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Debbie Holt

Report Number: 13-035-0206
Account Number: 16010
Submitted By: ROB FEHRMANN

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Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 1/28/2013
AZ#0629

REPORT OF ANALYSIS

Lab Number : 91696
Sample Id : PIMA CO 1/28/2013

Date Sampled: 1/28/2013 09:50:00
Date Received: 02/04/2013 00:00
Date Reported: 02/07/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Chromium		35	5	KM	02/05/2013 12:49	SW-6010B
Total Nickel		51	5	KM	02/05/2013 12:49	SW-6010B
Total Lead		21	5	KM	02/05/2013 12:49	SW-6010B
Total Arsenic		10.0	3.0	KM	02/05/2013 12:49	SW-6010B
Total Mercury		1.4	0.4	KM	02/05/2013 09:00	SW-7471A
Total Selenium		10.0	5.0	KM	02/05/2013 12:49	SW-6010B
pH (Standard Units) *	8.07		2.00	JM	02/05/2013 08:39	SW-9045D
Total Molybdenum		17	5	KM	02/05/2013 12:49	SW-6010B
Chloride		2880	200	JM	02/06/2013 09:00	SM-4500Cl-D
Total Boron		61	3	KM	02/05/2013 12:49	SW-6010B
Total Silver		7	5	BKN	02/07/2013 13:12	SW-6010B

Comments:
pH, CHLORIDE, SULFUR, & SILVER NOT FOR COMPLIANCE TESTING

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Debbie Holt

Report Number: 13-058-0201
Account Number: 16010
Submitted By: ROB FEHRMANN

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Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 2/14/13

REPORT OF ANALYSIS

Lab Number : 92060
Sample Id : PIMA CO

Date Sampled: 2/14/2013 11:50:00
Date Received: 02/27/2013 00:00
Date Reported: 03/04/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	5.72	57200	100.0	JM	02/27/2013 13:39	SM-2540G
Moisture *	94.28		100.0	JM	02/27/2013 13:39	SM-2540G
Total Kjeldahl Nitrogen	7.74	77400	10.0	JM	02/28/2013 08:19	SM-4500-NH3C-TKN
Total Phosphorus	2.71	27100	100	KM	02/28/2013 12:18	SW-6010B
Total Potassium	0.36	3570	100	KM	02/28/2013 12:18	SW-6010B
Total Sulfur	1.12	11200	100	KM	02/28/2013 12:18	SW-6010B
Total Calcium	4.52	45200	100	KM	02/28/2013 12:18	SW-6010B
Total Magnesium	0.90	9000	100	KM	02/28/2013 12:18	SW-6010B
Total Sodium	0.28	2840	100	KM	02/28/2013 12:18	SW-6010B
Total Iron		9490	100	KM	02/28/2013 12:18	SW-6010B
Total Aluminum		6500	100	KM	02/28/2013 12:18	SW-6010B
Total Manganese		145	5	KM	02/28/2013 12:18	SW-6010B
Total Copper		457	5	KM	02/28/2013 12:18	SW-6010B
Total Zinc		1050	5	KM	02/28/2013 12:18	SW-6010B
Ammonia Nitrogen	2.34	23400	10.0	JM	02/28/2013 08:19	SM-4500-NH3C
Organic N	5.40	54000	10.0		02/28/2013 08:19	CALCULATION
Nitrate+Nitrite-N		<2.00	2.00	JM	02/28/2013 08:20	SM-4500NO3F
Total Cadmium		2.0	2.0	KM	02/28/2013 12:18	SW-6010B

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

Report Number: 13-058-0201
Account Number: 16010
Submitted By: ROB FEHRMANN

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Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 2/14/13

REPORT OF ANALYSIS

Lab Number : 92060
Sample Id : PIMA CO

Date Sampled: 2/14/2013 11:50:00
Date Received: 02/27/2013 00:00
Date Reported: 03/04/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Chromium		38	5	KM	02/28/2013 12:18	SW-6010B
Total Nickel		35	5	KM	02/28/2013 12:18	SW-6010B
Total Lead		17	5	KM	02/28/2013 12:18	SW-6010B
Total Arsenic		8.0	3.0	KM	02/28/2013 12:18	SW-6010B
Total Mercury		1.1	0.4	KM	02/28/2013 09:00	SW-7471A
Total Selenium		9.0	5.0	KM	02/28/2013 12:18	SW-6010B
pH (Standard Units) *	8.15		2.00	JM	02/28/2013 08:19	SW-9045D
Total Molybdenum		15	5	KM	02/28/2013 12:18	SW-6010B
Chloride		2550	200	JM	02/28/2013 09:05	SM-4500Cl-D
Total Boron		60	3	KM	02/28/2013 12:18	SW-6010B
Total Silver		7	5	BKN	03/01/2013 11:03	SW-6010B

Comments:
pH, CHLORIDE, SULFUR, & SILVER NOT FOR COMPLIANCE TESTING
QUALIFIER: THE LRB WAS OUT OF LIMITS FOR "Mn". THE MATRIX SPIKE WAS OUT OF LIMITS FOR "Al", "Fe", AND "Se". THE MSD WAS OUT OF LIMITS FOR "Se". ALL OTHER QC DATA IS ACCEPTABLE.

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

Report Number: 13-058-0202
Account Number: 16010
Submitted By: ROB FEHRMANN

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Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA COUNTY
AZ CERT # 0629

REPORT OF ANALYSIS

Lab Number : 92061
Sample Id : PIMA COUNTY

Date Sampled: 2/24/2013 09:50:00
Date Received: 02/27/2013 00:00
Date Reported: 03/04/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	5.65	56500	100.0	JM	02/27/2013 13:39	SM-2540G
Moisture *	94.35		100.0	JM	02/27/2013 13:39	SM-2540G
Total Kjeldahl Nitrogen	7.77	77700	10.0	JM	02/28/2013 08:19	SM-4500-NH3C-TKN
Total Phosphorus	2.80	28000	100	KM	02/28/2013 12:18	SW-6010B
Total Potassium	0.38	3770	100	KM	02/28/2013 12:18	SW-6010B
Total Sulfur	1.10	11000	100	KM	02/28/2013 12:18	SW-6010B
Total Calcium	4.47	44700	100	KM	02/28/2013 12:18	SW-6010B
Total Magnesium	1.01	10100	100	KM	02/28/2013 12:18	SW-6010B
Total Sodium	0.28	2840	100	KM	02/28/2013 12:18	SW-6010B
Total Iron		7560	100	KM	02/28/2013 12:18	SW-6010B
Total Aluminum		6300	100	KM	02/28/2013 12:18	SW-6010B
Total Manganese		131	5	KM	02/28/2013 12:18	SW-6010B
Total Copper		455	5	KM	02/28/2013 12:18	SW-6010B
Total Zinc		1040	5	KM	02/28/2013 12:18	SW-6010B
Ammonia Nitrogen	2.44	24400	10.0	JM	02/28/2013 08:19	SM-4500-NH3C
Organic N	5.33	53300	10.0		02/28/2013 08:19	CALCULATION
Nitrate+Nitrite-N		<2.00	2.00	JM	02/28/2013 08:20	SM-4500NO3F
Total Cadmium		2.0	2.0	KM	02/28/2013 12:18	SW-6010B

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

Report Number: 13-058-0202
Account Number: 16010
Submitted By: ROB FEHRMANN

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Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA COUNTY
AZ CERT # 0629

REPORT OF ANALYSIS

Lab Number : 92061
Sample Id : PIMA COUNTY

Date Sampled: 2/24/2013 09:50:00
Date Received: 02/27/2013 00:00
Date Reported: 03/04/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Chromium		38	5	KM	02/28/2013 12:18	SW-6010B
Total Nickel		30	5	KM	02/28/2013 12:18	SW-6010B
Total Lead		17	5	KM	02/28/2013 12:18	SW-6010B
Total Arsenic		8.0	3.0	KM	02/28/2013 12:18	SW-6010B
Total Mercury		1.1	0.4	KM	02/28/2013 09:00	SW-7471A
Total Selenium		7.0	5.0	KM	02/28/2013 12:18	SW-6010B
pH (Standard Units) *	8.02		2.00	JM	02/28/2013 08:19	SW-9045D
Total Molybdenum		14	5	KM	02/28/2013 12:18	SW-6010B
Chloride		2670	200	JM	02/28/2013 09:05	SM-4500Cl-D
Total Boron		59	3	KM	02/28/2013 12:18	SW-6010B
Total Silver		7	5	BKN	03/01/2013 11:03	SW-6010B

Comments:
pH, CHLORIDE, SULFUR, & SILVER NOT FOR COMPLIANCE TESTING
QUALIFIER: THE LRB WAS OUT OF LIMITS FOR "Mn". THE MATRIX SPIKE WAS OUT OF LIMITS FOR "Al", "Fe", AND "Se". THE MSD WAS OUT OF LIMITS FOR "Se". ALL OTHER QC DATA IS ACCEPTABLE.

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

Report Number: 13-080-0200
Account Number: 16010
Submitted By: ROB FEHRMANN

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Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 3/15/203
AZ#0629

REPORT OF ANALYSIS

Lab Number : 92582
Sample Id : PIMA CO

Date Sampled: 3/15/2013 22:30:00
Date Received: 03/21/2013 00:00
Date Reported: 03/26/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	5.44	54400	100.0	JM	03/21/2013 14:24	SM-2540G
Moisture *	94.56		100.0	JM	03/21/2013 14:24	SM-2540G
Total Kjeldahl Nitrogen	8.03	80300	10.0	JM	03/22/2013 08:10	SM-4500-NH3C-TKN
Total Phosphorus	2.58	25800	100	KM	03/22/2013 11:34	SW-6010B
Total Potassium	0.34	3370	100	KM	03/22/2013 11:34	SW-6010B
Total Sulfur	1.08	10800	100	KM	03/22/2013 11:34	SW-6010B
Total Calcium	4.40	44000	100	KM	03/22/2013 11:34	SW-6010B
Total Magnesium	0.92	9220	100	KM	03/22/2013 11:34	SW-6010B
Total Sodium	0.29	2870	100	KM	03/22/2013 11:34	SW-6010B
Total Iron		7320	100	KM	03/22/2013 11:34	SW-6010B
Total Aluminum		6400	100	KM	03/22/2013 11:34	SW-6010B
Total Manganese		127	5	KM	03/22/2013 11:34	SW-6010B
Total Copper		472	5	KM	03/22/2013 11:34	SW-6010B
Total Zinc		917	5	KM	03/22/2013 11:34	SW-6010B
Ammonia Nitrogen	2.41	24100	10.0	JM	03/22/2013 08:10	SM-4500-NH3C
Organic N	5.62	56200	10.0		03/22/2013 08:10	CALCULATION
Nitrate+Nitrite-N		<2.00	2.00	JM	03/22/2013 08:10	SM-4500NO3F
Total Cadmium		2.0	2.0	KM	03/22/2013 11:34	SW-6010B

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

Report Number: 13-080-0200
Account Number: 16010
Submitted By: ROB FEHRMANN

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Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 3/15/203
AZ#0629

REPORT OF ANALYSIS

Lab Number : 92582
Sample Id : PIMA CO

Date Sampled: 3/15/2013 22:30:00
Date Received: 03/21/2013 00:00
Date Reported: 03/26/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Chromium		45	5	KM	03/22/2013 11:34	SW-6010B
Total Nickel		29	5	KM	03/22/2013 11:34	SW-6010B
Total Lead		15	5	KM	03/22/2013 11:34	SW-6010B
Total Arsenic		8.0	3.0	KM	03/22/2013 11:34	SW-6010B
Total Mercury		1.3	0.4	KM	03/22/2013 09:00	SW-7471A
Total Selenium		8.0	5.0	KM	03/22/2013 11:34	SW-6010B
pH (Standard Units) *	7.98		2.00	jm	03/22/2013 08:10	SW-9045D
Total Molybdenum		13	5	KM	03/22/2013 11:34	SW-6010B
Chloride		2520	200	JM	03/22/2013 09:10	SM-4500Cl-D
Total Boron		56	3	KM	03/22/2013 11:34	SW-6010B
Total Silver		8	5	BKN	03/25/2013 16:06	SW-6010B

Comments:
pH, CHLORIDE, SULFUR, & SILVER NOT FOR COMPLIANCE TESTING
QUALIFIER: THE MATRIX SPIKE WAS OUT OF LIMITS FOR "Ca", "K", "Mg", "Na", AND "Se". ALL OTHER QC DATA IS ACCEPTABLE.

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

Report Number: 13-088-0201
Account Number: 16010
Submitted By: ROB FEHRMANN

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Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 3/26/2013
AZ#0629

REPORT OF ANALYSIS

Lab Number : 92732
Sample Id : PIMA CO

Date Sampled: 3/26/2013 09:30:00
Date Received: 03/29/2013 00:00
Date Reported: 04/04/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	5.67	56700	100.0	JM	03/29/2013 15:00	SM-2540G
Moisture *	94.33		100.0	JM	03/29/2013 15:00	SM-2540G
Total Kjeldahl Nitrogen	7.83	78300	10.0	JM	04/01/2013 08:39	SM-4500-NH3C-TKN
Total Phosphorus	2.80	28000	100	KM	04/02/2013 14:09	SW-6010B
Total Potassium	0.38	3800	100	KM	04/02/2013 14:09	SW-6010B
Total Sulfur	1.12	11200	100	KM	04/02/2013 14:09	SW-6010B
Total Calcium	4.85	48500	100	KM	04/02/2013 14:09	SW-6010B
Total Magnesium	0.90	8980	100	KM	04/02/2013 14:09	SW-6010B
Total Sodium	0.30	3040	100	KM	04/02/2013 14:09	SW-6010B
Total Iron		7420	100	KM	04/02/2013 14:09	SW-6010B
Total Aluminum		6200	100	KM	04/02/2013 14:09	SW-6010B
Total Manganese		133	5	KM	04/02/2013 14:09	SW-6010B
Total Copper		474	5	KM	04/02/2013 14:09	SW-6010B
Total Zinc		1040	5	KM	04/02/2013 14:09	SW-6010B
Ammonia Nitrogen	2.77	27700	10.0	JM	04/01/2013 08:39	SM-4500-NH3C
Organic N	5.06	50600	10.0		04/01/2013 08:39	CALCULATION
Nitrate+Nitrite-N		<2.00	2.00	JM	04/01/2013 08:40	SM-4500NO3F
Total Cadmium		2.0	2.0	KM	04/02/2013 14:09	SW-6010B

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

Report Number: 13-088-0201
Account Number: 16010
Submitted By: ROB FEHRMANN

A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446
www.aleastern.com

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 3/26/2013
AZ#0629

REPORT OF ANALYSIS

Lab Number : 92732
Sample Id : PIMA CO

Date Sampled: 3/26/2013 09:30:00
Date Received: 03/29/2013 00:00
Date Reported: 04/04/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Chromium		44	5	KM	04/02/2013 14:09	SW-6010B
Total Nickel		28	5	KM	04/02/2013 14:09	SW-6010B
Total Lead		14	5	KM	04/02/2013 14:09	SW-6010B
Total Arsenic		8.0	3.0	KM	04/02/2013 14:09	SW-6010B
Total Mercury		1.2	0.4	KM	04/03/2013 09:00	SW-7471A
Total Selenium		8.0	5.0	KM	04/02/2013 14:09	SW-6010B
pH (Standard Units) *	8.12		2.00	JM	04/01/2013 08:39	SW-9045D
Total Molybdenum		13	5	KM	04/02/2013 14:09	SW-6010B
Chloride		2400	200	JM	04/02/2013 09:00	SM-4500Cl-D
Total Boron		66	3	KM	04/02/2013 14:09	SW-6010B
Total Silver		7	5	BKN	04/03/2013 13:26	SW-6010B

Comments:
pH, CHLORIDE, SULFUR, & SILVER NOT FOR COMPLIANCE TESTING
QUALIFIER: THE MATRIX SPIKE WAS OUT OF LIMITS FOR "Ca", "Fe", "P", AND "S". ALL OTHER QC DATA IS ACCEPTABLE.

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

Report Number: 13-112-0201
Account Number: 16010

A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446
www.aleastern.com

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 4/16/2013
AZ#0629

REPORT OF ANALYSIS

Lab Number : 93168
Sample Id : PIMA CO

Date Sampled: 4/16/2013 11:30:00
Date Received: 04/22/2013 00:00
Date Reported: 04/26/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	5.95	59500	100.0	JM	04/22/2013 13:59	SM-2540G
Moisture *	94.05		100.0	JM	04/22/2013 13:59	SM-2540G
Total Kjeldahl Nitrogen	7.58	75800	10.0	JM	04/23/2013 09:15	SM-4500-NH3C-TKN
Total Phosphorus	2.71	27100	100	KM	04/23/2013 14:38	SW-6010B
Total Potassium	0.30	3030	100	KM	04/23/2013 14:38	SW-6010B
Total Sulfur	1.17	11700	100	KM	04/23/2013 14:38	SW-6010B
Total Calcium	5.04	50400	100	KM	04/23/2013 14:38	SW-6010B
Total Magnesium	0.92	9230	100	KM	04/23/2013 14:38	SW-6010B
Total Sodium	0.29	2930	100	KM	04/23/2013 14:38	SW-6010B
Total Iron		8030	100	KM	04/23/2013 14:38	SW-6010B
Total Aluminum		5900	100	KM	04/23/2013 14:38	SW-6010B
Total Manganese		134	5	KM	04/23/2013 14:38	SW-6010B
Total Copper		564	5	KM	04/23/2013 14:38	SW-6010B
Total Zinc		1110	5	KM	04/23/2013 14:38	SW-6010B
Ammonia Nitrogen	2.52	25200	10.0	JM	04/23/2013 09:24	SM-4500-NH3C
Organic N	5.06	50600	10.0		04/23/2013 09:15	CALCULATION
Nitrate+Nitrite-N		<2.00	2.00	JM	04/24/2013 08:25	SM-4500NO3F
Total Cadmium		2.0	2.0	KM	04/23/2013 14:38	SW-6010B

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Debbie Holt

Report Number: 13-112-0201
Account Number: 16010

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7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 4/16/2013
AZ#0629

REPORT OF ANALYSIS

Lab Number : 93168
Sample Id : PIMA CO

Date Sampled: 4/16/2013 11:30:00
Date Received: 04/22/2013 00:00
Date Reported: 04/26/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Chromium		40	5	KM	04/23/2013 14:38	SW-6010B
Total Nickel		27	5	KM	04/23/2013 14:38	SW-6010B
Total Lead		18	5	KM	04/23/2013 14:38	SW-6010B
Total Arsenic		9.0	3.0	KM	04/23/2013 14:38	SW-6010B
Total Mercury		1.4	0.4	KM	04/24/2013 09:00	SW-7471A
Total Selenium		8.0	5.0	KM	04/23/2013 14:38	SW-6010B
pH (Standard Units) *	7.96		2.00	JM	04/23/2013 09:24	SW-9045D
Total Molybdenum		15	5	KM	04/23/2013 14:38	SW-6010B
Chloride		2920	200	JM	04/25/2013 09:05	SM-4500Cl-D
Total Boron		57	3	KM	04/23/2013 14:38	SW-6010B
Total Silver		8	5	KMM	04/24/2013 14:23	SW-6010B

Comments:
pH, CHLORIDE, SULFUR, & SILVER NOT FOR COMPLIANCE TESTING

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Debbie Holt

Report Number: 13-119-0210
Account Number: 16010

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www.aleastern.com

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO
AZ#0629

REPORT OF ANALYSIS

Lab Number : 93354
Sample Id : PIMA CO

Date Sampled: 4/23/2013 12:15:00
Date Received: 04/29/2013 00:00
Date Reported: 05/02/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	5.49	54900	100.0	JM	04/29/2013 15:40	SM-2540G
Moisture *	94.51		100.0	JM	04/29/2013 15:40	SM-2540G
Total Kjeldahl Nitrogen	7.78	77800	10.0	JM	04/30/2013 08:19	SM-4500-NH3C-TKN
Total Phosphorus	2.76	27600	100	KM	04/30/2013 12:57	SW-6010B
Total Potassium	0.30	3000	100	KM	04/30/2013 12:57	SW-6010B
Total Sulfur	1.24	12400	100	KM	04/30/2013 12:57	SW-6010B
Total Calcium	4.80	48000	100	KM	04/30/2013 12:57	SW-6010B
Total Magnesium	0.85	8470	100	KM	04/30/2013 12:57	SW-6010B
Total Sodium	0.34	3410	100	KM	04/30/2013 12:57	SW-6010B
Total Iron		8740	100	KM	04/30/2013 12:57	SW-6010B
Total Aluminum		6000	100	KM	04/30/2013 12:57	SW-6010B
Total Manganese		155	5	KM	04/30/2013 12:57	SW-6010B
Total Copper		493	5	KM	04/30/2013 12:57	SW-6010B
Total Zinc		1250	5	KM	04/30/2013 12:57	SW-6010B
Ammonia Nitrogen	2.31	23100	10.0	JM	04/30/2013 08:19	SM-4500-NH3C
Organic N	5.47	54700	10.0		04/30/2013 08:19	CALCULATION
Nitrate+Nitrite-N		<2.00	2.00	JM	04/30/2013 08:20	SM-4500NO3F
Total Cadmium		2.0	2.0	KM	04/30/2013 12:57	SW-6010B

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Debbie Holt

Report Number: 13-119-0210
Account Number: 16010

A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446
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Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO
AZ#0629

REPORT OF ANALYSIS

Lab Number : 93354
Sample Id : PIMA CO

Date Sampled: 4/23/2013 12:15:00
Date Received: 04/29/2013 00:00
Date Reported: 05/02/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Chromium		46	5	KM	04/30/2013 12:57	SW-6010B
Total Nickel		28	5	KM	04/30/2013 12:57	SW-6010B
Total Lead		17	5	KM	04/30/2013 12:57	SW-6010B
Total Arsenic		9.0	3.0	KM	04/30/2013 12:57	SW-6010B
Total Mercury		1.3	0.4	KM	04/30/2013 08:05	SW-7471A
Total Selenium		6.0	5.0	KM	04/30/2013 12:57	SW-6010B
pH (Standard Units) *	8.00		2.00	JM	04/30/2013 08:19	SW-9045D
Total Molybdenum		16	5	KM	04/30/2013 12:57	SW-6010B
Chloride		2960	200	JM	05/01/2013 09:45	SM-4500Cl-D
Total Boron		51	3	KM	04/30/2013 12:57	SW-6010B
Total Silver		6	5	BKN	05/01/2013 15:44	SW-6010B

Comments:
pH, CHLORIDE, SULFUR, & SILVER NOT FOR COMPLIANCE TESTING
QUALIFIER: THE MATRIX SPIKE WAS OUT OF LIMITS FOR "S". ALL OTHER QC DATA IS ACCEPTABLE.

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Debbie Holt

Report Number: 13-141-0205
Account Number: 16010

A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446
www.aleastern.com

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO AZ#0629

REPORT OF ANALYSIS

Lab Number : 93878
Sample Id : PIMA CO

Date Sampled: 5/17/2013 14:00:00
Date Received: 05/21/2013 00:00
Date Reported: 06/04/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	5.33	53300	100.0	JM	05/21/2013 14:19	SM-2540G
Moisture *	94.67		100.0	JM	05/21/2013 14:19	SM-2540G
Total Kjeldahl Nitrogen	7.69	76900	10.0	JM	05/22/2013 07:54	SM-4500-NH3C-TKN
Total Phosphorus	2.71	27100	100	KM	05/23/2013 14:27	SW-6010B
Total Potassium	0.33	3290	100	KM	05/23/2013 14:27	SW-6010B
Total Sulfur	1.17	11700	100	KM	05/23/2013 14:27	SW-6010B
Total Calcium	4.76	47600	100	KM	05/23/2013 14:27	SW-6010B
Total Magnesium	0.74	7350	100	KM	05/23/2013 14:27	SW-6010B
Total Sodium	0.33	3310	100	KM	05/23/2013 14:27	SW-6010B
Total Iron		14200	100	KM	05/23/2013 14:27	SW-6010B
Total Aluminum		5900	100	KM	05/23/2013 14:27	SW-6010B
Total Manganese		157	5	KM	05/23/2013 14:27	SW-6010B
Total Copper		505	5	KM	05/23/2013 14:27	SW-6010B
Total Zinc		1070	5	KM	05/23/2013 14:27	SW-6010B
Ammonia Nitrogen	2.44	24400	10.0	JM	05/22/2013 07:54	SM-4500-NH3C
Organic N	5.25	52500	10.0		05/22/2013 07:54	CALCULATION
Nitrate+Nitrite-N		<2.00	2.00	JM	05/22/2013 07:55	SM-4500NO3F
Total Cadmium		2.0	2.0	KM	05/23/2013 14:27	SW-6010B

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

Report Number: 13-141-0205
Account Number: 16010

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7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO AZ#0629

REPORT OF ANALYSIS

Lab Number : 93878
Sample Id : PIMA CO

Date Sampled: 5/17/2013 14:00:00
Date Received: 05/21/2013 00:00
Date Reported: 06/04/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Chromium		45	5	KM	05/23/2013 14:27	SW-6010B
Total Nickel		30	5	KM	05/23/2013 14:27	SW-6010B
Total Lead		18	5	KM	05/23/2013 14:27	SW-6010B
Total Arsenic		11.0	3.0	KM	05/23/2013 14:27	SW-6010B
Total Mercury		1.5	0.4	KM	05/23/2013 09:00	SW-7471A
Total Selenium		7.0	5.0	KM	05/23/2013 14:27	SW-6010B
pH (Standard Units) *	8.03		2.00	JM	05/22/2013 07:54	SW-9045D
Total Molybdenum		16	5	KM	05/23/2013 14:27	SW-6010B
Chloride		5420	200	JM	05/22/2013 09:20	SM-4500Cl-D
Total Boron		52	3	KM	05/23/2013 14:27	SW-6010B
Total Silver		6	5	BKN	05/29/2013 15:41	SW-6010B

Comments:
pH, CHLORIDE, SULFUR, & SILVER NOT FOR COMPLIANCE TESTING
QUALIFIER: THE MATRIX SPIKE WAS OUT OF LIMITS FOR "Fe". ALL OTHER QC DATA IS ACCEPTABLE.

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Debbie Holt

Report Number: 13-154-0201
Account Number: 16010
Submitted By: ROB FEHRMANN

A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446
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Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 5/30/13
AZ#0629

REPORT OF ANALYSIS

Lab Number : 94033
Sample Id : PIMA CO

Date Sampled: 5/30/2013 09:00:00
Date Received: 06/03/2013 00:00
Date Reported: 06/10/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	5.48	54800	100.0	JM	06/03/2013 12:49	SM-2540G
Moisture *	94.52		100.0	JM	06/03/2013 12:49	SM-2540G
Total Kjeldahl Nitrogen	7.59	75900	10.0	JM	06/04/2013 08:05	SM-4500-NH3C-TKN
Total Phosphorus	2.73	27300	100	DH	06/04/2013 11:00	SW-6010B
Total Potassium	0.33	3300	100	DH	06/04/2013 11:00	SW-6010B
Total Sulfur	1.20	12000	100	DH	06/04/2013 11:00	SW-6010B
Total Calcium	4.67	46700	100	DH	06/04/2013 11:00	SW-6010B
Total Magnesium	0.71	7080	100	DH	06/04/2013 11:00	SW-6010B
Total Sodium	0.30	3000	100	DH	06/04/2013 11:00	SW-6010B
Total Iron		14700	100	DH	06/04/2013 11:00	SW-6010B
Total Aluminum		6500	100	DH	06/04/2013 11:00	SW-6010B
Total Manganese		205	5	DH	06/04/2013 11:00	SW-6010B
Total Copper		498	5	DH	06/04/2013 11:00	SW-6010B
Total Zinc		1070	5	DH	06/04/2013 11:00	SW-6010B
Ammonia Nitrogen	3.14	31400	10.0	JM	06/05/2013 08:39	SM-4500-NH3C
Organic N	4.45	44500	10.0		06/04/2013 08:05	CALCULATION
Nitrate+Nitrite-N		<2.00	2.00	JM	06/04/2013 08:05	SM-4500NO3F
Total Cadmium		2.0	2.0	DH	06/04/2013 11:00	SW-6010B

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

Report Number: 13-154-0201
Account Number: 16010
Submitted By: ROB FEHRMANN

A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446
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Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 5/30/13
AZ#0629

REPORT OF ANALYSIS

Lab Number : 94033
Sample Id : PIMA CO

Date Sampled: 5/30/2013 09:00:00
Date Received: 06/03/2013 00:00
Date Reported: 06/10/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Chromium		47	5	DH	06/04/2013 11:00	SW-6010B
Total Nickel		31	5	DH	06/04/2013 11:00	SW-6010B
Total Lead		18	5	DH	06/04/2013 11:00	SW-6010B
Total Arsenic		10.0	3.0	DH	06/04/2013 11:00	SW-6010B
Total Mercury		1.3	0.4	JM	06/04/2013 09:30	SW-7471A
Total Selenium		8.0	5.0	DH	06/04/2013 11:00	SW-6010B
pH (Standard Units) *	7.96		2.00	JM	06/04/2013 08:05	SW-9045D
Total Molybdenum		15	5	DH	06/04/2013 11:00	SW-6010B
Chloride		8110	200	JM	06/06/2013 09:30	SM-4500Cl-D
Total Boron		58	3	DH	06/04/2013 11:00	SW-6010B
Total Silver		6	5	BKN	06/06/2013 12:47	SW-6010B

Comments:
pH, CHLORIDE, SULFUR, & SILVER NOT FOR COMPLIANCE TESTING
QUALIFIER: THE MATRIX SPIKE WAS OUT OF LIMITS FOR "Ni". ALL OTHER QC DATA IS ACCEPTABLE.

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

Report Number: 13-177-0209
Account Number: 16010
Submitted By: ROB FEHRMANN

A&L Eastern Laboratories, Inc.
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Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 6/14/13
AZ#0629

REPORT OF ANALYSIS

Lab Number : 94354
Sample Id : PIMA CO

Date Sampled: 6/14/2013 14:00:00
Date Received: 06/26/2013 00:00
Date Reported: 07/02/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	5.76	57600	100.0	JM	06/26/2013 14:39	SM-2540G
Moisture *	94.24		100.0	JM	06/26/2013 14:39	SM-2540G
Total Kjeldahl Nitrogen	7.62	76200	10.0	JM	07/01/2013 07:50	SM-4500-NH3C-TKN
Total Phosphorus	2.77	27700	100	KM	06/27/2013 09:45	SW-6010B
Total Potassium	0.30	3030	100	KM	06/27/2013 09:45	SW-6010B
Total Sulfur	1.28	12800	100	KM	06/27/2013 09:45	SW-6010B
Total Calcium	5.00	50000	100	KM	06/27/2013 09:45	SW-6010B
Total Magnesium	0.64	6380	100	KM	06/27/2013 09:45	SW-6010B
Total Sodium	0.32	3210	100	KM	06/27/2013 09:45	SW-6010B
Total Iron		15400	100	KM	06/27/2013 09:45	SW-6010B
Total Aluminum		6200	100	KM	06/27/2013 09:45	SW-6010B
Total Manganese		190	5	KM	06/27/2013 09:45	SW-6010B
Total Copper		580	5	KM	06/27/2013 09:45	SW-6010B
Total Zinc		1060	5	KM	06/27/2013 09:45	SW-6010B
Ammonia Nitrogen	2.53	25300	10.0	JM	06/28/2013 08:24	SM-4500-NH3C
Organic N	5.09	50900	10.0		06/28/2013 08:24	CALCULATION
Nitrate+Nitrite-N		106	2.00	JM	06/28/2013 08:25	SM-4500NO3F
Total Cadmium		2.0	2.0	KM	06/27/2013 09:45	SW-6010B

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

Report Number: 13-177-0209
Account Number: 16010
Submitted By: ROB FEHRMANN

www.aleastern.com

A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 6/14/13
AZ#0629

REPORT OF ANALYSIS

Lab Number : 94354
Sample Id : PIMA CO

Date Sampled: 6/14/2013 14:00:00
Date Received: 06/26/2013 00:00
Date Reported: 07/02/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Chromium		44	5	KM	06/27/2013 09:45	SW-6010B
Total Nickel		28	5	KM	06/27/2013 09:45	SW-6010B
Total Lead		17	5	KM	06/27/2013 09:45	SW-6010B
Total Arsenic		11.0	3.0	KM	06/27/2013 09:45	SW-6010B
Total Mercury		0.7	0.4	KM	06/27/2013 11:00	SW-7471A
Total Selenium		7.0	5.0	KM	06/27/2013 09:45	SW-6010B
pH (Standard Units) *	8.10		2.00	JM	06/28/2013 08:30	SW-9045D
Total Molybdenum		16	5	KM	06/27/2013 09:45	SW-6010B
Chloride		6990	200	JM	06/28/2013 09:30	SM-4500Cl-D
Total Boron		60	3	KM	06/27/2013 09:45	SW-6010B
Total Silver		6	5	BKN	06/28/2013 23:29	SW-6010B

Comments:
pH, CHLORIDE, SULFUR, & SILVER NOT FOR COMPLIANCE TESTING

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Debbie Holt

Report Number: 13-177-0210
Account Number: 16010
Submitted By: ROB FEHRMANN

A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446
www.aleastern.com

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 6/24/13
AZ#0629

REPORT OF ANALYSIS

Lab Number : 94355
Sample Id : PIMA CO

Date Sampled: 6/24/2013 09:30:00
Date Received: 06/26/2013 00:00
Date Reported: 07/02/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	5.42	54200	100.0	JM	06/26/2013 14:39	SM-2540G
Moisture *	94.58		100.0	JM	06/26/2013 14:39	SM-2540G
Total Kjeldahl Nitrogen	7.69	76900	10.0	JM	07/01/2013 07:50	SM-4500-NH3C-TKN
Total Phosphorus	2.83	28300	100	KM	06/27/2013 09:45	SW-6010B
Total Potassium	0.30	3020	100	KM	06/27/2013 09:45	SW-6010B
Total Sulfur	1.24	12400	100	KM	06/27/2013 09:45	SW-6010B
Total Calcium	5.22	52200	100	KM	06/27/2013 09:45	SW-6010B
Total Magnesium	0.65	6530	100	KM	06/27/2013 09:45	SW-6010B
Total Sodium	0.31	3110	100	KM	06/27/2013 09:45	SW-6010B
Total Iron		16300	100	KM	06/27/2013 09:45	SW-6010B
Total Aluminum		5900	100	KM	06/27/2013 09:45	SW-6010B
Total Manganese		181	5	KM	06/27/2013 09:45	SW-6010B
Total Copper		536	5	KM	06/27/2013 09:45	SW-6010B
Total Zinc		1040	5	KM	06/27/2013 09:45	SW-6010B
Ammonia Nitrogen	2.45	24500	10.0	JM	06/28/2013 08:24	SM-4500-NH3C
Organic N	5.24	52400	10.0		06/28/2013 08:24	CALCULATION
Nitrate+Nitrite-N		64.6	2.00	JM	06/28/2013 08:25	SM-4500NO3F
Total Cadmium		2.0	2.0	KM	06/27/2013 09:45	SW-6010B

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Debbie Holt

Report Number: 13-177-0210
Account Number: 16010
Submitted By: ROB FEHRMANN

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A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 6/24/13
AZ#0629

REPORT OF ANALYSIS

Lab Number : 94355
Sample Id : PIMA CO

Date Sampled: 6/24/2013 09:30:00
Date Received: 06/26/2013 00:00
Date Reported: 07/02/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Chromium		45	5	KM	06/27/2013 09:45	SW-6010B
Total Nickel		26	5	KM	06/27/2013 09:45	SW-6010B
Total Lead		19	5	KM	06/27/2013 09:45	SW-6010B
Total Arsenic		11.0	3.0	KM	06/27/2013 09:45	SW-6010B
Total Mercury		1.4	0.4	KM	06/27/2013 11:00	SW-7471A
Total Selenium		7.0	5.0	KM	06/27/2013 09:45	SW-6010B
pH (Standard Units) *	7.93		2.00	JM	06/28/2013 08:30	SW-9045D
Total Molybdenum		16	5	KM	06/27/2013 09:45	SW-6010B
Chloride		6460	200	JM	06/28/2013 09:30	SM-4500Cl-D
Total Boron		58	3	KM	06/27/2013 09:45	SW-6010B
Total Silver		7	5	BKN	06/28/2013 23:29	SW-6010B

Comments:
pH, CHLORIDE, SULFUR, & SILVER NOT FOR COMPLIANCE TESTING
QUALIFIER: THE LRB WAS OUT OF LIMITS FOR "Mn". ALL OTHER QC DATA IS ACCEPTABLE.

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Debbie Holt

Report Number: 13-212-0200
Account Number: 16010
Submitted By: ROB FEHRMANN

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A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 7/18/13
AZ#0629

REPORT OF ANALYSIS

Lab Number : 94803
Sample Id : PIMA CO 7/18/13

Date Sampled: 7/18/2013 00:00:00
Date Received: 07/31/2013 00:00
Date Reported: 08/05/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	5.39	53900	100.0	JM	07/31/2013 14:15	SM-2540G
Moisture *	94.61		100.0	JM	07/31/2013 14:15	SM-2540G
Total Kjeldahl Nitrogen	7.25	72500	10.0	JM	08/01/2013 07:59	SM-4500-NH3C-TKN
Total Phosphorus	3.16	31600	100	KM	08/02/2013 08:40	SW-6010B
Total Potassium	0.29	2930	100	KM	08/02/2013 08:40	SW-6010B
Total Sulfur	1.31	13100	100	KM	08/02/2013 08:40	SW-6010B
Total Calcium	5.22	52200	100	KM	08/02/2013 08:40	SW-6010B
Total Magnesium	0.75	7520	100	KM	08/02/2013 08:40	SW-6010B
Total Sodium	0.33	3330	100	KM	08/02/2013 08:40	SW-6010B
Total Iron		19200	100	KM	08/02/2013 08:40	SW-6010B
Total Aluminum		6400	100	KM	08/02/2013 08:40	SW-6010B
Total Manganese		255	5	KM	08/02/2013 08:40	SW-6010B
Total Copper		564	5	KM	08/02/2013 08:40	SW-6010B
Total Zinc		1120	5	KM	08/02/2013 08:40	SW-6010B
Ammonia Nitrogen	2.39	23900	10.0	JM	08/01/2013 07:59	SM-4500-NH3C
Organic N	4.86	48600	10.0		08/01/2013 07:59	CALCULATION
Nitrate+Nitrite-N		26.0	2.00	JM	08/01/2013 08:00	SM-4500NO3F
Total Cadmium		2.0	2.0	KM	08/02/2013 08:40	SW-6010B

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Debbie Holt

Report Number: 13-212-0200
Account Number: 16010
Submitted By: ROB FEHRMANN

A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446
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Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 7/18/13
AZ#0629

REPORT OF ANALYSIS

Lab Number : 94803
Sample Id : PIMA CO 7/18/13

Date Sampled: 7/18/2013 00:00:00
Date Received: 07/31/2013 00:00
Date Reported: 08/05/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Chromium		46	5	KM	08/02/2013 08:40	SW-6010B
Total Nickel		28	5	KM	08/02/2013 08:40	SW-6010B
Total Lead		18	5	KM	08/02/2013 08:40	SW-6010B
Total Arsenic		11.0	3.0	KM	08/02/2013 08:40	SW-6010B
Total Selenium		8.0	5.0	KM	08/02/2013 08:40	SW-6010B
pH (Standard Units) *	8.00		2.00	JM	08/01/2013 07:59	SW-9045D
Total Molybdenum		17	5	KM	08/02/2013 08:40	SW-6010B
Chloride		6830	200	MW	08/02/2013 07:55	SM-4500Cl-D
Total Boron		63	3	KM	08/02/2013 08:40	SW-6010B

Comments:
pH, CHLORIDE, SULFUR, & SILVER NOT FOR COMPLIANCE TESTING.
PHOSPHORUS QUALIFIER: T2 AND T6, NOT FOR COMPLIANCE REPORTING

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Debbie Holt

Report Number: 13-212-0201
Account Number: 16010
Submitted By: ROB FEHRMANN

A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446
www.aleastern.com

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 7/26/2013
AZ#0629

REPORT OF ANALYSIS

Lab Number : 94804
Sample Id : PIMA CO 7/26

Date Sampled: 7/26/2013 00:00:00
Date Received: 07/31/2013 00:00
Date Reported: 08/05/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	5.42	54200	100.0	JM	07/31/2013 14:15	SM-2540G
Moisture *	94.58		100.0	JM	07/31/2013 14:15	SM-2540G
Total Kjeldahl Nitrogen	7.10	71000	10.0	JM	08/01/2013 07:59	SM-4500-NH3C-TKN
Total Phosphorus	3.04	30400	100	KM	08/02/2013 08:40	SW-6010B
Total Potassium	0.32	3150	100	KM	08/02/2013 08:40	SW-6010B
Total Sulfur	1.33	13300	100	KM	08/02/2013 08:40	SW-6010B
Total Calcium	5.22	52200	100	KM	08/02/2013 08:40	SW-6010B
Total Magnesium	0.73	7310	100	KM	08/02/2013 08:40	SW-6010B
Total Sodium	0.34	3380	100	KM	08/02/2013 08:40	SW-6010B
Total Iron		14700	100	KM	08/02/2013 08:40	SW-6010B
Total Aluminum		6500	100	KM	08/02/2013 08:40	SW-6010B
Total Manganese		237	5	KM	08/02/2013 08:40	SW-6010B
Total Copper		685	5	KM	08/02/2013 08:40	SW-6010B
Total Zinc		1200	5	KM	08/02/2013 08:40	SW-6010B
Ammonia Nitrogen	2.25	22500	10.0	JM	08/01/2013 07:59	SM-4500-NH3C
Organic N	4.85	48500	10.0		08/01/2013 07:59	CALCULATION
Nitrate+Nitrite-N		16.6	2.00	JM	08/01/2013 08:00	SM-4500NO3F
Total Cadmium		2.0	2.0	KM	08/02/2013 08:40	SW-6010B

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Debbie Holt

Report Number: 13-212-0201
Account Number: 16010
Submitted By: ROB FEHRMANN

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7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 7/26/2013
AZ#0629

REPORT OF ANALYSIS

Lab Number : 94804
Sample Id : PIMA CO 7/26

Date Sampled: 7/26/2013 00:00:00
Date Received: 07/31/2013 00:00
Date Reported: 08/05/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Chromium		49	5	KM	08/02/2013 08:40	SW-6010B
Total Nickel		34	5	KM	08/02/2013 08:40	SW-6010B
Total Lead		23	5	KM	08/02/2013 08:40	SW-6010B
Total Arsenic		10.0	3.0	KM	08/02/2013 08:40	SW-6010B
Total Selenium		7.0	5.0	KM	08/02/2013 08:40	SW-6010B
pH (Standard Units) *	7.96		2.00	JM	08/01/2013 07:59	SW-9045D
Total Molybdenum		16	5	KM	08/02/2013 08:40	SW-6010B
Chloride		9740	200	MW	08/02/2013 07:55	SM-4500Cl-D
Total Boron		71	3	KM	08/02/2013 08:40	SW-6010B

Comments:
pH, CHLORIDE, SULFUR, & SILVER NOT FOR COMPLIANCE TESTING.
PHOSPHORUS QUALIFIER: T2 AND T6, NOT FOR COMPLIANCE REPORTING

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Debbie Holt

Report Number: 13-241-0208
Account Number: 16010
Submitted By: ROB FEHRMANN

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A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO
AZ#0629

REPORT OF ANALYSIS

Lab Number : 95266
Sample Id : PIMA CO

Date Sampled: 8/28/2013 12:45:00
Date Received: 08/29/2013 00:00
Date Reported: 09/05/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	6.26	62600	100.0	JM	08/29/2013 13:59	SM-2540G
Moisture *	93.74		100.0	JM	08/29/2013 13:59	SM-2540G
Total Kjeldahl Nitrogen	6.85	68500	10.0	JM	08/30/2013 08:30	SM-4500-NH3C-TKN
Total Phosphorus	2.67	26700	100	KM	09/03/2013 12:00	SW-6010B
Total Potassium	0.26	2590	100	KM	08/30/2013 11:51	SW-6010B
Total Sulfur	1.37	13700	100	KM	08/30/2013 11:51	SW-6010B
Total Calcium	5.37	53700	100	KM	08/30/2013 11:51	SW-6010B
Total Magnesium	0.73	7260	100	KM	08/30/2013 11:51	SW-6010B
Total Sodium	0.27	2690	100	KM	08/30/2013 11:51	SW-6010B
Total Iron		21700	100	KM	08/30/2013 11:51	SW-6010B
Total Aluminum		6800	100	KM	08/30/2013 11:51	SW-6010B
Total Manganese		196	5	KM	08/30/2013 11:51	SW-6010B
Total Copper		589	5	KM	08/30/2013 11:51	SW-6010B
Total Zinc		1190	5	KM	08/30/2013 11:51	SW-6010B
Ammonia Nitrogen	2.09	20900	10.0	JM	08/30/2013 08:30	SM-4500-NH3C
Organic N	4.76	47600	10.0		08/30/2013 08:30	CALCULATION
Nitrate+Nitrite-N		35.1	2.00	JM	09/03/2013 08:00	SM-4500NO3F
Total Cadmium		2.0	2.0	KM	08/30/2013 11:51	SW-6010B

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Debbie Holt

Report Number: 13-241-0208
Account Number: 16010
Submitted By: ROB FEHRMANN

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A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO
AZ#0629

REPORT OF ANALYSIS

Lab Number : 95266
Sample Id : PIMA CO

Date Sampled: 8/28/2013 12:45:00
Date Received: 08/29/2013 00:00
Date Reported: 09/05/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Chromium		67	5	KM	08/30/2013 11:51	SW-6010B
Total Nickel		37	5	KM	08/30/2013 11:51	SW-6010B
Total Lead		22	5	KM	08/30/2013 11:51	SW-6010B
Total Arsenic		11.0	3.0	KM	08/30/2013 11:51	SW-6010B
Total Mercury		1.6	0.4	KM	08/30/2013 09:00	SW-7471A
Total Selenium		6.0	5.0	KM	08/30/2013 11:51	SW-6010B
pH (Standard Units) *	7.88		2.00	JM	08/30/2013 08:30	SW-9045D
Total Molybdenum		16	5	KM	08/30/2013 11:51	SW-6010B
Chloride		7550	200	MW	09/03/2013 13:40	SM-4500Cl-D
Total Boron		63	3	KM	08/30/2013 11:51	SW-6010B
Total Silver		5	5	BKN	09/04/2013 11:46	SW-6010B

Comments:
pH, CHLORIDE, SULFUR, & SILVER NOT FOR COMPLIANCE TESTING.

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Debbie Holt

Report Number: 13-224-0202
Account Number: 16010
Submitted By: ROB FEHRMANN

A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446
www.aleastern.com

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 8/8/2013 AZ#0629

REPORT OF ANALYSIS

Lab Number : 94987
Sample Id : PIMA CO 8/8/2013

Date Sampled: 8/8/2013 07:10:00
Date Received: 08/12/2013 00:00
Date Reported: 08/19/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	17.99	179900	100.0	JM	08/12/2013 14:10	SM-2540G
Moisture *	82.01		100.0	JM	08/12/2013 14:10	SM-2540G
Total Kjeldahl Nitrogen	6.39	63900	10.0	MW	08/13/2013 08:39	SM-4500-NH3C-TKN
Total Phosphorus	2.77	27700	100	KM	08/13/2013 12:05	SW-6010B
Total Potassium	0.15	1500	100	KM	08/13/2013 12:05	SW-6010B
Total Sulfur	1.46	14600	100	KM	08/13/2013 12:05	SW-6010B
Total Calcium	5.08	50800	100	KM	08/13/2013 12:05	SW-6010B
Total Magnesium	0.59	5910	100	KM	08/13/2013 12:05	SW-6010B
Total Sodium	0.12	1150	100	KM	08/13/2013 12:05	SW-6010B
Total Iron		27700	100	KM	08/13/2013 12:05	SW-6010B
Total Aluminum		5700	100	KM	08/13/2013 12:05	SW-6010B
Total Manganese		199	5	KM	08/13/2013 12:05	SW-6010B
Total Copper		604	5	KM	08/13/2013 12:05	SW-6010B
Total Zinc		1070	5	KM	08/13/2013 12:05	SW-6010B
Ammonia Nitrogen	1.38	13800	10.0	MW	08/13/2013 08:39	SM-4500-NH3C
Organic N	5.01	50100	10.0		08/13/2013 08:39	CALCULATION
Nitrate+Nitrite-N		36.7	2.00	JM	08/14/2013 07:40	SM-4500NO3F
Total Cadmium		2.0	2.0	KM	08/13/2013 12:05	SW-6010B

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Debbie Holt

Report Number: 13-224-0202
Account Number: 16010
Submitted By: ROB FEHRMANN

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A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 8/8/2013 AZ#0629

REPORT OF ANALYSIS

Lab Number : 94987
Sample Id : PIMA CO 8/8/2013

Date Sampled: 8/8/2013 07:10:00
Date Received: 08/12/2013 00:00
Date Reported: 08/19/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Chromium		49	5	KM	08/13/2013 12:05	SW-6010B
Total Nickel		32	5	KM	08/13/2013 12:05	SW-6010B
Total Lead		20	5	KM	08/13/2013 12:05	SW-6010B
Total Arsenic		11.0	3.0	KM	08/13/2013 12:05	SW-6010B
Total Mercury		1.4	0.4	KM	08/13/2013 09:00	SW-7471A
Total Selenium		9.0	5.0	KM	08/13/2013 12:05	SW-6010B
pH (Standard Units) *	8.14		2.00	MW	08/13/2013 08:39	SW-9045D
Total Molybdenum		14	5	KM	08/13/2013 12:05	SW-6010B
Chloride		2730	200	JM	08/13/2013 09:30	SM-4500Cl-D
Total Boron		66	3	KM	08/13/2013 12:05	SW-6010B
Total Silver		<5	5	BKN	08/15/2013 11:50	SW-6010B

Comments:
pH, CHLORIDE, SULFUR, & SILVER NOT FOR COMPLIANCE TESTING.
QUALIFIER: THE MATRIX SPIKE WAS OUT OF LIMITS FOR "S". ALL OTHER QC DATA IS ACCEPTABLE.

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

Report Number: 13-255-0207
Account Number: 16010
Submitted By: ROB FEHRMANN

A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446
www.aleastern.com

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 9/11/2013
AZ#0629

REPORT OF ANALYSIS

Lab Number : 95474
Sample Id : PIMA CO 9/11/2013

Date Sampled: 9/11/2013 09:45:00
Date Received: 09/12/2013 00:00
Date Reported: 09/18/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	2.72	27200	100.0	JM	09/12/2013 13:45	SM-2540G
Moisture *	97.28		100.0	JM	09/12/2013 13:45	SM-2540G
Total Kjeldahl Nitrogen	8.60	86000	10.0	JM	09/13/2013 07:59	SM-4500-NH3C-TKN
Total Phosphorus	2.84	28400	100	KM	09/13/2013 12:10	SW-6010B
Total Potassium	0.40	4010	100	KM	09/13/2013 12:10	SW-6010B
Total Sulfur	1.31	13100	100	KM	09/13/2013 12:10	SW-6010B
Total Calcium	5.22	52200	100	KM	09/13/2013 12:10	SW-6010B
Total Magnesium	0.80	8020	100	KM	09/13/2013 12:10	SW-6010B
Total Sodium	0.46	4590	100	KM	09/13/2013 12:10	SW-6010B
Total Iron		20800	100	KM	09/13/2013 12:10	SW-6010B
Total Aluminum		6900	100	KM	09/13/2013 12:10	SW-6010B
Total Manganese		182	5	KM	09/13/2013 12:10	SW-6010B
Total Copper		604	5	KM	09/13/2013 12:10	SW-6010B
Total Zinc		1320	5	KM	09/13/2013 12:10	SW-6010B
Ammonia Nitrogen	3.57	35700	10.0	JM	09/13/2013 07:59	SM-4500-NH3C
Organic N	5.03	50300	10.0		09/13/2013 07:59	CALCULATION
Nitrate+Nitrite-N		<2.00	2.00	JM	09/13/2013 08:00	SM-4500NO3F
Total Cadmium		2.0	2.0	KM	09/13/2013 12:10	SW-6010B

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Debbie Holt

Report Number: 13-255-0207
Account Number: 16010
Submitted By: ROB FEHRMANN

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Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 9/11/2013
AZ#0629

REPORT OF ANALYSIS

Lab Number : 95474
Sample Id : PIMA CO 9/11/2013

Date Sampled: 9/11/2013 09:45:00
Date Received: 09/12/2013 00:00
Date Reported: 09/18/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Chromium		51	5	KM	09/13/2013 12:10	SW-6010B
Total Nickel		44	5	KM	09/13/2013 12:10	SW-6010B
Total Lead		23	5	KM	09/13/2013 12:10	SW-6010B
Total Arsenic		12.0	3.0	KM	09/13/2013 12:10	SW-6010B
Total Mercury		1.2	0.4	KM	09/13/2013 09:00	SW-7471A
Total Selenium		8.0	5.0	KM	09/13/2013 12:10	SW-6010B
pH (Standard Units) *	8.19		2.00	JM	09/13/2013 07:59	SW-9045D
Total Molybdenum		16	5	KM	09/13/2013 12:10	SW-6010B
Chloride		16900	200	JM	09/13/2013 10:00	SM-4500Cl-D
Total Boron		64	3	KM	09/13/2013 12:10	SW-6010B
Total Silver		<5	5	BKN	09/17/2013 12:08	SW-6010B

Comments:
pH, CHLORIDE, SULFUR, & SILVER NOT FOR COMPLIANCE TESTING.
QUALIFIER: THE MATRIX SPIKE WAS OUT OF LIMITS FOR "Fe" AND "P". ALL OTHER QC DATA IS ACCEPTABLE.

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

Report Number: 13-269-0200
Account Number: 16010
Submitted By: ROB FEHRMANN

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7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446
www.aleastern.com

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 9/25/13
AZ#0629

REPORT OF ANALYSIS

Lab Number : 95723
Sample Id : PIMA CO

Date Sampled: 9/25/2013 11:45:00
Date Received: 09/26/2013 00:00
Date Reported: 10/03/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	6.01	60100	100.0	JM	09/26/2013 14:10	SM-2540G
Moisture *	93.99		100.0	JM	09/26/2013 14:10	SM-2540G
Total Kjeldahl Nitrogen	6.59	65900	10.0	JM	09/30/2013 08:44	SM-4500-NH3C-TKN
Total Phosphorus	2.77	27700	100	KM	09/30/2013 13:31	SW-6010B
Total Potassium	0.27	2660	100	KM	09/30/2013 13:31	SW-6010B
Total Sulfur	1.35	13500	100	KM	09/30/2013 13:31	SW-6010B
Total Calcium	5.02	50200	100	KM	09/30/2013 13:31	SW-6010B
Total Magnesium	0.70	6950	100	KM	09/30/2013 13:31	SW-6010B
Total Sodium	0.26	2590	100	KM	09/30/2013 13:31	SW-6010B
Total Iron		19300	100	KM	09/30/2013 13:31	SW-6010B
Total Aluminum		6400	100	KM	09/30/2013 13:31	SW-6010B
Total Manganese		191	5	KM	09/30/2013 13:31	SW-6010B
Total Copper		559	5	KM	09/30/2013 13:31	SW-6010B
Total Zinc		1160	5	KM	09/30/2013 13:31	SW-6010B
Ammonia Nitrogen	1.93	19300	10.0	JM	09/27/2013 08:39	SM-4500-NH3C
Organic N	4.66	46600	10.0		09/27/2013 08:39	CALCULATION
Nitrate+Nitrite-N		<2.00	2.00	JM	09/30/2013 08:45	SM-4500NO3F
Total Cadmium		2.0	2.0	KM	09/30/2013 13:31	SW-6010B

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Debbie Holt

Report Number: 13-269-0200
Account Number: 16010
Submitted By: ROB FEHRMANN

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Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 9/25/13
AZ#0629

REPORT OF ANALYSIS

Lab Number : 95723
Sample Id : PIMA CO

Date Sampled: 9/25/2013 11:45:00
Date Received: 09/26/2013 00:00
Date Reported: 10/03/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Chromium		59	5	KM	09/30/2013 13:31	SW-6010B
Total Nickel		39	5	KM	09/30/2013 13:31	SW-6010B
Total Lead		21	5	KM	09/30/2013 13:31	SW-6010B
Total Arsenic		10.0	3.0	KM	09/30/2013 13:31	SW-6010B
Total Mercury		1.5	0.4	KM	09/27/2013 12:00	SW-7471A
Total Selenium		7.0	5.0	KM	09/30/2013 13:31	SW-6010B
pH (Standard Units) *	7.91		2.00	JM	09/27/2013 08:39	SW-9045D
Total Molybdenum		15	5	KM	09/30/2013 13:31	SW-6010B
Chloride		700	200	JM	09/30/2013 09:55	SM-4500Cl-D
Total Boron		61	3	KM	09/30/2013 13:31	SW-6010B
Total Silver		7	5	BKN	10/02/2013 13:34	SW-6010B

Comments:
pH, CHLORIDE, SULFUR, & SILVER NOT FOR COMPLIANCE TESTING.
QUALIFIER: THE LRB WAS OUT OF LIMITS FOR "Mn". ALL OTHER QC DATA IS ACCEPTABLE.

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Debbie Holt

Report Number: 13-302-0202
Account Number: 16010
Submitted By: ROB FEHRMANN

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7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 10/17/13
AZ#0629

REPORT OF ANALYSIS

Lab Number : 96224
Sample Id : PIMA CO

Date Sampled: 10/17/2013 14:45:00
Date Received: 10/29/2013 00:00
Date Reported: 11/04/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	5.36	53600	100.0	JM	10/29/2013 14:30	SM-2540G
Moisture *	94.64		100.0	JM	10/29/2013 14:30	SM-2540G
Total Kjeldahl Nitrogen	7.13	71300	10.0	JM	10/30/2013 08:50	SM-4500-NH3C-TKN
Total Phosphorus	2.63	26300	100	KM	10/30/2013 13:45	SW-6010B
Total Potassium	0.27	2710	100	KM	10/30/2013 13:45	SW-6010B
Total Sulfur	1.35	13500	100	KM	10/30/2013 13:45	SW-6010B
Total Calcium	4.70	47000	100	KM	10/30/2013 13:45	SW-6010B
Total Magnesium	0.68	6780	100	KM	10/30/2013 13:45	SW-6010B
Total Sodium	0.30	2980	100	KM	10/30/2013 13:45	SW-6010B
Total Iron		22500	100	KM	10/30/2013 13:45	SW-6010B
Total Aluminum		5900	100	KM	10/30/2013 13:45	SW-6010B
Total Manganese		214	5	KM	10/30/2013 13:45	SW-6010B
Total Copper		538	5	KM	10/30/2013 13:45	SW-6010B
Total Zinc		1010	5	KM	10/30/2013 13:45	SW-6010B
Ammonia Nitrogen	2.43	24300	10.0	JM	10/30/2013 08:50	SM-4500-NH3C
Organic N	4.70	47000	10.0		10/30/2013 08:50	CALCULATION
Nitrate+Nitrite-N		54.1	2.00	JM	10/30/2013 08:50	SM-4500NO3F
Total Cadmium		2.0	2.0	KM	10/30/2013 13:45	SW-6010B

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Debbie Holt

Report Number: 13-302-0202
Account Number: 16010
Submitted By: ROB FEHRMANN

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Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 10/17/13
AZ#0629

REPORT OF ANALYSIS

Lab Number : 96224
Sample Id : PIMA CO

Date Sampled: 10/17/2013 14:45:00
Date Received: 10/29/2013 00:00
Date Reported: 11/04/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Chromium		46	5	KM	10/30/2013 13:45	SW-6010B
Total Nickel		31	5	KM	10/30/2013 13:45	SW-6010B
Total Lead		18	5	KM	10/30/2013 13:45	SW-6010B
Total Arsenic		11.0	3.0	KM	10/30/2013 13:45	SW-6010B
Total Mercury		1.3	0.4	KM	10/31/2013 09:00	SW-7471A
Total Selenium		9.0	5.0	KM	10/30/2013 13:45	SW-6010B
pH (Standard Units) *		7.93	2.00	JM	10/30/2013 08:50	SW-9045D
Total Molybdenum		15	5	KM	10/30/2013 13:45	SW-6010B
Chloride		9560	200	JM	10/30/2013 09:45	SM-4500Cl-D
Total Boron		63	3	KM	10/30/2013 13:45	SW-6010B
Total Silver		<5	5	BKN	10/31/2013 13:44	SW-6010B

Comments:
pH, CHLORIDE, SULFUR, & SILVER NOT FOR COMPLIANCE TESTING.

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Debbie Holt

Report Number: 13-302-0203
Account Number: 16010
Submitted By: ROB FEHRMANN

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Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 10/25/13
AZ#0629

REPORT OF ANALYSIS

Lab Number : 96225
Sample Id : PIMA CO

Date Sampled: 10/25/2013 14:00:00
Date Received: 10/29/2013 00:00
Date Reported: 11/04/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	4.25	42500	100.0	JM	10/29/2013 14:30	SM-2540G
Moisture *	95.75		100.0	JM	10/29/2013 14:30	SM-2540G
Total Kjeldahl Nitrogen	7.53	75300	10.0	JM	10/30/2013 08:50	SM-4500-NH3C-TKN
Total Phosphorus	2.66	26600	100	KM	10/30/2013 13:45	SW-6010B
Total Potassium	0.32	3190	100	KM	10/30/2013 13:45	SW-6010B
Total Sulfur	1.33	13300	100	KM	10/30/2013 13:45	SW-6010B
Total Calcium	5.09	50900	100	KM	10/30/2013 13:45	SW-6010B
Total Magnesium	0.74	7430	100	KM	10/30/2013 13:45	SW-6010B
Total Sodium	0.37	3730	100	KM	10/30/2013 13:45	SW-6010B
Total Iron		15200	100	KM	10/30/2013 13:45	SW-6010B
Total Aluminum		6200	100	KM	10/30/2013 13:45	SW-6010B
Total Manganese		203	5	KM	10/30/2013 13:45	SW-6010B
Total Copper		641	5	KM	10/30/2013 13:45	SW-6010B
Total Zinc		1090	5	KM	10/30/2013 13:45	SW-6010B
Ammonia Nitrogen	2.78	27800	10.0	JM	10/30/2013 08:50	SM-4500-NH3C
Organic N	4.75	47500	10.0		10/30/2013 08:50	CALCULATION
Nitrate+Nitrite-N		40.0	2.00	JM	10/30/2013 08:50	SM-4500NO3F
Total Cadmium		2.0	2.0	KM	10/30/2013 13:45	SW-6010B

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Debbie Holt

Report Number: 13-302-0203
Account Number: 16010
Submitted By: ROB FEHRMANN

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7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446
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Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 10/25/13
AZ#0629

REPORT OF ANALYSIS

Lab Number : 96225
Sample Id : PIMA CO

Date Sampled: 10/25/2013 14:00:00
Date Received: 10/29/2013 00:00
Date Reported: 11/04/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Chromium		48	5	KM	10/30/2013 13:45	SW-6010B
Total Nickel		39	5	KM	10/30/2013 13:45	SW-6010B
Total Lead		25	5	KM	10/30/2013 13:45	SW-6010B
Total Arsenic		11.0	3.0	KM	10/30/2013 13:45	SW-6010B
Total Mercury		1.6	0.4	KM	10/31/2013 09:00	SW-7471A
Total Selenium		8.0	5.0	KM	10/30/2013 13:45	SW-6010B
pH (Standard Units) *		8.12	2.00	JM	10/30/2013 08:50	SW-9045D
Total Molybdenum		16	5	KM	10/30/2013 13:45	SW-6010B
Chloride		10800	200	JM	10/30/2013 09:45	SM-4500Cl-D
Total Boron		63	3	KM	10/30/2013 13:45	SW-6010B
Total Silver		<5	5	BKN	10/31/2013 13:51	SW-6010B

Comments:
pH, CHLORIDE, SULFUR, & SILVER NOT FOR COMPLIANCE TESTING.

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

Report Number: 13-325-0203
Account Number: 16010
Submitted By: ROB FEHRMANN

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Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 11/15/13
AZ#0629

REPORT OF ANALYSIS

Lab Number : 96698
Sample Id : PIMA CO

Date Sampled: 11/15/2013 13:45:00
Date Received: 11/21/2013 00:00
Date Reported: 12/03/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	5.51	55100	100.0	JM	11/22/2013 09:09	SM-2540G
Moisture *	94.49		100.0	JM	11/22/2013 09:09	SM-2540G
Total Kjeldahl Nitrogen	7.10	71000	10.0	JM	11/22/2013 09:00	SM-4500-NH3C-TKN
Total Phosphorus	2.65	26500	100	KM	11/25/2013 13:23	SW-6010B
Total Potassium	0.29	2940	100	KM	11/22/2013 12:11	SW-6010B
Total Sulfur	1.41	14100	100	KM	11/22/2013 12:11	SW-6010B
Total Calcium	4.38	43800	100	KM	11/22/2013 12:11	SW-6010B
Total Magnesium	0.59	5900	100	KM	11/22/2013 12:11	SW-6010B
Total Sodium	0.28	2780	100	KM	11/22/2013 12:11	SW-6010B
Total Iron		28200	100	KM	11/22/2013 12:11	SW-6010B
Total Aluminum		5300	100	KM	11/22/2013 12:11	SW-6010B
Total Manganese		232	5	KM	11/22/2013 12:11	SW-6010B
Total Copper		505	5	KM	11/22/2013 12:11	SW-6010B
Total Zinc		1020	5	KM	11/22/2013 12:11	SW-6010B
Ammonia Nitrogen	2.14	21400	10.0	JM	11/22/2013 09:00	SM-4500-NH3C
Organic N	4.96	49600	10.0		11/22/2013 09:00	CALCULATION
Nitrate+Nitrite-N		38.1	2.00	JM	11/26/2013 13:45	SM-4500NO3F
Total Cadmium		2.0	2.0	KM	11/22/2013 12:11	SW-6010B

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Debbie Holt

Report Number: 13-325-0203
Account Number: 16010
Submitted By: ROB FEHRMANN

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Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 11/15/13
AZ#0629

REPORT OF ANALYSIS

Lab Number : 96698
Sample Id : PIMA CO

Date Sampled: 11/15/2013 13:45:00
Date Received: 11/21/2013 00:00
Date Reported: 12/03/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Chromium		38	5	KM	11/22/2013 12:11	SW-6010B
Total Nickel		24	5	KM	11/22/2013 12:11	SW-6010B
Total Lead		18	5	KM	11/22/2013 12:11	SW-6010B
Total Arsenic		9.0	3.0	KM	11/22/2013 12:11	SW-6010B
Total Mercury		1.2	0.4	KM	11/22/2013 09:00	SW-7471A
Total Selenium		6.0	5.0	KM	11/22/2013 12:11	SW-6010B
pH (Standard Units) *	7.83		2.00	JM	11/22/2013 09:00	SW-9045D
Total Molybdenum		13	5	KM	11/22/2013 12:11	SW-6010B
Chloride		895	200	JM	11/25/2013 09:10	SM-4500Cl-D
Total Boron		62	3	KM	11/22/2013 12:11	SW-6010B
Total Silver		<5	5	BKN	12/02/2013 13:53	SW-6010B

Comments:
pH, CHLORIDE, SULFUR, & SILVER NOT FOR COMPLIANCE TESTING.
QUALIFIER: THE MATRIX SPIKE WAS OUT OF LIMITS FOR "Fe", "K", "Na", "P", AND "S". ALL OTHER QC DATA IS ACCEPTABLE.

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

Report Number: 13-331-0203
Account Number: 16010
Submitted By: ROB FEHRMANN

A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446
www.aleastern.com

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 11/25/2013
AZ#0629

REPORT OF ANALYSIS

Lab Number : 96792
Sample Id : PIMA CO

Date Sampled: 11/25/2013 13:45:00
Date Received: 11/27/2013 00:00
Date Reported: 12/09/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	6.35	63500	100.0	JM	11/27/2013 13:14	SM-2540G
Moisture *	93.65		100.0	JM	11/27/2013 13:14	SM-2540G
Total Kjeldahl Nitrogen	6.82	68200	10.0	JM	12/02/2013 08:39	SM-4500-NH3C-TKN
Total Phosphorus	2.56	25600	100	KM	12/02/2013 13:48	SW-6010B
Total Potassium	0.26	2610	100	KM	12/02/2013 13:48	SW-6010B
Total Sulfur	1.38	13800	100	KM	12/02/2013 13:48	SW-6010B
Total Calcium	4.58	45800	100	KM	12/02/2013 13:48	SW-6010B
Total Magnesium	0.61	6090	100	KM	12/02/2013 13:48	SW-6010B
Total Sodium	0.25	2500	100	KM	12/02/2013 13:48	SW-6010B
Total Iron		24900	100	KM	12/02/2013 13:48	SW-6010B
Total Aluminum		5300	100	KM	12/02/2013 13:48	SW-6010B
Total Manganese		229	5	KM	12/02/2013 13:48	SW-6010B
Total Copper		526	5	KM	12/02/2013 13:48	SW-6010B
Total Zinc		996	5	KM	12/02/2013 13:48	SW-6010B
Ammonia Nitrogen	2.03	20300	10.0	JM	12/02/2013 00:00	SM-4500-NH3C
Organic N	4.79	47900	10.0		12/02/2013 00:00	CALCULATION
Nitrate+Nitrite-N		40.9	2.00	JM	12/02/2013 08:40	SM-4500NO3F
Total Cadmium		2.0	2.0	KM	12/02/2013 13:48	SW-6010B

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Debbie Holt

Report Number: 13-331-0203
Account Number: 16010
Submitted By: ROB FEHRMANN

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7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446
www.aleastern.com

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 11/25/2013
AZ#0629

REPORT OF ANALYSIS

Lab Number : 96792
Sample Id : PIMA CO

Date Sampled: 11/25/2013 13:45:00
Date Received: 11/27/2013 00:00
Date Reported: 12/09/2013

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Chromium		45	5	KM	12/02/2013 13:48	SW-6010B
Total Nickel		26	5	KM	12/02/2013 13:48	SW-6010B
Total Lead		22	5	KM	12/02/2013 13:48	SW-6010B
Total Arsenic		9.0	3.0	KM	12/02/2013 13:48	SW-6010B
Total Mercury		1.2	0.4	KM	12/04/2013 09:00	SW-7471A
Total Selenium		6.0	5.0	KM	12/02/2013 13:48	SW-6010B
pH (Standard Units) *	7.91		2.00	JM	12/02/2013 08:39	SW-9045D
Total Molybdenum		13	5	KM	12/02/2013 13:48	SW-6010B
Chloride		10200	200	JM	12/04/2013 11:10	SM-4500Cl-D
Total Boron		61	3	KM	12/02/2013 13:48	SW-6010B
Total Silver		<5	5	BKN	12/05/2013 17:04	SW-6010B

Comments:
pH, CHLORIDE, SULFUR, & SILVER NOT FOR COMPLIANCE TESTING.
QUALIFIER: THE MATRIX SPIKE WAS OUT OF LIMITS FOR "Fe". ALL OTHER QC DATA IS ACCEPTABLE.

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

Report Number: 13-357-0204
Account Number: 16010

A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446
www.aleastern.com

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 12/17/13

REPORT OF ANALYSIS

Lab Number : 97232
Sample Id : PIMA CO 12/17/13

Date Sampled: 12/17/2013 12:30:00
Date Received: 12/23/2013 00:00
Date Reported: 01/09/2014

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	6.09	60900	100.0	BW	12/23/2013 14:39	SM-2540G
Moisture *	93.91		100.0	BW	12/23/2013 14:39	SM-2540G
Total Kjeldahl Nitrogen	7.01	70100	10.0	JM	12/30/2013 08:10	SM-4500-NH3C-TKN
Total Phosphorus	3.04	30400	100	KM	01/03/2014 12:10	SW-6010B
Total Potassium	0.30	2980	100	KM	01/03/2014 12:10	SW-6010B
Total Sulfur	1.43	14300	100	KM	01/03/2014 12:10	SW-6010B
Total Calcium	4.65	46500	100	KM	01/03/2014 12:10	SW-6010B
Total Magnesium	0.65	6520	100	KM	01/03/2014 12:10	SW-6010B
Total Sodium	0.28	2840	100	KM	01/03/2014 12:10	SW-6010B
Total Iron		25300	100	KM	01/03/2014 12:10	SW-6010B
Total Aluminum		5500	100	KM	01/03/2014 12:10	SW-6010B
Total Manganese		233	5	KM	01/03/2014 12:10	SW-6010B
Total Copper		490	5	KM	01/03/2014 12:10	SW-6010B
Total Zinc		991	5	KM	01/03/2014 12:10	SW-6010B
Ammonia Nitrogen	1.95	19500	10.0	JM	12/30/2013 08:10	SM-4500-NH3C
Organic N	5.06	50600	10.0		12/30/2013 08:10	CALCULATION
Nitrate+Nitrite-N		27.9	2.00	JM	01/02/2014 08:20	SM-4500NO3F
Total Cadmium		2.0	2.0	KM	01/03/2014 12:10	SW-6010B

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

Report Number: 13-357-0204
Account Number: 16010

www.aleastern.com

A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 12/17/13

REPORT OF ANALYSIS

Lab Number : 97232
Sample Id : PIMA CO 12/17/13

Date Sampled: 12/17/2013 12:30:00
Date Received: 12/23/2013 00:00
Date Reported: 01/09/2014

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Chromium		48	5	KM	01/03/2014 12:10	SW-6010B
Total Nickel		28	5	KM	01/03/2014 12:10	SW-6010B
Total Lead		18	5	KM	01/03/2014 12:10	SW-6010B
Total Arsenic		8.0	3.0	KM	01/03/2014 12:10	SW-6010B
Total Mercury		1.1	0.4	KM	01/02/2014 09:00	SW-7471A
Total Selenium		5.0	5.0	KM	01/03/2014 12:10	SW-6010B
pH (Standard Units) *	7.95		2.00	JM	01/02/2014 08:19	SW-9045D
Total Molybdenum		14	5	KM	01/03/2014 12:10	SW-6010B
Chloride		15300	200	JM	01/03/2014 09:20	SM-4500Cl-D
Total Boron		64	3	KM	01/03/2014 12:10	SW-6010B
Total Silver		<5	5	BKN	01/08/2014 13:24	SW-6010B

Comments:
pH, CHLORIDE, SULFUR, & SILVER NOT FOR COMPLIANCE TESTING.
QUALIFIER: THE MATRIX SPIKE WAS OUT OF LIMIS FOR "Fe". ALL OTHER QC DATA IS ACCEPTABLE.

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

Report Number: 14-001-0200
Account Number: 16010
Submitted By: ROB FEHRMANN

A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446
www.aleastern.com

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 12/27/13 AZ#0629

REPORT OF ANALYSIS

Lab Number : 97266
Sample Id : PIMA CO

Date Sampled: 12/27/2013 10:30:00
Date Received: 01/02/2014 00:00
Date Reported: 01/15/2014

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Solids *	4.95	49500	100.0	JM	01/02/2014 14:30	SM-2540G
Moisture *	95.05		100.0	JM	01/02/2014 14:30	SM-2540G
Total Kjeldahl Nitrogen	7.19	71900	10.0	JM	01/03/2014 00:00	SM-4500-NH3C-TKN
Total Phosphorus	2.81	28100	100	KM	01/03/2014 15:23	SW-6010B
Total Potassium	0.34	3410	100	KM	01/03/2014 15:23	SW-6010B
Total Sulfur	1.44	14400	100	KM	01/03/2014 15:23	SW-6010B
Total Calcium	4.58	45800	100	KM	01/03/2014 15:23	SW-6010B
Total Magnesium	0.67	6660	100	KM	01/03/2014 15:23	SW-6010B
Total Sodium	0.34	3400	100	KM	01/03/2014 15:23	SW-6010B
Total Iron	2.52	25200	100	KM	01/03/2014 15:23	SW-6010B
Total Aluminum	0.60	6000	100	KM	01/03/2014 15:23	SW-6010B
Total Manganese	0.02	212	5	KM	01/03/2014 15:23	SW-6010B
Total Copper	0.05	480	5	KM	01/03/2014 15:23	SW-6010B
Total Zinc	0.10	986	5	KM	01/03/2014 15:23	SW-6010B
Ammonia Nitrogen	2.32	23200	10.0	JM	01/03/2014 07:39	SM-4500-NH3C
Organic N	4.87	48700	10.0		01/03/2014 00:00	CALCULATION
Nitrate+Nitrite-N		40.4	2.00	JM	01/03/2014 07:40	SM-4500NO3F
Total Cadmium		2.0	2.0	KM	01/03/2014 15:23	SW-6010B

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Debbie Holt

Report Number: 14-001-0200
Account Number: 16010
Submitted By: ROB FEHRMANN

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7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446
www.aleastern.com

Send To: AVRA GRO SYSTEMS INC
ROB FEHRMANN
11661 W GRIER RD
MARANA , AZ 85653

Project : PIMA CO 12/27/13 AZ#0629

REPORT OF ANALYSIS

Lab Number : 97266
Sample Id : PIMA CO

Date Sampled: 12/27/2013 10:30:00
Date Received: 01/02/2014 00:00
Date Reported: 01/15/2014

PARAMETER	RESULT (%)	RESULT (mg/kg)	QUANTITATION LIMIT (mg/kg*)	ANALYST	ANALYSIS DATE/TIME	METHOD
Total Chromium		43	5	KM	01/03/2014 15:23	SW-6010B
Total Nickel		27	5	KM	01/03/2014 15:23	SW-6010B
Total Lead		18	5	KM	01/03/2014 15:23	SW-6010B
Total Arsenic		10.0	3.0	KM	01/03/2014 15:23	SW-6010B
Total Mercury		1.2	0.4	KM	01/06/2014 09:00	SW-7471A
Total Selenium		7.0	5.0	KM	01/03/2014 15:23	SW-6010B
pH (Standard Units) *	7.95		2.00	JM	01/03/2014 07:39	SW-9045D
Total Molybdenum		15	5	KM	01/03/2014 15:23	SW-6010B
Chloride		13800	200	JM	01/03/2014 09:20	SM-4500Cl-D
Total Boron		68	3	KM	01/03/2014 15:23	SW-6010B
Total Silver		6	5	BKN	01/14/2014 12:25	SW-6010B

Comments:
pH, CHLORIDE, SULFUR, & SILVER NOT FOR COMPLIANCE TESTING.

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

SECTION 5

ROGER ROAD WRF
AZPDES NO. AZ0020923

QUARTERLY SLUDGE SAMPLING AND ANALYSES

PRIORITY POLLUTANTS AND POLLUTANTS OF CONCERN

ANNUAL BIOSOLIDS REPORT 2013

PIMA COUNTY
REGIONAL WASTEWATER RECLAMATION DEPARTMENT
PIMA COUNTY, ARIZONA

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office (CRAO) Laboratory
2955 W. Calle Agua Nueva, Tucson Arizona 85745-9750, Phone (520) 724-6200

Report Date: 08/28/2013
Laboratory License: AZO159

Sample Analysis Report
Roger Road WRF
February 2013

Sample Integrity

SAMPLE RECEIPT: Samples were received intact at the required temperature, unless otherwise noted with a data qualifier below. Please refer to the Chain of Custody for sample receipt details.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Pima County CRAO Laboratory Quality Manual.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS:

Notes and Definitions:
See attached

Case Narratives:
See attached

All results on this report intended for compliance submission must have the associated chain(s) of custody attached for the results to meet reporting requirements as per ADHS Laboratory licensure rules. If you have received this report for compliance purposes and it is not complete, please contact the Compliance and Regulatory Affairs Office for a final report in its entirety.

Reviewed By:

Barbara A Esther

08/28/13
Date

Laboratory Director or Designee
Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

Laboratory License: AZO159

Sample Qualifiers

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Sample Qualifiers
Final Effluent Trough	1302070-01	Water	2/8/2013 6:00:00	2/8/2013 9:45:00	Q6
Raw Influent	1302070-04	Water	2/8/2013 6:00:00	2/8/2013 9:45:00	Q6
Well SC-01R	1302091-01	Water	2/11/2013 9:30:00	2/11/2013 10:40:00	Q6
Well SC-02R	1302091-02	Water	2/11/2013 10:10:00	2/11/2013 10:40:00	Q6

Raw Influent (20923-0100)

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1302062-09	D	Cyanide	02/07/13 9:20	SM4500-CN-E	2/15/13 14:17	**1.41**	ug/L	1.10	5.00	J	MGA
1302070-04	C	Antimony	02/08/13 6:00	EPA 200.8	2/21/13 13:02	**0.70**	ug/L	0.17	1.00	J	JB
1302070-04	C	Arsenic	02/08/13 6:00	EPA 200.8	2/21/13 13:02	**4.76**	ug/L	0.13	1.00		JB
1302070-04	C	Cadmium	02/08/13 6:00	EPA 200.8	2/21/13 13:02	**ND**	ug/L	0.41	1.00		JB
1302070-04	C	Chromium	02/08/13 6:00	EPA 200.8	2/21/13 13:02	**3.99**	ug/L	0.40	1.00		JB
1302070-04	C	Copper	02/08/13 6:00	EPA 200.8	2/21/13 13:02	**53.9**	ug/L	0.66	1.00		JB
1302070-04	C	Lead	02/08/13 6:00	EPA 200.8	2/21/13 13:02	**1.27**	ug/L	0.11	1.00		JB
1302070-04	C	Nickel	02/08/13 6:00	EPA 200.8	2/21/13 13:02	**3.81**	ug/L	0.29	1.00		JB
1302070-04	C	Selenium	02/08/13 6:00	EPA 200.8	2/21/13 13:02	**2.75**	ug/L	0.50	1.00		JB
1302070-04	C	Silver	02/08/13 6:00	EPA 200.8	2/21/13 13:02	**2.14**	ug/L	0.11	1.00		JB
1302070-04	C	Thallium	02/08/13 6:00	EPA 200.8	2/21/13 13:02	**0.16**	ug/L	0.13	1.00	J	JB
1302070-04	C	Mercury	02/08/13 6:00	EPA 245.1	2/14/13 9:40	**0.297**	ug/L	0.111	0.20		DDO
1302070-04RE1	C	Beryllium	02/08/13 6:00	EPA 200.8	2/26/13 14:44	**ND**	ug/L	0.22	1.00		JB
1302070-04RE2	C	Zinc	02/08/13 6:00	EPA 200.8	2/21/13 16:32	**246**	ug/L	0.90	5.00	D2	JB
1302070-04	C	Acrolein	02/08/13 6:00	EPA 624	2/12/13 12:49	**ND**	ug/L	1.03	5.00		EVS
1302070-04	C	Acrylonitrile	02/08/13 6:00	EPA 624	2/12/13 12:49	**ND**	ug/L	2.06	5.00		EVS
1302070-04	C	Bromoform	02/08/13 6:00	EPA 624	2/11/13 18:51	**0.13**	ug/L	0.07	0.50	J	DLC
1302070-04	C	Ethyl Benzene	02/08/13 6:00	EPA 624	2/11/13 18:51	**0.67**	ug/L	0.03	0.50	N1	DLC
1302070-04	C	Toluene	02/08/13 6:00	EPA 624	2/11/13 18:51	**0.83**	ug/L	0.06	0.50		DLC
1302070-04	C	1,4-Dichlorobenzene	02/08/13 6:00	EPA 624	2/11/13 18:51	**1.33**	ug/L	0.06	0.50		DLC
1302070-04	C	Chloroform	02/08/13 6:00	EPA 624	2/11/13 18:51	**1.76**	ug/L	0.03	0.50		DLC
1302070-04	C	Total Trihalomethanes	02/08/13 6:00	EPA 624	2/11/13 18:51	**1.89**	ug/L	0.09	0.50		DLC
1302070-04	C	1,1,1-Trichloroethane	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.06	0.50		DLC
1302070-04	C	1,1,2,2-Tetrachloroethane	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.05	0.50	N1	DLC
1302070-04	C	1,1,2-Trichloroethane	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.04	0.50	N1	DLC
1302070-04	C	1,1-Dichloroethane	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.05	0.50		DLC
1302070-04	C	1,1-Dichloroethene	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.17	0.50		DLC
1302070-04	C	1,2-Dichlorobenzene	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.06	0.50		DLC
1302070-04	C	1,2-Dichloroethane	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.06	1.00	N1	DLC
1302070-04	C	1,2-Dichloropropane	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.07	0.50		DLC
1302070-04	C	1,3-Dichlorobenzene	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.06	0.50		DLC
1302070-04	C	2-Chloroethyl vinyl ether	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.06	0.50		DLC
1302070-04	C	Benzene	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.03	0.50	N1	DLC
1302070-04	C	Bromodichloromethane	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.06	1.00		DLC
1302070-04	C	Bromomethane	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.14	0.50		DLC
1302070-04	C	Carbon Tetrachloride	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.09	0.50		DLC
1302070-04	C	Chlorobenzene	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.02	0.50		DLC
1302070-04	C	Chloroethane	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.10	0.50		DLC
1302070-04	C	Chloromethane	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.11	0.50		DLC
1302070-04	C	cis-1,3-Dichloropropene	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.07	1.00		DLC
1302070-04	C	Dibromochloromethane	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.09	0.50		DLC
1302070-04	C	Methylene Chloride	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.05	0.50		DLC
1302070-04	C	Tetrachloroethene	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.05	0.50		DLC
1302070-04	C	trans-1,2-Dichloroethene	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.13	0.50		DLC
1302070-04	C	trans-1,3-Dichloropropene	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.06	0.50		DLC
1302070-04	C	Trichloroethene	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.05	0.50		DLC
1302070-04	C	Trichlorofluoromethane	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.07	0.50		DLC
1302070-04	C	Vinyl chloride	02/08/13 6:00	EPA 624	2/11/13 18:51	**ND**	ug/L	0.05	0.50		DLC
1302070-04	C	4,4-DDD	02/08/13 6:00	EPA 625	3/7/13 20:10	**ND**	ug/L	0.06	1.25	D1, D7	mam-z
1302070-04	C	4,4-DDE	02/08/13 6:00	EPA 625	3/7/13 20:10	**ND**	ug/L	0.05	1.25	D1, D7, L5	mam-z
1302070-04	C	4,4-DDT	02/08/13 6:00	EPA 625	3/7/13 20:10	**ND**	ug/L	0.04	1.25	D1, D7, N1	mam-z
1302070-04	C	Aldrin	02/08/13 6:00	EPA 625	3/7/13 20:10	**ND**	ug/L	0.10	1.25	D1, D7	mam-z
1302070-04	C	alpha-BHC	02/08/13 6:00	EPA 625	3/7/13 20:10	**ND**	ug/L	0.09	1.25	D1, D7	mam-z
1302070-04	C	beta-BHC	02/08/13 6:00	EPA 625	3/7/13 20:10	**ND**	ug/L	0.10	1.25	D1, D7, N1	mam-z
1302070-04	C	Chlordane	02/08/13 6:00	EPA 625	3/7/13 20:10	**ND**	ug/L	0.70	10.00	D1, D7	mam-z
1302070-04	C	delta-BHC	02/08/13 6:00	EPA 625	3/7/13 20:10	**ND**	ug/L	0.08	1.25	D1, D7, N1	mam-z
1302070-04	C	Dieldrin	02/08/13 6:00	EPA 625	3/7/13 20:10	**ND**	ug/L	0.07	1.25	D1, D7, N1	mam-z
1302070-04	C	Endosulfan I	02/08/13 6:00	EPA 625	3/7/13 20:10	**ND**	ug/L	0.05	1.25	D1, D7	mam-z
1302070-04	C	Endosulfan II	02/08/13 6:00	EPA 625	3/7/13 20:10	**ND**	ug/L	0.03	1.25	D1, D7	mam-z
1302070-04	C	Endosulfan sulfate	02/08/13 6:00	EPA 625	3/7/13 20:10	**ND**	ug/L	0.05	2.50	D1, D7	mam-z
1302070-04	C	Endrin	02/08/13 6:00	EPA 625	3/7/13 20:10	**ND**	ug/L	0.10	1.25	D1, D7, L5	mam-z
1302070-04	C	Endrin aldehyde	02/08/13 6:00	EPA 625	3/7/13 20:10	**ND**	ug/L	0.07	1.25	D1, D7, N1	mam-z
1302070-04	C	gamma-BHC (Lindane)	02/08/13 6:00	EPA 625	3/7/13 20:10	**ND**	ug/L	0.09	1.25	D1, D7	mam-z
1302070-04	C	Heptachlor	02/08/13 6:00	EPA 625	3/7/13 20:10	**ND**	ug/L	0.10	1.25	D1, D7, N1	mam-z
1302070-04	C	Heptachlor Epoxide	02/08/13 6:00	EPA 625	3/7/13 20:10	**ND**	ug/L	0.11	1.25	D1, D7, N1	mam-z
1302070-04	C	PCB 1016	02/08/13 6:00	EPA 625	3/7/13 20:10	**ND**	ug/L	0.10	3.00	D1, D7	mam-z
1302070-04	C	PCB 1221	02/08/13 6:00	EPA 625	3/7/13 20:10	**ND**	ug/L	0.09	2.50	D1, D7	mam-z

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1302070-04	C	PCB 1232	02/08/13 6:00	EPA 625	3/7/13 20:10	ND	ug/L	0.16	2.50	D1, D7	mam-z
1302070-04	C	PCB 1242	02/08/13 6:00	EPA 625	3/7/13 20:10	ND	ug/L	0.10	2.50	D1, D7	mam-z
1302070-04	C	PCB 1248	02/08/13 6:00	EPA 625	3/7/13 20:10	ND	ug/L	0.16	2.50	D1, D7	mam-z
1302070-04	C	PCB 1254	02/08/13 6:00	EPA 625	3/7/13 20:10	ND	ug/L	0.07	2.50	D1, D7	mam-z
1302070-04	C	PCB 1260	02/08/13 6:00	EPA 625	3/7/13 20:10	ND	ug/L	0.25	3.00	D1, D7	mam-z
1302070-04	C	Total PCBs	02/08/13 6:00	EPA 625	3/7/13 20:10	ND	ug/L	0.25	3.00	D1, D7	mam-z
1302070-04	C	Toxaphene	02/08/13 6:00	EPA 625	3/7/13 20:10	ND	ug/L	5.08	60.00	D1, D7	mam-z
1302070-04	C	2,3,7,8-TCDD - Dioxin Scan	02/08/13 6:00	EPA 625	2/28/13 12:17	ND	ug/L		0.03		SJM
1302070-04	C	4-Methylphenol	02/08/13 6:00	EPA 625	2/27/13 20:45	161	ug/L	2.94	12.00	D1, D7, N1	SJM
1302070-04	C	Phenol	02/08/13 6:00	EPA 625	2/27/13 20:45	19.3	ug/L	2.30	12.00	D1, D7, N1	SJM
1302070-04	C	Di-n-butyl phthalate	02/08/13 6:00	EPA 625	2/27/13 20:45	2.73	ug/L	1.67	4.00	D1, D7, N1	SJM
1302070-04	C	Diethyl phthalate	02/08/13 6:00	EPA 625	2/27/13 20:45	3.74	ug/L	1.05	4.00	D1, D7, N1	SJM
1302070-04	C	bis(2-ethylhexyl)phthalate	02/08/13 6:00	EPA 625	2/27/13 20:45	8.18	ug/L	2.67	12.00	D1, D7, N1	SJM
1302070-04	C	1,2,4-Trichlorobenzene	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.06	4.00	D1, D7, N1	SJM
1302070-04	C	1,2-Diphenylhydrazine	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.23	4.00	D1, D7	SJM
1302070-04	C	2,3-Dichloroaniline	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.04	4.00	D1, D7, N1	SJM
1302070-04	C	2,4,6-Trichlorophenol	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.20	4.00	D1, D7, N1	SJM
1302070-04	C	2,4-Dichlorophenol	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.16	4.00	D1, D7, N1	SJM
1302070-04	C	2,4-Dimethylphenol	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	2.89	12.00	D1, D7	SJM
1302070-04	C	2,4-Dinitrophenol	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	9.43	20.00	D1, D7, N1	SJM
1302070-04	C	2,4-Dinitrotoluene	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.20	4.00	D1, D7, N1	SJM
1302070-04	C	2,6-Dinitrotoluene	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.94	4.00	D1, D7, N1	SJM
1302070-04	C	2-Chloronaphthalene	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.13	4.00	D1, D7, N1	SJM
1302070-04	C	2-Chlorophenol	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.51	4.00	D1, D7, N1	SJM
1302070-04	C	2-Methyl-4,6-dinitrophenol	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	3.73	12.00	D1, D7, N1	SJM
1302070-04	C	2-Methylphenol	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.52	4.00	D1, D7, N1	SJM
1302070-04	C	2-Nitrophenol	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	2.18	12.00	D1, D7, N1	SJM
1302070-04	C	3,3-Dichlorobenzidine	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	2.23	30.00	D1, D7, N1	SJM
1302070-04	C	4-Bromophenyl phenyl ether	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.45	4.00	D1, D7, N1	SJM
1302070-04	C	4-Chloro-3-methylphenol	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.42	4.00	D1, D7, N1	SJM
1302070-04	C	4-Chlorophenyl phenyl ether	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.15	4.00	D1, D7, N1	SJM
1302070-04	C	4-Nitrophenol	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	4.95	12.00	D1, D7, N1	SJM
1302070-04	C	Acenaphthene	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.17	4.00	D1, D7, N1	SJM
1302070-04	C	Acenaphthylene	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	0.84	4.00	D1, D7	SJM
1302070-04	C	Anthracene	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.09	4.00	D1, D7, N1	SJM
1302070-04	C	Benzidine	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	24.9	70.00	D1, D7, N1	SJM
1302070-04	C	Benzo[a]anthracene	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.44	4.00	D1, D7, N1	SJM
1302070-04	C	Benzo[a]pyrene	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.55	12.00	D1, D7, N1	SJM
1302070-04	C	Benzo[b]fluoranthene	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.57	4.00	D1, D7, N1	SJM
1302070-04	C	Benzo[ghi]perylene	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.78	4.00	D1, D7, N1	SJM
1302070-04	C	Benzo[k]fluoranthene	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	2.28	12.00	D1, D7, N1	SJM
1302070-04	C	bis(2-chloroethoxy)methane	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.06	4.00	D1, D7, N1	SJM
1302070-04	C	bis(2-chloroethyl)ether	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	0.99	4.00	D1, D7, N1	SJM
1302070-04	C	bis(2-chloroisopropyl)ether	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.14	4.00	D1, D7, N1	SJM
1302070-04	C	Butylbenzylphthalate	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.53	12.00	D1, D7	SJM
1302070-04	C	Carbazole	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.27	4.00	D1, D7, N1	SJM
1302070-04	C	Chrysene	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.47	4.00	D1, D7, N1	SJM
1302070-04	C	Dibenzo(a,h)anthracene	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.87	4.00	D1, D7, N1	SJM
1302070-04	C	Dimethyl phthalate	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	0.72	4.00	D1, D7, N1	SJM
1302070-04	C	Di-n-octyl phthalate	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.83	4.00	D1, D7, N1	SJM
1302070-04	C	Fluoranthene	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.45	4.00	D1, D7, N1	SJM
1302070-04	C	Fluorene	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.28	4.00	D1, D7, N1	SJM
1302070-04	C	Hexachlorobenzene	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	0.80	4.00	D1, D7, N1	SJM
1302070-04	C	Hexachlorobutadiene	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.19	4.00	D1, D7	SJM
1302070-04	C	Hexachlorocyclopentadiene	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	2.59	12.00	D1, D7	SJM
1302070-04	C	Hexachloroethane	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.21	4.00	D1, D7	SJM
1302070-04	C	Indeno(1,2,3-cd)pyrene	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	2.25	12.00	D1, D7, N1	SJM
1302070-04	C	Isophorone	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.35	4.00	D1, D7, N1	SJM
1302070-04	C	Naphthalene	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.26	4.00	D1, D7, N1	SJM
1302070-04	C	n-Decane	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.66	4.00	D1, D7, N1	SJM
1302070-04	C	Nitrobenzene	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	2.86	12.00	D1, D7, N1	SJM
1302070-04	C	N-Nitrosodimethylamine	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	4.23	12.00	D1, D7, N1, PC3	SJM
1302070-04	C	N-Nitroso-di-n-propylamine	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.13	4.00	D1, D7, N1	SJM
1302070-04	C	N-Nitrosodiphenylamine	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.83	4.00	D1, D7, N1	SJM
1302070-04	C	n-Octadecane	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.66	4.00	D1, D7, N1	SJM
1302070-04	C	Pentachlorophenol	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	3.20	12.00	D1, D7, N1	SJM
1302070-04	C	Phenanthrene	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.15	4.00	D1, D7, N1	SJM
1302070-04	C	Pyrene	02/08/13 6:00	EPA 625	2/27/13 20:45	ND	ug/L	1.29	4.00	D1, D7, N1	SJM
1302070-04	C	Styrene	02/08/13 6:00	EPA 8260B	2/15/13 20:10	0.46	ug/L	0.18	2.00	J	DLC
1302070-04	C	1,2,4-Trichlorobenzene	02/08/13 6:00	EPA 8260B	2/11/13 18:51	ND	ug/L	0.08	0.50		DLC
1302070-04	C	1,2-Dibromo-3-chloropropane	02/08/13 6:00	EPA 8260B	2/11/13 18:51	ND	ug/L	0.09	0.50		DLC

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1302070-04	C	1,2-Dibromoethane	02/08/13 6:00	EPA 8260B	2/11/13 18:51	**ND**	ug/L	0.04	0.50		DLC
1302070-04	C	cis-1,2-Dichloroethene	02/08/13 6:00	EPA 8260B	2/11/13 18:51	**ND**	ug/L	0.06	0.50		DLC
1302070-04	C	m,p-Xylenes	02/08/13 6:00	EPA 8260B	2/11/13 18:51	**ND**	ug/L	0.06	0.50		DLC
1302070-04	C	o-Xylene	02/08/13 6:00	EPA 8260B	2/11/13 18:51	**ND**	ug/L	0.05	1.00		DLC
1302070-04	C	Xylenes, total	02/08/13 6:00	EPA 8260B	2/11/13 18:51	**ND**	ug/L	0.06	1.00		DLC
1302070-04	C	Methoxychlor	02/08/13 6:00	EPA 8270C	3/7/13 20:10	**ND**	ug/L	0.0600	1.00	D1, D7, N1	mam-z
1302070-04	C	1,2-Diphenylhydrazine	02/08/13 6:00	EPA 8270C	2/27/13 20:45	**ND**	ug/L	1.23	4.00	D1, D7	SJM

Final Effluent Trough (20923-7003)

1302062-01	D	Temperature	02/07/13 10:00	SM2550B	2/7/13 10:00	**22.6**	°C		0.01		SMPLR
1302062-01	D	pH	02/07/13 10:00	SM4500 H B	2/7/13 10:00	**7.59**	pH Units				SMPLR
1302062-01	D	Temp at time of pH, °C	02/07/13 10:00	SM4500 H B	2/7/13 10:00	**22.7**	°C				SMPLR
1302062-01	D	Dissolved Oxygen	02/07/13 10:00	SM4500 O G	2/7/13 10:00	**6.9**	mg/L		0.10		SMPLR
1302192-01	D	Temperature	02/22/13 9:30	SM2550B	2/22/13 9:30	**20.7**	°C		0.01		SMPLR
1302192-01	D	pH	02/22/13 9:30	SM4500 H B	2/22/13 9:30	**7.78**	pH Units				SMPLR
1302192-01	D	Temp at time of pH, °C	02/22/13 9:30	SM4500 H B	2/22/13 9:30	**20.6**	°C				SMPLR
1302032-01	D	Nitrate	02/04/13 9:05	Calculated	2/7/13 12:29	**ND**	mg/L	0.03	0.20		DDO
1302032-01	D	Nitrogen Total Water	02/04/13 9:05	Calculated	2/7/13 12:29	**32.9**	mg/L	0.38	0.80		KKH
1302032-01	D	Total Kjeldahl Nitrogen	02/04/13 9:05	EPA 351.2	2/7/13 11:18	**32.8**	mg/L	0.38	0.80		KKH
1302032-01	D	Nitrate/Nitrite	02/04/13 9:05	EPA 353.2	2/7/13 12:29	**0.12**	mg/L	0.03	0.20	J	AMK
1302032-01	D	Ammonia	02/04/13 9:05	SM4500-NH3-D	2/15/13 11:01	**22.6**	mg/L	0.02	0.50	D1	AMK
1302032-01	D	Nitrite	02/04/13 9:05	SM4500-NO2 B	2/5/13 13:35	**0.19**	mg/L	0.01	0.20	J	DDO
1302062-01	D	Mercury	02/07/13 10:00	EPA 245.7	2/11/13 10:54	**7.96**	ng/L		5.00	T1, T6	KKH
1302062-01	D	Sulfide	02/07/13 10:00	Hach 8131	2/8/13 11:47	**ND**	mg/L	0.006	0.10		DDO
1302062-01	D	Cyanide	02/07/13 10:00	SM4500-CN-E	2/15/13 14:16	**ND**	ug/L	1.10	5.00		MGA
1302062-01	D	Ammonia	02/07/13 10:00	SM4500-NH3-D	2/15/13 11:32	**27.9**	mg/L	0.02	0.50		AMK
1302062-02	D	Chromium (Dissolved)	02/07/13 10:00	EPA 200.8	2/12/13 17:13	**0.86**	ug/L	0.40	1.00	J	JB
1302062-02	D	Chromium, Hexavalent	02/07/13 10:00	EPA 200.8		**NA**	ug/L	0.400	1.00	N7	
1302062-02	D	Mercury (Dissolved)	02/07/13 10:00	EPA 245.7	2/11/13 11:01	**ND**	ng/L		5.00	T1, T6	KKH
1302062-03	FB	Mercury	02/07/13 10:00	EPA 245.7	2/11/13 10:49	**ND**	ng/L		5.00	T1, T6	KKH
1302062-04	FB	Mercury (Dissolved)	02/07/13 10:00	EPA 245.7	2/11/13 10:51	**ND**	ng/L		5.00	T1, T6	KKH
1302070-01	C	Nitrogen Total Water	02/08/13 6:00	Calculated	2/22/13 10:34	**38.2**	mg/L	0.38	0.80		AMK
1302070-01	C	Boron	02/08/13 6:00	EPA 200.7	3/7/13 11:34	**186**	ug/L	4.86	25.00		MLB
1302070-01	C	Calcium	02/08/13 6:00	EPA 200.7	2/15/13 15:28	**53.9**	mg/L	0.04	4.00		MLB
1302070-01	C	Iron	02/08/13 6:00	EPA 200.7	3/7/13 11:34	**168**	ug/L	3.39	25.00		MLB
1302070-01	C	Magnesium	02/08/13 6:00	EPA 200.7	2/15/13 15:28	**12.2**	mg/L	0.01	2.00		MLB
1302070-01	C	Antimony	02/08/13 6:00	EPA 200.8	2/21/13 12:30	**0.28**	ug/L	0.17	1.00	J	JB
1302070-01	C	Arsenic	02/08/13 6:00	EPA 200.8	2/21/13 12:30	**3.40**	ug/L	0.13	1.00		JB
1302070-01	C	Barium	02/08/13 6:00	EPA 200.8	2/21/13 12:30	**53.5**	ug/L	0.26	1.00		JB
1302070-01	C	Cadmium	02/08/13 6:00	EPA 200.8	2/21/13 12:30	**ND**	ug/L	0.41	1.00		JB
1302070-01	C	Chromium	02/08/13 6:00	EPA 200.8	2/21/13 12:30	**1.05**	ug/L	0.40	1.00		JB
1302070-01	C	Copper	02/08/13 6:00	EPA 200.8	2/21/13 12:30	**8.60**	ug/L	0.66	1.00		JB
1302070-01	C	Lead	02/08/13 6:00	EPA 200.8	2/21/13 12:30	**0.23**	ug/L	0.11	1.00	J	JB
1302070-01	C	Manganese	02/08/13 6:00	EPA 200.8	2/21/13 12:30	**14.9**	ug/L	0.12	1.00		JB
1302070-01	C	Nickel	02/08/13 6:00	EPA 200.8	2/21/13 12:30	**1.80**	ug/L	0.29	1.00		JB
1302070-01	C	Selenium	02/08/13 6:00	EPA 200.8	2/21/13 12:30	**0.84**	ug/L	0.50	1.00	J	JB
1302070-01	C	Silver	02/08/13 6:00	EPA 200.8	2/21/13 12:30	**0.17**	ug/L	0.11	1.00	J	JB
1302070-01	C	Thallium	02/08/13 6:00	EPA 200.8	2/21/13 12:30	**0.37**	ug/L	0.13	1.00	J	JB
1302070-01	C	Mercury	02/08/13 6:00	EPA 245.1	2/14/13 9:38	**ND**	ug/L	0.111	0.20		DDO
1302070-01	C	Total Kjeldahl Nitrogen	02/08/13 6:00	EPA 351.2	2/22/13 10:34	**38.1**	mg/L	0.38	0.80		AMK
1302070-01	C	Nitrate/Nitrite	02/08/13 6:00	EPA 353.2	2/12/13 11:29	**0.09**	mg/L	0.03	0.20	J	KKH
1302070-01	C	Phosphorus	02/08/13 6:00	EPA 365.1	2/20/13 15:06	**3.27**	mg/L	0.06	0.50		MGA
1302070-01	C	Hardness	02/08/13 6:00	SM 2340B	2/15/13 15:28	**185**	mg/L	0.10	9.99		MLB
1302070-01	C	Cyanide	02/08/13 6:00	SM4500-CN-E	2/15/13 14:21	**1.95**	ug/L	1.10	5.00	J	MGA
1302070-01	C	Fluoride	02/08/13 6:00	SM4500-F-C	2/20/13 11:57	**0.462**	mg/L	0.009	0.02		KKH
1302070-01RE1	C	Beryllium	02/08/13 6:00	EPA 200.8	2/26/13 14:25	**ND**	ug/L	0.22	1.00		JB
1302070-01RE1	C	Zinc	02/08/13 6:00	EPA 200.8	2/21/13 16:10	**30.1**	ug/L	0.90	2.00	D1	JB
1302192-01	D	Ammonia	02/22/13 9:30	SM4500-NH3-D	3/6/13 11:35	**28.4**	mg/L	0.02	0.50	B4	AMK
1302070-01	C	Total Dissolved Solids	02/08/13 6:00	SM 2540C	2/12/13 15:15	**559**	mg/L		10.00		SJD
1302070-01	C	Total Suspended Solids	02/08/13 6:00	SM 2540D	2/10/13 11:40	**15.0**	mg/L		2.50		SRM
1302070-01	C	Biochemical Oxygen Deman	02/08/13 6:00	SM 5210B	2/14/13 7:47	**11.0**	mg/L		2.00		SJD
1302062-01	D	Oil & Grease	02/07/13 10:00	EPA 1664B	2/19/13 16:26	**4.38**	mg/L	0.83	5.00	J	EVS
1302070-01	C	Acrolein	02/08/13 6:00	EPA 624	2/12/13 11:12	**ND**	ug/L	1.11	5.00		cv
1302070-01	C	Acrylonitrile	02/08/13 6:00	EPA 624	2/12/13 11:12	**ND**	ug/L	1.16	5.00		cv
1302070-01	C	1,4-Dichlorobenzene	02/08/13 6:00	EPA 624	2/11/13 19:52	**0.11**	ug/L	0.06	0.50	J	DLC

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1302070-01	C	Toluene	02/08/13 6:00	EPA 624	2/11/13 19:52	**0.21**	ug/L	0.06	0.50	J	DLC
1302070-01	C	Methylene Chloride	02/08/13 6:00	EPA 624	2/11/13 19:52	**0.22**	ug/L	0.05	0.50	J	DLC
1302070-01	C	Chloroform	02/08/13 6:00	EPA 624	2/11/13 19:52	**0.36**	ug/L	0.03	0.50	J	DLC
1302070-01	C	Total Trihalomethanes	02/08/13 6:00	EPA 624	2/11/13 19:52	**0.36**	ug/L	0.09	0.50	J	DLC
1302070-01	C	1,1,1-Trichloroethane	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.06	0.50		DLC
1302070-01	C	1,1,2,2-Tetrachloroethane	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.05	0.50	N1	DLC
1302070-01	C	1,1,2-Trichloroethane	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.04	0.50	N1	DLC
1302070-01	C	1,1-Dichloroethane	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.05	0.50		DLC
1302070-01	C	1,1-Dichloroethene	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.17	0.50		DLC
1302070-01	C	1,2-Dichlorobenzene	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.06	1.00		DLC
1302070-01	C	1,2-Dichloroethane	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.06	0.50	N1	DLC
1302070-01	C	1,2-Dichloropropane	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.07	0.50		DLC
1302070-01	C	1,3-Dichlorobenzene	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.06	0.50		DLC
1302070-01	C	2-Chloroethyl vinyl ether	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.06	0.50		DLC
1302070-01	C	Benzene	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.03	0.50	N1	DLC
1302070-01	C	Bromodichloromethane	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.06	0.50		DLC
1302070-01	C	Bromoform	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.07	0.50		DLC
1302070-01	C	Bromomethane	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.14	0.50		DLC
1302070-01	C	Carbon Tetrachloride	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.09	0.50		DLC
1302070-01	C	Chlorobenzene	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.02	0.50		DLC
1302070-01	C	Chloroethane	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.10	0.50		DLC
1302070-01	C	Chloromethane	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.11	0.50		DLC
1302070-01	C	cis-1,3-Dichloropropene	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.07	0.50		DLC
1302070-01	C	Dibromochloromethane	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.09	0.50		DLC
1302070-01	C	Ethyl Benzene	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.03	0.50	N1	DLC
1302070-01	C	Tetrachloroethene	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.05	0.50		DLC
1302070-01	C	trans-1,2-Dichloroethene	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.13	0.50		DLC
1302070-01	C	trans-1,3-Dichloropropene	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.06	0.50		DLC
1302070-01	C	Trichloroethene	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.05	0.50		DLC
1302070-01	C	Trichlorofluoromethane	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.07	0.50		DLC
1302070-01	C	Vinyl chloride	02/08/13 6:00	EPA 624	2/11/13 19:52	**ND**	ug/L	0.05	0.50		DLC
1302070-01	C	4,4-DDD	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.06	0.13	L5	mam-z
1302070-01	C	4,4-DDE	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.05	0.13	L5	mam-z
1302070-01	C	4,4-DDT	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.04	0.13	R4	mam-z
1302070-01	C	Aldrin	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.10	0.13		mam-z
1302070-01	C	alpha-BHC	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.09	0.13		mam-z
1302070-01	C	beta-BHC	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.10	0.13	R13	mam-z
1302070-01	C	Chlordane	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.70	1.00		mam-z
1302070-01	C	delta-BHC	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.08	0.13	R4	mam-z
1302070-01	C	Dieldrin	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.07	0.13	R4	mam-z
1302070-01	C	Endosulfan I	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.05	0.13		mam-z
1302070-01	C	Endosulfan II	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.03	0.13		mam-z
1302070-01	C	Endosulfan sulfate	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.05	0.25		mam-z
1302070-01	C	Endrin	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.10	0.13	L5	mam-z
1302070-01	C	Endrin aldehyde	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.07	0.13	R4	mam-z
1302070-01	C	gamma-BHC (Lindane)	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.09	0.13		mam-z
1302070-01	C	Heptachlor	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.10	0.13	R4	mam-z
1302070-01	C	Heptachlor Epoxide	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.11	0.13	R13	mam-z
1302070-01	C	PCB 1016	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.10	0.30		mam-z
1302070-01	C	PCB 1221	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.09	0.25		mam-z
1302070-01	C	PCB 1232	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.16	0.25		mam-z
1302070-01	C	PCB 1242	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.10	0.25		mam-z
1302070-01	C	PCB 1248	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.16	0.25		mam-z
1302070-01	C	PCB 1254	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.07	0.25		mam-z
1302070-01	C	PCB 1260	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.25	0.30		mam-z
1302070-01	C	Total PCBs	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	0.25	0.30		mam-z
1302070-01	C	Toxaphene	02/08/13 6:00	EPA 625	3/7/13 13:12	**ND**	ug/L	5.08	6.00		mam-z
1302070-01	C	Diethyl phthalate	02/08/13 6:00	EPA 625	2/27/13 15:07	**1.56**	ug/L	1.05	2.13	M2, J	SJM
1302070-01	C	bis(2-ethylhexyl)phthalate	02/08/13 6:00	EPA 625	2/27/13 15:07	**2.83**	ug/L	2.67	6.39	M2, R1, J	SJM
1302070-01	C	1,2,4-Trichlorobenzene	02/08/13 6:00	EPA 625	2/27/13 15:07	**ND**	ug/L	1.06	2.13	M2	SJM
1302070-01	C	1,2-Diphenylhydrazine	02/08/13 6:00	EPA 625	2/27/13 15:07	**ND**	ug/L	1.23	2.13		SJM
1302070-01	C	2,3-Dichloroaniline	02/08/13 6:00	EPA 625	2/27/13 15:07	**ND**	ug/L	1.04	2.13	L4, M2	SJM
1302070-01	C	2,4,6-Trichlorophenol	02/08/13 6:00	EPA 625	2/27/13 15:07	**ND**	ug/L	1.20	2.13	M2, R1	SJM
1302070-01	C	2,4-Dichlorophenol	02/08/13 6:00	EPA 625	2/27/13 15:07	**ND**	ug/L	1.16	2.13	M2, R1	SJM
1302070-01	C	2,4-Dimethylphenol	02/08/13 6:00	EPA 625	2/27/13 15:07	**ND**	ug/L	2.89	6.39		SJM
1302070-01	C	2,4-Dinitrophenol	02/08/13 6:00	EPA 625	2/27/13 15:07	**ND**	ug/L	9.43	10.65	M2, R1	SJM
1302070-01	C	2,4-Dinitrotoluene	02/08/13 6:00	EPA 625	2/27/13 15:07	**ND**	ug/L	1.20	2.13	M2	SJM
1302070-01	C	2,6-Dinitrotoluene	02/08/13 6:00	EPA 625	2/27/13 15:07	**ND**	ug/L	1.94	2.13	M2	SJM
1302070-01	C	2-Chloronaphthalene	02/08/13 6:00	EPA 625	2/27/13 15:07	**ND**	ug/L	1.13	2.13	M2	SJM
1302070-01	C	2-Chlorophenol	02/08/13 6:00	EPA 625	2/27/13 15:07	**ND**	ug/L	1.51	2.13	M2, R1	SJM
1302070-01	C	2-Methyl-4,6-dinitrophenol	02/08/13 6:00	EPA 625	2/27/13 15:07	**ND**	ug/L	3.73	6.39	M2, R1	SJM

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1302070-01	C	2-Methylphenol	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.52	2.13	M2, R1	SJM
1302070-01	C	2-Nitrophenol	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	2.18	6.39	M2, R1	SJM
1302070-01	C	3,3-Dichlorobenzidine	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	2.23	15.98	M2, V9	SJM
1302070-01	C	4-Bromophenyl phenyl ether	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.45	2.13	M2	SJM
1302070-01	C	4-Chloro-3-methylphenol	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.42	2.13	M2, R1	SJM
1302070-01	C	4-Chlorophenyl phenyl ether	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.15	2.13	M2	SJM
1302070-01	C	4-Methylphenol	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	2.94	6.39	L4, M2, R1	SJM
1302070-01	C	4-Nitrophenol	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	4.95	6.39	R4	SJM
1302070-01	C	Acenaphthene	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.17	2.13	M2	SJM
1302070-01	C	Acenaphthylene	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	0.84	2.13		SJM
1302070-01	C	Anthracene	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.09	2.13	M2	SJM
1302070-01	C	Benzidine	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	24.9	37.28	L4, M2, R1, V9	SJM
1302070-01	C	Benzo[a]anthracene	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.44	2.13	M2	SJM
1302070-01	C	Benzo[a]pyrene	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.55	6.39	M2, R1	SJM
1302070-01	C	Benzo[b]fluoranthene	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.57	2.13	M2, R1	SJM
1302070-01	C	Benzo[ghi]perylene	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.78	2.13	M2, R1	SJM
1302070-01	C	Benzo[k]fluoranthene	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	2.28	6.39	M2, R1	SJM
1302070-01	C	bis(2-chloroethoxy)methane	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.06	2.13	M2	SJM
1302070-01	C	bis(2-chloroethyl)ether	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	0.99	2.13	M2	SJM
1302070-01	C	bis(2-chloroisopropyl)ether	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.14	2.13	M2	SJM
1302070-01	C	Butylbenzylphthalate	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.53	6.39		SJM
1302070-01	C	Carbazole	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.27	2.13	L4, M2	SJM
1302070-01	C	Chrysene	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.47	2.13	M2, R1	SJM
1302070-01	C	Dibenzo(a,h)anthracene	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.87	2.13	M2	SJM
1302070-01	C	Dimethyl phthalate	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	0.72	2.13	R4	SJM
1302070-01	C	Di-n-butyl phthalate	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.67	2.13	M2	SJM
1302070-01	C	Di-n-octyl phthalate	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.83	2.13	M2, R1	SJM
1302070-01	C	Fluoranthene	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.45	2.13	M2	SJM
1302070-01	C	Fluorene	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.28	2.13	M2	SJM
1302070-01	C	Hexachlorobenzene	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	0.80	2.13	M2	SJM
1302070-01	C	Hexachlorobutadiene	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.19	2.13		SJM
1302070-01	C	Hexachlorocyclopentadiene	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	2.59	6.39		SJM
1302070-01	C	Hexachloroethane	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.21	2.13		SJM
1302070-01	C	Indeno(1,2,3-cd)pyrene	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	2.25	6.39	M2, R1	SJM
1302070-01	C	Isophorone	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.35	2.13	M2	SJM
1302070-01	C	Naphthalene	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.26	2.13	M2	SJM
1302070-01	C	n-Decane	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.66	2.13	R4	SJM
1302070-01	C	Nitrobenzene	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	2.86	6.39	M2	SJM
1302070-01	C	N-Nitrosodimethylamine	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	4.23	6.39	M2, PC3	SJM
1302070-01	C	N-Nitroso-di-n-propylamine	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.13	2.13	M2	SJM
1302070-01	C	N-Nitrosodiphenylamine	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.83	2.13	M2	SJM
1302070-01	C	n-Octadecane	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.66	2.13	M2	SJM
1302070-01	C	Pentachlorophenol	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	3.20	6.39	M2, R1	SJM
1302070-01	C	Phenanthrene	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.15	2.13	M2	SJM
1302070-01	C	Phenol	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	2.30	6.39	M2, R1	SJM
1302070-01	C	Pyrene	02/08/13 6:00	EPA 625	2/27/13 15:07	ND	ug/L	1.29	2.13	M2	SJM
1302070-01	C	1,2,4-Trichlorobenzene	02/08/13 6:00	EPA 8260B	2/11/13 19:52	ND	ug/L	0.08	1.00		DLC
1302070-01	C	1,2-Dibromo-3-chloropropan	02/08/13 6:00	EPA 8260B	2/11/13 19:52	ND	ug/L	0.09	1.00		DLC
1302070-01	C	1,2-Dibromoethane	02/08/13 6:00	EPA 8260B	2/11/13 19:52	ND	ug/L	0.04	0.50		DLC
1302070-01	C	cis-1,2-Dichloroethene	02/08/13 6:00	EPA 8260B	2/11/13 19:52	ND	ug/L	0.06	0.50		DLC
1302070-01	C	m,p-Xylenes	02/08/13 6:00	EPA 8260B	2/11/13 19:52	ND	ug/L	0.06	1.00		DLC
1302070-01	C	o-Xylene	02/08/13 6:00	EPA 8260B	2/11/13 19:52	ND	ug/L	0.05	0.50		DLC
1302070-01	C	Styrene	02/08/13 6:00	EPA 8260B	2/11/13 19:52	ND	ug/L	0.18	0.50		DLC
1302070-01	C	Xylenes, total	02/08/13 6:00	EPA 8260B	2/11/13 19:52	ND	ug/L	0.06	1.00		DLC
1302070-01	C	Methoxychlor	02/08/13 6:00	EPA 8270C	3/7/13 13:12	ND	ug/L	0.0600	0.10	R4	mam-z
1302070-01	C	1,2-Diphenylhydrazine	02/08/13 6:00	EPA 8270C	2/27/13 15:07	ND	ug/L	1.23	2.13		SJM
CL Pimephales promelas Growth											
1302031-01	C	TUc (NOEC Based)	02/04/13 8:00	EPA 1000	2/5/13 17:45	1.0	N/A	1.0	1.0		OTHER
1302031-01	C	NOEC % Effluent	02/04/13 8:00	EPA 1000	2/5/13 17:45	100	N/A	1.0	1.0		OTHER
1302031-01	C	LOEC % Effluent	02/04/13 8:00	EPA 1000	2/5/13 17:45	NC	N/A	1.0	1.0		OTHER
1302031-01	C	TUc (IC25 Based)	02/04/13 8:00	EPA 1000	2/5/13 17:45	NC	N/A	1.0	1.0		OTHER
* Analysis Performed by:Bio-Aquatic Testing, Inc. - See attached contract lab report for official results.											
CL Pimephales promelas Survival											
1302031-01	C	TUc (NOEC Based)	02/04/13 8:00	EPA 1000	2/5/13 17:45	1.0	N/A	1.0	1.0		OTHER
1302031-01	C	NOEC % Effluent	02/04/13 8:00	EPA 1000	2/5/13 17:45	100	N/A	1.0	1.0		OTHER
1302031-01	C	LOEC % Effluent	02/04/13 8:00	EPA 1000	2/5/13 17:45	NC	N/A	1.0	1.0		OTHER
1302031-01	C	TUc (IC25 Based)	02/04/13 8:00	EPA 1000	2/5/13 17:45	NC	N/A	1.0	1.0		OTHER
* Analysis Performed by:Bio-Aquatic Testing, Inc. - See attached contract lab report for official results.											
CL Ceriodaphnia dubia Reproduction											

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1302031-01	C	TUc (NOEC Based)	02/04/13 8:00	EPA 1002	2/5/13 15:40	**1.0**	N/A	1.0	1.0		OTHER
1302031-01	C	NOEC % Effluent	02/04/13 8:00	EPA 1002	2/5/13 15:40	**100**	N/A	1.0	1.0		OTHER
1302031-01	C	LOEC % Effluent	02/04/13 8:00	EPA 1002	2/5/13 15:40	**NC**	N/A	1.0	1.0		OTHER
1302031-01	C	TUc (IC25 Based)	02/04/13 8:00	EPA 1002	2/5/13 15:40	**NC**	N/A	1.0	1.0		OTHER
* Analysis Performed by:Bio-Aquatic Testing, Inc. - See attached contract lab report for official results.											
CL Ceriodaphnia dubia Survival											
1302031-01	C	TUc (NOEC Based)	02/04/13 8:00	EPA 1002	2/5/13 15:40	**1.0**	N/A	1.0	1.0		OTHER
1302031-01	C	NOEC % Effluent	02/04/13 8:00	EPA 1002	2/5/13 15:40	**100**	N/A	1.0	1.0		OTHER
1302031-01	C	LOEC % Effluent	02/04/13 8:00	EPA 1002	2/5/13 15:40	**NC**	N/A	1.0	1.0		OTHER
1302031-01	C	TUc (IC25 Based)	02/04/13 8:00	EPA 1002	2/5/13 15:40	**NC**	N/A	1.0	1.0		OTHER
* Analysis Performed by:Bio-Aquatic Testing, Inc. - See attached contract lab report for official results.											
CL Selenastrum capricornutum											
1302031-01	C	TUc (NOEC Based)	02/04/13 8:00	EPA 1003	2/5/13 17:05	**1.0**	N/A	1.0	1.0		OTHER
1302031-01	C	NOEC % Effluent	02/04/13 8:00	EPA 1003	2/5/13 17:05	**100**	N/A	1.0	1.0		OTHER
1302031-01	C	LOEC % Effluent	02/04/13 8:00	EPA 1003	2/5/13 17:05	**NC**	N/A	1.0	1.0		OTHER
1302031-01	C	TUc (IC25 Based)	02/04/13 8:00	EPA 1003	2/5/13 17:05	**NC**	N/A	1.0	1.0		OTHER
* Analysis Performed by:Bio-Aquatic Testing, Inc. - See attached contract lab report for official results.											
1302071-01	C	Tributyltin	02/08/13 6:00	Organotins/GC	2/24/13 14:05	**ND**	ug/L	0.014	0.052		WBR*
* Analysis Performed by:TestAmerica Burlington - See attached contract lab report for official results.											
1302071-01	C	1,2-Dibromo-3-Chloropropan	02/08/13 6:00	504.1	2/19/13 23:44	**ND**	ug/L		0.019		DD *
1302071-01	C	1,2-Dibromoethane	02/08/13 6:00	504.1	2/19/13 23:44	**ND**	ug/L		0.0097		DD *
* Analysis Performed by:TestAmerica Irvine - See attached contract lab report for official results.											
1302071-01	C	2,4,5-T	02/08/13 6:00	515.4	2/15/13 0:39	**ND**	ug/L		0.99		DD *
1302071-01	C	2,4,5-TP (Silvex)	02/08/13 6:00	515.4	2/15/13 0:39	**ND**	ug/L		0.20		DD *
1302071-01	C	2,4-D	02/08/13 6:00	515.4	2/15/13 0:39	**ND**	ug/L		0.099		DD *
1302071-01	C	2,4-DB	02/08/13 6:00	515.4	2/15/13 0:39	**ND**	ug/L		0.99		DD *
1302071-01	C	3,5-Dichlorobenzoic acid	02/08/13 6:00	515.4	2/15/13 0:39	**ND**	ug/L		0.99		DD *
1302071-01	C	Bentazon	02/08/13 6:00	515.4	2/15/13 0:39	**ND**	ug/L		2.0		DD *
1302071-01	C	Dacthal acid metabolites	02/08/13 6:00	515.4	2/15/13 0:39	**ND**	ug/L		0.99		DD *
1302071-01	C	Dalapon	02/08/13 6:00	515.4	2/15/13 0:39	**ND**	ug/L		0.99		DD *
1302071-01	C	Dicamba	02/08/13 6:00	515.4	2/15/13 0:39	**ND**	ug/L		1.5		DD *
1302071-01	C	Dichlorprop	02/08/13 6:00	515.4	2/15/13 0:39	**ND**	ug/L		0.99		DD *
1302071-01	C	Dinoseb	02/08/13 6:00	515.4	2/15/13 0:39	**ND**	ug/L		0.20		DD *
1302071-01	C	Pentachlorophenol	02/08/13 6:00	515.4	2/15/13 0:39	**ND**	ug/L		0.040		DD *
1302071-01	C	Picloram	02/08/13 6:00	515.4	2/15/13 0:39	**ND**	ug/L		0.099		DD *
* Analysis Performed by:TestAmerica Irvine - See attached contract lab report for official results.											
1302071-01	C	3-Hydroxycarbofuran	02/08/13 6:00	531.1	2/18/13 23:26	**ND**	ug/L		1.0		DD *
1302071-01	C	Aldicarb	02/08/13 6:00	531.1	2/18/13 23:26	**ND**	ug/L		3.0		DD *
1302071-01	C	Aldicarb sulfone	02/08/13 6:00	531.1	2/18/13 23:26	**ND**	ug/L		4.0		DD *
1302071-01	C	Aldicarb sulfoxide	02/08/13 6:00	531.1	2/18/13 23:26	**ND**	ug/L		3.0		DD *
1302071-01	C	Carbaryl	02/08/13 6:00	531.1	2/18/13 23:26	**ND**	ug/L		1.0		DD *
1302071-01	C	Carbofuran	02/08/13 6:00	531.1	2/18/13 23:26	**ND**	ug/L		0.90		DD *
1302071-01	C	Methomyl	02/08/13 6:00	531.1	2/18/13 23:26	**ND**	ug/L		1.0		DD *
1302071-01	C	Oxamyl	02/08/13 6:00	531.1	2/18/13 23:26	**ND**	ug/L		2.0		DD *
* Analysis Performed by:TestAmerica Irvine - See attached contract lab report for official results.											
1302071-01	C	Glyphosate	02/08/13 6:00	547	2/14/13 0:59	**ND**	ug/L		6.0		DD *
* Analysis Performed by:TestAmerica Irvine - See attached contract lab report for official results.											
1302071-01	C	Endothall	02/08/13 6:00	548.1	2/14/13 22:19	**ND**	ug/L		9.0		CP *
* Analysis Performed by:TestAmerica Irvine - See attached contract lab report for official results.											
1302071-01	C	Diquat	02/08/13 6:00	549.2	2/18/13 19:20	**ND**	ug/L		0.40		DD *
1302071-01	C	Paraquat	02/08/13 6:00	549.2	2/18/13 19:20	**ND**	ug/L		20		DD *
* Analysis Performed by:TestAmerica Irvine - See attached contract lab report for official results.											
1302071-01	C	Mirex	02/08/13 6:00	8081A	2/19/13 3:56	**ND**	ug/L		0.22		CN *
* Analysis Performed by:TestAmerica Irvine - See attached contract lab report for official results.											
1302062-05	D	Mercury	02/07/13 10:00	1631E	2/13/13 12:40	**0.0093**	ug/L		0.00050		VLC *
* Analysis Performed by:TestAmerica Pensacola - See attached contract lab report for official results.											
1302062-07	D	Mercury, Dissolved	02/07/13 10:00	1631E	2/13/13 10:33	**0.0021**	ug/L		0.00050		VLC *
* Analysis Performed by:TestAmerica Pensacola - See attached contract lab report for official results.											
1302071-01	C	Uranium	02/08/13 6:00	EPA 200.8	2/19/13 11:29	**0.0031**	mg/l		0.0010		SLS *
* Analysis Performed by:TestAmerica Phoenix - See attached contract lab report for official results.											
1302071-01	C	Guthion	02/08/13 6:00	EPA 8141A	2/23/13 19:37	**ND**	ug/l		10		AT *
* Analysis Performed by:TestAmerica Phoenix - See attached contract lab report for official results.											
1302071-01	C	Malathion	02/08/13 6:00	EPA 8141A	2/19/13 23:32	**ND**	ug/l		2.5		AT *

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1302071-01	C	Parathion	02/08/13 6:00	EPA 8141A	2/19/13 23:32	ND	ug/l		2.5		AT *
* Analysis Performed by:TestAmerica Phoenix - See attached contract lab report for official results.											
1302071-01	C	2,3,7,8-TCDD	02/08/13 6:00	1613B	2/21/13 0:14	ND	pg/L		.11		MG *
* Analysis Performed by:TestAmerica Sacramento - See attached contract lab report for official results.											
1302071-01	C	Simazine	02/08/13 6:00	525.2	2/21/13 0:00	0.58	ug/L		0.07		SMP *
1302071-01	C	Di(2-ethylhexyl)phthalate	02/08/13 6:00	525.2	2/21/13 0:00	4.8	ug/L		0.6		SMP *
1302071-01	C	Erucylamide	02/08/13 6:00	525.2	2/21/13 0:00	6.7	ug/L		5		SMP *
1302071-01	C	1,2,4,5-Tetrachlorobenzene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP *
1302071-01	C	1-Methylnaphthalene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	2,2',3,3',4,4',6-Heptachlorobi	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP *
1302071-01	C	2,2',3,3',4,5',6,6'-Octachlorob	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP *
1302071-01	C	2,2',3',4,6-Pentachlorobiphen	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	2,2',4,4',5,6'-Hexachlorobiphe	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	2,2',4,4'-Tetrachlorobiphenyl	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	2,3-Dichlorobiphenyl	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	2,4,5-Trichlorobiphenyl	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	2,4-Dinitrotoluene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP *
1302071-01	C	2,6-Dinitrotoluene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP *
1302071-01	C	2-Chlorobiphenyl	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	2-Methylnaphthalene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	4,4'-DDD	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	4,4'-DDE	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	4,4'-DDT	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Acenaphthene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Acenaphthylene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Acetochlor	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Alachlor	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.2		SMP *
1302071-01	C	Aldrin	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	alpha-BHC	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	alpha-Chlordane	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Ametryn	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Anilazine	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		1		SMP *
1302071-01	C	Anthracene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Aspon	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Atraton	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Atrazine	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Azinphos-ethyl	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP *
1302071-01	C	Azinphos-methyl	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP *
1302071-01	C	Bendiocarb	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP *
1302071-01	C	Benfluralin	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Benzo(a)anthracene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Benzo(a)pyrene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.02		SMP *
1302071-01	C	Benzo(b)fluoranthene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Benzo(g,h,i)perylene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Benzo(k)fluoranthene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	beta-BHC	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Bolstar	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Bromacil	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Butachlor	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Butylate	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Butylbenzylphthalate	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		1		SMP *
1302071-01	C	Carbophenothion	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP *
1302071-01	C	Carboxin	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Chlorfenvinphos	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		5		SMP *
1302071-01	C	Chlorobenzilate	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Chloroneb	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Chloropropylate	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Chlorothalonil	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Chlorpropham	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Chlorpyrifos	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Chlorpyrifos methyl	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP *
1302071-01	C	Chrysene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	cis-Nonachlor	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	cis-Permethrin	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Clomazone	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Clopyralid	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		10		SMP *
1302071-01	C	Coumaphos	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP *
1302071-01	C	Crotoxyphos	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP *

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1302071-01	C	Cyanazine	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Cycloate	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	DCPA	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	delta-BHC	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Demeton O	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Demeton S	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Desethylatrazine	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		1		SMP*
1302071-01	C	Desisopropylatrazine	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		1		SMP*
1302071-01	C	Di(2-ethylhexyl)adipate	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.6		SMP*
1302071-01	C	Diazinon	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Dibenzo(a,h)anthracene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Dichlobenil	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Dichlofenthion	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Dichloran	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Dichlorvos	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Dicrotophos	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Dieldrin	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Diethylphthalate	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		1		SMP*
1302071-01	C	Dimethoate	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Dimethylphthalate	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		1		SMP*
1302071-01	C	Di-n-butylphthalate	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		2		SMP*
1302071-01	C	Di-n-octylphthalate	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		2		SMP*
1302071-01	C	Dioxathion	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Diphenamid	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Disulfoton	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Disulfoton sulfone	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Disulfoton sulfoxide	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		10		SMP*
1302071-01	C	Endosulfan I	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Endosulfan II	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Endosulfan sulfate	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Endrin	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.01		SMP*
1302071-01	C	Endrin aldehyde	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	E-Phosphamidon	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	EPN	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	EPTC	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Esfenvalerate	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Ethalfluralin	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Ethion	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		5		SMP*
1302071-01	C	Ethofumesate	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Ethoprop	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Etridiazole	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Famphur	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Fenamiphos	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Fenarimol	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		1		SMP*
1302071-01	C	Fenitrothion	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Fenoxaprop-ethyl	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		1		SMP*
1302071-01	C	Fensulfothion	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Fenthion	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Fluazifop-butyl	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Fluchloralin	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Fluometuron	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Fluoranthene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Fluorene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Fluridone	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		1		SMP*
1302071-01	C	Fonofos	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	gamma-BHC (Lindane)	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.02		SMP*
1302071-01	C	gamma-Chlordane	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Heptachlor	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.04		SMP*
1302071-01	C	Heptachlor epoxide	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.02		SMP*
1302071-01	C	Hexachlorobenzene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Hexachlorocyclopentadiene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Hexazinone	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Indeno(1,2,3-cd)pyrene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Iprodione	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Isofenphos	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Isophorone	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Leptophos	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Malathion	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Metalaxyl	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Methoxychlor	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Methyl paraoxon	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1302071-01	C	Methyl parathion	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Metolachlor	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Metribuzin	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Metsulfuron-methyl	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		10		SMP*
1302071-01	C	Mevinphos	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	MGK 264 isomer a	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	MGK 264 isomer b	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	MGK 326	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Mirex	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Molinate	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Monocrotophos	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Naled	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Naphthalene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Napropamide	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Norflurazon	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		1		SMP*
1302071-01	C	Oryzalin	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		10		SMP*
1302071-01	C	Oxadiazon	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Oxychlordane	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Oxyfluorfen	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Parathion	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Pebulate	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Pendimethalin	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Pentachlorobenzene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Pentachloronitrobenzene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Pentachlorophenol	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		1		SMP*
1302071-01	C	Permethrin, cis & trans	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Phenanthrene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Phorate	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Phosmet	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Profluralin	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Prometon	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		1		SMP*
1302071-01	C	Prometryn	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Pronamide	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Propachlor	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Propanil	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Propazine	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Propiconazole isomer a	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		5		SMP*
1302071-01	C	Propiconazole isomer b	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		5		SMP*
1302071-01	C	Prothiofos	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Pyrene	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Simetryn	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Stirofos	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Sulfotep	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Tebuthiuron	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		10		SMP*
1302071-01	C	TEPP	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		1		SMP*
1302071-01	C	Terbacil	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Terbufos	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Terbutryn	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Thiabendazole	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		10		SMP*
1302071-01	C	Thiobencarb	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Thionazin	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	trans-Nonachlor	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	trans-Permethrin	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Triadimefon	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Tribufos	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Trichloronate	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Tricyclazole	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		1		SMP*
1302071-01	C	Trifluralin	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Vernolate	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.1		SMP*
1302071-01	C	Vinclozolin	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*
1302071-01	C	Z-Phosphamidon	02/08/13 6:00	525.2	2/21/13 0:00	ND	ug/L		0.5		SMP*

* Analysis Performed by:UL LLC - See attached contract lab report for official results.

Well SC-01R (20923-9009)

APP

1302091-01	D	Nitrate	02/11/13 9:30	Calculated	2/12/13 11:55	**14.1**	mg/L	0.03	0.20		AMK
1302091-01	D	Nitrogen Total Water	02/11/13 9:30	Calculated	2/22/13 10:48	**14.1**	mg/L	0.38	0.80		AMK
1302091-01	D	Calcium	02/11/13 9:30	EPA 200.7	2/15/13 15:30	**94.9**	mg/L	0.04	4.00		MLB
1302091-01	D	Iron	02/11/13 9:30	EPA 200.7	3/7/13 11:42	**21.2**	ug/L	3.39	25.00	J	MLB
1302091-01	D	Magnesium	02/11/13 9:30	EPA 200.7	2/15/13 15:30	**12.2**	mg/L	0.01	2.00		MLB

Qualifier Definitions

A	Absent
B4	Target analyte detected in blank at or above method acceptance criteria.
D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of target analyte.
D7	Minimum Reporting Limit adjusted to reflect sample dilution.
J	Concentration estimated. Analyte was detected below laboratory minimum reporting limit (MRL) but above MDL.
L4	The associated blank spike recovery was below method acceptance limits.
L5	The associated blank spike recovery was above laboratory/method acceptance limits. This analyte was not detected in the sample.
M2	Matrix spike recovery was low; the associated blank spike recovery was acceptable.
N1	See case narrative.
N7	Additional analysis was not performed based on the "Total" result which was below the requested analyte's MCL/Action level/Trigger Level.
NA	Not Analyzed
NC	Not Calculable
PC3	Semi-quantitation is included in the case narrative.
Q6	Sample was received above recommended temperature.
R1	RDP/RSD exceeded the method acceptance limit. See case narrative.
R13	MS/MSD RPD exceeded method acceptance limit. Matrix spike recovery was outside the acceptance criteria. Batch precision and accuracy were demonstrated.
R4	MS/MSD RPD exceeded the method acceptance limit. Recovery met acceptance criteria.
T1	Method approved by EPA, but not yet licensed by ADHS.
T6	The reported result cannot be used for compliance purposes.
V9	CCV recovery was below method acceptance limits.

General Notes and Definitions

C	Sample Type - Composite
D	Sample Type - Discrete
DD	Sample Type - Discrete Duplicate
ND	Analyte NOT DETECTED at or above the reporting limit (MDL)
NR	Not Reported
DET	Analyte DETECTED
DRY	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
Analysis Date	Analysis Date represents the final reading date.
Field Results	Field Results performed by "SMPLR" (Sampler), are not subject to approval of Laboratory Director.
Solids, Total Volatile	Used for process control samples only.
RE	Re-Analysis has been performed.

Case Narrative(s)

1302070-04
This sample was extracted for EPA Method 625 Pesticides on 02/12/13. Target analytes flagged with N1 for this method failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. MAM-Z

1302070-04A & 1302070-03A
This sample was extracted for EPA Method 624 and Method 8260on 02/11/13. Target analytes flagged with N1 for this method failed the Matrix Spike from the same analytical batch but the spike was performed on a different sample. DLC

Semi-Quantitation
Method:625
1302070-01

Compound Name	Concentration-ug/L
Palmitic Acid	129

1302070-01
This sample was analyzed for EPA Method 625. Target compounds flagged with R1 for this method failed precision due to problems encountered during sample preparation. SJM

1302070-04
This sample was extracted for EPA Method 625 Semi-volatiles on 02/14/13. Target analytes flagged with N1 failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample.SJM

Semi-Quantitation
Method:625
1302070-04

Compound Name	Concentration-ug/L
Benzyl Alcohol	27
Benzoic Acid	173
.alpha.-Terpineol	14
Benzeneacetic Acid	104
Indole	30
n-Decanoic Acid	12
Dodecanoic Acid	24
1-Dodecanol	8
Tetradecanoic Acid	29
Caffeine	23
Palmitic Acid	4040
9,12-Octadecadienoic Acid, ZZ-	27
Oleic Acid	5747
Stearic Acid	1401
Squalene	21
Cholestanol	9

1302091-01G
This sample was extracted for EPA Method 624 and Method 8260 on 02/11/13. Target analytes flagged with N1 for this method failed the Matrix Spike from the same analytical batch but the spike was performed on a different sample. DLC

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1302062-09

SITE & LOCATION: Roger Road WRF - Raw Influent

SITE-LOCATION NUMBER: 20923-0100 (XXXXX-XXXX)

SAMPLE START DATE: — (MM / DD / YYYY)

SAMPLE START TIME: — (24 Hour Clock)

SUBMITTER: CRAO/Water Quality

SAMPLE END DATE: 02/07/2013 (MM / DD / YYYY)

SAMPLE END TIME: 0920 (24 Hour Clock)

SAMPLER: Goodman, Horney (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ■ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ☐ Biosolids ☐ Soil ■ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐			
Cobalt	☐	☐			
Copper	☐	☐			
Hardness	☐	☐			
Iron	☐	☐			
Lead	☐	☐			
Magnesium	☐	☐			
Manganese	☐	☐			
Mercury	☐	☐			
Molybdenum	☐	☐			
Nickel	☐	☐			
Potassium	☐	☐			
Selenium	☐	☐			
Silver	☐	☐			
Sodium	☐	☐			
Strontium	☐	☐			
Thallium	☐	☐			
Tin	☐	☐			

WET METHODS	D	C
Ammonia as N	☐	☐
Chloride	☐	☐
Cyanide, Total	■	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	☐
Nitrite as N	☐	☐
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	☐
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:

# of Bottles Delivered: 1 GOS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	[signature]	02-07-13	1032
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature: 5 °C

Initials: GOS

Non-Preserved		#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH	1	#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☒
Received from a refrigerator?	☐	☒	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1302070-04, 05, 06

SITE & LOCATION: Roger Road WRF - Raw Influent

SITE-LOCATION NUMBER: 20923-0100 (XXXXX-XXXX)

SAMPLE START DATE: 02-07-2013 (MM / DD / YYYY)

SAMPLE START TIME: 0600 (24 Hour Clock)

SUBMITTER: CRAO/Water Quality

SAMPLE END DATE: 02-08-2013 (MM / DD / YYYY)

SAMPLE END TIME: 0600 (24 Hour Clock)

SAMPLER: Grodman, Horney, Goodyear, Grodman (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ■ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ☐ Biosolids ☐ Soil ■ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	■
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐			
Cobalt	☐	☐			
Copper	☐	☐			
Hardness	☐	☐			
Iron	☐	☐			
Lead	☐	☐			
Magnesium	☐	☐			
Manganese	☐	☐			
Mercury *	☐	■			
Molybdenum	☐	☐			
Nickel	☐	☐			
Potassium	☐	☐			
Selenium	☐	☐			
Silver	☐	☐			
Sodium	☐	☐			
Strontium	☐	☐			
Thallium	☐	☐			
Tin	☐	☐			

WET METHODS	D	C
Ammonia as N	☐	☐
Chloride	☐	☐
Cyanide, Total	☐	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	☐
Nitrite as N	☐	☐
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	☐
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	■	☐
Dioxin GC/SIM/MS Scan	☐	■
Organochlorine Pesticides & PCBs	☐	■
Purgeable Organics (GCMS)	■	☐
Semivolatile Organics (GCMS)	☐	■
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:
The Laboratory shall composite the 4 Purgeable organic and Acrolein/Acrylonitrile samples. Acrolein/Acrylonitrile samples have been pH adjusted 4-5SU

# of Bottles Delivered: (6) GOS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials: 1-29-13 LFS

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	[signature]	02-07-13	1530
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	[signature]	02-08-13	0800
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	[signature]	02-08-13	0945
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature: 6.8 °C (GOS 02-08-13)
Initials: GOS

Non-Preserved	4	#
HNO_3	1	#
H_2SO_4		#
HCl	1	#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☒	☐
Received from a refrigerator?	☐	☒	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1302062-01 through 08

SITE & LOCATION: Roger Road WRF - Final Effluent Trough

SITE-LOCATION NUMBER: 20923-7003 (XXXXX-XXXX)

SAMPLE START DATE: — (MM / DD / YYYY)

SAMPLE START TIME: — (24 Hour Clock)

SUBMITTER: CRAO/Water Quality

SAMPLE END DATE: 02/07/2013 (MM / DD / YYYY)

SAMPLE END TIME: 1000 (24 Hour Clock)

SAMPLER: Grodman, Horney (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ■ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ☐ Biosolids ☐ Soil ■ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C
Aluminum		
Antimony		
Arsenic		
Barium		
Beryllium		
Boron		
Cadmium		
Calcium		
Chromium		
Cobalt		
Copper		
Hardness		
Iron		
Lead		
Magnesium		
Manganese		
Mercury		
Molybdenum		
Nickel		
Potassium		
Selenium		
Silver		
Sodium		
Strontium		
Thallium		
Tin		

METALS	D	C
Titanium		
Vanadium		
Zinc		
Priority Pollutant Metals *		
TCLP Metals		
503 Metals **		
Chromium, Hexavalent	■	
Chromium, Trivalent		

WET METHODS	D	C
Ammonia as N	■	
Chloride		
Cyanide, Total	■	
Cyanide, Amenable		
Fluoride		
Ignitability		
Nitrate as N		
Nitrite as N		
Nitrate/Nitrite as N		
Nitrogen, Total Kjeldahl		
Nitrogen, Total as N		
Orthophosphate as P		
Phosphorus, Total as P		
Sulfate		
Sulfide	■	
Turbidity		

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile		
Dioxin GC/SIM/MS Scan		
Organochlorine Pesticides & PCBs		
Purgeable Organics (GCMS)		
Semivolatile Organics (GCMS)		
Other		

MISCELLANEOUS METHODS	D	C
4,4-DDE		
Bis(2-ethylhexyl) phthalate		
Digester Gas		
Oil and Grease	■	
Organic Carbon, Total		
Organic Carbon, Dissolved		
TCLP Herbicides (Contract Lab)		
TCLP Pesticides		
TCLP Semivolatile Organics		
TCLP Volatile Organics		
Total Petroleum Hydrocarbons		
Volatile Acids		

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*		
Chronic *C. dubia*		
Chronic *Selenastrum capricornutum*		
Other		

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity		
BOD		
COD		
Coliform, Fecal		
Coliform, Total		
Conductivity		
E. coli		
Oxygen, Dissolved		
pH		
Solids, Settleable		
Solids, Total		
Solids, Total Dissolved		
Solids, Total Suspended		
Solids, Total Volatile		
Solids, Volatile Suspended		
Other		

OTHER	D	C
Dissolved LL Mercury	■	
Total LL Mercury	■	
(contract lab)		

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
■ Oxygen, Dissolved *SM 4500-O G*	6.92	mg/L
■ pH / pH Temp *SM 4500-H B*	7.59 / 22.7	pH Units/ °C
■ Temperature *SM 2550 B*	22.6	°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:
Low level mercury to Test America PO#13-25736
Duplicate Low level mercury for in-house analysis
Triplicate Oil and Grease sample

# of Bottles Delivered: 10 QOS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
		020713	1032
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
		2-8-13	1212
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	13	°C
Initials:		
Non-Preserved	4	#
HNO_3		#
H_2SO_4	1	#
HCl	3	#
NaOH	2	#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$	1	#

Sample Inspection:

	Yes	No	NA
Chain of Custody Record completed appropriately?	☒		
Sample labels match Chain of Custody?	☒		
Correct number of samples were delivered?	☒		
Custody seals intact?			☒
Within holding time?	☒		
Sufficient sample volume for analysis?	☒		
Samples are in proper containers?	☒		
Sample containers damaged/leaking/frozen?		☒	
40 ml vials headspace, > pea-sized air bubble?			☒
Received from a refrigerator?		☒	

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-0013-550 (10/10)

CHAIN OF CUSTODY FORM

[ ] Phoenix - 4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303
[ ] Tucson - 1870 W. Prince Road, Suite 59, Tucson, AZ 85705 (520) 807-3801 FAX (520) 807-3803
[ ] Las Vegas - 6000 S Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

Page 1 of 1

Client Name/Address: Pima County CRAO Lab, 3035 W El Camino Del Cerro, Tucson AZ 85745

Project/PO Number: Roger mercury DO# 13-25736

Project Manager: Nancy Powell

Phone Number: 520-724-6183

Sampler: Jason Grodman

Fax Number: 520-724-6071

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	LL Hg EPA 1631	LL Hg EPA 1631 blank	LL Hg EPA 1631 dissolved	LL Hg EPA 1631 dissolved blank						Special Instructions
Roger Road final effluent	WW	glass vials	2 bags	02-07-13	1000	none										
20923-7003																
1302062-05							1									discrete
1302062-06								1								
1302062-07									1							discrete
1302062-08										1						Please filter
																dissolved samples.

Relinquished By:	Date/Time:	Received By:	Date/Time:	Turnaround Time: (Check)
[signature]	02-07-13 1032	[signature]	02-07-13 1032	same day ____ 72 hours ____
Relinquished By:	Date/Time:	Received By:	Date/Time:	24 hours ____ 5 days ____
[signature]	2-8-13 1212	[signature]	2-8-13 1212	48 hours ____ normal ✓
Relinquished By:	Date/Time:	Received in Lab By:	Date/Time:	Sample Integrity: (Check)
				intact ____ on ice ____

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-0013-550 (10/10)

CHAIN OF CUSTODY FORM

[ ] Phoenix - 4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303
[ ] Tucson - 1870 W. Prince Road, Suite 59, Tucson, AZ 85705 (520) 807-3801 FAX (520) 807-3803
[ ] Las Vegas - 6000 S Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

Client Name/Address: Pima County CRAO Lab, 3035 W El Camino Del Cerro, Tucson AZ 85745

Project/PO Number: Roger mercury DO# 13-25736

Project Manager: Nancy Powell

Phone Number: 520-724-6133

Sampler: Jason Gudman

Fax Number: 520-724-6071

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	LL Hg EPA 1631	LL Hg EPA 1631 blank	LL Hg EPA 1631 dissolved	LL Hg EPA 1631 dissolved blank						Special Instruction
Roger Road final effluent	WW	glass vials	2 bags	020713	1000	none										
20923-7003																
1302062-05							1									discrete
1302062-06								1								
1302062-07									1							discrete
1302062-08										1						Please filter dissolved sample

Relinquished By:	Date/Time:	Received By:	Date/Time:	Turnaround Time: (Check)
[signature]	02-07-13 / 1032	[signature]	02-07-13 1032	same day ____ 72 hours ____
Relinquished By:	Date/Time:	Received By:	Date/Time:	24 hours ____ 5 days ____
[signature]		[signature]	2-8-13 1212	48 hours ____ normal ✓
Relinquished By:	Date/Time:	Received in Lab By:	Date/Time:	Sample Integrity: (Check)
				intact ____ on ice ____

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

CMS

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: ~~1301032-01~~ 1302032-01 NH 4-20-13

SITE & LOCATION: Roger Road WRF - Final Effluent Trough

SITE-LOCATION NUMBER: 20923-7003 (XXXXX-XXXX)

SAMPLE START DATE: (MM / DD / YYYY)

SAMPLE START TIME: (24 Hour Clock)

SUBMITTER: CRAO/Water Quality

SAMPLE END DATE: 02-04-2013 (MM / DD / YYYY)

SAMPLE END TIME: 0905 (24 Hour Clock)

SAMPLER: GOODYEAR, GRODMAN (Print Last Names Only)

Permit Type: ■ APP ☐ Investigative ☐ 503 ☐ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ☐ Biosolids ☐ Soil ■ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐			
Cobalt	☐	☐			
Copper	☐	☐			
Hardness	☐	☐			
Iron	☐	☐			
Lead	☐	☐			
Magnesium	☐	☐			
Manganese	☐	☐			
Mercury	☐	☐			
Molybdenum	☐	☐			
Nickel	☐	☐			
Potassium	☐	☐			
Selenium	☐	☐			
Silver	☐	☐			
Sodium-	☐	☐			
Strontium	☐	☐			
Thallium	☐	☐			
Tin	☐	☐			

WET METHODS	D	C
Ammonia as N	■	☐
Chloride	☐	☐
Cyanide, Total	☐	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	■	☐
Nitrite as N	■	☐
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	■	☐
Nitrogen, Total as N	■	☐
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:

# of Bottles Delivered: 2 GOS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials:

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	2	°C
Initials:	GOS	
Non-Preserved	1	#
HNO_3		#
H_2SO_4	1	#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:

	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☒
Received from a refrigerator?	☐	☒	☐

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
[signature]		02-04-13	0955
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

* Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)
** As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1302070-01,02,03

SITE & LOCATION: Roger Road WRF - Final Effluent Trough

SITE-LOCATION NUMBER: 20923-7003 (XXXXX-XXXX)

SAMPLE START DATE: 02-07-2013 (MM / DD / YYYY)

SAMPLE START TIME: 0600 (24 Hour Clock)

SUBMITTER: CRAO/Water Quality

SAMPLE END DATE: 02-08-2013 (MM / DD / YYYY)

SAMPLE END TIME: 0600 (24 Hour Clock)

SAMPLER: Goldman, Harvey, Goodyear, Guebara (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ■ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ☐ Biosolids ☐ Soil ■ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium *	☐	■	Priority Pollutant Metals *	☐	■
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron *	☐	■	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐			
Cobalt	☐	☐			
Copper	☐	■			
Hardness *	☐	■			
Iron *	☐	■			
Lead	☐	☐			
Magnesium	☐	☐			
Manganese *	☐	■			
Mercury	☐	☐			
Molybdenum	☐	☐			
Nickel	☐	☐			
Potassium	☐	☐			
Selenium	☐	☐			
Silver	☐	☐			
Sodium	☐	☐			
Strontium	☐	☐			
Thallium	☐	☐			
Tin	☐	☐			

WET METHODS	D	C
Ammonia as N	☐	☐
Chloride	☐	☐
Cyanide, Total *	☐	■
Cyanide, Amenable	☐	☐
Fluoride *	☐	■
Ignitability	☐	☐
Nitrate as N	☐	☐
Nitrite as N	☐	☐
Nitrate/Nitrite as N *	☐	■
Nitrogen, Total Kjeldahl *	☐	■
Nitrogen, Total as N	☐	☐
Orthophosphate as P	☐	☐
Phosphorus, Total as P *	☐	■
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile *	■	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs *	☐	■
Purgeable Organics (GCMS) *	■	☐
Semivolatile Organics (GCMS) *	☐	■
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD *	☐	■
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	☐
Solids, Total Dissolved *	☐	■
Solids, Total Suspended *	☐	■
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:
The Laboratory shall composite the 4 Purgeable organic and Acrolein/Acrylonitrile samples. Acrolein/Acrylonitrile samples have been pH adjusted 4-5SU

# of Bottles Delivered: (15) GOS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials: 1-29-13 LEJ

Triplicates for 625 & GC/SP. GOS 02-08-13

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	[signature]	02/07/13	1530
[signature]	[signature]	02-08-13	0800
[signature]	[signature]	02-08-13	0945
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	8	°C
Initials:	GOS	
Non-Preserved	11	#
HNO_3	1	#
H_2SO_4	1	#
HCl	1	#
NaOH	1	#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:

	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☒	☐
Received from a refrigerator?	☐	☒	☐

* Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)
** As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1302192-01

SITE & LOCATION: Roger Road WRF - Final Effluent Trough

SITE-LOCATION NUMBER: 20923-7003 (XXXXX-XXXX)

SAMPLE START DATE: (MM / DD / YYYY)

SAMPLE START TIME: (24 Hour Clock)

SUBMITTER: CRAO/Water Quality

SAMPLE END DATE: 02/22/13 (MM / DD / YYYY)

SAMPLE END TIME: 0930 (24 Hour Clock)

SAMPLER: Goodman, Guebara, Morales (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ■ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ☐ Biosolids ☐ Soil ■ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐			
Cobalt	☐	☐			
Copper	☐	☐			
Hardness	☐	☐			
Iron	☐	☐			
Lead	☐	☐			
Magnesium	☐	☐			
Manganese	☐	☐			
Mercury	☐	☐			
Molybdenum	☐	☐			
Nickel	☐	☐			
Potassium	☐	☐			
Selenium	☐	☐			
Silver	☐	☐			
Sodium	☐	☐			
Strontium	☐	☐			
Thallium	☐	☐			
Tin	☐	☐			

WET METHODS	D	C
Ammonia as N	■	☐
Chloride	☐	☐
Cyanide, Total	☐	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	☐
Nitrite as N	☐	☐
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	☐
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
■ pH / pH Temp *SM 4500-H B*	7.78 / 20.6	pH Units/ °C
■ Temperature *SM 2550 B*	20.7	°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:

# of Bottles Delivered: 1 GS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
		02-22-13	1021
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature: 10 °C

Initials: GS

Non-Preserved		#
HNO_3		#
H_2SO_4	1	#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☒
Received from a refrigerator?	☐	☒	☐

** Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
*** As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office (CRAO) Laboratory
3035 W. El Camino del Cerro, Tucson Arizona 85745-9750, Phone (520) 724-6200

Report Date: 06/17/2013
Laboratory License: AZO159

Sample Analysis Report

Roger Road WRF

April 2013

Sample Integrity

SAMPLE RECEIPT: Samples were received intact at the required temperature, unless otherwise noted with a data qualifier below. Please refer to the Chain of Custody for sample receipt details.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Pima County CRAO Laboratory Quality Manual.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS:

Notes and Definitions:

See attached

Case Narratives:

See attached

All results on this report intended for compliance submission must have the associated chain(s) of custody attached for the results to meet reporting requirements as per ADHS Laboratory licensure rules. If you have received this report for compliance purposes and it is not complete, please contact the Compliance and Regulatory Affairs Office for a final report in its entirety.

Reviewed By:

Barbara Alcorton

06/27/13
Date

Laboratory Director or Designee
Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

Sample Qualifiers

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Sample Qualifiers
Final Effluent Trough	1304251-04	Water	4/25/2013 8:30:00	4/25/2013 10:27:00	Q6
Final Effluent Trough	1304251-01	Water	4/25/2013 8:30:00	4/25/2013 10:27:00	Q6
Final Effluent Trough	1304251-03	Water	4/25/2013 8:30:00	4/25/2013 10:27:00	Q6
Digested Sludge to Regional Biosolids Facility	1304253-01	Biosolids	4/25/2013 9:27:00	4/25/2013 10:46:00	Q6
Raw Influent	1304255-01	Water	4/25/2013 9:40:00	4/25/2013 10:46:00	Q6
Final Effluent Trough	1304251-02	Water	4/25/2013 8:30:00	4/25/2013 10:27:00	Q6

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1304270-01	C	Benzo[b]fluoranthene	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	1.57	4.00	D1, D7, N1	SJM
1304270-01	C	Benzo[ghi]perylene	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	1.78	4.00	D1, D7, N1	SJM
1304270-01	C	Benzo[k]fluoranthene	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	2.28	12.00	D1, D7, N1	SJM
1304270-01	C	bis(2-chloroethoxy)methane	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	1.06	4.00	D1, D7, N1	SJM
1304270-01	C	bis(2-chloroethyl)ether	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	0.99	4.00	D1, D7	SJM
1304270-01	C	bis(2-chloroisopropyl)ether	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	1.14	4.00	D1, D7	SJM
1304270-01	C	bis(2-ethylhexyl)phthalate	04/26/13 6:00	EPA 625	5/22/13 18:06	**6.24**	ug/L	2.67	12.00	D1, D7, N1	SJM
1304270-01	C	Butylbenzylphthalate	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	1.53	4.00	D1, D7, N1	SJM
1304270-01	C	Carbazole	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	1.27	4.00	D1, D7, N1	SJM
1304270-01	C	Chrysene	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	1.47	4.00	D1, D7, N1	SJM
1304270-01	C	Dibenzo(a,h)anthracene	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	1.87	4.00	D1, D7, N1	SJM
1304270-01	C	Diethyl phthalate	04/26/13 6:00	EPA 625	5/22/13 18:06	**2.96**	ug/L	1.05	4.00	D1, D7, N1	SJM
1304270-01	C	Dimethyl phthalate	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	0.72	4.00	D1, D7, N1	SJM
1304270-01	C	Di-n-butyl phthalate	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	1.67	4.00	D1, D7, N1	SJM
1304270-01	C	Di-n-octyl phthalate	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	1.83	4.00	D1, D7, N1	SJM
1304270-01	C	Fluoranthene	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	1.45	4.00	D1, D7, N1	SJM
1304270-01	C	Fluorene	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	1.28	4.00	D1, D7, N1	SJM
1304270-01	C	Hexachlorobenzene	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	0.80	4.00	D1, D7, N1	SJM
1304270-01	C	Hexachlorobutadiene	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	1.19	4.00	D1, D7, N1	SJM
1304270-01	C	Hexachlorocyclopentadiene	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	2.59	12.00	D1, D7	SJM
1304270-01	C	Hexachloroethane	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	1.21	4.00	D1, D7	SJM
1304270-01	C	Indeno(1,2,3-cd)pyrene	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	2.25	12.00	D1, D7, N1	SJM
1304270-01	C	Isophorone	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	1.35	4.00	D1, D7, N1	SJM
1304270-01	C	Naphthalene	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	1.26	4.00	D1, D7, N1	SJM
1304270-01	C	n-Decane	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	1.66	4.00	D1, D7, N1	SJM
1304270-01	C	Nitrobenzene	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	2.86	12.00	D1, D7, N1	SJM
1304270-01	C	N-Nitrosodimethylamine	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	4.23	12.00	D1, D7	SJM
1304270-01	C	N-Nitroso-di-n-propylamine	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	1.13	4.00	D1, D7, N1	SJM
1304270-01	C	N-Nitrosodiphenylamine	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	1.83	4.00	D1, D7, N1	SJM
1304270-01	C	n-Octadecane	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	1.66	12.00	D1, D7	SJM
1304270-01	C	Pentachlorophenol	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	3.20	12.00	D1, D7, N1	SJM
1304270-01	C	Phenanthrene	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	1.15	4.00	D1, D7, N1	SJM
1304270-01	C	Phenol	04/26/13 6:00	EPA 625	5/22/13 18:06	**28.6**	ug/L	2.30	12.00	D1, D7, N1	SJM
1304270-01	C	Pyrene	04/26/13 6:00	EPA 625	5/22/13 18:06	**ND**	ug/L	1.29	4.00	D1, D7, N1	SJM
1304270-01	C	1,2-Diphenylhydrazine	04/26/13 6:00	EPA 8270C	5/22/13 18:06	**ND**	ug/L	1.23	4.00	D1, D7	SJM
1304270-01	C	Silver	04/26/13 6:00	EPA 200.8	4/30/13 17:19	**0.60**	ug/L	0.11	1.00	J	JB
1304270-01	C	Thallium	04/26/13 6:00	EPA 200.8	4/30/13 17:19	**ND**	ug/L	0.13	1.00		JB
1304270-01RE	C	Zinc	04/26/13 6:00	EPA 200.8	4/30/13 18:58	**122**	ug/L	0.90	5.00	D1	JB

Digested Sludge to Regional Biosolids Facility (20923-4500)

1304253-01	D	Acrolein	04/25/13 9:27	EPA 624	4/25/13 15:59	**ND**	mg/kg dry	0.00111	9.17		ev
1304253-01	D	Acrylonitrile	04/25/13 9:27	EPA 624	4/25/13 15:59	**ND**	mg/kg dry	0.00116	9.17		ev
1304253-01	D	Antimony	04/25/13 9:27	EPA 6010B	5/3/13 12:15	**2.68**	mg/kg dry	1.72	6.99	J	MLB
1304253-01	D	Arsenic	04/25/13 9:27	EPA 6010B	5/2/13 15:56	**7.49**	mg/kg dry	2.68	6.99		MLB
1304253-01	D	Beryllium	04/25/13 9:27	EPA 6010B	5/2/13 15:56	**0.157**	mg/kg dry	0.0142	1.40	J	MLB
1304253-01	D	Cadmium	04/25/13 9:27	EPA 6010B	5/2/13 17:39	**2.42**	mg/kg dry	0.121	2.80	J	MLB
1304253-01	D	Chromium	04/25/13 9:27	EPA 6010B	5/2/13 15:56	**33.0**	mg/kg dry	0.215	6.99		MLB
1304253-01	D	Copper	04/25/13 9:27	EPA 6010B	5/3/13 11:38	**405**	mg/kg dry	0.388	6.99		MLB
1304253-01	D	Cyanide	04/25/13 9:27	EPA 9010C	5/1/13 8:36	**1.30**	mg/kg dry	0.276	1.15		KKH
1304253-01	D	Lead	04/25/13 9:27	EPA 6010B	5/2/13 15:56	**18.4**	mg/kg dry	2.47	6.99		MLB
1304253-01	D	Mercury	04/25/13 9:27	EPA 7471A	5/7/13 9:51	**1.20**	mg/kg dry	0.0868	0.23		DDO
1304253-01	D	Molybdenum	04/25/13 9:27	EPA 6010B	5/2/13 15:56	**14.7**	mg/kg dry	0.344	2.80		MLB
1304253-01	D	Nickel	04/25/13 9:27	EPA 6010B	5/2/13 15:56	**16.3**	mg/kg dry	1.59	6.99		MLB
1304253-01	D	4,4-DDD	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00006	0.0004	D1, D7	mam-z
1304253-01	D	4,4-DDE	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00005	0.0004	D1, D7	mam-z

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1304253-01	D	4,4-DDT	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00004	0.0009	D1, D7	mam-z
1304253-01	D	Aldrin	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00010	0.0004	D1, D7, L4, N1	mam-z
1304253-01	D	alpha-BHC	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00009	0.0004	D1, D7	mam-z
1304253-01	D	beta-BHC	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00010	0.0004	D1, D7	mam-z
1304253-01	D	Chlordane	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00070	0.0044	D1, D7	mam-z
1304253-01	D	delta-BHC	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00008	0.0004	D1, D7	mam-z
1304253-01	D	Dieldrin	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00007	0.0004	D1, D7	mam-z
1304253-01	D	Endosulfan I	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00005	0.0004	D1, D7	mam-z
1304253-01	D	Endosulfan II	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00003	0.0002	D1, D7	mam-z
1304253-01	D	Endosulfan sulfate	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00005	0.0009	D1, D7	mam-z
1304253-01	D	Endrin	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00010	0.0004	D1, D7	mam-z
1304253-01	D	Endrin aldehyde	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00007	0.0004	D1, D7, N1	mam-z
1304253-01	D	gamma-BHC (Lindane)	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00009	0.0004	D1, D7	mam-z
1304253-01	D	Heptachlor	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00010	0.0004	D1, D7, N1	mam-z
1304253-01	D	Heptachlor Epoxide	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00011	0.0004	D1, D7, N1	mam-z
1304253-01	D	PCB 1016	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00010	0.0011	D1, D7	mam-z
1304253-01	D	PCB 1221	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00009	0.0011	D1, D7	mam-z
1304253-01	D	PCB 1232	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00016	0.0011	D1, D7	mam-z
1304253-01	D	PCB 1242	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00010	0.0011	D1, D7	mam-z
1304253-01	D	PCB 1248	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00016	0.0011	D1, D7	mam-z
1304253-01	D	PCB 1254	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00007	0.0011	D1, D7	mam-z
1304253-01	D	PCB 1260	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00025	0.0011	D1, D7	mam-z
1304253-01	D	Total PCBs	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00030	0.0011	D1, D7	mam-z
1304253-01	D	Toxaphene	04/25/13 9:27	EPA 625	5/3/13 19:11	**ND**	mg/kg dry	0.00508	0.02	D1, D7	mam-z
1304253-01	D	Methoxychlor	04/25/13 9:27	EPA 8270C	5/3/13 19:11	**ND**	mg/kg dry	0.00006	0.0004	D1, D7	mam-z
1304253-01	D	1,1,1-Trichloroethane	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.00006	0.0005	N1	DLC
1304253-01	D	1,1,2,2-Tetrachloroethane	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.00005	0.0005		DLC
1304253-01	D	1,1,2-Trichloroethane	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.00004	0.0005	N1	DLC
1304253-01	D	1,1-Dichloroethane	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.00005	0.0005		DLC
1304253-01	D	1,1-Dichloroethene	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.0002	0.0005		DLC
1304253-01	D	1,2-Dichlorobenzene	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.00006	0.0005		DLC
1304253-01	D	1,2-Dichloroethane	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.00006	0.0005		DLC
1304253-01	D	1,2-Dichloropropane	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.00007	0.0005		DLC
1304253-01	D	1,3-Dichlorobenzene	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.00006	0.0005		DLC
1304253-01	D	1,4-Dichlorobenzene	04/25/13 9:27	EPA 624	4/29/13 21:09	**0.882**	mg/kg dry	0.00006	0.0005		DLC
1304253-01	D	2-Chloroethyl vinyl ether	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.00006	0.0009		DLC
1304253-01	D	Benzene	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.00003	0.0005		DLC
1304253-01	D	Bromodichloromethane	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.00006	0.0005		DLC
1304253-01	D	Bromoform	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.00007	0.0005		DLC
1304253-01	D	Bromomethane	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.0001	0.0005		DLC
1304253-01	D	Carbon Tetrachloride	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.00009	0.0005	N1	DLC
1304253-01	D	Chlorobenzene	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.00002	0.0005		DLC
1304253-01	D	Chloroethane	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.0001	0.0005		DLC
1304253-01	D	Chloroform	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.00003	0.0005		DLC
1304253-01	D	Chloromethane	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.0001	0.0005		DLC
1304253-01	D	cis-1,3-Dichloropropene	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.00007	0.0005		DLC
1304253-01	D	Dibromochloromethane	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.00009	0.0005		DLC
1304253-01	D	Ethyl Benzene	04/25/13 9:27	EPA 624	4/29/13 21:09	**0.101**	mg/kg dry	0.00003	0.0005		DLC
1304253-01	D	Methylene Chloride	04/25/13 9:27	EPA 624	4/29/13 21:09	**0.230**	mg/kg dry	0.00005	0.0005		DLC
1304253-01	D	Tetrachloroethene	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.00005	0.0005		DLC
1304253-01	D	Toluene	04/25/13 9:27	EPA 624	4/29/13 21:09	**0.276**	mg/kg dry	0.00006	0.0005		DLC
1304253-01	D	Total Trihalomethanes	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.00009	0.0005		DLC
1304253-01	D	trans-1,2-Dichloroethene	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.0001	0.0005		DLC
1304253-01	D	trans-1,3-Dichloropropene	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.00006	0.0005		DLC
1304253-01	D	Trichloroethene	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.00005	0.0005		DLC
1304253-01	D	Trichlorofluoromethane	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.00007	0.0005	N1	DLC

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1304253-01	D	Vinyl chloride	04/25/13 9:27	EPA 624	4/29/13 21:09	**ND**	mg/kg dry	0.00005	0.0005		DLC
1304253-01	D	1,2,4-Trichlorobenzene	04/25/13 9:27	EPA 8260	4/29/13 21:09	**ND**	mg/kg dry	0.0003	0.0005		DLC
1304253-01	D	1,2-Dibromo-3-chloropropane	04/25/13 9:27	EPA 8260	4/29/13 21:09	**ND**	mg/kg dry	0.0002	0.0005		DLC
1304253-01	D	1,2-Dibromoethane	04/25/13 9:27	EPA 8260	4/29/13 21:09	**ND**	mg/kg dry	0.0001	0.0005		DLC
1304253-01	D	cis-1,2-Dichloroethene	04/25/13 9:27	EPA 8260	4/29/13 21:09	**ND**	mg/kg dry	0.0001	0.0005		DLC
1304253-01	D	m,p-Xylenes	04/25/13 9:27	EPA 8260	4/29/13 21:09	**ND**	mg/kg dry	0.0001	0.0005		DLC
1304253-01	D	o-Xylene	04/25/13 9:27	EPA 8260	4/29/13 21:09	**ND**	mg/kg dry	0.00007	0.0005		DLC
1304253-01	D	Styrene	04/25/13 9:27	EPA 8260	4/29/13 21:09	**ND**	mg/kg dry	0.0001	0.0005		DLC
1304253-01	D	Xylenes, total	04/25/13 9:27	EPA 8260	4/29/13 21:09	**ND**	mg/kg dry	0.0001	0.0005		DLC
1304253-01	D	Selenium	04/25/13 9:27	EPA 6010B	5/2/13 17:39	**5.13**	mg/kg dry	2.83	6.99	J	MLB
1304253-01	D	1,2,4-Trichlorobenzene	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM
1304253-01	D	1,2-Diphenylhydrazine	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM
1304253-01	D	2,3-Dichloroaniline	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM
1304253-01	D	2,4,6-Trichlorophenol	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM
1304253-01	D	2,4-Dichlorophenol	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM
1304253-01	D	2,4-Dimethylphenol	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.003	10.98	D1, D7, N1	SJM
1304253-01	D	2,4-Dinitrophenol	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.009	18.30	D1, D7, N1	SJM
1304253-01	D	2,4-Dinitrotoluene	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM
1304253-01	D	2,6-Dinitrotoluene	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM
1304253-01	D	2-Chloronaphthalene	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM
1304253-01	D	2-Chlorophenol	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM
1304253-01	D	2-Methyl-4,6-dinitrophenol	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.004	10.98	D1, D7, N1	SJM
1304253-01	D	2-Methylphenol	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.002	3.66	D1, D7, N1	SJM
1304253-01	D	2-Nitrophenol	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.002	10.98	D1, D7	SJM
1304253-01	D	3,3-Dichlorobenzidine	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.002	18.30	D1, D7	SJM
1304253-01	D	4-Bromophenyl phenyl ether	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM
1304253-01	D	4-Chloro-3-methylphenol	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM
1304253-01	D	4-Chlorophenyl phenyl ether	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM
1304253-01	D	4-Methylphenol	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.003	10.98	D1, D7, N1	SJM
1304253-01	D	4-Nitrophenol	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.005	10.98	D1, D7	SJM
1304253-01	D	Acenaphthene	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM
1304253-01	D	Acenaphthylene	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.0008	3.66	D1, D7	SJM
1304253-01	D	Anthracene	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM
1304253-01	D	Benzidine	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.02	64.05	D1, D7, N1	SJM
1304253-01	D	Benzo[a]anthracene	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM
1304253-01	D	Benzo[a]pyrene	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM
1304253-01	D	Benzo[b]fluoranthene	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM
1304253-01	D	Benzo[ghi]perylene	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM
1304253-01	D	Benzo[k]fluoranthene	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.002	10.98	D1, D7	SJM
1304253-01	D	bis(2-chloroethoxy)methane	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM
1304253-01	D	bis(2-chloroethyl)ether	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7, N1	SJM
1304253-01	D	bis(2-chloroisopropyl)ether	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7, N1	SJM
1304253-01	D	bis(2-ethylhexyl)phthalate	04/25/13 9:27	EPA 625	5/22/13 18:43	**18.43**	mg/kg dry	0.003	10.98	D1, D7	SJM
1304253-01	D	Butylbenzylphthalate	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM
1304253-01	D	Carbazole	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7, N1	SJM
1304253-01	D	Chrysene	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM
1304253-01	D	Dibenzo(a,h)anthracene	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM
1304253-01	D	Diethyl phthalate	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM
1304253-01	D	Dimethyl phthalate	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.0007	3.66	D1, D7, N1	SJM
1304253-01	D	Di-n-butyl phthalate	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM
1304253-01	D	Di-n-octyl phthalate	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM
1304253-01	D	Fluoranthene	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM
1304253-01	D	Fluorene	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM
1304253-01	D	Hexachlorobenzene	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.0008	3.66	D1, D7	SJM
1304253-01	D	Hexachlorobutadiene	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM
1304253-01	D	Hexachlorocyclopentadiene	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.003	10.98	D1, D7	SJM

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1304253-01	D	Hexachloroethane	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7, N1	SJM
1304253-01	D	Indeno(1,2,3-cd)pyrene	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.002	10.98	D1, D7	SJM
1304253-01	D	Isophorone	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7, N1	SJM
1304253-01	D	Naphthalene	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM
1304253-01	D	n-Decane	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.002	3.66	D1, D7, N1	SJM
1304253-01	D	Nitrobenzene	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.003	10.98	D1, D7	SJM
1304253-01	D	N-Nitrosodimethylamine	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.004	10.98	D1, D7, N1	SJM
1304253-01	D	N-Nitroso-di-n-propylamine	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM
1304253-01	D	N-Nitrosodiphenylamine	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.002	3.66	D1, D7	SJM
1304253-01	D	n-Octadecane	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.002	10.98	D1, D7, N1	SJM
1304253-01	D	Pentachlorophenol	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.003	10.98	D1, D7	SJM
1304253-01	D	Phenanthrene	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM
1304253-01	D	Phenol	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.002	10.98	D1, D7	SJM
1304253-01	D	Pyrene	04/25/13 9:27	EPA 625	5/22/13 18:43	**ND**	mg/kg dry	0.001	3.66	D1, D7	SJM
1304253-01	D	1,2-Diphenylhydrazine	04/25/13 9:27	EPA 8270C	5/22/13 18:43	**ND**	mg/kg dry	0.06	168.13	D1, D7	SJM
1304253-01	D	Silver	04/25/13 9:27	EPA 6010B	5/2/13 15:56	**6.98**	mg/kg dry	0.233	0.70		MLB
1304253-01	D	% Solids	04/25/13 9:27	SM 2540G	4/26/13 13:24	**2.18**	%		0.01		ETD
1304253-01	D	Thallium	04/25/13 9:27	EPA 6010B	5/2/13 17:39	**ND**	mg/kg dry	3.98	6.99		MLB
1304253-01RE	D	Zinc	04/25/13 9:27	EPA 6010B	5/2/13 16:03	**1010**	mg/kg dry	3.90	34.99	D2	MLB

Final Effluent Trough (20923-7003)

1304117-01	D	Ammonia	04/12/13 9:10	SM4500-NH3-D	4/12/13 13:54	**18.2**	mg/L	0.02	0.50		DDO
1304117-01	D	Temperature	04/12/13 9:10	SM2550B	4/12/13 9:10	**24.5**	°C		0.01		SMPLR
1304117-01	D	pH	04/12/13 9:10	SM4500 H B	4/12/13 9:10	**7.36**	pH Units				SMPLR
1304117-01	D	Temp at time of pH, °C	04/12/13 9:10	SM4500 H B	4/12/13 9:10	**23.9**	°C				SMPLR
CL Ceriodaphnia dubia Reproduction											
1304211-01	C	LOEC % Effluent	04/22/13 8:00	EPA 1002	4/23/13 15:00	**NC**	N/A	1.0	1.0		OTHER
1304211-01	C	NOEC % Effluent	04/22/13 8:00	EPA 1002	4/23/13 15:00	**100**	N/A	1.0	1.0		OTHER
1304211-01	C	TUc (IC25 Based)	04/22/13 8:00	EPA 1002	4/23/13 15:00	**NC**	N/A	1.0	1.0		OTHER
1304211-01	C	TUc (NOEC Based)	04/22/13 8:00	EPA 1002	4/23/13 15:00	**1.0**	N/A	1.0	1.0		OTHER
* Analysis Performed by:Bio-Aquatic Testing, Inc. - See attached contract lab report for official results.											
CL Ceriodaphnia dubia Survival											
1304211-01	C	LOEC % Effluent	04/22/13 8:00	EPA 1002	4/23/13 15:00	**NC**	N/A	1.0	1.0		OTHER
1304211-01	C	NOEC % Effluent	04/22/13 8:00	EPA 1002	4/23/13 15:00	**100**	N/A	1.0	1.0		OTHER
1304211-01	C	TUc (IC25 Based)	04/22/13 8:00	EPA 1002	4/23/13 15:00	**NC**	N/A	1.0	1.0		OTHER
1304211-01	C	TUc (NOEC Based)	04/22/13 8:00	EPA 1002	4/23/13 15:00	**1.0**	N/A	1.0	1.0		OTHER
* Analysis Performed by:Bio-Aquatic Testing, Inc. - See attached contract lab report for official results.											
CL Pimephales promelas Growth											
1304211-01	C	LOEC % Effluent	04/22/13 8:00	EPA 1000	4/23/13 17:30	**NC**	N/A	1.0	1.0		OTHER
1304211-01	C	NOEC % Effluent	04/22/13 8:00	EPA 1000	4/23/13 17:30	**100**	N/A	1.0	1.0		OTHER
1304211-01	C	TUc (IC25 Based)	04/22/13 8:00	EPA 1000	4/23/13 17:30	**NC**	N/A	1.0	1.0		OTHER
1304211-01	C	TUc (NOEC Based)	04/22/13 8:00	EPA 1000	4/23/13 17:30	**1.0**	N/A	1.0	1.0		OTHER
* Analysis Performed by:Bio-Aquatic Testing, Inc. - See attached contract lab report for official results.											
CL Pimephales promelas Survival											
1304211-01	C	LOEC % Effluent	04/22/13 8:00	EPA 1000	4/23/13 17:30	**NC**	N/A	1.0	1.0		OTHER
1304211-01	C	NOEC % Effluent	04/22/13 8:00	EPA 1000	4/23/13 17:30	**100**	N/A	1.0	1.0		OTHER
1304211-01	C	TUc (IC25 Based)	04/22/13 8:00	EPA 1000	4/23/13 17:30	**NC**	N/A	1.0	1.0		OTHER
1304211-01	C	TUc (NOEC Based)	04/22/13 8:00	EPA 1000	4/23/13 17:30	**1.0**	N/A	1.0	1.0		OTHER
* Analysis Performed by:Bio-Aquatic Testing, Inc. - See attached contract lab report for official results.											
CL Selenastrum capricornutum											
1304211-01	C	LOEC % Effluent	04/22/13 8:00	EPA 1003	4/23/13 19:00	**NC**	N/A	1.0	1.0		OTHER
1304211-01	C	NOEC % Effluent	04/22/13 8:00	EPA 1003	4/23/13 19:00	**100**	N/A	1.0	1.0		OTHER
1304211-01	C	TUc (IC25 Based)	04/22/13 8:00	EPA 1003	4/23/13 19:00	**NC**	N/A	1.0	1.0		OTHER
1304211-01	C	TUc (NOEC Based)	04/22/13 8:00	EPA 1003	4/23/13 19:00	**1.0**	N/A	1.0	1.0		OTHER
* Analysis Performed by:Bio-Aquatic Testing, Inc. - See attached contract lab report for official results.											

Qualifier Definitions

A	Absent
B4	Target analyte detected in blank at or above method acceptance criteria.
D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of target analyte.
D4	Minimum Reporting Limit (MRL) adjusted to reflect sample amount received and analyzed.
D7	Minimum Reporting Limit adjusted to reflect sample dilution.
J	Concentration estimated. Analyte was detected below laboratory minimum reporting limit (MRL) but above MDL.
L4	The associated blank spike recovery was below method acceptance limits.
M2	Matrix spike recovery was low; the associated blank spike recovery was acceptable.
N1	See case narrative.
N7	Additional analysis was not performed based on the "Total" result which was below the requested analyte's MCL/Action level/Trigger Level.
NA	Not Analyzed
NC	Not Calculable
Q6	Sample was received above recommended temperature.
R4	MS/MSD RPD exceeded the method acceptance limit. Recovery met acceptance criteria.
T1	Method approved by EPA, but not yet licensed by ADHS.
T6	The reported result cannot be used for compliance purposes.

General Notes and Definitions

C	Sample Type - Composite
D	Sample Type - Discrete
DD	Sample Type - Discrete Duplicate
ND	Analyte NOT DETECTED at or above the reporting limit (MDL)
NR	Not Reported
DET	Analyte DETECTED
DRY	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
Analysis Date	Analysis Date represents the final reading date.
Field Results	Field Results performed by "SMPLR" (Sampler), are not subject to approval of Laboratory Director.
Solids, Total Volatile	Used for process control samples only.
RE	Re-Analysis has been performed.

Case Narrative(s)

1304251-02
The sample recovery was 1.1961 wich is below the reporting limit, therefore the recovery was calculated incorrectly. The Spike recovery was 102% and 101% for the spike and spike duplicate respectively. DDO 5-2-2013

1304253-01E

This sample was analyzed for EPA Method 624 and Method 8260 on 04/29/13. Target compounds flagged with N1 for this method failed matrix spike from the same analytical batch but the spike was performed on a different sample. DLC

1304253-01
This sample was extracted for EPA Method 625 Pesticides on 04/28/13. Target analytes flagged with N1 for this method failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. MAM-Z.

1304253-01

This sample was extracted for EPA Method 625 Semi-volatiles on. 04/30/13 Target analytes flagged with N1 failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample.
SJM

1304270-01E
1304270-02F

This sample was analyzed for EPA Method 624 and Method 8260 on 04/29/13. Target compounds flagged with N1 for this method failed matrix spike from the same analytical batch but the spike was performed on a different sample. DLC
1304270-01
This sample was extracted for EPA Method 625 Pesticides on 04/28/13. Target analytes flagged with N1 for this method failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. MAM-Z.

1304270-02

This sample was extracted for EPA Method 625 Semi-volatiles on. 05/02/13 Target analytes flagged with N1 failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample.
SJM

1304270-01

This sample was extracted for EPA Method 625 Semi-volatiles on. 05/02/13 Target analytes flagged with N1 failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample.
SJM

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1304253-01

SITE & LOCATION: Roger Road WRF -Digester Sludge to Regional Biosolids Facility

SITE-LOCATION NUMBER: 20923-4500 (XXXXX-XXXX)

SAMPLE START DATE: — (MM / DD / YYYY)

SAMPLE START TIME: — (24 Hour Clock)

SUBMITTER: CRAO/Water Quality

SAMPLE END DATE: 04/25/2013 (MM / DD / YYYY)

SAMPLE END TIME: 0927 (24 Hour Clock)

SAMPLER: Grodman, Guebara (Print Last Names Only)

Permit Type: ☐ APP ■ AZPDES ☐ IWC ☐ Investigative ☐ Reuse ☐ USFS ☐ 503 ☐ Process Control ☐ Other

Sample Matrix: ■ Biosolids ☐ Groundwater ☐ Industrial ☐ Soil ☐ Stormwater ☐ Surface Water ☐ Wastewater ☐ Other

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	■	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐	**WET METHODS**	D	C
Cobalt	☐	☐	Ammonia as N	☐	☐
Copper	☐	☐	Chloride	☐	☐
Hardness	☐	☐	Cyanide, Total	■	☐
Iron	☐	☐	Cyanide, Amenable	☐	☐
Lead	☐	☐	Fluoride	☐	☐
Magnesium	☐	☐	Ignitability	☐	☐
Manganese	☐	☐	Nitrate as N	☐	☐
Mercury	☐	☐	Nitrite as N	☐	☐
Molybdenum	■	☐	Nitrate/Nitrite as N	☐	☐
Nickel	☐	☐	Nitrogen, Total Kjeldahl	☐	☐
Potassium	☐	☐	Nitrogen, Total as N	☐	☐
Selenium	☐	☐	Orthophosphate as P	☐	☐
Silver	☐	☐	Phosphorus, Total as P	☐	☐
Sodium	☐	☐	Sulfate	☐	☐
Strontium	☐	☐	Sulfide	☐	☐
Thallium	☐	☐	Turbidity	☐	☐
Tin	☐	☐			

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile *	■	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs *	■	☐
Purgeable Organics (GCMS) *	■	☐
Semivolatile Organics (GCMS) *	■	☐
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total *	■	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:

# of Bottles Delivered: 7 GOS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials: 04-01-2013 [illegible]

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	[signature]	04-25-13	1046
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	11	°C
Initials:	GOS	
Non-Preserved	7	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☒	☐	☐
Received from a refrigerator?	☐	☒	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office (CRAO) Laboratory
2955 W. Calle Agua Nueva, Tucson Arizona 85745-9750, Phone (520) 724-6200

Report Date: 11/19/2013
Laboratory License: AZO159

Sample Analysis Report

Roger Road WRF

August 2013

Sample Integrity

SAMPLE RECEIPT: Samples were received intact at the required temperature, unless otherwise noted with a data qualifier below. Please refer to the Chain of Custody for sample receipt details.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Pima County CRAO Laboratory Quality Manual.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS:

Notes and Definitions:

See attached

Case Narratives:

See attached

All results on this report intended for compliance submission must have the associated chain(s) of custody attached for the results to meet reporting requirements as per ADHS Laboratory licensure rules. If you have received this report for compliance purposes and it is not complete, please contact the Compliance and Regulatory Affairs Office for a final report in its entirety.

Reviewed By:

12/13/13
Date

Laboratory Director or Designee
Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

Sample Qualifiers

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Sample Qualifiers
Raw Influent	1308053-03	Water	8/6/2013 8:50:00	8/6/2013 13:09:00	Q6
Digested Sludge to Regional Biosolids Facility	1308053-02	Biosolids	8/6/2013 9:05:00	8/6/2013 13:09:00	Q6

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1308079-03	C	Pentachlorophenol	08/09/13 6:00	EPA 625	9/12/13 14:32	ND	ug/L	3.20	24.00	D7	SJM
1308079-03	C	Phenanthrene	08/09/13 6:00	EPA 625	9/12/13 14:32	ND	ug/L	1.15	8.00	D7	SJM
1308079-03	C	Phenol	08/09/13 6:00	EPA 625	9/12/13 14:32	ND	ug/L	2.30	24.00	D7, R4	SJM
1308079-03	C	Pyrene	08/09/13 6:00	EPA 625	9/12/13 14:32	ND	ug/L	1.29	8.00	D7	SJM
1308079-03	C	o-Xylene	08/09/13 6:00	EPA 8260B	8/13/13 17:21	0.07	ug/L	0.05	0.50	J	dlc
1308079-03	C	Styrene	08/09/13 6:00	EPA 8260B	8/13/13 17:21	0.21	ug/L	0.18	2.00	J	dlc
1308079-03	C	1,2,4-Trichlorobenzene	08/09/13 6:00	EPA 8260B	8/13/13 17:21	ND	ug/L	0.08	0.50		dlc
1308079-03	C	1,2-Dibromo-3-chloropropane	08/09/13 6:00	EPA 8260B	8/13/13 17:21	ND	ug/L	0.09	0.50		dlc
1308079-03	C	1,2-Dibromoethane	08/09/13 6:00	EPA 8260B	8/13/13 17:21	ND	ug/L	0.04	0.50		dlc
1308079-03	C	cis-1,2-Dichloroethene	08/09/13 6:00	EPA 8260B	8/13/13 17:21	ND	ug/L	0.06	0.50		dlc
1308079-03	C	m,p-Xylenes	08/09/13 6:00	EPA 8260B	8/13/13 17:21	ND	ug/L	0.06	1.00		dlc
1308079-03	C	Xylenes, total	08/09/13 6:00	EPA 8260B	8/13/13 17:21	ND	ug/L	0.06	4.00		dlc
1308079-03	C	Methoxychlor	08/09/13 6:00	EPA 8270C	8/30/13 17:24	ND	ug/L	0.0600	1.00	D7	mam-z
1308079-03	C	1,2-Diphenylhydrazine	08/09/13 6:00	EPA 8270C	9/12/13 14:32	ND	ug/L	1.23	8.00	D7	SJM

Digested Sludge to Regional Biosolids Facility (20923-4500)

1308053-02	D	Antimony	08/06/13 9:05	EPA 6010B	8/20/13 13:57	ND	mg/kg dry	4.43	9.00		MLB
1308053-02	D	Arsenic	08/06/13 9:05	EPA 6010B	8/20/13 13:57	11.1	mg/kg dry	7.88	9.00		MLB
1308053-02	D	Beryllium	08/06/13 9:05	EPA 6010B	8/20/13 13:57	0.209	mg/kg dry	0.0176	1.80	J	MLB
1308053-02	D	Cadmium	08/06/13 9:05	EPA 6010B	8/20/13 13:57	2.51	mg/kg dry	0.292	3.60	J	MLB
1308053-02	D	Chromium	08/06/13 9:05	EPA 6010B	8/20/13 13:57	38.5	mg/kg dry	0.312	9.00		MLB
1308053-02	D	Copper	08/06/13 9:05	EPA 6010B	8/20/13 15:39	492	mg/kg dry	0.405	9.00		MLB
1308053-02	D	Lead	08/06/13 9:05	EPA 6010B	8/20/13 15:39	21.1	mg/kg dry	4.03	9.00		MLB
1308053-02	D	Molybdenum	08/06/13 9:05	EPA 6010B	8/20/13 13:57	19.5	mg/kg dry	0.522	3.60		MLB
1308053-02	D	Nickel	08/06/13 9:05	EPA 6010B	8/20/13 13:57	27.2	mg/kg dry	3.83	9.00		MLB
1308053-02	D	Selenium	08/06/13 9:05	EPA 6010B	8/20/13 13:57	10.4	mg/kg dry	6.42	9.00		MLB
1308053-02	D	Silver	08/06/13 9:05	EPA 6010B	8/20/13 13:57	7.42	mg/kg dry	0.486	0.90		MLB
1308053-02	D	Thallium	08/06/13 9:05	EPA 6010B	8/20/13 15:39	ND	mg/kg dry	5.43	9.00		MLB
1308053-02	D	Mercury	08/06/13 9:05	EPA 7471A	8/14/13 10:31	1.26	mg/kg dry	0.103	0.27		DDO
1308053-02	D	Cyanide	08/06/13 9:05	EPA 9010C	8/8/13 12:33	1.86	mg/kg dry	0.327	1.36	M5	KB
1308053-02RE1	D	Zinc	08/06/13 9:05	EPA 6010B	8/20/13 14:15	1140	mg/kg dry	1.51	45.00	D2, D7	MLB
1308053-02	D	% Solids	08/06/13 9:05	SM 2540G	8/7/13 16:18	1.84	%		0.01		JAH
1308053-02	D	Acrolein	08/06/13 9:05	EPA 624	8/7/13 15:00	ND	mg/kg dry	0.00111	10.87		ev
1308053-02	D	Acrylonitrile	08/06/13 9:05	EPA 624	8/7/13 15:00	ND	mg/kg dry	0.00116	10.87		ev
1308053-02	D	Ethyl Benzene	08/06/13 9:05	EPA 624	8/9/13 23:30	0.153	mg/kg dry	0.00003	0.00054	D1, D7	DLC
1308053-02	D	Toluene	08/06/13 9:05	EPA 624	8/9/13 23:30	0.185	mg/kg dry	0.00006	0.00054	D1, D7	DLC
1308053-02	D	1,4-Dichlorobenzene	08/06/13 9:05	EPA 624	8/9/13 23:30	0.763	mg/kg dry	0.00006	0.00054	D1, D7	DLC
1308053-02	D	1,1,1-Trichloroethane	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.00006	0.00054	D1, D7	DLC
1308053-02	D	1,1,2,2-Tetrachloroethane	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.00005	0.00054	D1, D7	DLC
1308053-02	D	1,1,2-Trichloroethane	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.00004	0.00054	D1, D7, N1	DLC
1308053-02	D	1,1-Dichloroethane	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.00005	0.00054	D1, D7	DLC
1308053-02	D	1,1-Dichloroethene	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.0002	0.00054	D1, D7	DLC
1308053-02	D	1,2-Dichlorobenzene	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.00006	0.00054	D1, D7	DLC
1308053-02	D	1,2-Dichloroethane	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.00006	0.00054	D1, D7	DLC
1308053-02	D	1,2-Dichloropropane	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.00007	0.00054	D1, D7	DLC
1308053-02	D	1,3-Dichlorobenzene	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.00006	0.00054	D1, D7	DLC
1308053-02	D	2-Chloroethyl vinyl ether	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.00006	0.00054	D1, D7	DLC
1308053-02	D	Benzene	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.00003	0.00054	D1, D7	DLC
1308053-02	D	Bromodichloromethane	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.00006	0.00054	D1, D7	DLC
1308053-02	D	Bromoform	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.00007	0.00054	D1, D7	DLC
1308053-02	D	Bromomethane	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.0001	0.00217	D1, D7	DLC
1308053-02	D	Carbon Tetrachloride	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.00009	0.00054	D1, D7	DLC
1308053-02	D	Chlorobenzene	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.00002	0.00054	D1, D7	DLC
1308053-02	D	Chloroethane	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.0001	0.00054	D1, D7	DLC
1308053-02	D	Chloroform	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.00003	0.00054	D1, D7	DLC
1308053-02	D	Chloromethane	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.0001	0.00054	D1, D7	DLC
1308053-02	D	cis-1,3-Dichloropropene	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.00007	0.00054	D1, D7	DLC
1308053-02	D	Dibromochloromethane	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.00009	0.00054	D1, D7, N1	DLC
1308053-02	D	Methylene Chloride	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.00005	0.00217	D1, D7	DLC
1308053-02	D	Tetrachloroethene	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.00005	0.00054	D1, D7	DLC
1308053-02	D	Total Trihalomethanes	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.00009	0.00054	D1, D7	DLC
1308053-02	D	trans-1,2-Dichloroethene	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.0001	0.00054	D1, D7	DLC
1308053-02	D	trans-1,3-Dichloropropene	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.00006	0.00054	D1, D7	DLC
1308053-02	D	Trichloroethene	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.00005	0.00054	D1, D7	DLC
1308053-02	D	Trichlorofluoromethane	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.00007	0.00054	D1, D7	DLC
1308053-02	D	Vinyl chloride	08/06/13 9:05	EPA 624	8/9/13 23:30	ND	mg/kg dry	0.00005	0.00054	D1, D7	DLC
1308053-02	D	4,4-DDD	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00006	0.00029	D7	mam-z

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1308053-02	D	4,4-DDE	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00005	0.00029	D7	mam-z
1308053-02	D	4,4-DDT	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00004	0.00029	D7	mam-z
1308053-02	D	Aldrin	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00010	0.00029	D7	mam-z
1308053-02	D	alpha-BHC	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00009	0.00029	D7	mam-z
1308053-02	D	beta-BHC	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00010	0.00029	D7	mam-z
1308053-02	D	Chlordane	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00070	0.01	D7	mam-z
1308053-02	D	delta-BHC	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00008	0.00029	D7	mam-z
1308053-02	D	Dieldrin	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00007	0.00029	D7	mam-z
1308053-02	D	Endosulfan I	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00005	0.00029	D7	mam-z
1308053-02	D	Endosulfan II	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00003	0.00029	D7	mam-z
1308053-02	D	Endosulfan sulfate	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00005	0.00029	D7	mam-z
1308053-02	D	Endrin	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00010	0.00029	D7	mam-z
1308053-02	D	Endrin aldehyde	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00007	0.00029	D7	mam-z
1308053-02	D	gamma-BHC (Lindane)	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00009	0.00029	D7, N1	mam-z
1308053-02	D	Heptachlor	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00010	0.00029	D7	mam-z
1308053-02	D	Heptachlor Epoxide	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00011	0.00029	D7	mam-z
1308053-02	D	PCB 1016	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00010	0.00071	D7	mam-z
1308053-02	D	PCB 1221	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00009	0.00071	D7	mam-z
1308053-02	D	PCB 1232	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00016	0.00071	D7	mam-z
1308053-02	D	PCB 1242	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00010	0.00118	D7	mam-z
1308053-02	D	PCB 1248	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00016	0.00118	D7	mam-z
1308053-02	D	PCB 1254	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00007	0.00071	D7	mam-z
1308053-02	D	PCB 1260	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00025	0.00071	D7	mam-z
1308053-02	D	Total PCBs	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00030	0.00118	D7	mam-z
1308053-02	D	Toxaphene	08/06/13 9:05	EPA 625	8/30/13 18:44	ND	mg/kg dry	0.00508	0.01	D7	mam-z
1308053-02	D	bis(2-ethylhexyl)phthalate	08/06/13 9:05	EPA 625	9/12/13 18:49	**25.85**	mg/kg dry	0.003	13.02	D1, D7	SJM
1308053-02	D	n-Decane	08/06/13 9:05	EPA 625	9/12/13 18:49	**3.71**	mg/kg dry	0.002	4.34	D1, D7, J, N1	SJM
1308053-02	D	n-Octadecane	08/06/13 9:05	EPA 625	9/12/13 18:49	**3.71**	mg/kg dry	0.002	4.34	D1, D7, J	SJM
1308053-02	D	1,2,4-Trichlorobenzene	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7, N1	SJM
1308053-02	D	1,2-Diphenylhydrazine	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7	SJM
1308053-02	D	2,3-Dichloroaniline	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7	SJM
1308053-02	D	2,4,6-Trichlorophenol	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7	SJM
1308053-02	D	2,4-Dichlorophenol	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7	SJM
1308053-02	D	2,4-Dimethylphenol	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.003	13.02	D1, D7, N1	SJM
1308053-02	D	2,4-Dinitrophenol	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.009	21.70	D1, D7, N1	SJM
1308053-02	D	2,4-Dinitrotoluene	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7	SJM
1308053-02	D	2,6-Dinitrotoluene	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.002	4.34	D1, D7	SJM
1308053-02	D	2-Chloronaphthalene	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7	SJM
1308053-02	D	2-Chlorophenol	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.002	4.34	D1, D7	SJM
1308053-02	D	2-Methyl-4,6-dinitrophenol	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.004	13.02	D1, D7, N1	SJM
1308053-02	D	2-Methylphenol	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.002	4.34	D1, D7	SJM
1308053-02	D	2-Nitrophenol	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.002	13.02	D1, D7	SJM
1308053-02	D	3,3-Dichlorobenzidine	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.002	13.02	D1, D7	SJM
1308053-02	D	4-Bromophenyl phenyl ether	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7	SJM
1308053-02	D	4-Chloro-3-methylphenol	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7	SJM
1308053-02	D	4-Chlorophenyl phenyl ether	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7	SJM
1308053-02	D	4-Methylphenol	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.003	13.02	D1, D7, L4, N1	SJM
1308053-02	D	4-Nitrophenol	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.005	13.02	D1, D7	SJM
1308053-02	D	Acenaphthene	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7	SJM
1308053-02	D	Acenaphthylene	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.0008	4.34	D1, D7	SJM
1308053-02	D	Anthracene	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7	SJM
1308053-02	D	Benzidine	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.02	75.95	D1, D7, N1	SJM
1308053-02	D	Benzo[a]anthracene	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7	SJM
1308053-02	D	Benzo[a]pyrene	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.002	4.34	D1, D7	SJM
1308053-02	D	Benzo[b]fluoranthene	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.002	4.34	D1, D7	SJM
1308053-02	D	Benzo[ghi]perylene	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.002	4.34	D1, D7	SJM
1308053-02	D	Benzo[k]fluoranthene	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.002	13.02	D1, D7	SJM
1308053-02	D	bis(2-chloroethoxy)methane	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7, N1	SJM
1308053-02	D	bis(2-chloroethyl)ether	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7, N1	SJM
1308053-02	D	bis(2-chloroisopropyl)ether	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7, N1	SJM
1308053-02	D	Butylbenzylphthalate	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.002	4.34	D1, D7	SJM
1308053-02	D	Carbazole	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7	SJM
1308053-02	D	Chrysene	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7	SJM
1308053-02	D	Dibenzo(a,h)anthracene	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.002	4.34	D1, D7	SJM
1308053-02	D	Diethyl phthalate	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7	SJM
1308053-02	D	Dimethyl phthalate	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.0007	4.34	D1, D7, N1	SJM
1308053-02	D	Di-n-butyl phthalate	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.002	4.34	D1, D7	SJM
1308053-02	D	Di-n-octyl phthalate	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.002	4.34	D1, D7	SJM
1308053-02	D	Fluoranthene	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7	SJM
1308053-02	D	Fluorene	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7	SJM
1308053-02	D	Hexachlorobenzene	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.0008	4.34	D1, D7	SJM

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1308053-02	D	Hexachlorobutadiene	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7, N1	SJM
1308053-02	D	Hexachlorocyclopentadiene	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.003	13.02	D1, D7	SJM
1308053-02	D	Hexachloroethane	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7, N1	SJM
1308053-02	D	Indeno(1,2,3-cd)pyrene	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.002	13.02	D1, D7	SJM
1308053-02	D	Isophorone	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7, N1	SJM
1308053-02	D	Naphthalene	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7	SJM
1308053-02	D	Nitrobenzene	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.003	13.02	D1, D7, N1	SJM
1308053-02	D	N-Nitrosodimethylamine	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.004	13.02	D1, D7, N1	SJM
1308053-02	D	N-Nitroso-di-n-propylamine	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7, N1	SJM
1308053-02	D	N-Nitrosodiphenylamine	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.002	4.34	D1, D7	SJM
1308053-02	D	Pentachlorophenol	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.003	13.02	D1, D7	SJM
1308053-02	D	Phenanthrene	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7	SJM
1308053-02	D	Phenol	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.002	13.02	D1, D7, N1	SJM
1308053-02	D	Pyrene	08/06/13 9:05	EPA 625	9/12/13 18:49	ND	mg/kg dry	0.001	4.34	D1, D7	SJM
1308053-02	D	m,p-Xylenes	08/06/13 9:05	EPA 8260	8/9/13 23:30	0.174	mg/kg dry	0.0001	0.00054	D1, D7	DLC
1308053-02	D	1,2,4-Trichlorobenzene	08/06/13 9:05	EPA 8260	8/9/13 23:30	0.371	mg/kg dry	0.0003	0.00054	D1, D7	DLC
1308053-02	D	1,2-Dibromo-3-chloropropane	08/06/13 9:05	EPA 8260	8/9/13 23:30	ND	mg/kg dry	0.0002	0.00054	D1, D7	DLC
1308053-02	D	1,2-Dibromoethane	08/06/13 9:05	EPA 8260	8/9/13 23:30	ND	mg/kg dry	0.0001	0.00054	D1, D7	DLC
1308053-02	D	cis-1,2-Dichloroethene	08/06/13 9:05	EPA 8260	8/9/13 23:30	ND	mg/kg dry	0.0001	0.00054	D1, D7	DLC
1308053-02	D	o-Xylene	08/06/13 9:05	EPA 8260	8/9/13 23:30	ND	mg/kg dry	0.00007	0.00054	D1, D7	DLC
1308053-02	D	Styrene	08/06/13 9:05	EPA 8260	8/9/13 23:30	ND	mg/kg dry	0.0001	0.00217	D1, D7	DLC
1308053-02	D	Xylenes, total	08/06/13 9:05	EPA 8260	8/9/13 23:30	ND	mg/kg dry	0.0001	0.00435	D1, D7	DLC
1308053-02	D	Methoxychlor	08/06/13 9:05	EPA 8270C	8/30/13 18:44	ND	mg/kg dry	0.00006	0.00059	D7, N1	mam-z
1308053-02	D	1,2-Diphenylhydrazine	08/06/13 9:05	EPA 8270C	9/12/13 18:49	ND	mg/kg dry	0.07	236.49	D1, D7	SJM

Final Effluent Trough (20923-7003)

1308051-01	D	Temperature	08/06/13 9:45	SM2550B	8/6/13 9:45	30.8	°C		0.01		SMPLR
1308051-01	D	pH	08/06/13 9:45	SM4500 H B	8/6/13 9:45	7.55	pH Units				SMPLR
1308051-01	D	Temp at time of pH, °C	08/06/13 9:45	SM4500 H B	8/6/13 9:45	30.7	°C				SMPLR
1308051-01	D	Dissolved Oxygen	08/06/13 9:45	SM4500 O G	8/6/13 9:45	6.1	mg/L		0.10		SMPLR
1308053-01	D	Specific Conductance	08/06/13 9:45	SM 2510B	8/6/13 9:45	1246	uS/cm		1.00		SMPLR
1308171-01	D	Temperature	08/21/13 7:20	SM2550B	8/21/13 7:20	30.7	°C		0.01		SMPLR
1308171-01	D	pH	08/21/13 7:20	SM4500 H B	8/21/13 7:20	7.30	pH Units				SMPLR
1308171-01	D	Temp at time of pH, °C	08/21/13 7:20	SM4500 H B	8/21/13 7:20	30.4	°C				SMPLR
1308051-01	D	Chromium, Hexavalent	08/06/13 9:45	EPA 200.8		NA	ug/L	0.400	1.00	N7	
1308051-01	D	Mercury	08/06/13 9:45	EPA 245.7	8/16/13 10:30	5.79	ng/L		5.00		DDO
1308051-01	D	Sulfide	08/06/13 9:45	Hach 8131	8/8/13 13:18	ND	mg/L	0.007	0.10		Sulfi
1308051-01	D	Cyanide	08/06/13 9:45	SM4500-CN-E	8/8/13 10:38	1.71	ug/L	1.20	5.00	J	KB
1308051-01	D	Ammonia	08/06/13 9:45	SM4500-NH3-D	8/7/13 14:44	21.9	mg/L	0.08	0.50	B4	KKH
1308051-02	D	Chromium (Dissolved)	08/06/13 9:45	EPA 200.8	8/19/13 16:13	1.33	ug/L	0.40	1.00	H6	JB
1308051-02	D	Mercury (Dissolved)	08/06/13 9:45	EPA 245.7	8/16/13 10:37	ND	ng/L		5.00	H6	DDO
1308051-03	FB	Mercury	08/06/13 9:45	EPA 245.7	8/16/13 10:25	ND	ng/L		5.00		DDO
1308051-04	FB	Mercury (Dissolved)	08/06/13 9:45	EPA 245.7	8/16/13 10:27	ND	ng/L		5.00	H6	DDO
1308053-01	D	Nitrate	08/06/13 9:45	Calculated	8/9/13 11:48	0.30	mg/L	0.05	0.20		DDO
1308053-01	D	Nitrogen Total Water	08/06/13 9:45	Calculated	8/13/13 11:29	30.6	mg/L	0.26	0.80		KKH
1308053-01	D	Calcium	08/06/13 9:45	EPA 200.7	8/16/13 11:55	67.0	mg/L	0.04	4.00		MLB
1308053-01	D	Iron	08/06/13 9:45	EPA 200.7	8/23/13 15:34	117	ug/L	7.17	25.00		MLB
1308053-01	D	Magnesium	08/06/13 9:45	EPA 200.7	8/16/13 11:55	14.7	mg/L	0.002	2.00		MLB
1308053-01	D	Potassium	08/06/13 9:45	EPA 200.7	8/16/13 11:55	15.2	mg/L	0.06	2.00		MLB
1308053-01	D	Sodium	08/06/13 9:45	EPA 200.7	8/16/13 11:55	120	mg/L	0.08	4.00		MLB
1308053-01	D	Antimony	08/06/13 9:45	EPA 200.8	8/22/13 14:03	0.44	ug/L	0.17	1.00	J	JB
1308053-01	D	Arsenic	08/06/13 9:45	EPA 200.8	8/22/13 14:03	4.04	ug/L	0.13	1.00		JB
1308053-01	D	Barium	08/06/13 9:45	EPA 200.8	8/22/13 14:03	62.7	ug/L	0.26	1.00		JB
1308053-01	D	Beryllium	08/06/13 9:45	EPA 200.8	8/22/13 14:03	ND	ug/L	0.22	1.00		JB
1308053-01	D	Cadmium	08/06/13 9:45	EPA 200.8	8/22/13 14:03	ND	ug/L	0.41	1.00		JB
1308053-01	D	Chromium	08/06/13 9:45	EPA 200.8	8/22/13 14:03	0.85	ug/L	0.40	1.00	J	JB
1308053-01	D	Copper	08/06/13 9:45	EPA 200.8	8/22/13 14:03	4.59	ug/L	0.66	1.00		JB
1308053-01	D	Lead	08/06/13 9:45	EPA 200.8	8/22/13 14:03	0.18	ug/L	0.11	1.00	J	JB
1308053-01	D	Manganese	08/06/13 9:45	EPA 200.8	8/22/13 14:03	13.8	ug/L	0.12	1.00		JB
1308053-01	D	Nickel	08/06/13 9:45	EPA 200.8	8/22/13 14:03	2.47	ug/L	0.29	1.00		JB
1308053-01	D	Selenium	08/06/13 9:45	EPA 200.8	8/22/13 14:03	1.09	ug/L	0.50	1.00		JB
1308053-01	D	Silver	08/06/13 9:45	EPA 200.8	8/22/13 14:03	ND	ug/L	0.11	1.00		JB
1308053-01	D	Thallium	08/06/13 9:45	EPA 200.8	8/22/13 14:03	0.37	ug/L	0.13	1.00	J	JB
1308053-01	D	Zinc	08/06/13 9:45	EPA 200.8	8/22/13 14:03	12.8	ug/L	0.90	1.00		JB
1308053-01	D	Mercury	08/06/13 9:45	EPA 245.1	8/13/13 12:01	ND	ug/L	0.111	0.20		DDO
1308053-01	D	Total Kjeldahl Nitrogen	08/06/13 9:45	EPA 351.2	8/13/13 11:29	27.9	mg/L	0.26	0.80		KKH
1308053-01	D	Nitrate/Nitrite	08/06/13 9:45	EPA 353.2	8/9/13 11:48	2.68	mg/L	0.05	0.20		KB
1308053-01	D	Hardness	08/06/13 9:45	SM 2340B	8/16/13 11:55	228	mg/L	0.10	9.99		MLB

Qualifier Definitions

A	Absent
B4	Target analyte detected in blank at or above method acceptance criteria.
D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of target analyte.
D7	Minimum Reporting Limit adjusted to reflect sample dilution.
H6	The filtration was not done within the required 15 minutes of sampling, the sample was filtered in the laboratory.
J	Concentration estimated. Analyte was detected below laboratory minimum reporting limit (MRL) but above MDL.
L4	The associated blank spike recovery was below method acceptance limits.
M2	Matrix spike recovery was low; the associated blank spike recovery was acceptable.
M5	Analyte concentration was determined by the method of standard addition (MSA).
N1	See case narrative.
N7	Additional analysis was not performed based on the "Total" result which was below the requested analyte's MCL/Action level/Trigger Level.
NA	Not Analyzed
NC	Not Calculable
PC3	Semi-quantitation is included in the case narrative.
Q2	Sample received with head space.
Q6	Sample was received above recommended temperature.
R1	RDP/RSD exceeded the method acceptance limit. See case narrative.
R4	MS/MSD RPD exceeded the method acceptance limit. Recovery met acceptance criteria.
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.

General Notes and Definitions

C	Sample Type - Composite
D	Sample Type - Discrete
DD	Sample Type - Discrete Duplicate
ND	Analyte NOT DETECTED at or above the reporting limit (MDL)
NR	Not Reported
DET	Analyte DETECTED
DRY	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
Analysis Date	Analysis Date represents the final reading date.
Field Results	Field Results performed by "SMPLR" (Sampler), are not subject to approval of Laboratory Director.
Solids, Total Volatile	Used for process control samples only.
RE	Re-Analysis has been performed.
FD	Field Duplicate

Case Narrative(s)

1308053-02
This sample was analyzed for EPA Method 624 and Method 8260 Volatiles on 08/09/13. Target analytes flagged with N1 failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. DLC 09/09/13

This sample was extracted for EPA Method 625 Pesticides on 08/12/13. Target analytes flagged with N1 for this method failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. MAM-Z. 09/05/13

This sample was extracted for EPA Method 625 Semi-volatiles on. 08/13/13 Target analytes flagged with N1 failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. In Addition, Benzidine and Hexachloroethane failed the matrix spike and blank spike. These analytes pass the calibration verification check and not detected in the sample.SJM 10/14/13

This sample was analyzed for EPA Method 625. Target compounds flagged with R1 for this method failed precision due to problems encountered during sample preparation. SJM 10/14/13

1308055-01I
This sample was analyzed for EPA Method 624 and Method 8260 Volatiles on 08/09/13. Target analytes flagged with N1 failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. DLC 09/09/13

1308055-01
This sample was extracted for EPA Method 625 Pesticides on 08/12/13. Target analytes flagged with N1 for this method failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. MAM-Z. 09/05/13

1308055-01
This sample was extracted for EPA Method 625 Semi-volatiles on. 08/13/13 Target analytes flagged with N1 failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. In Addition, Benzidine and Hexachloroethane failed the matrix spike and blank spike. These analytes pass the calibration verification check and not detected in the sample.SJM-10/04/13

1308055-01
This sample was analyzed for EPA Method 625. Target compounds flagged with R1 for this method failed precision due to problems encountered during sample preparation. SJM 10/04/13

Semi-Quantitation
Method:625
1308055-01
SJM 10-04-13

Compound Name	Concentration-ug/L
p-Benzoquinone	228

1308079-01 & 1308079-03

These samples were analyzed for EPA Method 624 VolatilesAcrolein on. 08/13/2013 EV11/27/13Target analytes flagged with N1 failed the Matrix Spike from the same analysis batch but the spike was performed on a different sample.

These samples were analyzed for EPA Method 625. Target compounds flagged with R1 for this method failed precision due to problems encountered during sample preparation.SJM 11/26/13

These samples were extracted for EPA Method 625 Pesticides on 08/12/13. Target analytes flagged with N1 for this method failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. MAM-Z. 09/05/13

1308079-01

_This sample was extracted for EPA Method 625 Semi-volatiles on. 08/13/13 Target analytes flagged with N1 failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. In Addition, Benzidine and Hexachloroethane failed the matrix spike and blank spike. These analytes pass the calibration verification check and not detected in the sample.SJM 11/26/13

1308162-01 & 1308162-02

CCB's were not performed in the set for mercury but the data was bracketed by a valid ICB and a final BLK1. All samples in the set were ND or Trace so lack of carryover was demonstrated. 8/29/13 RA

1308162-01

This sample was analyzed for EPA Method 624 Volatiles on 08/22/13. Target analytes flagged with N1 failed the Matrix Spike from the same analysis batch but the spike was performed on a different sample. SM 09/11/13.
This sample was extracted for EPA Method 625 Pesticides on 08/27/13. Target analytes flagged with N1 for this method failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. MAM-Z. 11/26/13

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1308053-02

SITE & LOCATION: Roger Road WRF -Digester Sludge to Regional Biosolids Facility

SITE-LOCATION NUMBER: 20923-4500 (XXXXX-XXXX)

SAMPLE START DATE: ____ (MM / DD / YYYY)

SAMPLE START TIME: ____ (24 Hour Clock)

SUBMITTER: CRAO/Water Quality

SAMPLE END DATE: 8-6-13 (MM / DD / YYYY)

SAMPLE END TIME: 0905 (24 Hour Clock)

SAMPLER: GUERRA, GRODMAN (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ☒ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other ____

Sample Matrix: ☒ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ____ ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☒	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐	**WET METHODS**	D	C
Cobalt	☐	☐	Ammonia as N	☐	☐
Copper	☐	☐	Chloride	☐	☐
Hardness	☐	☐	Cyanide, Total	☒	☐
Iron	☐	☐	Cyanide, Amenable	☐	☐
Lead	☐	☐	Fluoride	☐	☐
Magnesium	☐	☐	Ignitability	☐	☐
Manganese	☐	☐	Nitrate as N	☐	☐
Mercury	☐	☐	Nitrite as N	☐	☐
Molybdenum	☒	☐	Nitrate/Nitrite as N	☐	☐
Nickel	☐	☐	Nitrogen, Total Kjeldahl	☐	☐
Potassium	☐	☐	Nitrogen, Total as N	☐	☐
Selenium	☐	☐	Orthophosphate as P	☐	☐
Silver	☐	☐	Phosphorus, Total as P	☐	☐
Sodium	☐	☐	Sulfate	☐	☐
Strontium	☐	☐	Sulfide	☐	☐
Thallium	☐	☐	Turbidity	☐	☐
Tin	☐	☐			

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☒	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☒	☐
Purgeable Organics (GCMS)	☒	☐
Semivolatile Organics (GCMS)	☒	☐
Other ____	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other ____	☐	☐

MICROBIOLOGY / WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☒	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other ____	☐	☐

OTHER	D	C
____	☐	☐
____	☐	☐
____	☐	☐
____	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*	____	µg/L
☐ Conductivity *SM 2510 B*	____	µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*	____	mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*	____	°C
☐ Total Depth of Well	____	feet
☐ Depth to Water	____	feet
☐ Other ____	____	____

Comments/Instructions: TS poured off from cyanide at SR
GOS 08-06-13

# of Bottles Delivered: (7) - (6) GOS 08-06-13

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials: 7-16-13 LEJ

Chain of Custody Record (Signature Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
		08-06-13	1309
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:		
Temperature:	7	°C
Initials:	GOS	
Non-Preserved	67	#
HNO_3 GOS 08-06-13		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered? GOS 08-06-13	☒	☒	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☒	☐
Received from a refrigerator?	☐	☒	☐

* Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)
** As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office (CRAO) Laboratory
2955 W. Calle Agua Nueva, Tucson Arizona 85745-9750, Phone (520) 724-6200

Report Date: 12/24/2013
Laboratory License: AZO159

Sample Analysis Report

Roger Road WRF

October 2013

Sample Integrity

SAMPLE RECEIPT: Samples were received intact at the required temperature, unless otherwise noted with a data qualifier below. Please refer to the Chain of Custody for sample receipt details.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Pima County CRAO Laboratory Quality Manual.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS:

Notes and Definitions:

See attached

Case Narratives:

See attached

All results on this report intended for compliance submission must have the associated chain(s) of custody attached for the results to meet reporting requirements as per ADHS Laboratory licensure rules. If you have received this report for compliance purposes and it is not complete, please contact the Compliance and Regulatory Affairs Office for a final report in its entirety.

Reviewed By:

01/27/14
Date

Laboratory Director or Designee
Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

Digested Sludge to Regional Biosolids Facility (20923-4500)

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1310246-02	D	Antimony	10/30/13 9:00	EPA 6010B	11/1/13 12:08	**ND**	mg/kg dry	5.98	12.16		MLB
1310246-02	D	Arsenic	10/30/13 9:00	EPA 6010B	11/1/13 12:08	**17.0**	mg/kg dry	10.6	12.16		MLB
1310246-02	D	Beryllium	10/30/13 9:00	EPA 6010B	11/1/13 14:58	**0.198**	mg/kg dry	0.0238	2.43	J	MLB
1310246-02	D	Cadmium	10/30/13 9:00	EPA 6010B	11/1/13 12:08	**2.78**	mg/kg dry	0.395	4.86	J	MLB
1310246-02	D	Chromium	10/30/13 9:00	EPA 6010B	11/1/13 14:58	**40.9**	mg/kg dry	0.421	12.16		MLB
1310246-02	D	Copper	10/30/13 9:00	EPA 6010B	11/1/13 14:58	**493**	mg/kg dry	0.547	12.16		MLB
1310246-02	D	Lead	10/30/13 9:00	EPA 6010B	11/1/13 14:58	**23.6**	mg/kg dry	5.45	12.16		MLB
1310246-02	D	Molybdenum	10/30/13 9:00	EPA 6010B	11/1/13 12:08	**20.2**	mg/kg dry	0.705	4.86		MLB
1310246-02	D	Nickel	10/30/13 9:00	EPA 6010B	11/1/13 12:08	**25.7**	mg/kg dry	5.17	12.16		MLB
1310246-02	D	Selenium	10/30/13 9:00	EPA 6010B	11/1/13 12:08	**11.1**	mg/kg dry	8.67	12.16	J	MLB
1310246-02	D	Silver	10/30/13 9:00	EPA 6010B	11/1/13 12:08	**6.98**	mg/kg dry	0.656	1.22		MLB
1310246-02	D	Thallium	10/30/13 9:00	EPA 6010B	11/1/13 14:58	**ND**	mg/kg dry	7.34	12.16		MLB
1310246-02	D	Mercury	10/30/13 9:00	EPA 7471A	11/21/13 11:23	**1.35**	mg/kg dry	0.119	0.31		RAROS
1310246-02	D	Cyanide	10/30/13 9:00	EPA 9010C	11/1/13 10:46	**0.639**	mg/kg dry	0.378	1.58	M5, PC2, J	KB
1310246-02RE2	D	Zinc	10/30/13 9:00	EPA 6010B	11/1/13 12:18	**1290**	mg/kg dry	2.04	60.79	D2, D7	MLB
1310246-02	D	% Solids	10/30/13 9:00	SM 2540G	10/31/13 14:22	**1.59**	%		0.01		JRV
1310246-02	D	Acrolein	10/30/13 9:00	EPA 624	11/6/13 20:39	**ND**	mg/kg dry	0.00111	12.58		ev
1310246-02	D	Acrylonitrile	10/30/13 9:00	EPA 624	11/6/13 20:39	**ND**	mg/kg dry	0.00116	12.58		ev
1310246-02	D	Ethyl Benzene	10/30/13 9:00	EPA 624	11/4/13 18:19	**0.101**	mg/kg dry	0.00003	0.00063	D1, D7, N1	DLC
1310246-02	D	Toluene	10/30/13 9:00	EPA 624	11/4/13 18:19	**0.113**	mg/kg dry	0.00006	0.00063	D1, D7	DLC
1310246-02	D	1,1,1-Trichloroethane	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00006	0.00063	D1, D7	DLC
1310246-02	D	1,1,2,2-Tetrachloroethane	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00005	0.00063	D1, D7, N1	DLC
1310246-02	D	1,1,2-Trichloroethane	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00004	0.00063	D1, D7	DLC
1310246-02	D	1,1-Dichloroethane	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00005	0.00063	D1, D7	DLC
1310246-02	D	1,1-Dichloroethene	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.0002	0.00063	D1, D7	DLC
1310246-02	D	1,2-Dichlorobenzene	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00006	0.00063	D1, D7, N1	DLC
1310246-02	D	1,2-Dichloroethane	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00006	0.00063	D1, D7, N1	DLC
1310246-02	D	1,2-Dichloropropane	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00007	0.00063	D1, D7	DLC
1310246-02	D	1,3-Dichlorobenzene	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00006	0.00063	D1, D7, N1	DLC
1310246-02	D	1,4-Dichlorobenzene	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00006	0.00063	D1, D7	DLC
1310246-02	D	2-Chloroethyl vinyl ether	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00006	0.63	D1, D7	DLC
1310246-02	D	Benzene	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00003	0.00063	D1, D7	DLC
1310246-02	D	Bromodichloromethane	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00006	0.00063	D1, D7	DLC
1310246-02	D	Bromoform	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00007	0.00063	D1, D7	DLC
1310246-02	D	Bromomethane	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.0001	2.52	D1, D7, N1	DLC
1310246-02	D	Carbon Tetrachloride	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00009	0.00063	D1, D7	DLC
1310246-02	D	Chlorobenzene	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00002	0.00063	D1, D7	DLC
1310246-02	D	Chloroethane	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.0001	0.00063	D1, D7	DLC
1310246-02	D	Chloroform	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00003	0.00063	D1, D7	DLC
1310246-02	D	Chloromethane	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.0001	0.00063	D1, D7	DLC
1310246-02	D	cis-1,3-Dichloropropene	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00007	0.00063	D1, D7	DLC
1310246-02	D	Dibromochloromethane	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00009	0.00063	D1, D7	DLC
1310246-02	D	Methylene Chloride	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00005	0.00126	D1, D7	DLC
1310246-02	D	Tetrachloroethene	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00005	0.00063	D1, D7	DLC
1310246-02	D	Total Trihalomethanes	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00009	0.00063	D1, D7	DLC
1310246-02	D	trans-1,2-Dichloroethene	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.0001	0.00063	D1, D7	DLC
1310246-02	D	trans-1,3-Dichloropropene	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00006	0.00063	D1, D7	DLC
1310246-02	D	Trichloroethene	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00005	0.00063	D1, D7	DLC
1310246-02	D	Trichlorofluoromethane	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00007	0.00063	D1, D7, N1	DLC
1310246-02	D	Vinyl chloride	10/30/13 9:00	EPA 624	11/4/13 18:19	**ND**	mg/kg dry	0.00005	0.00063	D1, D7, N1	DLC
1310246-02	D	4,4-DDD	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00006	0.00037	D1, D7	mam-z
1310246-02	D	4,4-DDE	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00005	0.00037	D1, D7	mam-z
1310246-02	D	4,4-DDT	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00004	0.00037	D1, D7	mam-z
1310246-02	D	Aldrin	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00010	0.00037	D1, D7	mam-z
1310246-02	D	alpha-BHC	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00009	0.00037	D1, D7	mam-z
1310246-02	D	beta-BHC	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00010	0.00037	D1, D7	mam-z
1310246-02	D	Chlordane	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00070	0.00298	D1, D7	mam-z
1310246-02	D	Dieldrin	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00007	0.00037	D1, D7	mam-z
1310246-02	D	Endosulfan I	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00005	0.00037	D1, D7	mam-z
1310246-02	D	Endosulfan II	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00003	0.00037	D1, D7	mam-z
1310246-02	D	Endosulfan sulfate	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00005	0.00037	D1, D7	mam-z
1310246-02	D	Endrin	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00010	0.00037	D1, D7	mam-z
1310246-02	D	Endrin aldehyde	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00007	0.00037	D1, D7	mam-z
1310246-02	D	gamma-BHC (Lindane)	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00009	0.00037	D1, D7	mam-z
1310246-02	D	Heptachlor	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00010	0.00037	D1, D7	mam-z
1310246-02	D	Heptachlor Epoxide	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00011	0.00037	D1, D7	mam-z

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1310246-02	D	PCB 1016	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00010	0.00075	D1, D7	mam-z
1310246-02	D	PCB 1221	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00009	0.00089	D1, D7	mam-z
1310246-02	D	PCB 1232	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00016	0.00089	D1, D7	mam-z
1310246-02	D	PCB 1242	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00010	0.00089	D1, D7	mam-z
1310246-02	D	PCB 1248	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00016	0.00089	D1, D7	mam-z
1310246-02	D	PCB 1254	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00007	0.00089	D1, D7	mam-z
1310246-02	D	PCB 1260	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00025	0.00089	D1, D7	mam-z
1310246-02	D	Total PCBs	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00030	0.00089	D1, D7	mam-z
1310246-02	D	Toxaphene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.00508	0.02	D1, D7	mam-z
1310246-02	D	bis(2-ethylhexyl)phthalate	10/30/13 9:00	EPA 625	11/26/13 18:09	**16.38**	mg/kg dry	0.003	15.12	D1, D7	SJM
1310246-02	D	Di-n-butyl phthalate	10/30/13 9:00	EPA 625	11/26/13 18:09	**4.69**	mg/kg dry	0.002	5.04	D1, D7, N1	SJM
1310246-02	D	1,2,4-Trichlorobenzene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	1,2-Diphenylhydrazine	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	2,3-Dichloroaniline	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	2,4,6-Trichlorophenol	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	2,4-Dichlorophenol	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	2,4-Dimethylphenol	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.003	15.12	D1, D7	SJM
1310246-02	D	2,4-Dinitrophenol	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.009	25.20	D1, D7	SJM
1310246-02	D	2,4-Dinitrotoluene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	2,6-Dinitrotoluene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.002	5.04	D1, D7	SJM
1310246-02	D	2-Chloronaphthalene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	2-Chlorophenol	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.002	5.04	D1, D7	SJM
1310246-02	D	2-Methyl-4,6-dinitrophenol	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.004	15.12	D1, D7	SJM
1310246-02	D	2-Methylphenol	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.002	5.04	D1, D7	SJM
1310246-02	D	2-Nitrophenol	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.002	15.12	D1, D7	SJM
1310246-02	D	3,3-Dichlorobenzidine	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.002	37.80	D1, D7	SJM
1310246-02	D	4-Bromophenyl phenyl ether	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	4-Chloro-3-methylphenol	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	4-Chlorophenyl phenyl ether	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	4-Methylphenol	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.003	15.12	D1, D7	SJM
1310246-02	D	4-Nitrophenol	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.005	15.12	D1, D7	SJM
1310246-02	D	Acenaphthene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	Acenaphthylene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.0008	5.04	D1, D7	SJM
1310246-02	D	Anthracene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	Benzidine	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.02	63.00	D1, D7, N1	SJM
1310246-02	D	Benzo[a]anthracene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	Benzo[a]pyrene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.002	5.04	D1, D7	SJM
1310246-02	D	Benzo[b]fluoranthene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.002	5.04	D1, D7	SJM
1310246-02	D	Benzo[ghi]perylene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.002	5.04	D1, D7	SJM
1310246-02	D	Benzo[k]fluoranthene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.002	15.12	D1, D7, N1	SJM
1310246-02	D	bis(2-chloroethoxy)methane	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	bis(2-chloroethyl)ether	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	bis(2-chloroisopropyl)ether	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	Butylbenzylphthalate	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.002	5.04	D1, D7	SJM
1310246-02	D	Carbazole	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7, N1	SJM
1310246-02	D	Chrysene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	Dibenzo(a,h)anthracene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.002	5.04	D1, D7	SJM
1310246-02	D	Diethyl phthalate	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	Dimethyl phthalate	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.0007	5.04	D1, D7	SJM
1310246-02	D	Di-n-octyl phthalate	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.002	5.04	D1, D7	SJM
1310246-02	D	Fluoranthene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	Fluorene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	Hexachlorobenzene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.0008	5.04	D1, D7	SJM
1310246-02	D	Hexachlorobutadiene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	Hexachlorocyclopentadiene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.003	15.12	D1, D7	SJM
1310246-02	D	Hexachloroethane	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	Indeno(1,2,3-cd)pyrene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.002	15.12	D1, D7	SJM
1310246-02	D	Isophorone	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	Naphthalene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	n-Decane	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.002	5.04	D1, D7	SJM
1310246-02	D	Nitrobenzene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.003	15.12	D1, D7	SJM
1310246-02	D	N-Nitrosodimethylamine	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.004	15.12	D1, D7	SJM
1310246-02	D	N-Nitroso-di-n-propylamine	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	N-Nitrosodiphenylamine	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.002	25.20	D1, D7, N1	SJM
1310246-02	D	n-Octadecane	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.002	5.04	D1, D7	SJM
1310246-02	D	Pentachlorophenol	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.003	15.12	D1, D7	SJM
1310246-02	D	Phenanthrene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	Phenol	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.002	5.04	D1, D7	SJM
1310246-02	D	Pyrene	10/30/13 9:00	EPA 625	11/26/13 18:09	**ND**	mg/kg dry	0.001	5.04	D1, D7	SJM
1310246-02	D	1,2,4-Trichlorobenzene	10/30/13 9:00	EPA 8260	11/4/13 18:19	**ND**	mg/kg dry	0.0003	0.00063	D1, D7	DLC
1310246-02	D	1,2-Dibromo-3-chloropropan	10/30/13 9:00	EPA 8260	11/4/13 18:19	**ND**	mg/kg dry	0.0002	0.00063	D1, D7	DLC

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1310246-02	D	1,2-Dibromoethane	10/30/13 9:00	EPA 8260	11/4/13 18:19	**ND**	mg/kg dry	0.0001	0.00063	D1, D7	DLC
1310246-02	D	cis-1,2-Dichloroethene	10/30/13 9:00	EPA 8260	11/4/13 18:19	**ND**	mg/kg dry	0.0001	0.00063	D1, D7	DLC
1310246-02	D	m,p-Xylenes	10/30/13 9:00	EPA 8260	11/4/13 18:19	**ND**	mg/kg dry	0.0001	0.00252	D1, D7	DLC
1310246-02	D	o-Xylene	10/30/13 9:00	EPA 8260	11/4/13 18:19	**ND**	mg/kg dry	0.00007	0.00063	D1, D7	DLC
1310246-02	D	Styrene	10/30/13 9:00	EPA 8260	11/4/13 18:19	**ND**	mg/kg dry	0.0001	0.00252	D1, D7, N1	DLC
1310246-02	D	Xylenes, total	10/30/13 9:00	EPA 8260	11/4/13 18:19	**ND**	mg/kg dry	0.0001	0.00126	D1, D7	DLC
1310246-02	D	Methoxychlor	10/30/13 9:00	EPA 8270C	11/26/13 18:09	**ND**	mg/kg dry	0.00006	0.00037	D1, D7	mam-z
1310246-02	D	1,2-Diphenylhydrazine	10/30/13 9:00	EPA 8270C	11/26/13 18:09	**ND**	mg/kg dry	0.08	317.52	D1, D7	SJM

Final Effluent Trough (20923-7003)

1310053-01	D	Temperature	10/07/13 8:11	SM2550B	10/7/13 8:11	**28.3**	°C		0.01		SMPLR
1310053-01	D	pH	10/07/13 8:11	SM4500 H B	10/7/13 8:11	**7.65**	pH Units				SMPLR
1310053-01	D	Temp at time of pH, °C	10/07/13 8:11	SM4500 H B	10/7/13 8:11	**28**	°C				SMPLR
1310238-01	D	Specific Conductance	10/29/13 10:20	SM 2510B	10/29/13 10:20	**1424**	uS/cm		1.00		SMPLR
1310238-02	D	Temperature	10/29/13 10:25	SM2550B	10/29/13 10:25	**26.8**	°C		0.01		SMPLR
1310238-02	D	pH	10/29/13 10:25	SM4500 H B	10/29/13 10:25	**7.50**	pH Units				SMPLR
1310238-02	D	Temp at time of pH, °C	10/29/13 10:25	SM4500 H B	10/29/13 10:25	**26.8**	°C				SMPLR
1310238-02	D	Dissolved Oxygen	10/29/13 10:25	SM4500 O G	10/29/13 10:25	**6.8**	mg/L		0.10		SMPLR
1310053-01	D	Ammonia	10/07/13 8:11	SM4500-NH3-D	10/16/13 14:26	**13.6**	mg/L	0.17	0.50		KKH
1310238-01	D	Nitrate	10/29/13 10:20	Calculated	11/4/13 13:37	**2.49**	mg/L	0.05	0.20		KKH
1310238-01	D	Nitrogen Total Water	10/29/13 10:20	Calculated	11/7/13 15:12	**27.6**	mg/L	0.26	0.80		KKH
1310238-01	D	Calcium	10/29/13 10:20	EPA 200.7	11/13/13 12:46	**69.5**	mg/L	0.04	4.00		MLB
1310238-01	D	Iron	10/29/13 10:20	EPA 200.7	10/31/13 16:06	**145**	ug/L	7.17	25.00		MLB
1310238-01	D	Magnesium	10/29/13 10:20	EPA 200.7	11/13/13 12:46	**14.8**	mg/L	0.002	2.00		MLB
1310238-01	D	Potassium	10/29/13 10:20	EPA 200.7	11/13/13 12:46	**16.5**	mg/L	0.06	2.00		MLB
1310238-01	D	Sodium	10/29/13 10:20	EPA 200.7	11/13/13 12:46	**130**	mg/L	0.08	4.00		MLB
1310238-01	D	Antimony	10/29/13 10:20	EPA 200.8	12/3/13 15:01	**0.38**	ug/L	0.17	1.00	J	JB
1310238-01	D	Arsenic	10/29/13 10:20	EPA 200.8	12/3/13 15:01	**3.65**	ug/L	0.13	1.00		JB
1310238-01	D	Barium	10/29/13 10:20	EPA 200.8	12/3/13 15:01	**59.0**	ug/L	0.26	1.00		JB
1310238-01	D	Beryllium	10/29/13 10:20	EPA 200.8	12/3/13 15:01	**ND**	ug/L	0.22	1.00		JB
1310238-01	D	Cadmium	10/29/13 10:20	EPA 200.8	12/3/13 15:01	**ND**	ug/L	0.41	1.00		JB
1310238-01	D	Chromium	10/29/13 10:20	EPA 200.8	12/3/13 15:01	**0.79**	ug/L	0.40	1.00	J	JB
1310238-01	D	Copper	10/29/13 10:20	EPA 200.8	12/3/13 15:01	**6.56**	ug/L	0.66	1.00		JB
1310238-01	D	Lead	10/29/13 10:20	EPA 200.8	12/3/13 15:01	**0.25**	ug/L	0.11	1.00	J	JB
1310238-01	D	Manganese	10/29/13 10:20	EPA 200.8	12/3/13 15:01	**16.7**	ug/L	0.12	1.00		JB
1310238-01	D	Nickel	10/29/13 10:20	EPA 200.8	12/3/13 15:01	**2.51**	ug/L	0.29	1.00		JB
1310238-01	D	Selenium	10/29/13 10:20	EPA 200.8	12/3/13 15:01	**1.19**	ug/L	0.50	1.00		JB
1310238-01	D	Silver	10/29/13 10:20	EPA 200.8	12/3/13 15:01	**0.11**	ug/L	0.11	1.00	J	JB
1310238-01	D	Thallium	10/29/13 10:20	EPA 200.8	12/3/13 15:01	**0.17**	ug/L	0.13	1.00	J	JB
1310238-01	D	Zinc	10/29/13 10:20	EPA 200.8	12/3/13 15:01	**21.0**	ug/L	0.90	1.00		JB
1310238-01	D	Mercury	10/29/13 10:20	EPA 245.1	11/14/13 16:02	**ND**	ug/L	0.111	0.20		RAROS
1310238-01	D	Total Kjeldahl Nitrogen	10/29/13 10:20	EPA 351.2	11/7/13 15:12	**21.1**	mg/L	0.26	0.80		KKH
1310238-01	D	Nitrate/Nitrite	10/29/13 10:20	EPA 353.2	11/4/13 13:37	**6.51**	mg/L	0.05	0.20		KB
1310238-01	D	Hardness	10/29/13 10:20	SM 2340B	11/13/13 12:46	**234**	mg/L	0.10	9.99		MLB
1310238-01	D	Cyanide Amenable	10/29/13 10:20	SM 4500-CN-G	11/1/13 9:31	**ND**	ug/L	1.40	5.00		KB
1310238-01	D	Chloride	10/29/13 10:20	SM4500-Cl-E	11/5/13 13:43	**149**	mg/L	1.10	4.00		KKH
1310238-01	D	Cyanide	10/29/13 10:20	SM4500-CN-E	11/1/13 9:31	**ND**	ug/L	1.40	5.00		KB
1310238-01	D	Fluoride	10/29/13 10:20	SM4500-F-C	11/3/13 12:16	**0.471**	mg/L	0.010	0.10		KKH
1310238-01	D	Nitrite	10/29/13 10:20	SM4500-NO2 B	10/30/13 14:18	**4.02**	mg/L	0.03	0.20		KKH
1310238-01	D	Sulfate	10/29/13 10:20	SM4500-SO4 F	11/7/13 10:21	**187**	mg/L	7.50	50.00		KB
1310238-02	D	Chromium, Hexavalent	10/29/13 10:25	EPA 200.8		**NA**	ug/L	0.400	1.00	N7	OTHER
1310238-02	D	Mercury	10/29/13 10:25	EPA 245.7	11/5/13 9:00	**7.75**	ng/L		5.00		KKH
1310238-02	D	Sulfide	10/29/13 10:25	Hach 8131	10/31/13 12:24	**ND**	mg/L	0.007	0.10		KKH
1310238-02	D	Cyanide	10/29/13 10:25	SM4500-CN-E	11/1/13 9:32	**ND**	ug/L	1.40	5.00		KB
1310238-02	D	Ammonia	10/29/13 10:25	SM4500-NH3-D	11/6/13 13:54	**20.0**	mg/L	0.17	0.50		KKH
1310238-03	FB	Mercury	10/29/13 10:25	EPA 245.7	11/5/13 8:57	**ND**	ng/L		5.00		KKH
1310257-01	C	Calcium	10/31/13 8:00	EPA 200.7	11/13/13 12:51	**70.6**	mg/L	0.04	4.00		MLB
1310257-01	C	Magnesium	10/31/13 8:00	EPA 200.7	11/13/13 12:51	**15.5**	mg/L	0.002	2.00		MLB
1310257-01	C	Copper	10/31/13 8:00	EPA 200.8	11/20/13 17:09	**7.49**	ug/L	0.66	1.00		JB
1310257-01	C	Selenium	10/31/13 8:00	EPA 200.8	11/20/13 17:09	**1.05**	ug/L	0.50	1.00		JB
1310257-01	C	Hardness	10/31/13 8:00	SM 2340B	11/13/13 12:51	**240**	mg/L	0.10	9.99		MLB
1310257-01RE1	C	Lead	10/31/13 8:00	EPA 200.8	11/21/13 16:37	**0.26**	ug/L	0.11	1.00	J	JB
1310257-02	C	Copper (Dissolved)	10/31/13 8:00	EPA 200.8	11/20/13 16:58	**5.70**	ug/L	0.66	1.00	H6	JB
1310257-02	C	Selenium (Dissolved)	10/31/13 8:00	EPA 200.8	11/20/13 16:58	**0.80**	ug/L	0.50	1.00	H6, J	JB
1310257-02RE1	C	Lead (Dissolved)	10/31/13 8:00	EPA 200.8	11/21/13 16:31	**0.20**	ug/L	0.11	1.00	H6, J	JB
1310238-01	D	Alkalinity Total	10/29/13 10:20	SM 2320B	10/30/13 11:03	**217**	mg/L		20.00		ETD
1310238-01	D	Bicarbonate Alkalinity	10/29/13 10:20	SM 2320B	10/30/13 11:03	**217**	mg/L		20.00		ETD

Qualifier Definitions

A	Absent
B8	Analyte found in both the travel blank and sample.
D1 -	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of target analyte.
D7	Minimum Reporting Limit adjusted to reflect sample dilution.
H6	The filtration was not done within the required 15 minutes of sampling, the sample was filtered in the laboratory.
J	Concentration estimated. Analyte was detected below laboratory minimum reporting limit (MRL) but above MDL.
M5	Analyte concentration was determined by the method of standard addition (MSA).
N1	See case narrative.
N7	Additional analysis was not performed based on the "Total" result which was below the requested analyte's MCL/Action level/Trigger Level.
NA	Not Analyzed
NC	Not Calculable
PC2	MSD/BSD only used for RPD.
R8	Sample RPD exceeded the method acceptance limit.

General Notes and Definitions

C	Sample Type - Composite
D	Sample Type - Discrete
DD	Sample Type - Discrete Duplicate
ND	Analyte NOT DETECTED at or above the reporting limit (MDL)
NR	Not Reported
DET	Analyte DETECTED
DRY	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
Analysis Date	Analysis Date represents the final reading date.
Field Results	Field Results performed by "SMPLR" (Sampler), are not subject to approval of Laboratory Director.
Solids, Total Volatile	Used for process control samples only.
RE	Re-Analysis has been performed.
FD	Field Duplicate

Case Narrative(s)

1310246-01 & 1310246-02

This sample was analyzed for EPA Method 624 and Method 8260 Volatiles on 10/30/13 and 11/04/13. Target analytes flagged with N1 failed the Matrix Spike from the same analytical batch but the spike was performed on a different sample. DLC 11/04/13

1310246-02

EPA Method 625 Semi-volatiles: Target analytes flagged with N1 failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample.SJM 12/16/13

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1310246-02

SITE & LOCATION: Roger Road WRF -Digester Sludge to Regional Biosolids Facility

SITE-LOCATION NUMBER: 20923-4500 (XXXXX-XXXX)

SAMPLE START DATE: (MM / DD / YYYY)

SAMPLE START TIME: (24 Hour Clock)

SUBMITTER: CRAO/Water Quality

SAMPLE END DATE: 10/30/13 (MM / DD / YYYY)

SAMPLE END TIME: 0900 (24 Hour Clock)

SAMPLER: Valencia, Hooney (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ■ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ■ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	■	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐			
Cobalt	☐	☐			
Copper	☐	☐			
Hardness	☐	☐			
Iron	☐	☐			
Lead	☐	☐			
Magnesium	☐	☐			
Manganese	☐	☐			
Mercury	☐	☐			
Molybdenum	■	☐			
Nickel	☐	☐			
Potassium	☐	☐			
Selenium	☐	☐			
Silver	☐	☐			
Sodium	☐	☐			
Strontium	☐	☐			
Thallium	☐	☐			
Tin	☐	☐			

WET METHODS	D	C
Ammonia as N	☐	☐
Chloride	☐	☐
Cyanide, Total	■	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	☐
Nitrite as N	☐	☐
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	☐
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	■	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	■	☐
Purgeable Organics (GCMS)	■	☐
Semivolatile Organics (GCMS)	■	☐
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	■	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:

# of Bottles Delivered: 2 COS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials: 10-09-13 DF

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	[signature]	10-30-13	1021
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	6	°C
Initials:	COS	
Non-Preserved	7	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☒	☐	☐
Received from a refrigerator?	☐	☒	☐

** Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
*** As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

Work Order Results for 1311049

Roger Road WRF	**Project:**	**Roger Road WRF**	**Prepared: 2/16/2014 3:50:28 PM**
2600 W. Sweetwater Drive	**Project number:**	**20923**	
Tucson ARIZONA 85705	**Project manager:**	**Frank Gall**	

Sample name: Drying Bed-Biosolids Pile Matrix: Biosolids Sampled: 11/6/2013 10:55:00 AM US Mountain

503 Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes

Arsenic Total 6010B Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Arsenic	8.42	8.99	mg/kg dry	1	B312054	12/3/2013 5:51:00 PM	12/5/2013 2:44:13 PM	EPA 6010B	J

Cadmium Total 6010B Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Cadmium	3.98	3.60	mg/kg dry	1	B312054	12/3/2013 5:51:00 PM	12/5/2013 2:44:13 PM	EPA 6010B	

Chromium Total 6010B Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Chromium	44.8	8.99	mg/kg dry	1	B312054	12/3/2013 5:51:00 PM	12/5/2013 2:44:13 PM	EPA 6010B	

Copper Total 6010B Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Copper	396	8.99	mg/kg dry	1	B312054	12/3/2013 5:51:00 PM	12/5/2013 2:44:13 PM	EPA 6010B	

Lead Total 6010B Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Lead	49.4	8.99	mg/kg dry	1	B312054	12/3/2013 5:51:00 PM	12/5/2013 2:44:13 PM	EPA 6010B	

Molybdenum Total 6010B Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Molybdenum	12.5	3.60	mg/kg	1	B312054	12/3/2013	12/5/2013	EPA	

			dry			5:51:00 PM	2:44:13 PM	6010B	

Nickel Total 6010B Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Nickel	28.9	8.99	mg/kg dry	1	B312054	12/3/2013 5:51:00 PM	12/5/2013 2:44:13 PM	EPA 6010B	

Nitrate/Nitrite Miscellaneous Inorganic Analysis

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Nitrate/Nitrite	575.70	1.35	mg/kg dry	5	B311246	11/17/2013 8:30:00 AM	11/17/2013 11:35:44 AM	EPA 353.2	D2

Nitrogen - Kjeldahl Miscellaneous Inorganic Analysis

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Total Kjeldahl Nitrogen	16848	169.32	mg/kg dry	2	B311259	11/18/2013 9:14:00 AM	11/21/2013 12:18:15 PM	EPA 351.2	D2

Nitrogen Total Biosolids Wet Chemistry

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Nitrogen Total Biosolids	17423	100.00	mg/kg dry	5	[CALC]	11/18/2013 9:14:00 AM	11/21/2013 12:18:15 PM	Calculated	

Selenium Total 6010B Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Selenium	**ND**	8.99	mg/kg dry	1	B312054	12/3/2013 5:51:00 PM	12/5/2013 2:44:13 PM	EPA 6010B	

Solids Total (%) Microbiological Testing

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
% Solids	59.1	0.005	%	1	B311107	11/7/2013 7:50:00 AM	11/8/2013 11:34:47 AM	SM 2540G	

TCLP Arsenic 6010B TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Arsenic	0.0234	0.0250	mg/L	1	B312148	12/10/2013 8:19:00 AM	12/11/2013 9:35:15 AM	TCLP/EPA 6010B	J

TCLP Barium 6010B TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Barium	0.0546	0.0250	mg/L	1	B312148	12/10/2013	12/11/2013	TCLP/EPA	

						8:19:00 AM	11:19:01 AM	6010B	

TCLP Cadmium 6010B TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Cadmium	**ND**	0.0100	mg/L	1	B312148	12/10/2013 8:19:00 AM	12/11/2013 9:35:15 AM	TCLP/EPA 6010B	

TCLP Chromium 6010B TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Chromium	0.00306	0.0250	mg/L	1	B312148	12/10/2013 8:19:00 AM	12/11/2013 9:35:15 AM	TCLP/EPA 6010B	J

TCLP Extraction - Metals TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes

TCLP Lead 6010B TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Lead	**ND**	0.0250	mg/L	1	B312148	12/10/2013 8:19:00 AM	12/11/2013 11:19:01 AM	TCLP/EPA 6010B	

TCLP Mercury TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Mercury	**ND**	0.000200	mg/L	1	B312037	12/3/2013 11:04:00 AM	12/4/2013 2:42:17 PM	TCLP/EPA 7470	

TCLP Selenium 6010B TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Selenium	**ND**	0.0250	mg/L	1	B312148	12/10/2013 8:19:00 AM	12/11/2013 9:35:15 AM	TCLP/EPA 6010B	

TCLP Silver 6010B TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Silver	0.00156	0.00250	mg/L	1	B312148	12/10/2013 8:19:00 AM	12/11/2013 9:35:15 AM	TCLP/EPA 6010B	J

Zinc Total 6010B Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Zinc	645	8.99	mg/kg dry	1	B312054	12/3/2013 5:51:00 PM	12/5/2013 2:44:13 PM	EPA 6010B	

Sample name: Drying Bed-Biosolids Pile Matrix: Biosolids Sampled: 11/6/2013 10:55:00 AM US Mountain

TCLP Arsenic 6010B TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes

TCLP Barium 6010B TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes

TCLP Cadmium 6010B TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes

TCLP Chromium 6010B TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes

TCLP Lead 6010B TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes

TCLP Selenium 6010B TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes

TCLP Silver 6010B TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes

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End Of Report

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ANNUAL BIOSOLIDS REPORT 2013

PIMA COUNTY
REGIONAL WASTEWATER RECLAMATION DEPARTMENT
PIMA COUNTY, ARIZONA

SECTION 6

AVRA VALLEY WRF
AZPDES NO. AZ0024121

SAMPLING AND ANALYSES

PRIORITY POLLUTANTS

TCLP

HAZARDOUSNESS

ANNUAL BIOSOLIDS REPORT 2013

PIMA COUNTY
REGIONAL WASTEWATER RECLAMATION DEPARTMENT
PIMA COUNTY, ARIZONA

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office (CRAO) Laboratory
3035 W. El Camino del Cerro, Tucson Arizona 85745-9750, Phone (520) 724-6200

Report Date: 06/13/2013
Laboratory License: AZO159

Sample Analysis Report

Avra Valley WRF

February 2013

Sample Integrity

SAMPLE RECEIPT: Samples were received intact at the required temperature, unless otherwise noted with a data qualifier below. Please refer to the Chain of Custody for sample receipt details.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Pima County CRAO Laboratory Quality Manual.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS:

Notes and Definitions:

See attached

Case Narratives:

See attached

All results on this report intended for compliance submission must have the associated chain(s) of custody attached for the results to meet reporting requirements as per ADHS Laboratory licensure rules. If you have received this report for compliance purposes and it is not complete, please contact the Compliance and Regulatory Affairs Office for a final report in its entirety.

Reviewed By:

06/17/13
Date

Laboratory Director or Designee
Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1302088-03	D	E. Coli	02/10/13 8:03	SM 9223B	2/11/13 13:10	**2.0**	MPN/100 mL		1.00		JAH
1302092-03	D	E. Coli	02/11/13 7:49	SM 9223B	2/12/13 12:50	**ND**	MPN/100 mL		1.00		AFNE
1302101-03	D	E. Coli	02/12/13 8:34	SM 9223B	2/13/13 12:58	**15.8**	MPN/100 mL		1.00		JAH
1302117-04	D	E. Coli	02/13/13 8:19	SM 9223B	2/14/13 13:05	**2.0**	MPN/100 mL		1.00		JAH
1302129-03	D	E. Coli	02/14/13 8:15	SM 9223B	2/15/13 13:42	**4.1**	MPN/100 mL		1.00		ETD
1302140-04	D	E. Coli	02/15/13 8:00	SM 9223B	2/16/13 13:24	**< 1**	MPN/100 mL		1.00		SRM
1302160-04	D	E. Coli	02/18/13 8:50	SM 9223B	2/19/13 14:02	**1.0**	MPN/100 mL		1.00		SJD
1302161-02	D	E. Coli	02/16/13 8:20	SM 9223B	2/17/13 11:31	**ND**	MPN/100 mL		1.00		SJD
1302162-01	D	E. Coli	02/17/13 8:13	SM 9223B	2/18/13 12:30	**ND**	MPN/100 mL		1.00		SJD
1302167-04	D	E. Coli	02/19/13 8:37	SM 9223B	2/20/13 12:41	**ND**	MPN/100 mL		1.00		SJD

Wet Haul Sludge (25003-1573)

1302012-01	D	Acrolein	02/01/13 11:10	EPA 624	2/4/13 16:28	**ND**	mg/kg dry	0.00111	6.35		ev
1302012-01	D	Acrylonitrile	02/01/13 11:10	EPA 624	2/4/13 16:28	**ND**	mg/kg dry	0.00116	6.35		ev
1302012-01	D	Antimony	02/01/13 11:10	EPA 6010B	2/26/13 16:32	**4.65**	mg/kg dry	3.41	13.86	J	MLB
1302012-01	D	Arsenic	02/01/13 11:10	EPA 6010B	2/26/13 15:14	**ND**	mg/kg dry	5.32	13.86		MLB
1302012-01	D	Beryllium	02/01/13 11:10	EPA 6010B	2/26/13 15:14	**0.131**	mg/kg dry	0.0281	2.77	J	MLB
1302012-01	D	Cadmium	02/01/13 11:10	EPA 6010B	2/26/13 15:14	**1.20**	mg/kg dry	0.239	5.55	J	MLB
1302012-01	D	Chromium	02/01/13 11:10	EPA 6010B	2/26/13 15:14	**12.8**	mg/kg dry	0.426	13.86	J	MLB
1302012-01	D	Copper	02/01/13 11:10	EPA 6010B	2/26/13 15:14	**172**	mg/kg dry	0.769	13.86		MLB
1302012-01	D	Cyanide	02/01/13 11:10	EPA 9010C	2/8/13 14:58	**0.875**	mg/kg dry	0.380	1.58	M5, J	MGA
1302012-01	D	Lead	02/01/13 11:10	EPA 6010B	2/26/13 15:14	**9.98**	mg/kg dry	4.90	13.86	J	MLB
1302012-01	D	Mercury	02/01/13 11:10	EPA 7471A	2/21/13 9:23	**0.884**	mg/kg dry	0.0599	0.16		DDO
1302012-01	D	Molybdenum	02/01/13 11:10	EPA 6010B	2/26/13 15:14	**9.77**	mg/kg dry	0.681	5.55		MLB
1302012-01	D	Nickel	02/01/13 11:10	EPA 6010B	2/26/13 15:14	**13.7**	mg/kg dry	3.15	13.86	J	MLB
1302012-01	D	4,4-DDD	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00006	0.0002	D1, D7	mam-z
1302012-01	D	4,4-DDE	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00005	0.0002	D1, D7	mam-z
1302012-01	D	4,4-DDT	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00004	0.0001	D1, D7	mam-z
1302012-01	D	Aldrin	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00010	0.0005	D1, D7	mam-z
1302012-01	D	alpha-BHC	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00009	0.0002	D1, D7	mam-z
1302012-01	D	beta-BHC	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00010	0.0005	D1, D7	mam-z
1302012-01	D	Chlordane	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00070	0.0020	D1, D7	mam-z
1302012-01	D	delta-BHC	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00008	0.0002	D1, D7	mam-z
1302012-01	D	Dieldrin	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00007	0.0002	D1, D7	mam-z
1302012-01	D	Endosulfan I	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00005	0.0002	D1, D7	mam-z
1302012-01	D	Endosulfan II	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00003	0.0005	D1, D7	mam-z
1302012-01	D	Endosulfan sulfate	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00005	0.0002	D1, D7	mam-z
1302012-01	D	Endrin	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00010	0.0005	D1, D7	mam-z
1302012-01	D	Endrin aldehyde	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00007	0.0002	D1, D7	mam-z
1302012-01	D	gamma-BHC (Lindane)	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00009	0.0002	D1, D7	mam-z
1302012-01	D	Heptachlor	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00010	0.0005	D1, D7	mam-z
1302012-01	D	Heptachlor Epoxide	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00011	0.0005	D1, D7	mam-z
1302012-01	D	PCB 1016	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00010	0.0005	D1, D7	mam-z
1302012-01	D	PCB 1221	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00009	0.0006	D1, D7	mam-z
1302012-01	D	PCB 1232	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00016	0.0006	D1, D7	mam-z
1302012-01	D	PCB 1242	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00010	0.0006	D1, D7	mam-z
1302012-01	D	PCB 1248	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00016	0.0006	D1, D7	mam-z

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1302012-01	D	PCB 1254	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00007	0.0006	D1, D7	mam-z
1302012-01	D	PCB 1260	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00025	0.0006	D1, D7	mam-z
1302012-01	D	Total PCBs	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00030	0.0006	D1, D7	mam-z
1302012-01	D	Toxaphene	02/01/13 11:10	EPA 625	2/6/13 17:19	**ND**	mg/kg dry	0.00508	0.01	D1, D7	mam-z
1302012-01	D	Methoxychlor	02/01/13 11:10	EPA 8270C	2/6/13 17:19	**ND**	mg/kg dry	0.00006	0.0003	D1, D7	mam-z
1302012-01	D	1,1,1-Trichloroethane	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.00005	0.0003	D1, D4	DLC
1302012-01	D	1,1,2,2-Tetrachloroethane	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.00009	0.0003	D1, D4	DLC
1302012-01	D	1,1,2-Trichloroethane	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.0001	0.0003	D1, D4	DLC
1302012-01	D	1,1-Dichloroethane	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.00006	0.0003	D1, D4	DLC
1302012-01	D	1,1-Dichloroethene	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.00007	0.0003	D1, D4	DLC
1302012-01	D	1,2-Dichlorobenzene	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.0002	0.0003	D1, D4	DLC
1302012-01	D	1,2-Dichloroethane	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.0001	0.0006	D1, D4	DLC
1302012-01	D	1,2-Dichloropropane	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.0001	0.0003	D1, D4	DLC
1302012-01	D	1,3-Dichlorobenzene	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.0001	0.0003	D1, D4	DLC
1302012-01	D	1,4-Dichlorobenzene	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.0002	0.0003	D1, D4	DLC
1302012-01	D	2-Chloroethyl vinyl ether	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.0002	0.0003	D1, D4	DLC
1302012-01	D	Benzene	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.0001	0.0003	D1, D4	DLC
1302012-01	D	Bromodichloromethane	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.0002	0.0006	D1, D4	DLC
1302012-01	D	Bromoform	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.00008	0.0003	D1, D4	DLC
1302012-01	D	Bromomethane	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.00009	0.0003	D1, D4	DLC
1302012-01	D	Carbon Tetrachloride	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.00006	0.0003	D1, D4	DLC
1302012-01	D	Chlorobenzene	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.0001	0.0003	D1, D4	DLC
1302012-01	D	Chloroethane	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.0002	0.0003	D1, D4	DLC
1302012-01	D	Chloroform	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.0001	0.0003	D1, D4	DLC
1302012-01	D	Chloromethane	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.00008	0.0003	D1, D4	DLC
1302012-01	D	cis-1,3-Dichloropropene	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.0001	0.0006	D1, D4	DLC
1302012-01	D	Dibromochloromethane	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.0001	0.0003	D1, D4	DLC
1302012-01	D	Ethyl Benzene	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.00008	0.0003	D1, D4	DLC
1302012-01	D	Methylene Chloride	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.0001	0.0003	D1, D4	DLC
1302012-01	D	Tetrachloroethene	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.00006	0.0003	D1, D4	DLC
1302012-01	D	Toluene	02/01/13 11:10	EPA 624	2/14/13 16:57	**567.236**	mg/kg dry	0.00008	0.0003	D1, D4, Q5	DLC
1302012-01	D	Total Trihalomethanes	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.0002	0.0003	D1, D4	DLC
1302012-01	D	trans-1,2-Dichloroethene	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.00009	0.0003	D1, D4	DLC
1302012-01	D	trans-1,3-Dichloropropene	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.0001	0.0003	D1, D4	DLC
1302012-01	D	Trichloroethene	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.00009	0.0003	D1, D4	DLC
1302012-01	D	Trichlorofluoromethane	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.00005	0.0003	D1, D4	DLC
1302012-01	D	Vinyl chloride	02/01/13 11:10	EPA 624	2/6/13 22:11	**ND**	mg/kg dry	0.00005	0.0003	D1, D4	DLC
1302012-01	D	1,2,4-Trichlorobenzene	02/01/13 11:10	EPA 8260	2/6/13 22:11	**ND**	mg/kg dry	0.0003	0.0003	D1, D4	DLC
1302012-01	D	1,2-Dibromo-3-chloropropane	02/01/13 11:10	EPA 8260	2/6/13 22:11	**ND**	mg/kg dry	0.0002	0.0003	D1, D4	DLC
1302012-01	D	1,2-Dibromoethane	02/01/13 11:10	EPA 8260	2/6/13 22:11	**ND**	mg/kg dry	0.0001	0.0003	D1, D4	DLC
1302012-01	D	cis-1,2-Dichloroethene	02/01/13 11:10	EPA 8260	2/6/13 22:11	**ND**	mg/kg dry	0.0001	0.0003	D1, D4	DLC
1302012-01	D	m,p-Xylenes	02/01/13 11:10	EPA 8260	2/6/13 22:11	**ND**	mg/kg dry	0.0001	0.0006	D1, D4	DLC
1302012-01	D	o-Xylene	02/01/13 11:10	EPA 8260	2/6/13 22:11	**ND**	mg/kg dry	0.00007	0.0003	D1, D4	DLC
1302012-01	D	Styrene	02/01/13 11:10	EPA 8260	2/6/13 22:11	**ND**	mg/kg dry	0.0001	0.0006	D1, D4	DLC
1302012-01	D	Xylenes, total	02/01/13 11:10	EPA 8260	2/6/13 22:11	**ND**	mg/kg dry	0.0001	0.0006	D1, D4	DLC
1302012-01	D	Selenium	02/01/13 11:10	EPA 6010B	2/26/13 16:32	**9.96**	mg/kg dry	5.61	13.86	J	MLB
1302012-01	D	2,3,7,8-TCDD - Dioxin Scan	02/01/13 11:10	EPA 625	2/28/13 11:39	**ND**	ug/kg dry		792.42		SJM
1302012-01	D	1,2,4-Trichlorobenzene	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	1,2-Diphenylhydrazine	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7, N1	SJM
1302012-01	D	2,3-Dichloroaniline	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	2,4,6-Trichlorophenol	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	2,4-Dichlorophenol	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	2,4-Dimethylphenol	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.003	7.62	D1, D7	SJM
1302012-01	D	2,4-Dinitrophenol	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.009	12.70	D1, D7	SJM
1302012-01	D	2,4-Dinitrotoluene	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	2,6-Dinitrotoluene	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.002	2.54	D1, D7	SJM

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1302012-01	D	2-Chloronaphthalene	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	2-Chlorophenol	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.002	2.54	D1, D7	SJM
1302012-01	D	2-Methyl-4,6-dinitrophenol	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.004	7.62	D1, D7	SJM
1302012-01	D	2-Methylphenol	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.002	2.54	D1, D7	SJM
1302012-01	D	2-Nitrophenol	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.002	7.62	D1, D7	SJM
1302012-01	D	3,3-Dichlorobenzidine	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.002	19.05	D1, D7, N1, V9	SJM
1302012-01	D	4-Bromophenyl phenyl ether	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	4-Chloro-3-methylphenol	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	4-Chlorophenyl phenyl ether	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	4-Methylphenol	02/01/13 11:10	EPA 625	3/8/13 17:19	**724.0**	mg/kg dry	0.003	7.62	D1, D7, N1	SJM
1302012-01	D	4-Nitrophenol	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.005	7.62	D1, D7, N1	SJM
1302012-01	D	Acenaphthene	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	Acenaphthylene	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.0008	2.54	D1, D7	SJM
1302012-01	D	Anthracene	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	Benzidine	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.02	44.45	D1, D7, N1, V9	SJM
1302012-01	D	Benzo[a]anthracene	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	Benzo[a]pyrene	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.002	7.62	D1, D7, N1	SJM
1302012-01	D	Benzo[b]fluoranthene	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.002	2.54	D1, D7, N1	SJM
1302012-01	D	Benzo[ghi]perylene	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.002	2.54	D1, D7, N1	SJM
1302012-01	D	Benzo[k]fluoranthene	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.002	7.62	D1, D7, N1	SJM
1302012-01	D	bis(2-chloroethoxy)methane	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	bis(2-chloroethyl)ether	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	bis(2-chloroisopropyl)ether	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	bis(2-ethylhexyl)phthalate	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.003	7.62	D1, D7	SJM
1302012-01	D	Butylbenzylphthalate	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.002	7.62	D1, D7	SJM
1302012-01	D	Carbazole	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7, N1	SJM
1302012-01	D	Chrysene	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	Dibenzo(a,h)anthracene	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.002	2.54	D1, D7, N1	SJM
1302012-01	D	Diethyl phthalate	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	Dimethyl phthalate	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.0007	2.54	D1, D7	SJM
1302012-01	D	Di-n-butyl phthalate	02/01/13 11:10	EPA 625	2/27/13 20:08	**4.06**	mg/kg dry	0.002	2.54	D1, D7, N1	SJM
1302012-01	D	Di-n-octyl phthalate	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.002	2.54	D1, D7, N1	SJM
1302012-01	D	Fluoranthene	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	Fluorene	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	Hexachlorobenzene	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.0008	2.54	D1, D7	SJM
1302012-01	D	Hexachlorobutadiene	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	Hexachlorocyclopentadiene	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.003	7.62	D1, D7, N1	SJM
1302012-01	D	Hexachloroethane	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	Indeno(1,2,3-cd)pyrene	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.002	7.62	D1, D7, N1	SJM
1302012-01	D	Isophorone	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	Naphthalene	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	n-Decane	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.002	2.54	D1, D7	SJM
1302012-01	D	Nitrobenzene	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.003	7.62	D1, D7	SJM
1302012-01	D	N-Nitrosodimethylamine	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.004	7.62	D1, D7, PC3	SJM
1302012-01	D	N-Nitroso-di-n-propylamine	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	N-Nitrosodiphenylamine	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.002	2.54	D1, D7, N1	SJM
1302012-01	D	n-Octadecane	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.002	2.54	D1, D7, N1	SJM
1302012-01	D	Pentachlorophenol	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.003	7.62	D1, D7	SJM
1302012-01	D	Phenanthrene	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	Phenol	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.002	7.62	D1, D7	SJM
1302012-01	D	Pyrene	02/01/13 11:10	EPA 625	2/27/13 20:08	**ND**	mg/kg dry	0.001	2.54	D1, D7	SJM
1302012-01	D	1,2-Diphenylhydrazine	02/01/13 11:10	EPA 8270C	2/27/13 20:08	**ND**	mg/kg dry	0.04	80.51	D1, D7	SJM
1302012-01	D	Silver	02/01/13 11:10	EPA 6010B	2/26/13 15:14	**0.832**	mg/kg dry	0.461	1.39	J	MLB
1302012-01	D	% Solids	02/01/13 11:10	SM 2540G	2/2/13 14:40	**3.15**	%		0.01		JVR
1302012-01	D	% Solids, Total Volatile	02/01/13 11:10	SM 2540G	2/2/13 14:40	**81.8**	%		0.01	T6	JVR
1302012-01	D	Thallium	02/01/13 11:10	EPA 6010B	2/26/13 17:58	**ND**	mg/kg dry	7.90	13.86		MLB

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1302012-01	D	Zinc	02/01/13 11:10	EPA 6010B	2/26/13 15:14	**426**	mg/kg dry	1.55	13.86		MLB
1302040-01	D	2,4,5-TP (Silvex)	02/01/13 11:10	EPA 1311/8151A	2/19/13 21:22	**ND**	mg/l		0.013		CL *
1302040-01	D	2,4-D	02/01/13 11:10	EPA 1311/8151A	2/19/13 21:22	**ND**	mg/l		0.013		CL *
1302040-01	D	Pentachlorophenol	02/01/13 11:10	EPA 1311/8151A	2/19/13 21:22	**ND**	mg/l		0.013		CL *
* Analysis Performed by:TestAmerica Phoenix - See attached contract lab report for official results.											
1302040-01	D	Arsenic	02/01/13 11:10	TCLP/EPA 6010B	2/22/13 9:56	**ND**	mg/L	0.0159	0.03		MLB
1302040-01	D	Barium	02/01/13 11:10	TCLP/EPA 6010B	2/22/13 9:56	**0.131**	mg/L	0.000440	0.03		MLB
1302040-01	D	Cadmium	02/01/13 11:10	TCLP/EPA 6010B	2/22/13 9:56	**ND**	mg/L	0.00920	0.01		MLB
1302040-01	D	Chromium	02/01/13 11:10	TCLP/EPA 6010B	2/22/13 9:56	**ND**	mg/L	0.00248	0.03		MLB
1302040-01	D	Lead	02/01/13 11:10	TCLP/EPA 6010B	2/22/13 12:12	**ND**	mg/L	0.0176	0.03		MLB
1302040-01	D	Mercury	02/01/13 11:10	TCLP/EPA 7470	3/6/13 11:33	**ND**	mg/L	0.000150	0.00		DDO
1302040-01	D	Chlordane	02/01/13 11:10	TCLP/EPA 8270C	3/7/13 18:25	**ND**	ug/L	1.38	2.00		mam-z
1302040-01	D	Endrin	02/01/13 11:10	TCLP/EPA 8270C	3/7/13 18:25	**ND**	ug/L	0.200	0.50	R4	mam-z
1302040-01	D	gamma-BHC (Lindane)	02/01/13 11:10	TCLP/EPA 8270C	3/7/13 18:25	**ND**	ug/L	0.270	0.50		mam-z
1302040-01	D	Heptachlor	02/01/13 11:10	TCLP/EPA 8270C	3/7/13 18:25	**ND**	ug/L	0.270	0.50	R4	mam-z
1302040-01	D	Heptachlor Epoxide	02/01/13 11:10	TCLP/EPA 8270C	3/7/13 18:25	**ND**	ug/L	0.290	0.50	L2, N1	mam-z
1302040-01	D	Methoxychlor	02/01/13 11:10	TCLP/EPA 8270C	3/7/13 18:25	**ND**	ug/L	0.270	0.50	R4	mam-z
1302040-01	D	Toxaphene	02/01/13 11:10	TCLP/EPA 8270C	3/7/13 18:25	**ND**	ug/L	3.79	6.00	V1	mam-z
1302040-01	D	1,1-Dichloroethene	02/01/13 11:10	EPA 8260	2/21/13 21:03	**ND**	ug/L		0.50		DLC
1302040-01	D	1,2-Dichloroethane	02/01/13 11:10	EPA 8260	2/21/13 21:03	**ND**	ug/L		0.50		DLC
1302040-01	D	1,4-Dichlorobenzene	02/01/13 11:10	EPA 8260	2/21/13 21:03	**ND**	ug/L		0.50		DLC
1302040-01	D	Benzene	02/01/13 11:10	EPA 8260	2/21/13 21:03	**ND**	ug/L		0.50		DLC
1302040-01	D	Carbon Tetrachloride	02/01/13 11:10	EPA 8260	2/21/13 21:03	**ND**	ug/L		0.50		DLC
1302040-01	D	Chlorobenzene	02/01/13 11:10	EPA 8260	2/21/13 21:03	**ND**	ug/L		0.50		DLC
1302040-01	D	Chloroform	02/01/13 11:10	EPA 8260	2/21/13 21:03	**ND**	ug/L		0.50		DLC
1302040-01	D	Hexachlorobutadiene	02/01/13 11:10	EPA 8260	2/21/13 21:03	**ND**	ug/L		1.00		DLC
1302040-01	D	Methyl Ethyl Ketone	02/01/13 11:10	EPA 8260	2/21/13 21:03	**5.11**	ug/L		0.50	B1	DLC
1302040-01	D	Tetrachloroethene	02/01/13 11:10	EPA 8260	2/21/13 21:03	**ND**	ug/L		0.50		DLC
1302040-01	D	Trichloroethene	02/01/13 11:10	EPA 8260	2/21/13 21:03	**ND**	ug/L		0.50		DLC
1302040-01	D	Vinyl chloride	02/01/13 11:10	EPA 8260	2/21/13 21:03	**ND**	ug/L		0.50		DLC
1302040-01	D	Selenium	02/01/13 11:10	TCLP/EPA 6010B	2/22/13 12:12	**0.0174**	mg/L	0.0114	0.03	J	MLB
1302040-01	D	1,4-Dichlorobenzene	02/01/13 11:10	EPA 8270C	3/7/13 20:02	**ND**	ug/L	0.540	4.00	D1, D7	SJM
1302040-01	D	2,4,5-Trichlorophenol	02/01/13 11:10	EPA 8270C	3/7/13 20:02	**ND**	ug/L	14.6	50.00	D1, D7, R4	SJM
1302040-01	D	2,4,6-Trichlorophenol	02/01/13 11:10	EPA 8270C	3/7/13 20:02	**ND**	ug/L	11.9	50.00	D1, D7, R4	SJM
1302040-01	D	2,4-Dinitrotoluene	02/01/13 11:10	EPA 8270C	3/7/13 20:02	**ND**	ug/L	12.4	50.00	D1, D7	SJM
1302040-01	D	2-Methylphenol	02/01/13 11:10	EPA 8270C	3/7/13 20:02	**ND**	ug/L	0.770	4.00	D1, D7, R4	SJM
1302040-01	D	3 & 4-Methylphenol	02/01/13 11:10	EPA 8270C	3/7/13 20:02	**1460**	ug/L	1.23	16.00	D1, D2, D7, M3	SJM
1302040-01	D	Hexachlorobenzene	02/01/13 11:10	EPA 8270C	3/7/13 20:02	**ND**	ug/L	0.980	4.00	D1, D7	SJM
1302040-01	D	Hexachlorobutadiene	02/01/13 11:10	EPA 8270C	3/7/13 20:02	**ND**	ug/L	1.72	4.00	D1, D7, L3, M1	SJM
1302040-01	D	Hexachloroethane	02/01/13 11:10	EPA 8270C	3/7/13 20:02	**ND**	ug/L	0.730	4.00	D1, D7, M1	SJM
1302040-01	D	Nitrobenzene	02/01/13 11:10	EPA 8270C	3/7/13 20:02	**ND**	ug/L	0.950	4.00	D1, D7	SJM
1302040-01	D	Pentachlorophenol	02/01/13 11:10	EPA 8270C	3/7/13 20:02	**ND**	ug/L	7.72	20.00	D1, D7, R4	SJM
1302040-01	D	Pyridine	02/01/13 11:10	EPA 8270C	3/7/13 20:02	**ND**	ug/L	1.22	4.00	D1, D7, R4	SJM
1302040-01	D	Silver	02/01/13 11:10	TCLP/EPA 6010B	2/22/13 9:56	**ND**	mg/L	0.00172	0.00		MLB
1302179-01	D	% Solids	02/20/13 8:00	SM 2540G	2/21/13 16:30	**1.78**	%		0.01		ETD
1302179-01	D	% Solids, Total Volatile	02/20/13 8:00	SM 2540G	2/21/13 16:30	**81.2**	%		0.01	T6	ETD

Well AV-04 (25003-2400)

1302241-01	D	Alkalinity Total	02/28/13 11:15	SM 2320B	3/1/13 14:40	**121**	mg/L	2.0	20.00		JGD
1302241-01	D	Ammonia	02/28/13 11:15	EPA 350.1	3/4/13 12:51	**ND**	mg/L	0.20	0.50		DDO
1302241-01	D	Antimony	02/28/13 11:15	EPA 200.8	3/13/13 15:28	**ND**	ug/L	0.17	1.00		JB
1302241-01	D	Arsenic	02/28/13 11:15	EPA 200.8	3/13/13 15:28	**1.93**	ug/L	0.13	1.00		JB
1302241-01	D	Beryllium	02/28/13 11:15	EPA 200.8	3/13/13 15:28	**ND**	ug/L	0.22	1.00		JB
1302241-01	D	Bicarbonate Alkalinity	02/28/13 11:15	SM 2320B	3/1/13 14:40	**121**	mg/L	2.0	20.00		JGD

Qualifier Definitions

<	< 1
<	< 2
>	> 2419.6
A	Absent
B1	Target analyte detected in method blank at or above the method reporting limit.
B4	Target analyte detected in blank at or above method acceptance criteria.
D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of target analyte.
D4	Minimum Reporting Limit (MRL) adjusted to reflect sample amount received and analyzed.
D7	Minimum Reporting Limit adjusted to reflect sample dilution.
J	Concentration estimated. Analyte was detected below laboratory minimum reporting limit (MRL) but above MDL.
K1	The sample dilutions set-up for the BOD/CBOD analysis did not meet the oxygen depletion criteria of at least 2 mg/L. Any reported result is an estimated value.
L2	The associated blank spike recovery was below laboratory acceptance limits.
L3	The associated blank spike recovery was above method acceptance limits.
L4	The associated blank spike recovery was below method acceptance limits.
M1	Matrix spike recovery was high; the associated blank spike recovery was acceptable.
M2	Matrix spike recovery was low; the associated blank spike recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike recovery was acceptable.
M5	Analyte concentration was determined by the method of standard addition (MSA).
N1	See case narrative.
N7	Additional analysis was not performed based on the "Total" result which was below the requested analyte's MCL/Action level/Trigger Level.
NA	Not Analyzed
PC3	Semi-quantitation is included in the case narrative.
Q5	Sample received with inadequate chemical preservation, but preserved by the laboratory.
R4	MS/MSD RPD exceeded the method acceptance limit. Recovery met acceptance criteria.
R8	Sample RPD exceeded the method acceptance limit.
T6	The reported result cannot be used for compliance purposes.
V9	CCV recovery was below method acceptance limits.

General Notes and Definitions

C	Sample Type - Composite
D	Sample Type - Discrete
DD	Sample Type - Discrete Duplicate
ND	Analyte NOT DETECTED at or above the reporting limit (MDL)
NR	Not Reported
DET	Analyte DETECTED

DRY	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
Analysis Date	Analysis Date represents the final reading date.
Field Results	Field Results performed by "SMPLR" (Sampler), are not subject to approval of Laboratory Director.
Solids, Total Volatile	Used for process control samples only.
RE	Re-Analysis has been performed.

Case Narrative(s)

1302012-01
This sample was extracted for EPA Method 625 Semi-volatiles on 02/05/13. Target analytes flagged with N1 failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. SJM

Semi-Quantitation
Method:625
1302012-01

Compound Name	Concentration-mg/kg
Benzeneacetic Acid	22
Indole	54
Tetradecanoic Acid	9
Palmitic Acid	2646
Oleic Acid	1849
Stearic Acid	957
Squalene	10
Propanoic Acid	272
Toluene	1065
Butanoic Acid	571
9-Octadecenoic Acid (Z)-, methyl ester	17

1302040-01
This sample was analyzed for TCLP Pesticides on 03/07/13. The Matrix Spikes and the Laboratory Control Sample failed recovery acceptance criteria for Heptachlor Epoxide due to matrix interferences. This compound was not found in the sample. MAM-Z.

1302168-03H
This sample was analyzed for EPA Method 624 and Method 8260. Target compounds flagged with N1 for this method failed the Matrix Spike from the same analytical batch but the spike was performed on a different sample. DLC

1302232-01
This sample was analyzed for EPA Method 625. Target compounds flagged with R1 for this method failed precision due to problems encountered during sample preparation. SJM

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1302012-01

SITE & LOCATION: Avra Valley Wet Haul Sludge

SITE-LOCATION NUMBER: 25003-1573 (XXXXX-XXXX)

SAMPLE START DATE: ____ (MM / DD / YYYY)

SAMPLE START TIME: ____ (24 Hour Clock)

SUBMITTER: IWC

SAMPLE END DATE: 02/01/2013 (MM / DD / YYYY)

SAMPLE END TIME: 1110 (24 Hour Clock)

SAMPLER: GUERRIT, MORALES (Print Last Names Only)

Permit Type: ☐ APP ☐ AZPDES IWC ☐ Investigative ☐ Reuse ☐ USFS ■ 503 ☐ Process Control ☐ Other ____

Sample Matrix: ■ Biosolids ☐ Groundwater ☐ Industrial ☐ Soil ☐ Stormwater ☐ Surface Water ☐ Wastewater ☐ Other ____

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	■	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	■	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐			
Cobalt	☐	☐			
Copper	☐	☐			
Hardness	☐	☐			
Iron	☐	☐			
Lead	☐	☐			
Magnesium	☐	☐			
Manganese	☐	☐			
Mercury	☐	☐			
Molybdenum	☐	☐			
Nickel	☐	☐			
Potassium	☐	☐			
Selenium	☐	☐			
Silver	☐	☐			
Sodium	☐	☐			
Strontium	☐	☐			
Thallium	☐	☐			
Tin	☐	☐			

WET METHODS	D	C
Ammonia as N	☐	☐
Chloride	☐	☐
Cyanide, Total	■	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	☐
Nitrite as N	☐	☐
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	☐
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile *	■	☐
Dioxin GC/SIM/MS Scan	■	☐
Organochlorine Pesticides & PCBs *	■	☐
Purgeable Organics (GCMS) *	■	☐
Semivolatile Organics (GCMS) *	■	☐
Other ____	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other ____	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total *	■	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile *	■	☐
Solids, Volatile Suspended	☐	☐
Other ____	☐	☐

OTHER	D	C
____	☐	☐
____	☐	☐
____	☐	☐
____	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*	____	µg/L
☐ Conductivity *SM 2510 B*	____	µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*	____	mg/L
pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*	____	°C
☐ Total Depth of Well	____	feet
☐ Depth to Water	____	feet
☐ Other ____	____	____

Comments/Instructions: ____

# of Bottles Delivered: 8 GOS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials: 01-14-13 LEJ

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	[signature]	02-01-13	1252
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	5	°C
Initials:	GOS	
Non-Preserved	6	#
HNO_3	1	#
H_2SO_4		#
HCl		#
NaOH	1	#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:

	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☒	☐
Received from a refrigerator?	☐	☒	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1302040-01

SITE & LOCATION: Avra Valley Wet Haul Sludge

SITE-LOCATION NUMBER: 25003-1573 (XXXXX-XXXX)

SAMPLE START DATE: (MM / DD / YYYY)

SAMPLE START TIME: (24 Hour Clock)

SUBMITTER: IWC

SAMPLE END DATE: 02/01/2013 (MM / DD / YYYY)

SAMPLE END TIME: 1110 (24 Hour Clock)

SAMPLER: Morales, Guebara (Print Last Names Only)

Permit Type: ☐ APP ☐ AZPDES IWC ☐ Investigative ☐ Reuse ☐ USFS ■ 503 ☐ Process Control ☐ Other

Sample Matrix: ■ Biosolids ☐ Groundwater ☐ Industrial ☐ Soil ☐ Stormwater ☐ Surface Water ☐ Wastewater ☐ Other

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	☐
Beryllium	☐	☐	TCLP Metals	■	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐			
Cobalt	☐	☐			
Copper	☐	☐			
Hardness	☐	☐			
Iron	☐	☐			
Lead	☐	☐			
Magnesium	☐	☐			
Manganese	☐	☐			
Mercury	☐	☐			
Molybdenum	☐	☐			
Nickel	☐	☐			
Potassium	☐	☐			
Selenium	☐	☐			
Silver	☐	☐			
Sodium	☐	☐			
Strontium	☐	☐			
Thallium	☐	☐			
Tin	☐	☐			

WET METHODS	D	C
Ammonia as N	☐	☐
Chloride	☐	☐
Cyanide, Total	☐	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	☐
Nitrite as N	☐	☐
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	☐
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	■	☐
TCLP Pesticides	■	☐
TCLP Semivolatile Organics	■	☐
TCLP Volatile Organics	■	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions: Pesticides and semi-vols in the same bottle. 4 bottles for volatiles. TCLP Herbicides sent TA DO#13-25360

# of Bottles Delivered: 7 GOS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by: Sampler	Received by:	Date:	Time: (24 Hour Clock)
R. [signature]	[signature]	02-05-13	1009
[signature]	[signature]	2-5-13	1147

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	5	°C
Initials:	GOS	
Non-Preserved	7	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:

	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☒
Received from a refrigerator?	☐	☒	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-0013-550 (10/10)

CHAIN OF CUSTODY FORM

[ ] Phoenix - 4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303
[ ] Tucson - 1870 W. Prince Road, Suite 59, Tucson, AZ 85705 (520) 807-3801 FAX (520) 807-3803
[ ] Las Vegas - 6000 S Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

Page _____ of _____

Client Name / Address:

Project / PO Number:

Project Manager:

Phone Number:

Sampler:

Fax Number:

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives										Special Instructions

Relinquished By:	Date / Time:	Received By:	Date / Time:
Relinquished By:	Date / Time:	Received By:	Date / Time:
Relinquished By:	Date / Time:	Received in Lab By:	Date / Time:

Turnaround Time: (Check)
same day _____ 72 hours _____
24 hours _____ 5 days _____
48 hours _____ normal _____

Sample Integrity: (Check)
intact _____ on ice _____

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-0013-550 (10/10)

CHAIN OF CUSTODY FORM

[ ] Phoenix - 4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303
[ ] Tucson - 1870 W. Prince Road, Suite 59, Tucson, AZ 85705 (520) 807-3801 FAX (520) 807-3803
[ ] Las Vegas - 6000 S Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

Page 1 of 1

Client Name/Address: Pima County CRAC Lab, 3035 W El Camino Del Cerro, Tucson AZ 85745

Project/PO Number: TCLP Herbicides 13-25360 DO# ~~13-25327~~

Project Manager: Nancy Powell

Phone Number: 602-305-176 520-724-6183

Sampler:

Fax Number: 520-724-6071

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	TCLP herbicides	extraction								Special Instructions
																BS- biosolids
Arra Valley wet haul sludge	BS	amber jar glass	1	02-01-13	1110	none	1	1								discrete
25003-1573 1302010-01																

Relinquished By:	Date/Time:	Received By:	Date/Time:	Turnaround Time: (Check)
[signature]	2-5-13 1009	[signature]	02-05-13 1009	same day ____ 72 hours ____
Relinquished By:	Date/Time:	Received By:	Date/Time:	24 hours ____ 5 days ____
[signature]	02-05-13 1148	[signature]	2-5-13 1148	48 hours ____ normal ✓
Relinquished By:	Date/Time:	Received in Lab By:	Date/Time:	Sample Integrity: (Check)
				intact ____ on ice ____

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1302179-01

SITE & LOCATION: Avra Valley RWRF Wet Haul Sludge (Discrete)

SITE-LOCATION NUMBER: 25003-1573 (XXXXX-XXXX)

SAMPLE START DATE: (MM / DD / YYYY)

SAMPLE START TIME: (24 Hour Clock)

SAMPLE END DATE: 02 / 20 / 2013 (MM / DD / YYYY)

SAMPLE END TIME: 0800 (24 Hour Clock)

SUBMITTER: SRF WRF Section

SAMPLER: CORNELIUS (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ☐ AZPDES ☐ Reuse ■ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ■ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐			
Cobalt	☐	☐			
Copper	☐	☐			
Hardness	☐	☐			
Iron	☐	☐			
Lead	☐	☐			
Magnesium	☐	☐			
Manganese	☐	☐			
Mercury	☐	☐			
Molybdenum	☐	☐			
Nickel	☐	☐			
Potassium	☐	☐			
Selenium	☐	☐			
Silver	☐	☐			
Sodium	☐	☐			
Strontium	☐	☐			
Thallium	☐	☐			
Tin	☐	☐			

WET METHODS	D	C
Ammonia as N	☐	☐
Chloride	☐	☐
Cyanide, Total	☐	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	☐
Nitrite as N	☐	☐
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	☐
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	■	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	■	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
Other	☐	☐
Other	☐	☐
Other	☐	☐
Other	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:

# of Bottles Delivered: 1

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
Sample Refrigerator	Sample Refrigerator	2-20-13	0815
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Sample Refrigerator	Steven Garcia	2-20-13	1038
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Steven Garcia	[illegible]	02-20-13	1150
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	1.8	°C
Initials:	LEJ	
Non-Preserved	1	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☒
Received from a refrigerator?	☐	☒	☐

* *Sb, As, Be, Ca, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Ca, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT
COMPLIANCE AND REGULATORY AFFAIRS OFFICE LABORATORY SERVICES
3035 W. El Camino del Cerro, Tucson, AZ 85745
Telephone: (520) 724-6200, Fax: (520)724-6071

LIMS CHECKLIST FOR SUBCONTRACT DATA

LIMS ID	**1302040-01**	**DO**	**13-25360**
CONTRACT LAB	**TestAmerica Phoenix**	**SAMPLE GROUP**	**TCLP Herbicides**
ANALYSES	**TCLP Herbicides**	**REPORT ID**	**PWB0381**

TRANSFER & CONVERT FILES:	
Was the contract lab spreadsheet file saved to \\Splimsapp\elementshare\TransferIn ?	Y
Was the above mentioned file converted from a .xls file to a .mdb file for each WO#, and further, for each subcontract location, or separate analysis (as applicable), on the contract lab report? (Element>Project Management>Reports)	Y
Was the converted file attached to the sample in LIMS?	Y
VALIDATING CONTRACT LAB REPORT , CHAIN OF CUSTODY(S), AND DO#:	
Contract Lab Report signed and dated?	Y
Copy of contract lab COC included with contract Lab Report?	Y
Contract lab COC verified with CRAO COC(s) for Sample ID, Sample Date, Analysis Requested?	Y
Sample dates and received dates on the CL report, match the CL COC?	Y
CL report includes all requested analysis?	Y
CL licensed in AZ for reported the reported methods?	Y
Check that DO matches COC in types and number of tests?	NA
DO received in Pima Core?	NA
CONTRACT LAB REPORT, EXCEL SPREADSHEET, and QC:	
CL report and CL spreadsheet report the same sample results, sample date, and analysis date?	Y
Was a Case Narrative Included in Contract Lab report?	N
Data packet includes QC Report from primary lab and any secondary subcontract labs?	Y
Did CL report list applicable AZ Data Qualifiers?	N
Were there any dilutions made to samples that were reported as ND?	N
If so, were they qualified due to matrix interference?	NA
Was QC included for every analysis method: typically Blk, LCS, MS, MSD?	Y
Did QC pass stated acceptance limits, or was it qualified?	N
Were samples analyzed within required holding times?	Y
Check that MDLs are below water quality standards, If not notify Tom Berry? (Cyanide, Hexachlorobenzene)	Y
Semivolatiles & Volatiles: Check that all analytes were delivered?	Y
COMPLIANCE LIMIT REVIEW	
Were results compared to the discharge permit?.	Y
Was Tom Berry notified of any exceedences?	NA
WET TESTING SPECIFIC REQUIREMENTS	
Statement of Pass/Fail reflected in End Points?	NA
Report states if zeolite treatment was utilized?	NA
Survival and Reproduction or Growth Data included (P. promelas or Ceriodaphnia only)?	NA
Chemistry data included?	NA
Reference Toxicant Test Results and Control Chart within limits?	NA
PMSD Determination included and within acceptable range?	NA
End Points include TUc, NOEC, LOEC, and IC25?	NA
Statistics verify endpoints	NA

Reviewer Initials:	**SN**	**Review Date:**	**3-7-13**

PEER/FINAL REVIEW:	PR	FR
LIMS/Excel data matches printed CL report?	✓	✓
Analysis dates are correct?	✓	✓
Correct Data Qualifiers included if necessary.	✓	✓
CRAO report shows result is from Contract Lab?	✓	✓
CRAO report shows correct Contract Lab (e.g. Test America, Phoenix)?	✓	✓
DO received in Pima Core	✓	
Analysis set to Reported?		✓

Peer Reviewer Initials:	[illegible]	**Review Date:**	3-13-13
Final Reviewer Initials:	BAE	**Review Date:**	3/18/13

CORRECTIVE ACTION REPORT:			
Preliminary Review:		Date:	
QA/QC Review:		Date:	
Data Entry:		Date:	
Peer Review:		Date:	
Lab Supervisor:		Date:	

LIMS #:	DEVIATION:	CORRECTIVE ACTION:

DEVIATIONS FROM ACCEPTABLE QA/QC:

Missing QC Report/Data
Holding Time for analysis exceeded.
Inappropriate dilution performed.
Missing COC.
Missing Data Qualifiers.
Incorrect Analysis Method.
Incorrect Sample IDs.
Other.

CORRECTIVE ACTION:

Request report correction from Subcontract Lab project manager.
Add missing Data Qualifiers.
Notify data end-user of deviation.
Arrange for resampling.
Other.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

4625 East Cotton Center Blvd. Ste 189, Phoenix, AZ 85040 (602) 437-3340 Fax:(602) 454-9303

LABORATORY REPORT

Prepared For: Pima County WWTP, WESC Laboratory
3035 W El Camino Del Cerro
Tucson, AZ 85745
Attention: Nancy Powell

Project:TCLP Herbicides

Sampled: 02/01/13
Received: 02/06/13
Issued: 02/25/13 16:11

NELAP #01109CA / AZ100001 Arizona DHS#AZ0728

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.
This entire report was reviewed and approved for release.

CASE NARRATIVE

LABORATORY ID	CLIENT ID	MATRIX
PWB0381-01	1302040-01	Soil

SAMPLE RECEIPT:	Samples were received intact, at 1°C, on ice and with chain of custody documentation.
HOLDING TIMES:	All samples were analyzed within prescribed holding times and/or in accordance with the TestAmerica Sample Acceptance Policy unless otherwise noted in the report.
PRESERVATION:	Samples requiring preservation were verified prior to sample analysis.
QA/QC CRITERIA:	All analyses met method criteria, except as noted in the report with data qualifiers. N1: RPD exceeded acceptance limit for the LCS/LCSD and MS/MSD. The analyte was not detected in the associated samples; therefore, the data is not impacted.
COMMENTS:	No significant observations were made.
SUBCONTRACTED:	No analyses were subcontracted to an outside laboratory.

Reviewed By:

TestAmerica Phoenix

Ken Baker For Suzanne Glass
Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING
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Pima County WWTP, WESC Laboratory
3035 W El Camino Del Cerro
Tucson, AZ 85745
Attention: Nancy Powell

Project ID: TCLP Herbicides
Report Number: PWB0381

Sampled: 02/01/13
Received: 02/06/13

TCLP CHLORINATED HERBICIDES (EPA 1311/8151A)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	TCLP Limit	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PWB0381-01 (1302040-01 - Soil)									
Reporting Units: mg/l									
2,4,5-TP (Silvex)	EPA 1311/8151A	13B0586	0.013	ND	1	1.0	2/15/2013	2/19/2013	
2,4-D	EPA 1311/8151A	13B0586	0.013	ND	1	10.0	2/15/2013	2/19/2013	
Pentachlorophenol	EPA 1311/8151A	13B0586	0.013	ND	1	100.0	2/15/2013	2/19/2013	
Surrogate: DCAA (30-154%)				*96 %*					

TestAmerica Phoenix

Ken Baker For Suzanne Glass
Project Manager

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Pima County WWTP, WESC Laboratory
3035 W El Camino Del Cerro
Tucson, AZ 85745
Attention: Nancy Powell

Project ID: TCLP Herbicides
Report Number: PWB0381

Sampled: 02/01/13
Received: 02/06/13

TCLP EXTRACTION

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	TCLP Limit	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PWB0381-01 (1302040-01 - Soil) - cont.									
Reporting Units: None									
TCLP Extraction	EPA 1311	13B0256	1.00	ND	1	NA	2/11/2013	2/12/2013	

TestAmerica Phoenix

Ken Baker For Suzanne Glass
Project Manager

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Pima County WWTP, WESC Laboratory
3035 W El Camino Del Cerro
Tucson, AZ 85745
Attention: Nancy Powell

Project ID: TCLP Herbicides
Report Number: PWB0381

Sampled: 02/01/13
Received: 02/06/13

METHOD BLANK/QC DATA

TCLP CHLORINATED HERBICIDES (EPA 1311/8151A)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 13B0586 Extracted: 02/15/13										
Blank Analyzed: 02/19/2013 (13B0586-BLK1)										
2,4,5-TP (Silvex)	ND	0.013	mg/l							
2,4-D	ND	0.013	mg/l							
Pentachlorophenol	ND	0.013	mg/l							
Surrogate: DCAA	*0.0383*		*mg/l*	*0.0500*		*77*	*30-154*			
Blank Analyzed: 02/19/2013 (13B0586-BLK2)										
2,4,5-TP (Silvex)	ND	0.013	mg/l							
2,4-D	ND	0.013	mg/l							
Pentachlorophenol	ND	0.013	mg/l							
Surrogate: DCAA	*0.0350*		*mg/l*	*0.0500*		*70*	*30-154*			
Blank Analyzed: 02/19/2013 (13B0586-BLK3)										
2,4,5-TP (Silvex)	ND	0.013	mg/l							
2,4-D	ND	0.013	mg/l							
Pentachlorophenol	ND	0.013	mg/l							
Surrogate: DCAA	*0.0336*		*mg/l*	*0.0500*		*67*	*30-154*			
LCS Analyzed: 02/19/2013 (13B0586-BS1)										
2,4,5-TP (Silvex)	0.0375	0.013	mg/l	0.0500		75	52-136			
2,4-D	0.0478	0.013	mg/l	0.0500		96	38-124			
Pentachlorophenol	0.0406	0.013	mg/l	0.0500		81	46-131			
Surrogate: DCAA	*0.0399*		*mg/l*	*0.0500*		*80*	*30-140*			
LCS Dup Analyzed: 02/19/2013 (13B0586-BSD1)										
2,4,5-TP (Silvex)	0.0322	0.013	mg/l	0.0500		64	52-136	15	20	
2,4-D	0.0321	0.013	mg/l	0.0500		64	38-124	39	20	*R6*
Pentachlorophenol	0.0311	0.013	mg/l	0.0500		62	46-131	26	20	*R6*
Surrogate: DCAA	*0.0203*		*mg/l*	*0.0500*		*41*	*30-140*			

TestAmerica Phoenix

Ken Baker For Suzanne Glass
Project Manager

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Pima County WWTP, WESC Laboratory
3035 W El Camino Del Cerro
Tucson, AZ 85745
Attention: Nancy Powell

Project ID: TCLP Herbicides
Report Number: PWB0381

Sampled: 02/01/13
Received: 02/06/13

METHOD BLANK/QC DATA

TCLP CHLORINATED HERBICIDES (EPA 1311/8151A)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 13B0586 Extracted: 02/15/13										
Matrix Spike Analyzed: 02/19/2013 (13B0586-MS1)					**Source: PWB0643-02**					
2,4,5-TP (Silvex)	0.0478	0.013	mg/l	0.0500	ND	96	31-158			
2,4-D	0.0568	0.013	mg/l	0.0500	ND	114	23-159			
Pentachlorophenol	0.0214	0.013	mg/l	0.0500	ND	43	36-143			
Surrogate: DCAA	*0.0509*		*mg/l*	*0.0500*		*102*	*30-154*			
Matrix Spike Dup Analyzed: 02/19/2013 (13B0586-MSD1)					**Source: PWB0643-02**					
2,4,5-TP (Silvex)	0.0345	0.013	mg/l	0.0500	ND	69	31-158	32	35	
2,4-D	0.0317	0.013	mg/l	0.0500	ND	63	23-159	57	35	*N1*
Pentachlorophenol	0.00805	0.013	mg/l	0.0500	ND	16	36-143	91	35	*M2, N1*
Surrogate: DCAA	*0.0279*		*mg/l*	*0.0500*		*56*	*30-154*			

TestAmerica Phoenix

Ken Baker For Suzanne Glass
Project Manager

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Pima County WWTP, WESC Laboratory
3035 W El Camino Del Cerro
Tucson, AZ 85745
Attention: Nancy Powell

Project ID: TCLP Herbicides
Report Number: PWB0381

Sampled: 02/01/13
Received: 02/06/13

METHOD BLANK/QC DATA

TCLP EXTRACTION

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 13B0256 Extracted: 02/11/13										
Blank Analyzed: 02/12/2013 (13B0256-BLK1)										
TCLP Extraction	ND	1.00	None							

TestAmerica Phoenix

Ken Baker For Suzanne Glass
Project Manager

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
4625 East Cotton Center Blvd. Ste 189, Phoenix, AZ 85040 (602) 437-3340 Fax:(602) 454-9303

Pima County WWTP, WESC Laboratory
3035 W El Camino Del Cerro
Tucson, AZ 85745
Attention: Nancy Powell

Project ID: TCLP Herbicides
Report Number: PWB0381

Sampled: 02/01/13
Received: 02/06/13

DATA QUALIFIERS AND DEFINITIONS

M2	Matrix spike recovery was low; the associated blank spike recovery was acceptable.
N1	See case narrative.
R6	LFB/LFBD RPD exceeded the method acceptance limit. Recovery met acceptance criteria.
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
RPD	Relative Percent Difference

TestAmerica Phoenix

Ken Baker For Suzanne Glass
Project Manager

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4625 East Cotton Center Blvd. Ste 189, Phoenix, AZ 85040 (602) 437-3340 Fax:(602) 454-9303

Pima County WWTP, WESC Laboratory
3035 W El Camino Del Cerro
Tucson, AZ 85745
Attention: Nancy Powell

Project ID: TCLP Herbicides
Report Number: PWB0381

Sampled: 02/01/13
Received: 02/06/13

Certification Summary

TestAmerica Phoenix

Method	Matrix	Nelac	Arizona
EPA 1311/8151A	Soil		X
EPA 1311	Soil		X

Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at www.testamericainc.com

TestAmerica Phoenix

Ken Baker For Suzanne Glass
Project Manager

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-0013-550 (10/10)

CHAIN OF CUSTODY FORM

[ ] Phoenix - 4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303
[ ] Tucson - 1870 W. Prince Road, Suite 59, Tucson, AZ 85705 (520) 807-3801 FAX (520) 807-3803
[ ] Las Vegas - 6000 S Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

Page _____ of _____

Client Name / Address:

Project / PO Number:

Project Manager:

Phone Number:

Sampler:

Fax Number:

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	Analysis Required									Special Instructions

Relinquished By:	Date / Time:	Received By:	Date / Time:
Relinquished By:	Date / Time:	Received By:	Date / Time:
Relinquished By:	Date / Time:	Received in Lab By:	Date / Time:

Turnaround Time: (Check)
same day _____ 72 hours _____
24 hours _____ 5 days _____
48 hours _____ normal _____

Sample Integrity: (Check)
intact _____ on ice _____

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

Nancy Powell

From: Nancy Powell
Sent: Wednesday, March 13, 2013 6:36
To: Barbara Escobar; Belinda Gamboa-Felix; Melaine Halash
Cc: Sharon Nevius
Subject: TCLP Herbicide Extraction

Barbara,

Please look at this report. Test America included in their EDD, TCLP Extraction for Herbicides. Should we include it in our report? To me giving it an ND is incorrect since it is just an extraction and not an analysis. Please let me know. Also ours don't say indicate TCLP at all, will it in the final report? Nancy

Waiting for response from BAE

\\splimsapp\elementshare\Report\1302040 DRAFT 03 13 2013 0628.pdf

File Options

Sample ID: **1302040-01** **Sample Start Date/Time**

Site Location: DRAFT: Wet Haul Sludge **Sample End Date/Time**

Site Number: 25003-1573 **Sampled By:**

Parameter	Sample Type	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Qu
Arsenic	D	EPA 6010B	2/22/13 9:56	ND	mg/L	0.0159	0.03	
Barium	D	EPA 6010B	2/22/13 9:56	0.131	mg/L	0.000440	0.03	
Cadmium	D	EPA 6010B	2/22/13 9:56	ND	mg/L	0.00920	0.01	
Chromium	D	EPA 6010B	2/22/13 9:56	ND	mg/L	0.00248	0.03	
Lead	D	EPA 6010B	2/22/13 12:12	ND	mg/L	0.0176	0.03	
Mercury	D	EPA 7470	3/6/13 11:33	ND	mg/L	0.000150	0.00	
TCLP Extraction	D	EPA 1311	2/12/13 15:10	ND	None		1.00	
* Analysis Performed by:TestAmerica Phoenix								
2,4,5-TP (Silvex)	D	EPA 1311/8151A	2/19/13 21:22	ND	mg/l		0.013	
2,4-D	D	EPA 1311/8151A	2/19/13 21:22	ND	mg/l		0.013	
Pentachlorophenol	D	EPA 1311/8151A	2/19/13 21:22	ND	mg/l		0.013	
* Analysis Performed by:TestAmerica Phoenix								
Selenium	D	EPA 6010B	2/22/13 12:12	0.0174	mg/L	0.0114	0.03	
Silver	D	EPA 6010B	2/22/13 9:56	ND	mg/L	0.00172	0.00	
Chlordane	D	EPA 8270C	3/7/13 18:25	ND	ug/L	1.38	2.00	
Endrin	D	EPA 8270C	3/7/13 18:25	ND	ug/L	0.200	0.50	
gamma-BHC (Lindane)	D	EPA 8270C	3/7/13 18:25	ND	ug/L	0.270	0.50	
Heptachlor	D	EPA 8270C	3/7/13 18:25	ND	ug/L	0.270	0.50	
Heptachlor Epoxide	D	EPA 8270C	3/7/13 18:25	ND	ug/L	0.290	0.50	
Methoxychlor	D	EPA 8270C	3/7/13 18:25	ND	ug/L	0.270	0.50	
Toxaphene	D	EPA 8270C	3/7/13 18:25	ND	ug/L	3.79	6.00	

2 of 3

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Nancy Powell
QA Chemist Specialist
Pima Co. RWRD
CRAO Laboratory
3035 W El Camino del Cerro
Tucson, Arizona 85745
(520) 724-6183

SECTION 7

2013 PREPARER FORM
AZPDES NO. AZ0024937

GREEN VALLEY BNROD

PREPARER FORM

AZPDES NO. AZ0024937

ANNUAL BIOSOLIDS REPORT 2013

2013 Biosolids or Sewage Sludge Annual Report

Mail signed printout to: Robert Phalen, ADEQ Biosolids Coordinator
1110 W. Washington St.,
Phoenix, AZ 85007
and email file to: biosolids@azdeq.gov

Date signed =date(mm/dd/ year)	NPDES/AZPDES Permit#	APP #	Facility Name	Contact First Name	Contact Last Name	Contact Email	Title	FTE Residents served	Preparer or Applicator (P/A/AP)	Street or P.O. Box #	Street Name or "P.O. Box"
2/14/2014	24937	100629	Pima County Green Valley WRF	Jeff	Prevatt	jeff.prevatt@wwm.pima.gov	Program Manager	20723	P	3035	W. El Camino del Cerro
										2201	N. Nogales Hwy
City	**Zip**	**Phone**	**Lagoons/Tanks or LINED Drying Beds for ALL Sludge (Y/N)**	**Dry Tons Stored 01/01/13**	**Class (A/B/N)**	**Alternative #**	**VAR #**	**Dry Tons stored 12/31/13**	**Class (A/B/N)**	**Alternative #**	**VAR #**
Tucson	85745	5207246200	Y	100							
Tucson	85735	5204436170									
Dry Tons stored 01/01/12	**Dry Tons in, from Daily Flow**	**Dry Tons Sludge Received**	**From Facility (Name)**	**Dry Tons Sludge sent away**	**To Facilty (Name)**	**Mark "S" if reporting Short, NOT Metric Tons**	**Dry Tons Additions to Sludge**	**Received / Sent Away Hauler**	**Hauler Phone**		**Follow Up**
300	484										
Disposition	**Dry Tons out, weighed**	**Class (A/B/N)**	**Alternative #**	**VAR #**	**Fecal C/ Salm. (F/S)**	**To (Recipient Name)**	**Hauler Name**	**Hauler Phone**	**Application Site**		

2013 Biosolids or Sewage Sludge Annual Report

Mail signed printout to: Robert Phalen, ADEQ Biosolids Coordinator
1110 W. Washington St.,
Phoenix, AZ 85007
and email file to: biosolids@azdeq.gov

Surface Unit											
Surface Unit											
Landfill											
Landfill											
Landfill											
Composting											
Composting											
Land Apply											
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I certify, under penalty of law, that the information and descriptions have been made under my direction and supervision and under a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine whether the applicable biosolids requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

Name: **John W. Sherlock** Title: **Deputy Director - Treatment**

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ANNUAL BIOSOLIDS REPORT 2013

PIMA COUNTY
REGIONAL WASTEWATER RECLAMATION DEPARTMENT
PIMA COUNTY, ARIZONA

SECTION 8

GREEN VALLEY BNROD
AZPDES NO. AZ0024937

SAMPLING AND ANALYSES

PRIORITY POLLUTANTS

TCLP

HAZARDOUSNESS

ANNUAL BIOSOLIDS REPORT 2013

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office (CRAO) Laboratory
3035 W. El Camino del Cerro, Tucson Arizona 85745-9750, Phone (520) 724-6200

Report Date: 07/10/2013
Laboratory License: AZO159

Sample Analysis Report
Green Valley WRF
February 2013

Sample Integrity

SAMPLE RECEIPT: Samples were received intact at the required temperature, unless otherwise noted with a data qualifier below. Please refer to the Chain of Custody for sample receipt details.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Pima County CRAO Laboratory Quality Manual.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS:

Notes and Definitions:
See attached

Case Narratives:
See attached

All results on this report intended for compliance submission must have the associated chain(s) of custody attached for the results to meet reporting requirements as per ADHS Laboratory licensure rules. If you have received this report for compliance purposes and it is not complete, please contact the Compliance and Regulatory Affairs Office for a final report in its entirety.

Reviewed By:

07/10/13
Date

Laboratory Director or Designee
Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1302053-06	C	Nitrogen Total Water	02/06/13 8:00	Calculated	2/22/13 10:27	**2.26**	mg/L	0.38	0.80		AMK
1302053-06	C	Total Suspended Solids	02/06/13 8:00	SM 2540D	2/7/13 12:48	**ND**	mg/L		2.50		SJD
BNROD-MLSS-Process Control (25000-1940)											
1302053-02	D	Total Suspended Solids	02/06/13 8:21	SM 2540D	2/7/13 12:48	**1940**	mg/L		2.50		SJD
1302053-02	D	Total Volatile Suspended Solid	02/06/13 8:21	EPA 160.4	2/7/13 13:29	**1640**	mg/L		2.50		SJD
BNROD-North Aerobic Digester Sludge (25000-1950)											
1302053-03	D	% Solids	02/06/13 8:15	SM 2540G	2/7/13 15:16	**2.83**	%		0.01		SJD
1302053-03	D	% Solids, Total Volatile	02/06/13 8:15	SM 2540G	2/7/13 15:16	**81.6**	%		0.01	T6	SJD
BNROD-Biosolids from drying bed #5 (25000-1970)											
1302055-01	C	Percent Solids	02/06/13 11:50	SM 2540G	2/11/13 15:59	**81**	% by Weight		0.10		BAM*
* Analysis Performed by:TestAmerica Phoenix - See attached contract lab report for official results.											
1302055-01	C	Acrolein	02/06/13 11:50	EPA 624	2/12/13 14:58	**ND**	mg/kg dry	0.00111	0.25		ev
1302055-01	C	Acrylonitrile	02/06/13 11:50	EPA 624	2/12/13 14:58	**ND**	mg/kg dry	0.00116	0.25		ev
1302055-01	C	Antimony	02/06/13 11:50	EPA 6010B	2/26/13 16:34	**3.68**	mg/kg dry	3.16	12.81	J	MLB
1302055-01	C	Arsenic	02/06/13 11:50	EPA 6010B	2/26/13 15:17	**7.95**	mg/kg dry	4.91	12.81	J	MLB
1302055-01	C	Beryllium	02/06/13 11:50	EPA 6010B	2/26/13 15:17	**0.180**	mg/kg dry	0.0260	2.56	J	MLB
1302055-01	C	Cadmium	02/06/13 11:50	EPA 6010B	2/26/13 15:17	**2.76**	mg/kg dry	0.221	5.12	J	MLB
1302055-01	C	Chromium	02/06/13 11:50	EPA 6010B	2/26/13 15:17	**25.1**	mg/kg dry	0.393	12.81		MLB
1302055-01	C	Copper	02/06/13 11:50	EPA 6010B	2/26/13 15:17	**622**	mg/kg dry	0.710	12.81		MLB
1302055-01	C	Cyanide	02/06/13 11:50	SW 9010C/9014	2/19/13 10:30	**8.1**	mg/kg dry		0.49		TS *
* Analysis Performed by:TestAmerica Phoenix - See attached contract lab report for official results.											
1302055-01	C	Lead	02/06/13 11:50	EPA 6010B	2/26/13 15:17	**25.8**	mg/kg dry	4.53	12.81		MLB
1302055-01	C	Mercury	02/06/13 11:50	EPA 7471A	2/21/13 9:33	**2.17**	mg/kg dry	0.0234	0.06		DDO
1302055-01	C	Molybdenum	02/06/13 11:50	EPA 6010B	2/26/13 15:17	**22.3**	mg/kg dry	0.629	5.12		MLB
1302055-01	C	2,4,5-TP (Silvex)	02/06/13 11:50	EPA 1311/8151A	2/22/13 16:42	**ND**	mg/l		0.013		CL *
1302055-01	C	2,4-D	02/06/13 11:50	EPA 1311/8151A	2/22/13 16:42	**ND**	mg/l		0.013		CL *
1302055-01	C	Pentachlorophenol	02/06/13 11:50	EPA 1311/8151A	2/22/13 16:42	**ND**	mg/l		0.013		CL *
* Analysis Performed by:TestAmerica Phoenix - See attached contract lab report for official results.											
1302055-01	C	Nickel	02/06/13 11:50	EPA 6010B	2/26/13 15:17	**9.48**	mg/kg dry	2.91	12.81	J	MLB
1302055-01	C	Total Kjeldahl Nitrogen	02/06/13 11:50	EPA 351.2	3/1/13 11:01	**54638**	mg/kg dry	71.59	60,289.66	D2	AMK
1302055-01	C	Nitrogen Total Biosolids	02/06/13 11:50	Calculated	3/1/13 11:01	**54890**	mg/kg dry	57.75	48,632.00		AMK
1302055-01	C	4,4-DDD	02/06/13 11:50	EPA 625	3/7/13 19:44	**ND**	mg/kg dry	0.00006	0.00004	D1, D7	mam-z
1302055-01	C	4,4-DDE	02/06/13 11:50	EPA 625	3/7/13 19:44	**ND**	mg/kg dry	0.00005	0.00004	D1, D7, L5	mam-z
1302055-01	C	4,4-DDT	02/06/13 11:50	EPA 625	3/7/13 19:44	**ND**	mg/kg dry	0.00004	0.00004	D1, D7, N1	mam-z
1302055-01	C	Aldrin	02/06/13 11:50	EPA 625	3/7/13 19:44	**ND**	mg/kg dry	0.00010	0.00004	D1, D7	mam-z
1302055-01	C	alpha-BHC	02/06/13 11:50	EPA 625	3/7/13 19:44	**ND**	mg/kg dry	0.00009	0.00004	D1, D7	mam-z
1302055-01	C	beta-BHC	02/06/13 11:50	EPA 625	3/7/13 19:44	**ND**	mg/kg dry	0.00010	0.00004	D1, D7, N1	mam-z
1302055-01	C	Chlordane	02/06/13 11:50	EPA 625	3/7/13 19:44	**ND**	mg/kg dry	0.00070	0.00040	D1, D7	mam-z
1302055-01	C	delta-BHC	02/06/13 11:50	EPA 625	3/7/13 19:44	**ND**	mg/kg dry	0.00008	0.00004	D1, D7, N1	mam-z
1302055-01	C	Dieldrin	02/06/13 11:50	EPA 625	3/7/13 20:37	**ND**	mg/kg dry	0.00007	0.00004	D1, D7, N1	mam-z
1302055-01	C	Endosulfan I	02/06/13 11:50	EPA 625	3/7/13 20:37	**ND**	mg/kg dry	0.00005	0.00004	D1, D7	mam-z
1302055-01	C	Endosulfan II	02/06/13 11:50	EPA 625	3/7/13 19:44	**ND**	mg/kg dry	0.00003	0.00004	D1, D7	mam-z
1302055-01	C	Endosulfan sulfate	02/06/13 11:50	EPA 625	3/7/13 19:44	**ND**	mg/kg dry	0.00005	0.00004	D1, D7	mam-z
1302055-01	C	Endrin	02/06/13 11:50	EPA 625	3/7/13 20:37	**ND**	mg/kg dry	0.00010	0.00004	D1, D7, L5	mam-z
1302055-01	C	Endrin aldehyde	02/06/13 11:50	EPA 625	3/7/13 19:44	**ND**	mg/kg dry	0.00007	0.00004	D1, D7, N1	mam-z
1302055-01	C	gamma-BHC (Lindane)	02/06/13 11:50	EPA 625	3/7/13 19:44	**ND**	mg/kg dry	0.00009	0.00004	D1, D7	mam-z
1302055-01	C	Heptachlor	02/06/13 11:50	EPA 625	3/7/13 19:44	**ND**	mg/kg dry	0.00010	0.00004	D1, D7, N1	mam-z
1302055-01	C	Heptachlor Epoxide	02/06/13 11:50	EPA 625	3/7/13 19:44	**ND**	mg/kg dry	0.00011	0.00004	D1, D7, N1	mam-z
1302055-01	C	PCB 1016	02/06/13 11:50	EPA 625	3/7/13 19:44	**ND**	mg/kg dry	0.00010	0.00010	D1, D7	mam-z
1302055-01	C	PCB 1221	02/06/13 11:50	EPA 625	3/7/13 19:44	**ND**	mg/kg dry	0.00009	0.00010	D1, D7	mam-z
1302055-01	C	PCB 1232	02/06/13 11:50	EPA 625	3/7/13 19:44	**ND**	mg/kg dry	0.00016	0.00010	D1, D7	mam-z
1302055-01	C	PCB 1242	02/06/13 11:50	EPA 625	3/7/13 19:44	**ND**	mg/kg dry	0.00010	0.00010	D1, D7	mam-z
1302055-01	C	PCB 1248	02/06/13 11:50	EPA 625	3/7/13 19:44	**ND**	mg/kg dry	0.00016	0.00010	D1, D7	mam-z

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1302055-01	C	PCB 1254	02/06/13 11:50	EPA 625	3/7/13 19:44	ND	mg/kg dry	0.00007	0.00010	D1, D7	mam-z
1302055-01	C	PCB 1260	02/06/13 11:50	EPA 625	3/7/13 19:44	ND	mg/kg dry	0.00025	0.00010	D1, D7	mam-z
1302055-01	C	Total PCBs	02/06/13 11:50	EPA 625	3/7/13 19:44	ND	mg/kg dry	0.00030	0.00010	D1, D7	mam-z
1302055-01	C	Toxaphene	02/06/13 11:50	EPA 625	3/7/13 19:44	ND	mg/kg dry	0.00508	0.00193	D1, D7	mam-z
1302055-01	C	Methoxychlor	02/06/13 11:50	EPA 8270C	3/7/13 20:37	ND	mg/kg dry	0.00006	0.00004	D1, D7, N1	mam-z
1302055-01	C	1,1,1-Trichloroethane	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.00005	0.00001		DLC
1302055-01	C	1,1,2,2-Tetrachloroethane	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.00009	0.00001	N1	DLC
1302055-01	C	1,1,2-Trichloroethane	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.0001	0.00001		DLC
1302055-01	C	1,1-Dichloroethane	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.00006	0.00001		DLC
1302055-01	C	1,1-Dichloroethene	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.00007	0.00001		DLC
1302055-01	C	1,2-Dichlorobenzene	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.0002	0.00001		DLC
1302055-01	C	1,2-Dichloroethane	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.0001	0.00002	N1	DLC
1302055-01	C	1,2-Dichloropropane	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.0001	0.00001		DLC
1302055-01	C	1,3-Dichlorobenzene	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.0001	0.00001		DLC
1302055-01	C	1,4-Dichlorobenzene	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.0002	0.00001		DLC
1302055-01	C	2-Chloroethyl vinyl ether	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.0002	0.00001		DLC
1302055-01	C	Benzene	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.0001	0.00001	N1	DLC
1302055-01	C	Bromodichloromethane	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.0002	0.00002		DLC
1302055-01	C	Bromoform	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.00008	0.00001		DLC
1302055-01	C	Bromomethane	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.00009	0.00001		DLC
1302055-01	C	Carbon Tetrachloride	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.00006	0.00001		DLC
1302055-01	C	Chlorobenzene	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.0001	0.00001		DLC
1302055-01	C	Chloroethane	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.0002	0.00001		DLC
1302055-01	C	Chloroform	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.0001	0.00001		DLC
1302055-01	C	Chloromethane	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.00008	0.00001		DLC
1302055-01	C	cis-1,3-Dichloropropene	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.0001	0.00002		DLC
1302055-01	C	Dibromochloromethane	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.0001	0.00001		DLC
1302055-01	C	Ethyl Benzene	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.00008	0.00001		DLC
1302055-01	C	Methylene Chloride	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.0001	0.00001		DLC
1302055-01	C	Tetrachloroethene	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.00006	0.00001		DLC
1302055-01	C	Toluene	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.00008	0.00001		DLC
1302055-01	C	Total Trihalomethanes	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.0002	0.00001		DLC
1302055-01	C	trans-1,2-Dichloroethene	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.00009	0.00001		DLC
1302055-01	C	trans-1,3-Dichloropropene	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.0001	0.00001		DLC
1302055-01	C	Trichloroethene	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.00009	0.00001		DLC
1302055-01	C	Trichlorofluoromethane	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.00005	0.00001		DLC
1302055-01	C	Vinyl chloride	02/06/13 11:50	EPA 624	2/11/13 20:52	ND	mg/kg dry	0.00005	0.00001		DLC
1302055-01	C	1,2,4-Trichlorobenzene	02/06/13 11:50	EPA 8260	2/11/13 20:52	ND	mg/kg dry	0.0003	0.00001		DLC
1302055-01	C	1,2-Dibromo-3-chloropropane	02/06/13 11:50	EPA 8260	2/11/13 20:52	ND	mg/kg dry	0.0002	0.00002		DLC
1302055-01	C	1,2-Dibromoethane	02/06/13 11:50	EPA 8260	2/11/13 20:52	ND	mg/kg dry	0.0001	0.00001		DLC
1302055-01	C	cis-1,2-Dichloroethene	02/06/13 11:50	EPA 8260	2/11/13 20:52	ND	mg/kg dry	0.0001	0.00001		DLC
1302055-01	C	m,p-Xylenes	02/06/13 11:50	EPA 8260	2/11/13 20:52	ND	mg/kg dry	0.0001	0.00001		DLC
1302055-01	C	o-Xylene	02/06/13 11:50	EPA 8260	2/11/13 20:52	ND	mg/kg dry	0.00007	0.00002		DLC
1302055-01	C	Styrene	02/06/13 11:50	EPA 8260	2/11/13 20:52	ND	mg/kg dry	0.0001	0.00005		DLC
1302055-01	C	Xylenes, total	02/06/13 11:50	EPA 8260	2/11/13 20:52	ND	mg/kg dry	0.0001	0.00002		DLC
1302055-01	C	Selenium	02/06/13 11:50	EPA 6010B	2/26/13 16:34	**13.8**	mg/kg dry	5.19	12.81		MLB
1302055-01	C	2,3,7,8-TCDD - Dioxin Scan	02/06/13 11:50	EPA 625	2/28/13 11:58	ND	ug/kg dry		30.99		SJM
1302055-01	C	1,2,4-Trichlorobenzene	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7, N1	SJM
1302055-01	C	1,2-Diphenylhydrazine	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7	SJM
1302055-01	C	2,3-Dichloroaniline	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7, N1	SJM
1302055-01	C	2,4,6-Trichlorophenol	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7, N1	SJM
1302055-01	C	2,4-Dichlorophenol	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7, N1	SJM
1302055-01	C	2,4-Dimethylphenol	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.003	3.75	D1, D7	SJM
1302055-01	C	2,4-Dinitrophenol	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.009	6.25	D1, D7, N1	SJM
1302055-01	C	2,4-Dinitrotoluene	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7, N1	SJM
1302055-01	C	2,6-Dinitrotoluene	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.002	1.25	D1, D7, N1	SJM

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1302055-01	C	2-Chloronaphthalene	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7, N1	SJM
1302055-01	C	2-Chlorophenol	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.002	1.25	D1, D7, N1	SJM
1302055-01	C	2-Methyl-4,6-dinitrophenol	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.004	3.75	D1, D7, N1	SJM
1302055-01	C	2-Methylphenol	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.002	1.25	D1, D7, N1	SJM
1302055-01	C	2-Nitrophenol	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.002	3.75	D1, D7, N1	SJM
1302055-01	C	3,3-Dichlorobenzidine	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.002	9.38	D7, N1, D1	SJM
1302055-01	C	4-Bromophenyl phenyl ether	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7, N1	SJM
1302055-01	C	4-Chloro-3-methylphenol	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7, N1	SJM
1302055-01	C	4-Chlorophenyl phenyl ether	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7, N1	SJM
1302055-01	C	4-Methylphenol	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.003	3.75	D1, D7, N1	SJM
1302055-01	C	4-Nitrophenol	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.005	3.75	D1, D7, N1	SJM
1302055-01	C	Acenaphthene	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7, N1	SJM
1302055-01	C	Acenaphthylene	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.0008	1.25	D1, D7	SJM
1302055-01	C	Anthracene	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7, N1	SJM
1302055-01	C	Benzidine	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.02	21.88	N1, D1, D7	SJM
1302055-01	C	Benzo[a]anthracene	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7, N1	SJM
1302055-01	C	Benzo[a]pyrene	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.002	3.75	D1, D7, N1	SJM
1302055-01	C	Benzo[b]fluoranthene	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.002	1.25	D1, D7, N1	SJM
1302055-01	C	Benzo[ghi]perylene	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.002	1.25	D1, D7, N1	SJM
1302055-01	C	Benzo[k]fluoranthene	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.002	3.75	D1, D7, N1	SJM
1302055-01	C	bis(2-chloroethoxy)methane	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7, N1	SJM
1302055-01	C	bis(2-chloroethyl)ether	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7, N1	SJM
1302055-01	C	bis(2-chloroisopropyl)ether	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7, N1	SJM
1302055-01	C	bis(2-ethylhexyl)phthalate	02/06/13 11:50	EPA 625	2/27/13 21:22	**5.23**	mg/kg dry	0.003	3.75	D1, D7, N1, J	SJM
1302055-01	C	Butylbenzylphthalate	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.002	3.75	D1, D7	SJM
1302055-01	C	Carbazole	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7, N1	SJM
1302055-01	C	Chrysene	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7, N1	SJM
1302055-01	C	Dibenzo(a,h)anthracene	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.002	1.25	D1, D7, N1	SJM
1302055-01	C	Diethyl phthalate	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D7, N1, D1	SJM
1302055-01	C	Dimethyl phthalate	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.0007	1.25	D1, D7, N1	SJM
1302055-01	C	Di-n-butyl phthalate	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.002	1.25	D1, D7, N1	SJM
1302055-01	C	Di-n-octyl phthalate	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.002	1.25	D1, D7, N1	SJM
1302055-01	C	Fluoranthene	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7, N1	SJM
1302055-01	C	Fluorene	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7, N1	SJM
1302055-01	C	Hexachlorobenzene	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.0008	1.25	D1, D7, N1	SJM
1302055-01	C	Hexachlorobutadiene	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7	SJM
1302055-01	C	Hexachlorocyclopentadiene	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.003	3.75	D1, D7	SJM
1302055-01	C	Hexachloroethane	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7	SJM
1302055-01	C	Indeno(1,2,3-cd)pyrene	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.002	3.75	D1, D7, N1	SJM
1302055-01	C	Isophorone	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7, N1	SJM
1302055-01	C	Naphthalene	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7, N1	SJM
1302055-01	C	n-Decane	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.002	1.25	D1, D7, N1	SJM
1302055-01	C	Nitrobenzene	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.003	3.75	D1, D7, N1	SJM
1302055-01	C	N-Nitrosodimethylamine	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.004	3.75	D1, D7, N1, PC3	SJM
1302055-01	C	N-Nitroso-di-n-propylamine	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7, N1	SJM
1302055-01	C	N-Nitrosodiphenylamine	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.002	1.25	D1, D7, N1	SJM
1302055-01	C	n-Octadecane	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.002	1.25	D1, D7, N1	SJM
1302055-01	C	Pentachlorophenol	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.003	3.75	D1, D7, N1	SJM
1302055-01	C	Phenanthrene	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7, N1	SJM
1302055-01	C	Phenol	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.002	3.75	D1, D7, N1	SJM
1302055-01	C	Pyrene	02/06/13 11:50	EPA 625	2/27/13 21:22	ND	mg/kg dry	0.001	1.25	D1, D7, N1	SJM
1302055-01	C	1,2-Diphenylhydrazine	02/06/13 11:50	EPA 8270C	2/27/13 21:22	ND	mg/kg dry	0.002	1.55	D1, D7	SJM
1302055-01	C	Silver	02/06/13 11:50	EPA 6010B	2/26/13 15:17	**6.38**	mg/kg dry	0.426	1.28		MLB
1302055-01	C	% Solids	02/06/13 11:50	SM 2540G	2/7/13 15:16	**80.7**	%		0.01		SJD
1302055-01	C	% Solids, Total Volatile	02/06/13 11:50	SM 2540G	2/7/13 15:16	**59.4**	%		0.01	T6	SJD
1302055-01	C	Arsenic	02/06/13 11:50	TCLP/EPA 6010B	2/22/13 10:04	**0.111**	mg/L	0.0159	0.03		MLB

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1302055-01	C	Barium	02/06/13 11:50	TCLP/EPA 6010B	2/22/13 10:04	**0.0468**	mg/L	0.000440	0.03		MLB
1302055-01	C	Cadmium	02/06/13 11:50	TCLP/EPA 6010B	2/22/13 10:04	**ND**	mg/L	0.00920	0.01		MLB
1302055-01	C	Chromium	02/06/13 11:50	TCLP/EPA 6010B	2/22/13 10:04	**0.0120**	mg/L	0.00248	0.03	J	MLB
1302055-01	C	Lead	02/06/13 11:50	TCLP/EPA 6010B	2/22/13 12:18	**ND**	mg/L	0.0176	0.03		MLB
1302055-01	C	Mercury	02/06/13 11:50	TCLP/EPA 7470	3/6/13 11:40	**ND**	mg/L	0.000150	0.00		DDO
1302055-01	C	Chlordane	02/06/13 11:50	TCLP/EPA 8270C	3/7/13 19:44	**ND**	ug/L	1.38	20.00	D1, D7	mam-z
1302055-01	C	Endrin	02/06/13 11:50	TCLP/EPA 8270C	3/7/13 20:37	**ND**	ug/L	0.200	5.00	D1, D7, N1	mam-z
1302055-01	C	gamma-BHC (Lindane)	02/06/13 11:50	TCLP/EPA 8270C	3/7/13 19:44	**ND**	ug/L	0.270	5.00	D1, D7	mam-z
1302055-01	C	Heptachlor	02/06/13 11:50	TCLP/EPA 8270C	3/7/13 19:44	**ND**	ug/L	0.270	5.00	D1, D7, N1	mam-z
1302055-01	C	Heptachlor Epoxide	02/06/13 11:50	TCLP/EPA 8270C	3/7/13 19:44	**ND**	ug/L	0.290	5.00	D1, D7, L4, N1	mam-z
1302055-01	C	Methoxychlor	02/06/13 11:50	TCLP/EPA 8270C	3/7/13 20:37	**ND**	ug/L	0.270	5.00	D1, D7, N1	mam-z
1302055-01	C	Toxaphene	02/06/13 11:50	TCLP/EPA 8270C	3/7/13 19:44	**ND**	ug/L	3.79	60.00	D1, D7, V1	mam-z
1302055-01	C	1,1-Dichloroethene	02/06/13 11:50	TCLP/EPA 8260B	2/21/13 21:33	**ND**	ug/L	0.0700	0.50		DLC
1302055-01	C	1,2-Dichloroethane	02/06/13 11:50	TCLP/EPA 8260B	2/21/13 21:33	**ND**	ug/L	0.120	0.50		DLC
1302055-01	C	1,4-Dichlorobenzene	02/06/13 11:50	TCLP/EPA 8260B	2/21/13 21:33	**ND**	ug/L	0.170	0.50		DLC
1302055-01	C	Benzene	02/06/13 11:50	TCLP/EPA 8260B	2/21/13 21:33	**ND**	ug/L	0.100	0.50		DLC
1302055-01	C	Carbon Tetrachloride	02/06/13 11:50	TCLP/EPA 8260B	2/21/13 21:33	**ND**	ug/L	0.0600	0.50		DLC
1302055-01	C	Chlorobenzene	02/06/13 11:50	TCLP/EPA 8260B	2/21/13 21:33	**ND**	ug/L	0.110	0.50		DLC
1302055-01	C	Chloroform	02/06/13 11:50	TCLP/EPA 8260B	2/21/13 21:33	**ND**	ug/L	0.110	0.50		DLC
1302055-01	C	Hexachlorobutadiene	02/06/13 11:50	TCLP/EPA 8260B	2/21/13 21:33	**ND**	ug/L	0.500	1.00		DLC
1302055-01	C	Methyl Ethyl Ketone	02/06/13 11:50	TCLP/EPA 8260B	2/21/13 21:33	**5.23**	ug/L	0.0600	0.50	B1	DLC
1302055-01	C	Tetrachloroethene	02/06/13 11:50	TCLP/EPA 8260B	2/21/13 21:33	**ND**	ug/L	0.0600	0.50		DLC
1302055-01	C	Trichloroethene	02/06/13 11:50	TCLP/EPA 8260B	2/21/13 21:33	**ND**	ug/L	0.0900	0.50		DLC
1302055-01	C	Vinyl chloride	02/06/13 11:50	TCLP/EPA 8260B	2/21/13 21:33	**ND**	ug/L	0.0500	0.50		DLC
1302055-01	C	Selenium	02/06/13 11:50	TCLP/EPA 6010B	2/22/13 12:18	**0.0278**	mg/L	0.0114	0.03		MLB
1302055-01	C	1,4-Dichlorobenzene	02/06/13 11:50	TCLP/EPA 8270C	3/7/13 19:24	**ND**	ug/L	0.540	20.00	D1, D7	SJM
1302055-01	C	2,4,5-Trichlorophenol	02/06/13 11:50	TCLP/EPA 8270C	3/7/13 19:24	**ND**	ug/L	14.6	250.00	D7, N1, D1	SJM
1302055-01	C	2,4,6-Trichlorophenol	02/06/13 11:50	TCLP/EPA 8270C	3/7/13 19:24	**ND**	ug/L	11.9	250.00	D1, D7, N1	SJM
1302055-01	C	2,4-Dinitrotoluene	02/06/13 11:50	TCLP/EPA 8270C	3/7/13 19:24	**ND**	ug/L	12.4	250.00	D1, D7	SJM
1302055-01	C	2-Methylphenol	02/06/13 11:50	TCLP/EPA 8270C	3/7/13 19:24	**ND**	ug/L	0.770	20.00	D1, D7, N1	SJM
1302055-01	C	3 & 4-Methylphenol	02/06/13 11:50	TCLP/EPA 8270C	3/7/13 19:24	**16.1**	ug/L	1.23	20.00	D1, D7, N1	SJM
1302055-01	C	Hexachlorobenzene	02/06/13 11:50	TCLP/EPA 8270C	3/7/13 19:24	**ND**	ug/L	0.980	20.00	D1, D7	SJM
1302055-01	C	Hexachlorobutadiene	02/06/13 11:50	TCLP/EPA 8270C	3/7/13 19:24	**ND**	ug/L	1.72	20.00	D1, D7, N1	SJM
1302055-01	C	Hexachloroethane	02/06/13 11:50	TCLP/EPA 8270C	3/7/13 19:24	**ND**	ug/L	0.730	20.00	D1, D7, N1	SJM
1302055-01	C	Nitrobenzene	02/06/13 11:50	TCLP/EPA 8270C	3/7/13 19:24	**ND**	ug/L	0.950	20.00	D1, D7	SJM
1302055-01	C	Pentachlorophenol	02/06/13 11:50	TCLP/EPA 8270C	3/7/13 19:24	**ND**	ug/L	7.72	100.00	D1, D7, N1	SJM
1302055-01	C	Pyridine	02/06/13 11:50	TCLP/EPA 8270C	3/7/13 19:24	**ND**	ug/L	1.22	20.00	D1, D7, N1	SJM
1302055-01	C	Silver	02/06/13 11:50	TCLP/EPA 6010B	2/22/13 10:04	**ND**	mg/L	0.00172	0.00		MLB
1302055-01	C	Thallium	02/06/13 11:50	EPA 6010B	2/26/13 17:59	**ND**	mg/kg dry	7.30	12.81		MLB
1302055-01	C	Zinc	02/06/13 11:50	EPA 6010B	2/26/13 15:17	**843**	mg/kg dry	1.43	12.81		MLB
1302055-01RE	C	Nitrate/Nitrite	02/06/13 11:50	EPA 353.2	2/7/13 13:08	**252.90**	mg/kg dry	0.41	4.96	D2	AMK

Qualifier Definitions

B1	Target analyte detected in method blank at or above the method reporting limit.
D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of target analyte.
D7	Minimum Reporting Limit adjusted to reflect sample dilution.
J	Concentration estimated. Analyte was detected below laboratory minimum reporting limit (MRL) but above MDL.
L4	The associated blank spike recovery was below method acceptance limits.
L5	The associated blank spike recovery was above laboratory/method acceptance limits. This analyte was not detected in the sample.
N1	See case narrative.
PC3	Semi-quantitation is included in the case narrative.
T6	The reported result cannot be used for compliance purposes.
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.

General Notes and Definitions

C	Sample Type - Composite
D	Sample Type - Discrete
DD	Sample Type - Discrete Duplicate
ND	Analyte NOT DETECTED at or above the reporting limit (MDL)
NR	Not Reported
DET	Analyte DETECTED
DRY	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
Analysis Date	Analysis Date represents the final reading date.
Field Results	Field Results performed by "SMPLR" (Sampler), are not subject to approval of Laboratory Director.
Solids, Total Volatile	Used for process control samples only.
RE	Re-Analysis has been performed.

Case Narrative(s)

1302055-01
This sample was analyzed for EPA Method 624 and Method 8260. Target compounds flagged with N1 for this method failed the matrix spike from the same analytical batch but the spike was performed on a different sample. DLC

1302055-01
This sample was extracted for EPA Method 8270C TCLP Pesticides on 02/22/13. Target analytes flagged with N1 for this mehod failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. MAM-Z

This sample was extracted for EPA Method 625 Pesticides on 02/12/13. Target analytes flagged with N1 for this method failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. MAM-Z

1302055-01
This sample was extracted for EPA Method 625 Semi-volatiles on 02/13/13 Target analytes flagged with N1 failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. SJM

Semi-Quantitation
Method:625
1302055-01

Compound Name	Concentration-mg/kg
Benzeneacetic Acid	5
Palmitic Acid	403
Stearic Acid	358
Squalene	16
Cholestanol	6

1302055-01
This sample was extracted for EPA Method 625 Semi-volatiles on 02/20/13. Target analytes flagged with N1 failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. SJM

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1302115-03

SITE & LOCATION: GREEN VALLEY WWTF- EFFLUENT

SITE-LOCATION NUMBER: 25000-0950 (XXXXX-XXXX)

SAMPLE START DATE: 02/12/2013 (MM / DD / YYYY)

SAMPLE START TIME: 0800 (24 Hour Clock)

SUBMITTER: Sub-Regional Facilities

SAMPLE END DATE: 02/13/2013 (MM / DD / YYYY)

SAMPLE END TIME: 0800 (24 Hour Clock)

SAMPLER: GARRISON (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ☐ AZPDES ☐ Reuse ■ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ☐ Biosolids ☐ Soil ■ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐	**WET METHODS**	D	C
Cobalt	☐	☐	Ammonia as N	☐	☐
Copper	☐	☐	Chloride	☐	☐
Hardness	☐	☐	Cyanide, Total	☐	☐
Iron	☐	☐	Cyanide, Amenable	☐	☐
Lead	☐	☐	Fluoride	☐	☐
Magnesium	☐	☐	Ignitability	☐	☐
Manganese	☐	☐	Nitrate as N	☐	☐
Mercury	☐	☐	Nitrite as N	☐	☐
Molybdenum	☐	☐	Nitrate/Nitrite as N	☐	☐
Nickel	☐	☐	Nitrogen, Total Kjeldahl	☐	☐
Potassium	☐	☐	Nitrogen, Total as N	☐	☐
Selenium	☐	☐	Orthophosphate as P	☐	☐
Silver	☐	☐	Phosphorus, Total as P	☐	☐
Sodium	☐	☐	Sulfate	☐	☐
Strontium	☐	☐	Sulfide	☐	☐
Thallium	☐	☐	Turbidity	☐	☐
Tin	☐	☐			

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐
MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐
EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	■
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	■
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐
OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions: 3 x 1000ml bottles with the same label. GOS 02-13-13

# of Bottles Delivered: 3 GOS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
Refridgerator	Refridgerator	02-13-13	0810
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Refridgerator	Steven Garcia	02-13-13	0959
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Steven Garcia		02-13-13	1207
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	2	°C
Initials:	GOS	
Non-Preserved	3	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:

	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☒
Received from a refrigerator?	☐	☒	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1302113-01

SITE & LOCATION: Green Valley WRF - BNROD - Raw Influent - AZPDES - Compliance Data

SITE-LOCATION NUMBER: 25001-1903 (XXXXX-XXXX)

SAMPLE START DATE: 02/12/13 (MM / DD / YYYY)

SAMPLE START TIME: 0900 (24 Hour Clock)

SUBMITTER: IWC

SAMPLE END DATE: 02/13/13 (MM / DD / YYYY)

SAMPLE END TIME: 0900 (24 Hour Clock)

SAMPLER: Morales, Dreyfuss (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ■ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ☐ Biosolids ☐ Soil ■ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐			
Cobalt	☐	☐			
Copper	☐	☐			
Hardness	☐	☐			
Iron	☐	☐			
Lead	☐	☐			
Magnesium	☐	☐			
Manganese	☐	☐			
Mercury	☐	☐			
Molybdenum	☐	☐			
Nickel	☐	☐			
Potassium	☐	☐			
Selenium	☐	☐			
Silver	☐	☐			
Sodium	☐	☐			
Strontium	☐	☐			
Thallium	☐	☐			
Tin	☐	☐			

WET METHODS	D	C
Ammonia as N	☐	☐
Chloride	☐	☐
Cyanide, Total	☐	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	☐
Nitrite as N	☐	☐
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	☐
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	■
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:

# of Bottles Delivered: 1 GOS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials:

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	3	°C
Initials:	GOS	
Non-Preserved	1	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:

	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☒
Received from a refrigerator?	☐	☒	☐

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	[signature]	02-13-13	1121
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1302053-04

SITE & LOCATION: GREEN VALLEY BNROD RAW INFLUENT-PROCESS CONTROL

SITE-LOCATION NUMBER: 25000-1905 (XXXXX-XXXX)

SAMPLE START DATE: 02/05/2013 (MM / DD / YYYY)

SAMPLE START TIME: 0800 (24 Hour Clock)

SUBMITTER: Sub-Regional Facilities

SAMPLE END DATE: 02/06/2013 (MM / DD / YYYY)

SAMPLE END TIME: 0800 (24 Hour Clock)

SAMPLER: Everhart (Print Last Names Only)

Permit Type: ☐ APP ☐ AZPDES ☐ IWC ☐ Investigative ☐ Reuse ☐ USFS ☐ 503 ■ Process Control ☐ Other

Sample Matrix: ☐ Biosolids ☐ Groundwater ☐ Industrial ☐ Soil ☐ Stormwater ☐ Surface Water ■ Wastewater ☐ Other

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐			
Cobalt	☐	☐			
Copper	☐	☐			
Hardness	☐	☐			
Iron	☐	☐			
Lead	☐	☐			
Magnesium	☐	☐			
Manganese	☐	☐			
Mercury	☐	☐			
Molybdenum	☐	☐			
Nickel	☐	☐			
Potassium	☐	☐			
Selenium	☐	☐			
Silver	☐	☐			
Sodium	☐	☐			
Strontium	☐	☐			
Thallium	☐	☐			
Tin	☐	☐			

WET METHODS	D	C
Ammonia as N	☐	■
Chloride	☐	☐
Cyanide, Total	☐	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	☐
Nitrite as N	☐	☐
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	■
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY WET CHEM

	D	C
Alkalinity	☐	■
BOD	☐	■
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	■
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:

# of Bottles Delivered: 2 SN

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
Refridgerator	Refridgerator	2-6-2013	0845
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Refridgerator	Steven Garcia	2-6-13	1011
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Steven Garcia	Sherry Neuus	2-6-13	1215
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature: 4.0 °C

Initials: SN

Non-Preserved	1	#
HNO_3		#
H_2SO_4	1	#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:

	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☒
Received from a refrigerator?	☐	☒	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1302115-04

SITE & LOCATION: GREEN VALLEY BNROD RAW INFLUENT-PROCESS CONTROL

SITE-LOCATION NUMBER: 25000-1905 (XXXXX-XXXX)

SAMPLE START DATE: 02/12/2013 (MM / DD / YYYY)

SAMPLE START TIME: 0800 (24 Hour Clock)

SUBMITTER: Sub-Regional Facilities

SAMPLE END DATE: 02/13/2013 (MM / DD / YYYY)

SAMPLE END TIME: 0800 (24 Hour Clock)

SAMPLER: GARRISON (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ☐ AZPDES ☐ Reuse ■ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ☐ Biosolids ☐ Soil ■ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐			
Cobalt	☐	☐			
Copper	☐	☐			
Hardness	☐	☐			
Iron	☐	☐			
Lead	☐	☐			
Magnesium	☐	☐			
Manganese	☐	☐			
Mercury	☐	☐			
Molybdenum	☐	☐			
Nickel	☐	☐			
Potassium	☐	☐			
Selenium	☐	☐			
Silver	☐	☐			
Sodium	☐	☐			
Strontium	☐	☐			
Thallium	☐	☐			
Tin	☐	☐			

WET METHODS	D	C
Ammonia as N	☐	■
Chloride	☐	☐
Cyanide, Total	☐	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	☐
Nitrite as N	☐	☐
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	■
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	■
BOD	☐	■
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	■
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:

# of Bottles Delivered: 2 GOS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
Refridgerator	Refridgerator	2-13-13	0815
Refridgerator	Steven Garcia	2-13-13	0958
Steven Garcia		02-13-13	1207

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	2	°C
Initials:	GOS	
Non-Preserved	1	#
HNO_3		#
H_2SO_4	1	#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:

	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☑
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☒
Received from a refrigerator?	☐	☒	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1302053-01

SITE & LOCATION: GREEN VALLEY DISCHARGE FROM BNROD

SITE-LOCATION NUMBER: 25000-1921 (XXXXX-XXXX)

SAMPLE START DATE: ____ (MM / DD / YYYY)

SAMPLE START TIME: ____ (24 Hour Clock)

SUBMITTER: Sub-Regional Facilities

SAMPLE END DATE: 02/06/2013 (MM / DD / YYYY)

SAMPLE END TIME: 0948 (24 Hour Clock)

SAMPLER: TOMS (Print Last Names Only)

Permit Type: ■ APP ☐ Investigative ☐ 503 ☐ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other ____

Sample Matrix: ☐ Biosolids ☐ Soil ■ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ____ ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐			
Cobalt	☐	☐			
Copper	☐	☐			
Hardness	☐	☐			
Iron	☐	☐			
Lead	☐	☐			
Magnesium	☐	☐			
Manganese	☐	☐			
Mercury	☐	☐			
Molybdenum	☐	☐			
Nickel	☐	☐			
Potassium	☐	☐			
Selenium	☐	☐			
Silver	☐	☐			
Sodium	☐	☐			
Strontium	☐	☐			
Thallium	☐	☐			
Tin	☐	☐			

WET METHODS	D	C
Ammonia as N	☐	☐
Chloride	☐	☐
Cyanide, Total	☐	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	☐
Nitrite as N	☐	☐
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	☐
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other ____	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other ____	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	■	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other ____	☐	☐

OTHER	D	C
____	☐	☐
____	☐	☐
____	☐	☐
____	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*	____	µg/L
☐ Conductivity *SM 2510 B*	____	µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*	____	mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*	____	°C
☐ Total Depth of Well	____	feet
☐ Depth to Water	____	feet
☐ Other ____	____	____

Comments/Instructions:
APP COMPLIANCE SAMPLE

# of Bottles Delivered: 1

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials: ____ ____

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
Shelli Toms	Refridgerator	2-6-13	@ 0950
Refridgerator	Steven Garcia	2-6-13	1014
Steven Garcia	Sherry Neuman	2-6-13	1215

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	4.0	°C
Initials:	SN	
Non-Preserved	____	#
HNO_3	____	#
H_2SO_4	____	#
HCl	____	#
NaOH	____	#
$Na_2S_2O_3$	1	#
$Zn(C_2H_3O_2)_2$	____	#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☑	☐	☐
Sample labels match Chain of Custody?	☑	☐	☐
Correct number of samples were delivered?	☑	☐	☐
Custody seals intact?	☑	☐	☐
Within holding time?	☑	☐	☐
Sufficient sample volume for analysis?	☑	☐	☐
Samples are in proper containers?	☑	☐	☐
Sample containers damaged/leaking/frozen?	☐	☑	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☑
Received from a refrigerator?	☐	☑	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1302053-05

SITE & LOCATION: GREEN VALLEY DISCHARGE FROM BNROD

SITE-LOCATION NUMBER: 25000-1921 (XXXXX-XXXX)

SAMPLE START DATE: _____ (MM / DD / YYYY)

SAMPLE START TIME: _____ (24 Hour Clock)

SUBMITTER: Sub-Regional Facilities

SAMPLE END DATE: 02/06/2013 (MM / DD / YYYY)

SAMPLE END TIME: 0948 (24 Hour Clock)

SAMPLER: TOMS (Print Last Names Only)

Permit Type: ■ APP ☐ AZPDES ☐ IWC ☐ Investigative ☐ Reuse ☐ USFS ☐ 503 ☐ Process Control ☐ Other _____

Sample Matrix: ☐ Biosolids ☐ Groundwater ☐ Industrial ☐ Soil ☐ Stormwater ☐ Surface Water ■ Wastewater ☐ Other _____

INORGANIC CHEMISTRY

METALS	D	C
Aluminum	☐	☐
Antimony	☐	☐
Arsenic	☐	☐
Barium	☐	☐
Beryllium	☐	☐
Boron	☐	☐
Cadmium	☐	☐
Calcium	☐	☐
Chromium	☐	☐
Cobalt	☐	☐
Copper	☐	☐
Hardness	☐	☐
Iron	☐	☐
Lead	☐	☐
Magnesium	☐	☐
Manganese	☐	☐
Mercury	☐	☐
Molybdenum	☐	☐
Nickel	☐	☐
Potassium	☐	☐
Selenium	☐	☐
Silver	☐	☐
Sodium	☐	☐
Strontium	☐	☐
Thallium	☐	☐
Tin	☐	☐

METALS	D	C
Titanium	☐	☐
Vanadium	☐	☐
Zinc	☐	☐
Priority Pollutant Metals *	☐	☐
TCLP Metals	☐	☐
503 Metals **	☐	☐
Chromium, Hexavalent	☐	☐
Chromium, Trivalent	☐	☐

WET METHODS	D	C
Ammonia as N	■	☐
Chloride	☐	☐
Cyanide, Total	☐	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	☐
Nitrite as N	☐	☐
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	■	☐
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other _____	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other _____	☐	☐

MICROBIOLOGY / WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other _____	☐	☐

OTHER	D	C
_____	☐	☐
_____	☐	☐
_____	☐	☐
_____	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*	_____	µg/L
☐ Conductivity *SM 2510 B*	_____	µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*	_____	mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*	_____	°C
☐ Total Depth of Well	_____	feet
☐ Depth to Water	_____	feet
☐ Other _____	_____	_____

Comments/Instructions:

APP MONTHLY COMPLIANCE SAMPLE

# of Bottles Delivered: 1 SN

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials: _____ _____

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
Shelli Toms	Refridgerator	2.6.13	0950
Refridgerator	Steven Garcia	2-6-13	1010
Steven Garcia	Sherry Norris	2-6-13	1215

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	4.0	°C
Initials:	SN	
Non-Preserved		#
HNO_3		#
H_2SO_4	1	#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:

	Yes	No	NA
Chain of Custody Record completed appropriately?	☑	☐	☐
Sample labels match Chain of Custody?	☑	☐	☐
Correct number of samples were delivered?	☑	☐	☐
Custody seals intact?	☐	☐	☑
Within holding time?	☑	☐	☐
Sufficient sample volume for analysis?	☑	☐	☐
Samples are in proper containers?	☑	☐	☐
Sample containers damaged/leaking/frozen?	☐	☑	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☑
Received from a refrigerator?	☐	☑	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1302053-06

SITE & LOCATION: GREEN VALLEY BNROD FINAL EFFLUENT-PROCESS CONTROL

SITE-LOCATION NUMBER: 25000-1925 (XXXXX-XXXX)

SAMPLE START DATE: 02/05/2013 (MM / DD / YYYY)

SAMPLE START TIME: 0800 (24 Hour Clock)

SUBMITTER: Sub-Regional Facilities

SAMPLE END DATE: 02/06/2013 (MM / DD / YYYY)

SAMPLE END TIME: 0800 (24 Hour Clock)

SAMPLER: Everhart (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ☐ AZPDES ☐ Reuse ■ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ☐ Biosolids ☐ Soil ■ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐			
Cobalt	☐	☐			
Copper	☐	☐			
Hardness	☐	☐			
Iron	☐	☐			
Lead	☐	☐			
Magnesium	☐	☐			
Manganese	☐	☐			
Mercury	☐	☐			
Molybdenum	☐	☐			
Nickel	☐	☐			
Potassium	☐	☐			
Selenium	☐	☐			
Silver	☐	☐			
Sodium	☐	☐			
Strontium	☐	☐			
Thallium	☐	☐			
Tin	☐	☐			

WET METHODS	D	C
Ammonia as N	☐	■
Chloride	☐	☐
Cyanide, Total	☐	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	☐
Nitrite as N	☐	☐
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	■
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	■
BOD	☐	■
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	■
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:

# of Bottles Delivered: 4 5P

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
Lucd M Everhart Refridgerator		2.6.13	1010
Refridgerator	Steven Garcia	2-6-13	1009
Steven Garcia	Sherry Neuron	2-6-13	1215

LAB USE ONLY

Sample Integrity/Preservation:

Temperature: 4.0 °C

Initials: SN

Non-Preserved	3	#
HNO_3		#
H_2SO_4	1	#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:

	Yes	No	NA
Chain of Custody Record completed appropriately?	☑	☐	☐
Sample labels match Chain of Custody?	☑	☐	☐
Correct number of samples were delivered?	☑	☐	☐
Custody seals intact?	☐	☐	☑
Within holding time?	☑	☐	☐
Sufficient sample volume for analysis?	☑	☐	☐
Samples are in proper containers?	☑	☐	☐
Sample containers damaged/leaking/frozen?	☐	☑	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☑
Received from a refrigerator?	☐	☑	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1302053-02

SITE & LOCATION: GREEN VALLEY WWTF-BNROD MLSS PROCESS CONTROL

SITE-LOCATION NUMBER: 25000-1940 (XXXXX-XXXX)

SAMPLE START DATE: _____ (MM / DD / YYYY)

SAMPLE START TIME: JE 2-6-13 (24 Hour Clock)

SUBMITTER: Sub-Regional Facilities

SAMPLE END DATE: 02/06/2013 (MM / DD / YYYY)

SAMPLE END TIME: 0821 (24 Hour Clock)

SAMPLER: Everhart (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ☐ AZPDES ☐ Reuse ■ Process Control ☐ IWC ☐ USFS ☐ Other _____

Sample Matrix: ☐ Biosolids ☐ Soil ■ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other _____ ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐			
Cobalt	☐	☐			
Copper	☐	☐			
Hardness	☐	☐			
Iron	☐	☐			
Lead	☐	☐			
Magnesium	☐	☐			
Manganese	☐	☐			
Mercury	☐	☐			
Molybdenum	☐	☐			
Nickel	☐	☐			
Potassium	☐	☐			
Selenium	☐	☐			
Silver	☐	☐			
Sodium	☐	☐			
Strontium	☐	☐			
Thallium	☐	☐			
Tin	☐	☐			

WET METHODS	D	C
Ammonia as N	☐	☐
Chloride	☐	☐
Cyanide, Total	☐	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	☐
Nitrite as N	☐	☐
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	☐
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other _____	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other _____	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	■	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	■	☐
Other _____	☐	☐

OTHER	D	C
_____	☐	☐
_____	☐	☐
_____	☐	☐
_____	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*	_____	µg/L
☐ Conductivity *SM 2510 B*	_____	µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*	_____	mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*	_____	°C
☐ Total Depth of Well	_____	feet
☐ Depth to Water	_____	feet
☐ Other _____	_____	_____

Comments/Instructions:

# of Bottles Delivered: 1 5

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials: _____

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
Everhart	Refridgerator	2-6-13	0825
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Refridgerator	Steven Garcia	2-6-13	1012
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Steven Garcia	Sherry Herrus	2-6-13	1215
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	4.0	°C
Initials:	SN	
Non-Preserved	1	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☑	☐	☐
Sample labels match Chain of Custody?	☑	☐	☐
Correct number of samples were delivered?	☑	☐	☐
Custody seals intact?	☐	☐	☑
Within holding time?	☑	☐	☐
Sufficient sample volume for analysis?	☑	☐	☐
Samples are in proper containers?	☑	☐	☐
Sample containers damaged/leaking/frozen?	☐	☑	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☑
Received from a refrigerator?	☐	☑	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1302053-03

SITE & LOCATION: GREEN VALLEY WWTF-BNROD-NORTH AEROBIC DIGESTER SLUDGE

SITE-LOCATION NUMBER: 25000-1950 (XXXXX-XXXX)

SAMPLE START DATE: (MM / DD / YYYY)

SAMPLE START TIME: (24 Hour Clock)

SUBMITTER: Sub-Regional Facilities

SAMPLE END DATE: 02/06/2013 (MM / DD / YYYY)

SAMPLE END TIME: 0815 (24 Hour Clock)

SAMPLER: BONIN (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ☐ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ☐ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum			Titanium		
Antimony			Vanadium		
Arsenic			Zinc		
Barium			Priority Pollutant Metals *		
Beryllium			TCLP Metals		
Boron			503 Metals **		
Cadmium			Chromium, Hexavalent		
Calcium			Chromium, Trivalent		
Chromium			**WET METHODS**	D	C
Cobalt			Ammonia as N		
Copper			Chloride		
Hardness			Cyanide, Total		
Iron			Cyanide, Amenable		
Lead			Fluoride		
Magnesium			Ignitability		
Manganese			Nitrate as N		
Mercury			Nitrite as N		
Molybdenum			Nitrate/Nitrite as N		
Nickel			Nitrogen, Total Kjeldahl		
Potassium			Nitrogen, Total as N		
Selenium			Orthophosphate as P		
Silver			Phosphorus, Total as P		
Sodium			Sulfate		
Strontium			Sulfide		
Thallium			Turbidity		
Tin					

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile		
Dioxin GC/SIM/MS Scan		
Organochlorine Pesticides & PCBs		
Purgeable Organics (GCMS)		
Semivolatile Organics (GCMS)		
Other		
MISCELLANEOUS METHODS	D	C
4,4-DDE		
Bis(2-ethylhexyl) phthalate		
Digester Gas		
Oil and Grease		
Organic Carbon, Total		
Organic Carbon, Dissolved		
TCLP Herbicides (Contract Lab)		
TCLP Pesticides		
TCLP Semivolatile Organics		
TCLP Volatile Organics		
Total Petroleum Hydrocarbons		
Volatile Acids		
EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*		
Chronic *C. dubia*		
Chronic *Selenastrum capricornutum*		
Other		

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity		
BOD		
COD		
Coliform, Fecal		
Coliform, Total		
Conductivity		
E. coli		
Oxygen, Dissolved		
pH		
Solids, Settleable		
Solids, Total	■	
Solids, Total Dissolved		
Solids, Total Suspended		
Solids, Total Volatile	■	
Solids, Volatile Suspended		
Other		
OTHER	D	C

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:

# of Bottles Delivered: 1 SN

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
Kevin Bonin	Refridgerator	2/6/13	0825
Refridgerator	Steven Garcia	2-6-13	1013
Steven Garcia	Sherry Neuns	2-6-13	1215

LAB USE ONLY

Sample Integrity/Preservation:

Temperature: 4.0 °C

Initials: SN

Non-Preserved	1	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☑		
Sample labels match Chain of Custody?	☑		
Correct number of samples were delivered?	☑		
Custody seals intact?			☑
Within holding time?	☑		
Sufficient sample volume for analysis?	☑		
Samples are in proper containers?	☑		
Sample containers damaged/leaking/frozen?		☑	
40 ml vials headspace, > pea-sized air bubble?			☑
Received from a refrigerator?		☑	

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1302055-01 through ~~05~~ removed trip blanks BJ-F 4-3-13

SITE & LOCATION: Green Valley WWTF- BNROD- Biosolids from Drying Bed #5

SITE-LOCATION NUMBER: 25000-1970 (XXXXX-XXXX)

SAMPLE START DATE: 02/06/2013 (MM / DD / YYYY)

SAMPLE START TIME: 0930 (24 Hour Clock)

SUBMITTER: IWC

SAMPLE END DATE: 02/06/2013 (MM / DD / YYYY)

SAMPLE END TIME: 1150 (24 Hour Clock)

SAMPLER: Dreyfuss/Silva (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ■ 503 ■ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ■ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	■
Beryllium	☐	☐	TCLP Metals	☐	■
Boron	☐	☐	503 Metals **	☐	■
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐	**WET METHODS**	D	C
Cobalt	☐	☐	Ammonia as N	☐	☐
Copper	☐	☐	Chloride	☐	☐
Hardness	☐	☐	Cyanide, Total	☐	☐
Iron	☐	☐	Cyanide, Amenable	☐	☐
Lead	☐	☐	Fluoride	☐	☐
Magnesium	☐	☐	Ignitability	☐	☐
Manganese	☐	☐	Nitrate as N	☐	☐
Mercury	☐	☐	Nitrite as N	☐	☐
Molybdenum	☐	☐	Nitrate/Nitrite as N	☐	☐
Nickel	☐	☐	Nitrogen, Total Kjeldahl	☐	☐
Potassium	☐	☐	Nitrogen, Total as N	☐	■
Selenium	☐	☐	Orthophosphate as P	☐	☐
Silver	☐	☐	Phosphorus, Total as P	☐	☐
Sodium	☐	☐	Sulfate	☐	☐
Strontium	☐	☐	Sulfide	☐	☐
Thallium	☐	☐	Turbidity	☐	☐
Tin	☐	☐			

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile *	☐	■
Dioxin GC/SIM/MS Scan *	☐	■
Organochlorine Pesticides & PCBs *	☐	■
Purgeable Organics (GCMS) *	☐	■
Semivolatile Organics (GCMS) *	☐	■
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	■
TCLP Pesticides *	☐	■
TCLP Semivolatile Organics *	☐	■
TCLP Volatile Organics *	☐	■
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricomutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total *	☐	■
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile *	☐	■
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
Cyanide total (contract) *	☐	■
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:
* 1 TCLP HERBACIDES, 1 TOTAL SOLIDS, AND 1 TOTAL
* CYANNIDE to be shipped to contract laboratory. 3 bottles to ship only. Test America DOH 13-25603

# of Bottles Delivered ~~16~~ 15 COS 2/4/13 Transported on Ice ☒ YES ☐ NO

Septum Blank Prep Date & Initials: 01-29-13 LEJ 2/12/13

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
		02-06-13	1407
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
		2-7-13	840
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	2	°C
Initials:	COS	
Non-Preserved	15	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	~~☒~~	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☒	☐	☐
Received from a refrigerator?	☐	☒	☐

COS 02-06-13

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

TestAmerica

HE LEADER IN ENVIRONMENTAL TESTING

L-0013-550 (10/10)

CHAIN OF CUSTODY FORM

[ ] Phoenix - 4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303
[ ] Tucson - 1870 W. Prince Road, Suite 59, Tucson, AZ 85705 (520) 807-3801 FAX (520) 807-3803
[ ] Las Vegas - 6000 S Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

Page 1 of 1

ent Name/Address:
Pima County CRAO Lab
3035 W El Camino Del Cerro
Tucson AZ 85745

Project/PO Number:
Green Valley BS
DO#1325603

oject Manager:
Nancy Powell

Phone Number:
520-724-6183

mpler:
William Dreyfuss

Fax Number:
520-724-6071

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	Total cyanide mg/kg	Total solids % for mg/kg	TCLP herbicides	TCLP extraction						Special Instructions
							Analysis Required									BS- biosolids
reenValley drying bed #5	BS	various	3	02-06-13	1150	none	1	1	1	1						composite-mixture
S000-1970																
1302055-01																

Relinquished By:	Date/Time:	Received By:	Date/Time:
for William Dreyfuss	02-06-13 1407		02-06-13 1407
	2-7-13 842		2-7-13 842

Turnaround Time: (Check)
same day _____ 72 hours _____
24 hours _____ 5 days _____
48 hours _____ normal ✓

Sample Integrity: (Check)
intact _____ on ice _____

Received in Lab By: Date/Time:

ote: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project.
yment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-0013-550 (10/10)

CHAIN OF CUSTODY FORM

[ ] Phoenix - 4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303
[ ] Tucson - 1870 W. Prince Road, Suite 59, Tucson, AZ 85705 (520) 807-3801 FAX (520) 807-3803
[ ] Las Vegas - 6000 S Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

Page 1 of 1

Client Name/Address: Pima County CRAO Lab, 3035 W El Camino Del Cerro, Tucson AZ 85745

Project/PO Number: Green Valley BS, DO#13-25603

Project Manager: Nancy Powell

Phone Number: 520-724-6183

Sampler: William Dreyfuss

Fax Number: 520-724-6071

Analysis Required: Total cyanide mg/kg; Total solids % for mg/kg; TCLP herbicides; TCLP extraction

BS - biosolids

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	Total cyanide mg/kg	Total solids % for mg/kg	TCLP herbicides	TCLP extraction						Special Instructions
Green Valley drying bed #5	BS	various	3	02-06-13	1150	none	1	1	1	1						composite - mixture
25000-1970																
1302055-01																

Relinquished By:	Date/Time:	Received By:	Date/Time:	Turnaround Time: (Check)
for William Dreyfuss	02-06-13 1407		02-06-13 1407	same day ____ 72 hours ____
Relinquished By:	Date/Time:	Received By:	Date/Time:	24 hours ____ 5 days ____
	2-7-13 842		2-7-13 842	48 hours ____ normal ✓
Relinquished By:	Date/Time:	Received in Lab By:	Date/Time:	Sample Integrity: (Check)
				intact ____ on ice ____

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

4625 East Cotton Center Blvd. Ste 189, Phoenix, AZ 85040 (602) 437-3340 Fax:(602) 454-9303

LABORATORY REPORT

Prepared For: Pima County WWTP, WESC Laboratory
3035 W El Camino Del Cerro
Tucson, AZ 85745
Attention: Nancy Powell

Project:Green Valley BS

Sampled:02/06/13
Received:02/08/13
Issued:02/25/13 16:21

NELAP #01109CA / AZ100001 Arizona DHS#AZ0728

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.
This entire report was reviewed and approved for release.

CASE NARRATIVE

LABORATORY ID	CLIENT ID	MATRIX
PWB0553-01	1302055-01	Soil

SAMPLE RECEIPT:	Samples were received intact, at 2°C, on ice and with chain of custody documentation.
HOLDING TIMES:	All samples were analyzed within prescribed holding times and/or in accordance with the TestAmerica Sample Acceptance Policy unless otherwise noted in the report.
PRESERVATION:	Samples requiring preservation were verified prior to sample analysis.
QA/QC CRITERIA:	All analyses met method criteria, except as noted in the report with data qualifiers.
COMMENTS:	No significant observations were made.
SUBCONTRACTED:	No analyses were subcontracted to an outside laboratory.

Reviewed By:

TestAmerica Phoenix

Ken Baker For Suzanne Glass
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
4625 East Cotton Center Blvd. Ste 189, Phoenix, AZ 85040 (602) 437-3340 Fax:(602) 454-9303

Pima County WWTP, WESC Laboratory
3035 W El Camino Del Cerro
Tucson, AZ 85745
Attention: Nancy Powell

Project ID: Green Valley BS
Report Number: PWB0553

Sampled: 02/06/13
Received: 02/08/13

INORGANICS

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PWB0553-01 (1302055-01 - Soil)								
Reporting Units: % by Weight								
Percent Solids	SM 2540G	13B0347	0.10	**81**	1	2/11/2013	2/11/2013	
Sample ID: PWB0553-01 (1302055-01 - Soil)								
Reporting Units: mg/kg dry								
Cyanide	SW 9010C/9014	13B0659	0.49	**8.1**	0.989	2/18/2013	2/19/2013	

TestAmerica Phoenix

Ken Baker For Suzanne Glass
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
4625 East Cotton Center Blvd. Ste 189, Phoenix, AZ 85040 (602) 437-3340 Fax:(602) 454-9303

Pima County WWTP, WESC Laboratory
3035 W El Camino Del Cerro
Tucson, AZ 85745
Attention: Nancy Powell

Project ID: Green Valley BS
Report Number: PWB0553

Sampled: 02/06/13
Received: 02/08/13

TCLP CHLORINATED HERBICIDES (EPA 1311/8151A)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	TCLP Limit	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PWB0553-01 (1302055-01 - Soil)									
Reporting Units: mg/l									
2,4,5-TP (Silvex)	EPA 1311/8151A	13B0826	0.013	ND	1	1.0	2/21/2013	2/22/2013	
2,4-D	EPA 1311/8151A	13B0826	0.013	ND	1	10.0	2/21/2013	2/22/2013	
Pentachlorophenol	EPA 1311/8151A	13B0826	0.013	ND	1	100.0	2/21/2013	2/22/2013	
Surrogate: DCAA (30-154%)				*78 %*					

TestAmerica Phoenix

Ken Baker For Suzanne Glass
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
4625 East Cotton Center Blvd. Ste 189, Phoenix, AZ 85040 (602) 437-3340 Fax:(602) 454-9303

Pima County WWTP, WESC Laboratory
3035 W El Camino Del Cerro
Tucson, AZ 85745
Attention: Nancy Powell

Project ID: Green Valley BS
Report Number: PWB0553

Sampled: 02/06/13
Received: 02/08/13

TCLP EXTRACTION

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	TCLP Limit	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PWB0553-01 (1302055-01 - Soil) - cont.									
Reporting Units: None									
TCLP Extraction	EPA 1311	13B0471	1.00	ND	1	NA	2/13/2013	2/14/2013	

TestAmerica Phoenix

Ken Baker For Suzanne Glass
Project Manager

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Tucson, AZ 85745
Attention: Nancy Powell

Project ID: Green Valley BS
Report Number: PWB0553

Sampled: 02/06/13
Received: 02/08/13

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 13B0347 Extracted: 02/11/13										
Blank Analyzed: 02/11/2013 (13B0347-BLK1)										
Percent Solids	ND	0.10	% by Weight							
Duplicate Analyzed: 02/11/2013 (13B0347-DUP1)					**Source: PWB0473-01**					
Percent Solids	78.7	0.10	% by Weight		73.3			7	10	
Duplicate Analyzed: 02/11/2013 (13B0347-DUP2)					**Source: PWB0575-06**					
Percent Solids	62.4	0.10	% by Weight		62.3			0.3	10	
Batch: 13B0659 Extracted: 02/18/13										
Blank Analyzed: 02/19/2013 (13B0659-BLK1)										
Cyanide	ND	0.40	mg/kg wet							
LCS Analyzed: 02/19/2013 (13B0659-BS1)										
Cyanide	6.97	0.40	mg/kg wet	7.33		95	90-110			
LCS Dup Analyzed: 02/19/2013 (13B0659-BSD1)										
Cyanide	7.91	0.40	mg/kg wet	7.55		105	90-110	13	20	
Matrix Spike Analyzed: 02/19/2013 (13B0659-MS1)					**Source: PWB0553-01**					
Cyanide	18.5	1.5	mg/kg dry	12.0	8.14	87	80-120			
Matrix Spike Dup Analyzed: 02/19/2013 (13B0659-MSD1)					**Source: PWB0553-01**					
Cyanide	18.5	1.5	mg/kg dry	12.2	8.14	84	80-120	0.5	20	

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Attention: Nancy Powell

Project ID: Green Valley BS
Report Number: PWB0553

Sampled: 02/06/13
Received: 02/08/13

METHOD BLANK/QC DATA

TCLP CHLORINATED HERBICIDES (EPA 1311/8151A)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 13B0826 Extracted: 02/21/13										
Blank Analyzed: 02/22/2013 (13B0826-BLK1)										
2,4,5-TP (Silvex)	ND	0.013	mg/l							
2,4-D	ND	0.013	mg/l							
Pentachlorophenol	ND	0.013	mg/l							
Surrogate: DCAA	*0.0291*		*mg/l*	*0.0500*		*58*	*30-154*			
Blank Analyzed: 02/22/2013 (13B0826-BLK2)										
2,4,5-TP (Silvex)	ND	0.013	mg/l							
2,4-D	ND	0.013	mg/l							
Pentachlorophenol	ND	0.013	mg/l							
Surrogate: DCAA	*0.0363*		*mg/l*	*0.0500*		*73*	*30-154*			
LCS Analyzed: 02/22/2013 (13B0826-BS1)										
2,4,5-TP (Silvex)	0.0278	0.013	mg/l	0.0500		56	52-136			
2,4-D	0.0277	0.013	mg/l	0.0500		55	38-124			
Pentachlorophenol	0.0290	0.013	mg/l	0.0500		58	46-131			
Surrogate: DCAA	*0.0214*		*mg/l*	*0.0500*		*43*	*30-140*			
LCS Dup Analyzed: 02/22/2013 (13B0826-BSD1)										
2,4,5-TP (Silvex)	0.0370	0.013	mg/l	0.0500		74	52-136	28	20	*R6*
2,4-D	0.0372	0.013	mg/l	0.0500		74	38-124	29	20	*R6*
Pentachlorophenol	0.0398	0.013	mg/l	0.0500		80	46-131	31	20	*R6*
Surrogate: DCAA	*0.0300*		*mg/l*	*0.0500*		*60*	*30-140*			
Matrix Spike Analyzed: 02/22/2013 (13B0826-MS1)					**Source: PWB0984-01**					
2,4,5-TP (Silvex)	0.364	0.65	mg/l	0.500	ND	73	31-158			
2,4-D	0.426	0.65	mg/l	0.500	ND	85	23-159			
Pentachlorophenol	0.184	0.65	mg/l	0.500	ND	37	36-143			
Surrogate: DCAA	*0.371*		*mg/l*	*0.500*		*74*	*30-154*			

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Pima County WWTP, WESC Laboratory 3035 W El Camino Del Cerro Tucson, AZ 85745 Attention: Nancy Powell	Project ID: Green Valley BS Report Number: PWB0553	Sampled: 02/06/13 Received: 02/08/13

METHOD BLANK/QC DATA

TCLP CHLORINATED HERBICIDES (EPA 1311/8151A)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 13B0826 Extracted: 02/21/13										
Matrix Spike Dup Analyzed: 02/22/2013 (13B0826-MSD1)					**Source: PWB0984-01**					
2,4,5-TP (Silvex)	0.316	0.65	mg/l	0.500	ND	63	31-158	14	35	
2,4-D	0.372	0.65	mg/l	0.500	ND	74	23-159	14	35	
Pentachlorophenol	0.150	0.65	mg/l	0.500	ND	30	36-143	20	35	*M2*
Surrogate: DCAA	*0.328*		*mg/l*	*0.500*		*66*	*30-154*			

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METHOD BLANK/QC DATA

TCLP EXTRACTION

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 13B0471 Extracted: 02/13/13										
Blank Analyzed: 02/14/2013 (13B0471-BLK1)										
TCLP Extraction	ND	1.00	None							
Blank Analyzed: 02/14/2013 (13B0471-BLK2)										
TCLP Extraction	ND	1.00	None							

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DATA QUALIFIERS AND DEFINITIONS

M2	Matrix spike recovery was low; the associated blank spike recovery was acceptable.
R6	LFB/LFBD RPD exceeded the method acceptance limit. Recovery met acceptance criteria.
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
RPD	Relative Percent Difference

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Certification Summary

TestAmerica Phoenix

Method	Matrix	Nelac	Arizona
EPA 1311/8151A	Soil		X
EPA 1311	Soil		X
SM 2540G	Soil		X
SW 9010C/9014	Soil		X

Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at www.testamericainc.com

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THE LEADER IN ENVIRONMENTAL TESTING

TAL-0013-550 (10/10)

CHAIN OF CUSTODY FORM PWB0553-01

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[ ] Tucson - 1870 W. Prince Road, Suite 59, Tucson, AZ 85705 (520) 807-3801 FAX (520) 807-3803
[ ] Las Vegas - 6000 S Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

Client Name/Address: Pima County CRAO Lab, 3035 W El Camino Del Cerro, Tucson AZ 85745

Project/PO Number: Green Valley BS, DO#13-25603

Project Manager: Nancy Powell

Phone Number: 520-724-6183

Sampler: William Dreyfuss

Fax Number: 520-724-6071

Analysis Required: Total cyanide mg/kg; Total solids % or mg/kg; TCLP herbicides; TCLP extraction

BS- biosolids

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	Total cyanide mg/kg	Total solids % or mg/kg	TCLP herbicides	TCLP extraction	Special Instructions
Green Valley drying bed #5	BS	various	3	02-06-13	1150	none	1	1	1	1	composite - mixture
25000-1970											
1302055-01											

Relinquished By:	Date/Time:	Received By:	Date/Time:
for William Dreyfuss	02-06-13 1407		02-06-13 1407
	2-7-13 842		2-7-13 842
	2-7-13 1520	Received in Lab By:	2/9/13 10:00

Turnaround Time: (Check)
same day ____ 72 hours ____
24 hours ____ 5 days ____
48 hours ____ normal ✓

Sample Integrity: (Check)
intact ____ on ice ✓

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

date should be 2-8-13 per S.G.

3-13-13 4 1

24 Phx

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office (CRAO) Laboratory
2955 W. Calle Agua Nueva, Tucson Arizona 85745-9750, Phone (520) 724-6200

Report Date: 08/28/2013
Laboratory License: AZO159

Sample Analysis Report

Green Valley WRF

May 2013

Sample Integrity

SAMPLE RECEIPT: Samples were received intact at the required temperature, unless otherwise noted with a data qualifier below. Please refer to the Chain of Custody for sample receipt details.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Pima County CRAO Laboratory Quality Manual.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS:

Notes and Definitions:

See attached

Case Narratives:

See attached

All results on this report intended for compliance submission must have the associated chain(s) of custody attached for the results to meet reporting requirements as per ADHS Laboratory licensure rules. If you have received this report for compliance purposes and it is not complete, please contact the Compliance and Regulatory Affairs Office for a final report in its entirety.

Reviewed By:

08/28/13

Date

Laboratory Director or Designee
Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
BNROD-North Aerobic Digester Sludge (25000-1950)											
1305084-02	D	% Solids	05/08/13 9:10	SM 2540G	5/9/13 14:49	**2.62**	%		0.01		JRV
1305084-02	D	% Solids, Total Volatile	05/08/13 9:10	SM 2540G	5/9/13 14:49	**81.5**	%		0.01	T6	JRV
BNROD-Biosolids from drying bed #5 (25000-1970)											
1305013-01	C	Nitrogen Total Biosolids	05/01/13 8:15	Calculated	5/7/13 13:54	**58229**	mg/kg dry	33.15	40,302.00		AMK
1305013-01	C	Total Kjeldahl Nitrogen	05/01/13 8:15	EPA 351.2	5/5/13 11:28	**57898**	mg/kg dry	39.48	47,998.18		AMK
1305013-01	C	Nitrate/Nitrite	05/01/13 8:15	EPA 353.2	5/7/13 13:54	**331.09**	mg/kg dry	0.39	4.76		KKH
1305013-01	C	Antimony	05/01/13 8:15	EPA 6010B	5/23/13 12:09	**ND**	mg/kg dry	3.30	13.39		MLB
1305013-01	C	Arsenic	05/01/13 8:15	EPA 6010B	5/23/13 13:14	**12.8**	mg/kg dry	5.14	13.39	J	MLB
1305013-01	C	Beryllium	05/01/13 8:15	EPA 6010B	5/23/13 12:09	**0.215**	mg/kg dry	0.0272	2.68	J	MLB
1305013-01	C	Cadmium	05/01/13 8:15	EPA 6010B	5/23/13 12:09	**2.40**	mg/kg dry	0.231	5.36	J	MLB
1305013-01	C	Chromium	05/01/13 8:15	EPA 6010B	5/23/13 12:09	**51.5**	mg/kg dry	0.411	13.39		MLB
1305013-01	C	Copper	05/01/13 8:15	EPA 6010B	5/23/13 14:10	**556**	mg/kg dry	0.742	13.39		MLB
1305013-01	C	Lead	05/01/13 8:15	EPA 6010B	5/23/13 13:14	**20.2**	mg/kg dry	4.73	13.39		MLB
1305013-01	C	Molybdenum	05/01/13 8:15	EPA 6010B	5/23/13 12:09	**20.8**	mg/kg dry	0.658	5.36		MLB
1305013-01	C	Nickel	05/01/13 8:15	EPA 6010B	5/23/13 13:14	**19.6**	mg/kg dry	3.04	13.39		MLB
1305013-01	C	Selenium	05/01/13 8:15	EPA 6010B	5/23/13 12:09	**ND**	mg/kg dry	5.42	13.39		MLB
1305013-01	C	Silver	05/01/13 8:15	EPA 6010B	5/23/13 12:09	**11.6**	mg/kg dry	0.445	1.34		MLB
1305013-01	C	Thallium	05/01/13 8:15	EPA 6010B	5/23/13 13:14	**ND**	mg/kg dry	7.63	13.39		MLB
1305013-01	C	Zinc	05/01/13 8:15	EPA 6010B	5/23/13 12:09	**808**	mg/kg dry	1.49	13.39		MLB
1305013-01	C	Mercury	05/01/13 8:15	EPA 7471A	5/7/13 9:54	**2.41**	mg/kg dry	0.0225	0.06		DDO
1305013-01RE1	C	Mercury	05/01/13 8:15	EPA 7471A	5/7/13 10:05	**2.38**	mg/kg dry	0.0225	0.24	D2	DDO
1305013-02	C	Arsenic	05/01/13 8:15	TCLP/EPA 6010B	5/29/13 15:02	**0.181**	mg/L	0.00898	0.03		MLB
1305013-02	C	Barium	05/01/13 8:15	TCLP/EPA 6010B	5/29/13 15:02	**0.0903**	mg/L	0.000580	0.03		MLB
1305013-02	C	Cadmium	05/01/13 8:15	TCLP/EPA 6010B	5/29/13 15:02	**0.00436**	mg/L	0.00124	0.01	J	MLB
1305013-02	C	Chromium	05/01/13 8:15	TCLP/EPA 6010B	5/29/13 15:02	**0.0207**	mg/L	0.00190	0.03	J	MLB
1305013-02	C	Lead	05/01/13 8:15	TCLP/EPA 6010B	5/29/13 15:02	**ND**	mg/L	0.0134	0.03		MLB
1305013-02	C	Selenium	05/01/13 8:15	TCLP/EPA 6010B	6/5/13 15:12	**ND**	mg/L	0.0205	0.03		MLB
1305013-02	C	Silver	05/01/13 8:15	TCLP/EPA 6010B	5/29/13 15:02	**ND**	mg/L	0.00145	0.00		MLB
1305013-02	C	Mercury	05/01/13 8:15	TCLP/EPA 7470	6/7/13 12:42	**ND**	mg/L	0.000150	0.00		DDO
1305013-02RE1	C	Mercury	05/01/13 8:15	TCLP/EPA 7470	6/7/13 12:43	**ND**	mg/L	0.000150	0.00		DDO
1305013-01	C	% Solids	05/01/13 8:15	SM 2540G	5/2/13 15:40	**84.0**	%		0.01		JVR
1305013-01	C	% Solids, Total Volatile	05/01/13 8:15	SM 2540G	5/2/13 15:40	**65.2**	%		0.01	T6	JVR
1305013-01	C	Acrolein	05/01/13 8:15	EPA 624	5/6/13 13:35	**ND**	mg/kg dry	0.00111	0.24		ev
1305013-01	C	Acrylonitrile	05/01/13 8:15	EPA 624	5/6/13 13:35	**ND**	mg/kg dry	0.00116	0.24		ev
1305013-01	C	1,1,1-Trichlorocthane	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.00005	0.00001	D1, D4	DLC
1305013-01	C	1,1,2,2-Tetrachloroethane	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.00009	0.00001	D1, D4, M1	DLC
1305013-01	C	1,1,2-Trichloroethane	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.0001	0.00001	D1, D4, M1	DLC
1305013-01	C	1,1-Dichloroethane	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.00006	0.00001	D1, D4	DLC
1305013-01	C	1,1-Dichloroethene	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.00007	0.00001	D1, D4	DLC
1305013-01	C	1,2-Dichlorobenzene	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.0002	0.00001	D1, D4	DLC
1305013-01	C	1,2-Dichloroethane	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.0001	0.00001	D1, D4	DLC
1305013-01	C	1,2-Dichloropropane	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.0001	0.00001	D1, D4	DLC
1305013-01	C	1,3-Dichlorobenzene	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.0001	0.00001	D1, D4	DLC
1305013-01	C	1,4-Dichlorobenzene	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.0002	0.00001	D1, D4	DLC
1305013-01	C	2-Chloroethyl vinyl ether	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.0002	0.00002	D1, D4, M1	DLC
1305013-01	C	Benzene	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.0001	0.00001	D1, D4	DLC
1305013-01	C	Bromodichloromethane	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.0002	0.00001	D1, D4, M1	DLC
1305013-01	C	Bromoform	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.00008	0.00001	D1, D4	DLC
1305013-01	C	Bromomethane	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.00009	0.00001	D1, D4	DLC
1305013-01	C	Carbon Tetrachloride	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.00006	0.00001	D1, D4	DLC
1305013-01	C	Chlorobenzene	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.0001	0.00001	D1, D4	DLC
1305013-01	C	Chloroethane	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.0002	0.00001	D1, D4, M1	DLC
1305013-01	C	Chloroform	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.0001	0.00001	D1, D4	DLC
1305013-01	C	Chloromethane	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.00008	0.00001	D1, D4, M1, V1	DLC
1305013-01	C	cis-1,3-Dichloropropene	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.0001	0.00001	D1, D4	DLC
1305013-01	C	Dibromochloromethane	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.0001	0.00001	D1, D4	DLC
1305013-01	C	Ethyl Benzene	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.00008	0.00001	D1, D4, M1	DLC
1305013-01	C	Methylene Chloride	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.0001	0.00001	D1, D4	DLC
1305013-01	C	Tetrachloroethene	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.00006	0.00001	D1, D4	DLC
1305013-01	C	Toluene	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.00008	0.00001	D1, D4	DLC
1305013-01	C	Total Trihalomethanes	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.00009	0.00001	D1, D4	DLC
1305013-01	C	trans-1,2-Dichloroethene	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.00009	0.00001	D1, D4	DLC
1305013-01	C	trans-1,3-Dichloropropene	05/01/13 8:15	EPA 624	5/8/13 19:38	**ND**	mg/kg dry	0.0001	0.00001	D1, D4	DLC

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1305013-01	C	Trichloroethene	05/01/13 8:15	EPA 624	5/8/13 19:38	ND	mg/kg dry	0.00009	0.00001	D1, D4	DLC
1305013-01	C	Trichlorofluoromethane	05/01/13 8:15	EPA 624	5/8/13 19:38	ND	mg/kg dry	0.00005	0.00001	D1, D4	DLC
1305013-01	C	Vinyl chloride	05/01/13 8:15	EPA 624	5/8/13 19:38	ND	mg/kg dry	0.00005	0.00001	D1, D4, M1	DLC
1305013-01	C	4,4-DDD	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00006	0.00005	D1, D7	mam-z
1305013-01	C	4,4-DDE	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00005	0.00005	D1, D7	mam-z
1305013-01	C	4,4-DDT	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00004	0.00005	D1, D7	mam-z
1305013-01	C	Aldrin	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00010	0.00005	D1, D7	mam-z
1305013-01	C	alpha-BHC	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00009	0.00005	D1, D7	mam-z
1305013-01	C	beta-BHC	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00010	0.00005	D1, D7	mam-z
1305013-01	C	Chlordane	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00070	0.00110	D1, D7	mam-z
1305013-01	C	delta-BHC	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00008	0.00005	D1, D7	mam-z
1305013-01	C	Dieldrin	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00007	0.00005	D1, D7	mam-z
1305013-01	C	Endosulfan I	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00005	0.00005	D1, D7	mam-z
1305013-01	C	Endosulfan II	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00003	0.00009	D1, D7	mam-z
1305013-01	C	Endosulfan sulfate	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00005	0.00009	D1, D7	mam-z
1305013-01	C	Endrin	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00010	0.00005	D1, D7, N1	mam-z
1305013-01	C	Endrin aldehyde	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00007	0.00005	D1, D7	mam-z
1305013-01	C	gamma-BHC (Lindane)	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00009	0.00005	D1, D7	mam-z
1305013-01	C	Heptachlor	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00010	0.00005	D1, D7	mam-z
1305013-01	C	Heptachlor Epoxide	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00011	0.00005	D1, D7	mam-z
1305013-01	C	PCB 1016	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00010	0.00011	D1, D7	mam-z
1305013-01	C	PCB 1221	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00009	0.00011	D1, D7	mam-z
1305013-01	C	PCB 1232	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00016	0.00011	D1, D7	mam-z
1305013-01	C	PCB 1242	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00010	0.00018	D1, D7	mam-z
1305013-01	C	PCB 1248	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00016	0.00018	D1, D7	mam-z
1305013-01	C	PCB 1254	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00007	0.00011	D1, D7	mam-z
1305013-01	C	PCB 1260	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00025	0.00011	D1, D7	mam-z
1305013-01	C	Total PCBs	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00030	0.00018	D1, D7	mam-z
1305013-01	C	Toxaphene	05/01/13 8:15	EPA 625	5/17/13 20:28	ND	mg/kg dry	0.00508	0.00221	D1, D7	mam-z
1305013-01	C	2,3,7,8-TCDD - Dioxin Scan	05/01/13 8:15	EPA 625	5/22/13 20:34	ND	ug/kg dry		29.77		SJM
1305013-01	C	n-Octadecane	05/01/13 8:15	EPA 625	5/22/13 19:20	**1.33**	mg/kg dry	0.002	3.60	S7, D1, D7, N1, J	SJM
1305013-01	C	4-Methylphenol	05/01/13 8:15	EPA 625	5/22/13 19:20	**2.85**	mg/kg dry	0.003	3.60	D1, D7, N1, S7, J	SJM
1305013-01	C	bis(2-ethylhexyl)phthalate	05/01/13 8:15	EPA 625	5/22/13 19:20	**4.53**	mg/kg dry	0.003	3.60	D1, D7, J	SJM
1305013-01	C	1,2,4-Trichlorobenzene	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D7, S7, D1	SJM
1305013-01	C	1,2-Diphenylhydrazine	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7, S7	SJM
1305013-01	C	2,3-Dichloroaniline	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7, S7	SJM
1305013-01	C	2,4,6-Trichlorophenol	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7, S7	SJM
1305013-01	C	2,4-Dichlorophenol	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7, S7	SJM
1305013-01	C	2,4-Dimethylphenol	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.003	3.60	D1, D7, N1, S7	SJM
1305013-01	C	2,4-Dinitrophenol	17/13/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.009	6.00	S7, D1, D7, N1	SJM
1305013-01	C	2,4-Dinitrotoluene	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7, S7	SJM
1305013-01	C	2,6-Dinitrotoluene	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.002	1.20	D1, D7, S7	SJM
1305013-01	C	2-Chloronaphthalene	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7, S7	SJM
1305013-01	C	2-Chlorophenol	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.002	1.20	D1, D7, S7	SJM
1305013-01	C	2-Methyl-4,6-dinitrophenol	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.004	3.60	D1, D7, N1, S7	SJM
1305013-01	C	2-Methylphenol	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.002	1.20	S7, D1, D7, N1	SJM
1305013-01	C	2-Nitrophenol	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.002	3.60	D1, D7, S7	SJM
1305013-01	C	3,3-Dichlorobenzidine	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.002	6.00	D1, D7	SJM
1305013-01	C	4-Bromophenyl phenyl ether	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7, S7	SJM
1305013-01	C	4-Chloro-3-methylphenol	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7, S7	SJM
1305013-01	C	4-Chlorophenyl phenyl ether	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7, S7	SJM
1305013-01	C	4-Nitrophenol	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.005	3.60	D1, D7, S7	SJM
1305013-01	C	Acenaphthene	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7, S7	SJM
1305013-01	C	Acenaphthylene	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.0008	1.20	D1, D7, S7	SJM
1305013-01	C	Anthracene	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7, S7	SJM
1305013-01	C	Benzidine	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.02	21.00	D1, D7, N1	SJM
1305013-01	C	Benzo[a]anthracene	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7	SJM
1305013-01	C	Benzo[a]pyrene	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.002	1.20	D1, D7	SJM
1305013-01	C	Benzo[b]fluoranthene	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.002	1.20	D1, D7	SJM
1305013-01	C	Benzo[ghi]perylene	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.002	1.20	D1, D7	SJM
1305013-01	C	Benzo[k]fluoranthene	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.002	3.60	D1, D7	SJM
1305013-01	C	bis(2-chloroethoxy)methane	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7, S7	SJM
1305013-01	C	bis(2-chloroethyl)ether	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7, N1, S7	SJM
1305013-01	C	bis(2-chloroisopropyl)ether	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7, N1, S7	SJM
1305013-01	C	Butylbenzylphthalate	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.002	1.20	D1, D7	SJM
1305013-01	C	Carbazole	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7, N1, S7	SJM
1305013-01	C	Chrysene	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7	SJM
1305013-01	C	Dibenzo(a,h)anthracene	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.002	1.20	D1, D7	SJM
1305013-01	C	Diethyl phthalate	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	S7, D1, D7	SJM
1305013-01	C	Dimethyl phthalate	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.0007	1.20	D1, D7, N1, S7	SJM
1305013-01	C	Di-n-butyl phthalate	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.002	1.20	D1, D7, S7	SJM

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1305013-01	C	Di-n-octyl phthalate	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.002	1.20	D1, D7	SJM
1305013-01	C	Fluoranthene	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7, S7	SJM
1305013-01	C	Fluorene	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7, S7	SJM
1305013-01	C	Hexachlorobenzene	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.0008	1.20	D1, D7, S7	SJM
1305013-01	C	Hexachlorobutadiene	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7, S7	SJM
1305013-01	C	Hexachlorocyclopentadiene	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.003	3.60	D1, D7, S7	SJM
1305013-01	C	Hexachloroethane	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7, N1, S7	SJM
1305013-01	C	Indeno(1,2,3-cd)pyrene	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.002	3.60	D1, D7	SJM
1305013-01	C	Isophorone	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7, N1, S7	SJM
1305013-01	C	Naphthalene	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7, S7	SJM
1305013-01	C	n-Decane	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.002	1.20	D1, D7, N1, S7	SJM
1305013-01	C	Nitrobenzene	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.003	3.60	D1, D7, S7	SJM
1305013-01	C	N-Nitrosodimethylamine	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.004	3.60	D1, D7, N1, S7	SJM
1305013-01	C	N-Nitroso-di-n-propylamine	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7, S7	SJM
1305013-01	C	N-Nitrosodiphenylamine	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.002	1.20	D1, D7, S7	SJM
1305013-01	C	Pentachlorophenol	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.003	3.60	D1, D7, S7	SJM
1305013-01	C	Phenanthrene	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7, S7	SJM
1305013-01	C	Phenol	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.002	3.60	D1, D7, S7	SJM
1305013-01	C	Pyrene	05/01/13 8:15	EPA 625	5/22/13 19:20	ND	mg/kg dry	0.001	1.20	D1, D7	SJM
1305013-01	C	1,2,4-Trichlorobenzene	05/01/13 8:15	EPA 8260	5/8/13 19:38	ND	mg/kg dry	0.0003	0.00001	D1, D4	DLC
1305013-01	C	1,2-Dibromo-3-chloropropane	05/01/13 8:15	EPA 8260	5/8/13 19:38	ND	mg/kg dry	0.0002	0.00001	D1, D4	DLC
1305013-01	C	1,2-Dibromoethane	05/01/13 8:15	EPA 8260	5/8/13 19:38	ND	mg/kg dry	0.0001	0.00001	D1, D4	DLC
1305013-01	C	cis-1,2-Dichloroethene	05/01/13 8:15	EPA 8260	5/8/13 19:38	ND	mg/kg dry	0.0001	0.00001	D1, D4	DLC
1305013-01	C	m,p-Xylenes	05/01/13 8:15	EPA 8260	5/8/13 19:38	ND	mg/kg dry	0.0001	0.00001	D1, D4	DLC
1305013-01	C	o-Xylene	05/01/13 8:15	EPA 8260	5/8/13 19:38	ND	mg/kg dry	0.00007	0.00001	D1, D4	DLC
1305013-01	C	Styrene	05/01/13 8:15	EPA 8260	5/8/13 19:38	ND	mg/kg dry	0.0001	0.00001	D1, D4	DLC
1305013-01	C	Xylenes, total	05/01/13 8:15	EPA 8260	5/8/13 19:38	ND	mg/kg dry	0.0001	0.00001	D1, D4	DLC
1305013-01	C	Methoxychlor	05/01/13 8:15	EPA 8270C	5/17/13 20:28	ND	mg/kg dry	0.00006	0.00005	D1, D7	mam-z
1305013-01	C	1,2-Diphenylhydrazine	05/01/13 8:15	EPA 8270C	5/22/13 19:20	ND	mg/kg dry	0.001	1.43	D1, D7, S7	SJM
1305013-01	C	Methyl Ethyl Ketone	05/01/13 8:15	TCLP/EPA 8260B	5/17/13 16:16	**48.8**	ug/L	0.0600	2.00	B1	DLC
1305013-01	C	1,1-Dichloroethene	05/01/13 8:15	TCLP/EPA 8260B	5/17/13 16:16	ND	ug/L	0.0700	0.50		DLC
1305013-01	C	1,2-Dichloroethane	05/01/13 8:15	TCLP/EPA 8260B	5/17/13 16:16	ND	ug/L	0.120	0.50		DLC
1305013-01	C	1,4-Dichlorobenzene	05/01/13 8:15	TCLP/EPA 8260B	5/17/13 16:16	ND	ug/L	0.170	0.50		DLC
1305013-01	C	Benzene	05/01/13 8:15	TCLP/EPA 8260B	5/17/13 16:16	ND	ug/L	0.100	0.50		DLC
1305013-01	C	Carbon Tetrachloride	05/01/13 8:15	TCLP/EPA 8260B	5/17/13 16:16	ND	ug/L	0.0600	0.50		DLC
1305013-01	C	Chlorobenzene	05/01/13 8:15	TCLP/EPA 8260B	5/17/13 16:16	ND	ug/L	0.110	0.50		DLC
1305013-01	C	Chloroform	05/01/13 8:15	TCLP/EPA 8260B	5/17/13 16:16	ND	ug/L	0.110	0.50		DLC
1305013-01	C	Hexachlorobutadiene	05/01/13 8:15	TCLP/EPA 8260B	5/17/13 16:16	ND	ug/L	0.500	0.50		DLC
1305013-01	C	Tetrachloroethene	05/01/13 8:15	TCLP/EPA 8260B	5/17/13 16:16	ND	ug/L	0.0600	0.50		DLC
1305013-01	C	Trichloroethene	05/01/13 8:15	TCLP/EPA 8260B	5/17/13 16:16	ND	ug/L	0.0900	0.50	N1	DLC
1305013-01	C	Vinyl chloride	05/01/13 8:15	TCLP/EPA 8260B	5/17/13 16:16	ND	ug/L	0.0500	0.50		DLC
1305013-01	C	Chlordane	05/01/13 8:15	TCLP/EPA 8270C	5/17/13 18:23	ND	ug/L	1.38	8.00	D1, D7	mam-z
1305013-01	C	Endrin	05/01/13 8:15	TCLP/EPA 8270C	5/17/13 18:23	ND	ug/L	0.200	2.00	D1, D7, R4	mam-z
1305013-01	C	gamma-BHC (Lindane)	05/01/13 8:15	TCLP/EPA 8270C	5/17/13 18:23	ND	ug/L	0.270	2.00	D1, D7	mam-z
1305013-01	C	Heptachlor	05/01/13 8:15	TCLP/EPA 8270C	5/17/13 18:23	ND	ug/L	0.270	2.00	D1, D7	mam-z
1305013-01	C	Heptachlor Epoxide	05/01/13 8:15	TCLP/EPA 8270C	5/17/13 18:23	ND	ug/L	0.290	2.00	D1, D7, L2, N1	mam-z
1305013-01	C	Methoxychlor	05/01/13 8:15	TCLP/EPA 8270C	5/17/13 20:28	ND	ug/L	0.270	2.00	D1, D7, E7	mam-z
1305013-01	C	Toxaphene	05/01/13 8:15	TCLP/EPA 8270C	5/17/13 18:23	ND	ug/L	3.79	24.00	D1, D7	mam-z
1305013-01	C	3 & 4-Methylphenol	05/01/13 8:15	TCLP/EPA 8270C	6/7/13 13:10	**42.1**	ug/L	1.23	20.00	D1, D7, M1	SJM
1305013-01	C	1,4-Dichlorobenzene	05/01/13 8:15	TCLP/EPA 8270C	6/7/13 13:10	ND	ug/L	0.540	8.00	D1, D7	SJM
1305013-01	C	2,4,5-Trichlorophenol	05/01/13 8:15	TCLP/EPA 8270C	6/7/13 13:10	ND	ug/L	14.6	100.00	D1, D7	SJM
1305013-01	C	2,4,6-Trichlorophenol	05/01/13 8:15	TCLP/EPA 8270C	6/7/13 13:10	ND	ug/L	11.9	100.00	D1, D7	SJM
1305013-01	C	2,4-Dinitrotoluene	05/01/13 8:15	TCLP/EPA 8270C	6/7/13 13:10	ND	ug/L	12.4	100.00	D1, D7, M1	SJM
1305013-01	C	2-Methylphenol	05/01/13 8:15	TCLP/EPA 8270C	6/7/13 13:10	ND	ug/L	0.770	20.00	D1, D7, M1	SJM
1305013-01	C	Hexachlorobenzene	05/01/13 8:15	TCLP/EPA 8270C	6/7/13 13:10	ND	ug/L	0.980	8.00	D1, D7	SJM
1305013-01	C	Hexachlorobutadiene	05/01/13 8:15	TCLP/EPA 8270C	6/7/13 13:10	ND	ug/L	1.72	8.00	D1, D7	SJM
1305013-01	C	Hexachloroethane	05/01/13 8:15	TCLP/EPA 8270C	6/7/13 13:10	ND	ug/L	0.730	8.00	D1, D7, M1	SJM
1305013-01	C	Nitrobenzene	05/01/13 8:15	TCLP/EPA 8270C	6/7/13 13:10	ND	ug/L	0.950	8.00	D1, D7	SJM
1305013-01	C	Pentachlorophenol	05/01/13 8:15	TCLP/EPA 8270C	6/7/13 13:10	ND	ug/L	7.72	40.00	D1, D7	SJM
1305013-01	C	Pyridine	05/01/13 8:15	TCLP/EPA 8270C	6/7/13 13:10	ND	ug/L	1.22	8.00	D1, D7	SJM
1305013-01	C	Ignitability	05/01/13 8:15	1030	5/10/13 17:25	**Non-Ignitabl**	NONE				TS *
* Analysis Performed by:TestAmerica Phoenix - See attached contract lab report for official results.											
1305013-01	C	2,4-D	05/01/13 8:15	8151A	5/11/13 4:03	ND	mg/Kg dry		0.060	V1	CL *
1305013-01	C	Pentachlorophenol	05/01/13 8:15	8151A	5/11/13 4:03	ND	mg/Kg dry		0.060		CL *
1305013-01	C	Silvex (2,4,5-TP)	05/01/13 8:15	8151A	5/11/13 4:03	ND	mg/Kg dry		0.060		CL *
* Analysis Performed by:TestAmerica Phoenix - See attached contract lab report for official results.											
1305013-01	C	Cyanide, Total	05/01/13 8:15	9014	5/15/13 16:40	**5.6**	mg/Kg dry		0.46		TS *
* Analysis Performed by:TestAmerica Phoenix - See attached contract lab report for official results.											
1305013-01	C	Sulfide	05/01/13 8:15	9034	5/7/13 22:34	ND	mg/Kg dry		24		NC *

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst

* Analysis Performed by:TestAmerica Phoenix - See attached contract lab report for official results.

Qualifier Definitions

B1	Target analyte detected in method blank at or above the method reporting limit.
B4	Target analyte detected in blank at or above method acceptance criteria.
D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of target analyte.
D4	Minimum Reporting Limit (MRL) adjusted to reflect sample amount received and analyzed.
D7	Minimum Reporting Limit adjusted to reflect sample dilution.
E7	Concentration estimated. Internal standard recoveries did not meet laboratory acceptance criteria.
J	Concentration estimated. Analyte was detected below laboratory minimum reporting limit (MRL) but above MDL.
L2	The associated blank spike recovery was below laboratory acceptance limits.
M1	Matrix spike recovery was high; the associated blank spike recovery was acceptable.
N1	See case narrative.
R4	MS/MSD RPD exceeded the method acceptance limit. Recovery met acceptance criteria.
R8	Sample RPD exceeded the method acceptance limit.
S7	Surrogate recovery was below laboratory and method acceptance limits. Unable to confirm matrix effect.
T6	The reported result cannot be used for compliance purposes.
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample,

General Notes and Definitions

C	Sample Type - Composite
D	Sample Type - Discrete
DD	Sample Type - Discrete Duplicate
ND	Analyte NOT DETECTED at or above the reporting limit (MDL)
NR	Not Reported
DET	Analyte DETECTED
DRY	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
Analysis Date	Analysis Date represents the final reading date.
Field Results	Field Results performed by "SMPLR" (Sampler), are not subject to approval of Laboratory Director.
Solids, Total Volatile	Used for process control samples only.
RE	Re-Analysis has been performed.

Case Narrative(s)

1305013-01S
This sample was analyzed for EPA Method 8260 Volatiles on 05/17/13. Target analytes flagged with N1 failed the Matrix Spike from the same analytical batch but the spike was performed on a different sample. DLC

1305013-01
This sample was analyzed for EPA Method 8270C TCLP-Pesticides. Heptachlor Epoxide failed recovery in the Matrix Spike and also in the Laboratory Control Sample. High matrix interferences, re-extraction of the sample was not possible. MAM-Z.

1305013-01
This sample was extracted for EPA Method 625 Pesticides on 05/08/13. Target analytes flagged with N1for this method failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample. MAM-Z

1305013-01
This sample was extracted for EPA Method 625 Semi-volatiles on. 05/08/13 Target analytes flagged with N1 failed the Matrix Spike from the same extraction batch but the spike was performed on a different sample.
SJM

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1305084-02

SITE & LOCATION: GREEN VALLEY WWTF-BNROD-NORTH AEROBIC DIGESTER SLUDGE

SITE-LOCATION NUMBER: 25000-1950 (XXXXX-XXXX)

SAMPLE START DATE: ____ (MM / DD / YYYY)

SAMPLE START TIME: ____ (24 Hour Clock)

SUBMITTER: Sub-Regional Facilities

SAMPLE END DATE: 05/08/2013 (MM / DD / YYYY)

SAMPLE END TIME: 0910 (24 Hour Clock)

SAMPLER: GARRISON (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ☐ AZPDES ☐ Reuse ■ Process Control ☐ IWC ☐ USFS ☐ Other ____

Sample Matrix: ☐ Biosolids ☐ Soil ■ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ____ ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐			
Cobalt	☐	☐			
Copper	☐	☐			
Hardness	☐	☐			
Iron	☐	☐			
Lead	☐	☐			
Magnesium	☐	☐			
Manganese	☐	☐			
Mercury	☐	☐			
Molybdenum	☐	☐			
Nickel	☐	☐			
Potassium	☐	☐			
Selenium	☐	☐			
Silver	☐	☐			
Sodium	☐	☐			
Strontium	☐	☐			
Thallium	☐	☐			
Tin	☐	☐			

WET METHODS	D	C
Ammonia as N	☐	☐
Chloride	☐	☐
Cyanide, Total	☐	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	☐
Nitrite as N	☐	☐
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	☐
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other ____	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other ____	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	■	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	■	☐
Solids, Volatile Suspended	☐	☐
Other ____	☐	☐

OTHER	D	C
____	☐	☐
____	☐	☐
____	☐	☐
____	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*	____	µg/L
☐ Conductivity *SM 2510 B*	____	µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*	____	mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*	____	°C
☐ Total Depth of Well	____	feet
☐ Depth to Water	____	feet
☐ Other ____	____	____

Comments/Instructions: No dates and time on label. GOS

# of Bottles Delivered: 1 GOS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials: ____ ____

LAB USE ONLY

Sample Integrity/Preservation:

Temperature: 4 °C

Initials: GOS

Non-Preserved	1	#
HNO_3	____	#
H_2SO_4	____	#
HCl	____	#
NaOH	____	#
$Na_2S_2O_3$	____	#
$Zn(C_2H_3O_2)_2$	____	#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☐	☒	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☒
Received from a refrigerator?	☐	☒	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

Chain of Custody Record (Signatures Only)

Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Refridgerator	Refridgerator	5-8-13	0923
Refridgerator		58-13	1028
		05-08-13	1218

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1305013-01

SITE & LOCATION: Green Valley Bio-Solids Drying Bed #5 (BNROD)

SITE-LOCATION NUMBER: 25000-1970 (XXXXX-XXXX)

SAMPLE START DATE: 05/01/2013 (MM / DD / YYYY)

SAMPLE START TIME: 0750 (24 Hour Clock)

SUBMITTER: Sub-Regional Facilities

SAMPLE END DATE: 05/01/2013 (MM / DD / YYYY)

SAMPLE END TIME: 0815 (24 Hour Clock)

SAMPLER: Mailloux (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ■ 503 ■ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ☒ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C
Aluminum		
Antimony		■
Arsenic		
Barium		
Beryllium		■
Boron		
Cadmium		
Calcium		
Chromium		
Cobalt		
Copper		
Hardness		
Iron		
Lead		
Magnesium		
Manganese		
Mercury		
Molybdenum		
Nickel		
Potassium		
Selenium		
Silver		
Sodium		
Strontium		
Thallium		
Tin		

METALS	D	C
Titanium		
Vanadium		
Zinc		
Priority Pollutant Metals *		■
TCLP Metals		■
503 Metals **		■
Chromium, Hexavalent		
Chromium, Trivalent		

WET METHODS	D	C
Ammonia as N		
Chloride		
Cyanide, Total		
Cyanide, Amenable (contract)		■
Fluoride		
Ignitability (contract)		■
Nitrate as N		
Nitrite as N		
Nitrate/Nitrite as N		
Nitrogen, Total Kjeldahl		
Nitrogen, Total as N		■
Orthophosphate as P		
Phosphorus, Total as P		
Sulfate		
Sulfide (contract)		■
Turbidity		

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile		■
Dioxin GC/SIM/MS Scan		■
Organochlorine Pesticides & PCBs		■
Purgeable Organics (GCMS)		■
Semivolatile Organics (GCMS)		■
Other		

MISCELLANEOUS METHODS	D	C
4,4-DDE		
Bis(2-ethylhexyl) phthalate		
Digester Gas		
Oil and Grease		
Organic Carbon, Total		
Organic Carbon, Dissolved		
TCLP Herbicides (Contract Lab)		■
TCLP Pesticides		■
TCLP Semivolatile Organics		■
TCLP Volatile Organics		■
Total Petroleum Hydrocarbons		
Volatile Acids		

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*		
Chronic *C. dubia*		
Chronic *Selenastrum capricornutum*		
Other		

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity		
BOD		
COD		
Coliform, Fecal		
Coliform, Total		
Conductivity		
E. coli		
Oxygen, Dissolved		
pH		
Solids, Settleable		
Solids, Total (contract)		■
Solids, Total Dissolved		
Solids, Total Suspended		
Solids, Total Volatile		■
Solids, Volatile Suspended		
Other		

OTHER	D	C
Cyanide, Amenable (contract)		☒

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:
1 TCLP Herbacides, 1 Total Solids, 1 Cyanide, 1 Sulfide, 1 Ignitability To be shipped to Test America 5 bottles for metals. GOS 05-01-13

# of Bottles Delivered: 20 GOS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials: 04-01-13, 01-04-13, 04-20-13 LEJ

Chain of Custody Record (Signatures Only)

Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
GOS 05-01-13			
Relinquished by Sampler:	Received by:	5-1-13	1044
Relinquished by:	Received by:	05-01-13	1238
Relinquished by:	Received by:	5-1-13	1449
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	24	°C
Initials:	GOS	
Non-Preserved	20	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:

	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☒	☐	☐
Received from a refrigerator?	☐	☒	☐

extra sample

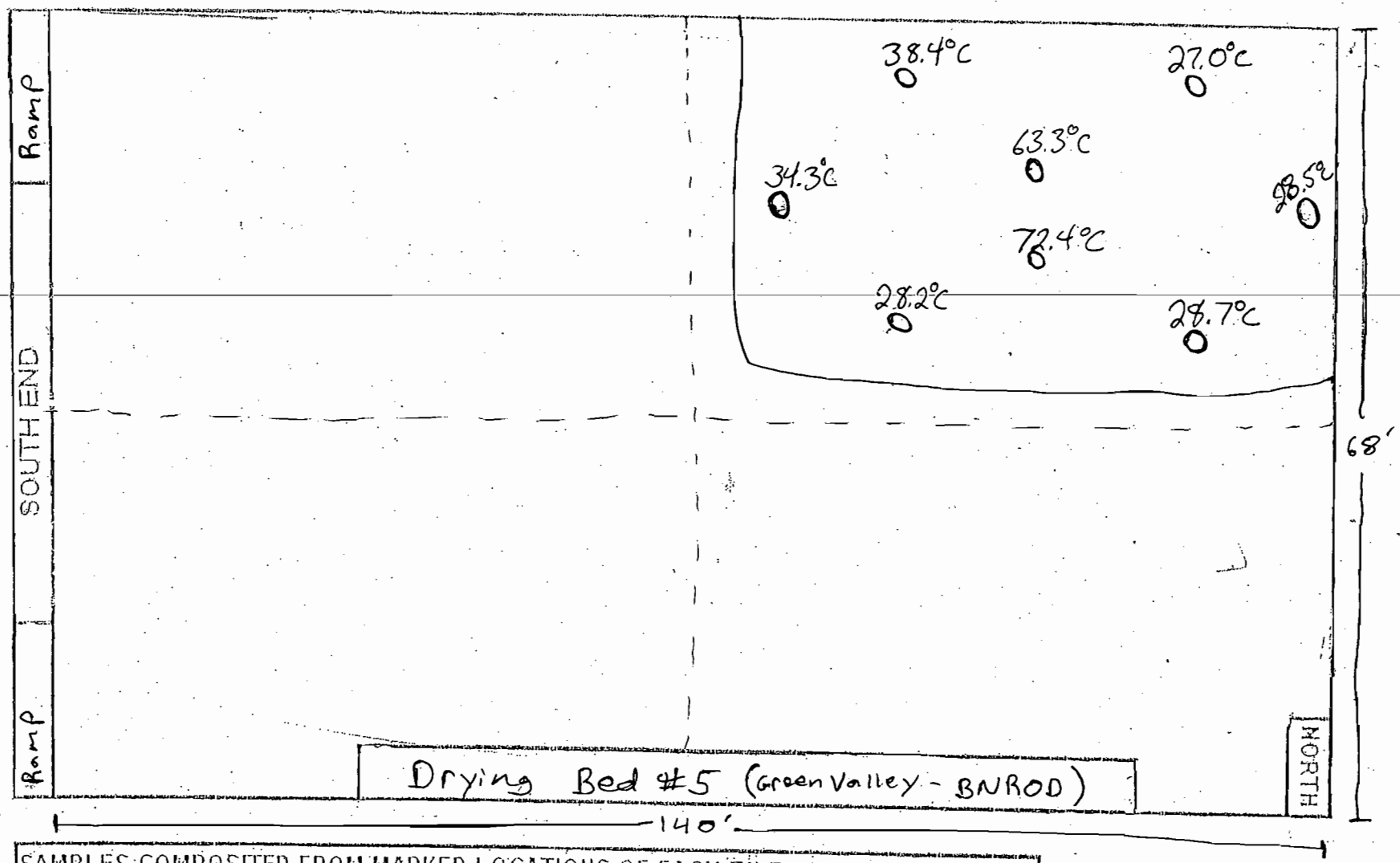
biosolids

* Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)
** As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn

D#13-35325

Ambient Air 23.3°C

1305013-01



SAMPLES COMPOSITED FROM MARKED LOCATIONS OF EACH PILE

SAMPLER T. Mailloux DATE: 5/1/13 TIME: 0815

Thermometer: Digi-Sense Thermocouple

SN#: F00006239

Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Nancy Powell	Site Contact:	Date:	COC No:
Pima County CRAO Lab	Tel/Fax: 520-724-6183	Lab Contact:	Carrier:	_____ of _____ COCs
3035 W El Camino Del Cerro	Analysis Turnaround Time			Job No.
Tucson/AZ/85745	Calendar (C) or Work Days (W) _____			
(520) 724-6183 Phone	TAT if different from Below _____			
(520) 724-6071 FAX	☐ 2 weeks			SDG No.
Project Name: Green Valley BS	☐ 1 week			
Site: Green Valley BS	☐ 2 days			
P O # 13-35325	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Total % solids for mg/kg	Cyanide amenable	TCLP herbicides	Sulfide	Ignitability	Sample Specific Notes:
Green Valley Drying bed #5 25000-1970 1305013-01	5/1/2013	815	Composite	BS	1		1					BS=biosolids
					1			1				
					1				1			
					1					1		
					1						1	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Greg Spence for Todd Mailloux	Pima County CRAO	1449 5-1-13		TA	5-1-13 1449
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Phoenix
4625 East Cotton Ctr Blvd
Suite 189
Phoenix, AZ 85040
Tel: (602)437-3340

TestAmerica Job ID: 550-1954-1
Client Project/Site: Green Valley BS

For:
Pima County WWTP
3035 W. El Camino Del Cerro
Tucson, Arizona 85745

Attn: Nancy Powell

Authorized for release by:
6/4/2013 4:49:07 PM
Kylie Emily, Project Manager II
(602)659-7622
kylie.emily@testamericainc.com

Designee for

TestAmerica Inc, Project Manager II
testamericainc@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.
N1	See case narrative.
S7	Surrogate recovery was below laboratory acceptance limits and method acceptance limits. Unable to confirm matrix effect.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CASE NARRATIVE

Client: Pima County WWTP

Project: Green Valley BS

Report Number: 550-1954-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Phoenix attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 05/02/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.8 C.

CHLORINATED HERBICIDES

Method(s) 8151A: Surrogate recovery was outside control limits for the following sample: Green Valley Drying Bed #5 25000-1970 1305013-01 (550-1954-1). Re-extraction required.
The sample was re-extracted past holding time (analytical batch 5551) confirming no analytes detected with good surrogate recovery.

Due to laboratory oversight the sample was analyzed for Total 8151 instead of the requested TCLP 8151. We reported the TCLP compounds only and the sample is ND; therefore the data should not be impacted as it is still below TCLP limits.

Sample Summary

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Solid	05/01/13 08:15	05/02/13 09:45

Detection Summary

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Client Sample ID: Green Valley Drying Bed #5 25000-1970 1305013-01

Lab Sample ID: 550-1954-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ignitability	Non-Ignitable				NONE	1		1030	Total/NA
Cyanide, Total	5.6		0.46		mg/Kg	1	☼	9014	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Client Sample ID: Green Valley Drying Bed #5 25000-1970 1305013-01

Lab Sample ID: 550-1954-1

Date Collected: 05/01/13 08:15
Date Received: 05/02/13 09:45

Matrix: Solid
Percent Solids: 83.3

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		0.060		mg/Kg	☼	05/03/13 09:34	05/11/13 04:03	1
2,4-D	ND	V1	0.060		mg/Kg	☼	05/03/13 09:34	05/11/13 04:03	1
Silvex (2,4,5-TP)	ND		0.060		mg/Kg	☼	05/03/13 09:34	05/11/13 04:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid (Surr)	*0*	*N1*	*10 - 131*	*05/03/13 09:34*	*05/11/13 04:03*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ignitability	**Non-Ignitable**				NONE			05/10/13 17:25	1
Percent Moisture	**17**		0.10		%			05/02/13 14:05	1
Percent Solids	**83**		0.10		%			05/02/13 14:05	1
Cyanide, Total	**5.6**		0.46		mg/Kg	☼	05/14/13 16:25	05/15/13 16:40	1
Sulfide	ND		24		mg/Kg	☼	05/07/13 19:12	05/07/13 22:34	1

Surrogate Summary

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Method: 8151A - Herbicides (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	**Client Sample ID**	**DCPA1 (10-131)**
550-1919-A-1-D MS	Matrix Spike	74
550-1919-A-1-E MSD	Matrix Spike Duplicate	82
550-1954-1	Green Valley Drying Bed #5 25000-'	0 N1
LCS 550-3911/2-A	Lab Control Sample	77
LCSD 550-3911/3-A	Lab Control Sample Dup	81
MB 550-3911/1-A	Method Blank	9 S7

Surrogate Legend

DCPA = 2,4-Dichlorophenylacetic acid (Surr)

QC Sample Results

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 550-3911/1-A
Matrix: Solid
Analysis Batch: 4470

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3911

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		0.050		mg/Kg		05/03/13 09:34	05/10/13 21:01	1
2,4-D	ND	V1	0.050		mg/Kg		05/03/13 09:34	05/10/13 21:01	1
Silvex (2,4,5-TP)	ND		0.050		mg/Kg		05/03/13 09:34	05/10/13 21:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid (Surr)	*9*	*S7*	*10 - 131*	*05/03/13 09:34*	*05/10/13 21:01*	*1*

Lab Sample ID: LCS 550-3911/2-A
Matrix: Solid
Analysis Batch: 4470

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3911

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Pentachlorophenol	0.200	0.117		mg/Kg		59	10 - 107
2,4-D	0.200	0.159	V1	mg/Kg		80	12 - 130
Silvex (2,4,5-TP)	0.200	0.142		mg/Kg		71	14 - 129

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid (Surr)	*77*		*10 - 131*

Lab Sample ID: LCSD 550-3911/3-A
Matrix: Solid
Analysis Batch: 4470

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3911

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pentachlorophenol	0.200	0.116		mg/Kg		58	10 - 107	1	40
2,4-D	0.200	0.181	V1	mg/Kg		91	12 - 130	13	40
Silvex (2,4,5-TP)	0.200	0.152		mg/Kg		76	14 - 129	7	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid (Surr)	*81*		*10 - 131*

Lab Sample ID: 550-1919-A-1-D MS
Matrix: Solid
Analysis Batch: 4470

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 3911

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Pentachlorophenol	ND		0.198	0.0986		mg/Kg		50	10 - 116
2,4-D	ND	V1	0.198	0.163	V1	mg/Kg		82	12 - 130
Silvex (2,4,5-TP)	ND		0.198	0.148		mg/Kg		74	14 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid (Surr)	*74*		*10 - 131*

QC Sample Results

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: 550-1919-A-1-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4470 — **Prep Batch: 3911**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pentachlorophenol	ND		0.198	0.0816		mg/Kg		41	10 - 116	19	40
2,4-D	ND	V1	0.198	0.145	V1	mg/Kg		73	12 - 130	12	40
Silvex (2,4,5-TP)	ND		0.198	0.119		mg/Kg		60	14 - 120	21	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid (Surr)	*82*		*10 - 131*

Method: 2540G - SM 2540G

Lab Sample ID: MB 550-3837/1 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 3837

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	100		0.10		%			05/02/13 14:05	1
Percent Solids	0.00000233		0.10		%			05/02/13 14:05	1

Lab Sample ID: 550-1823-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 3837

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	32		31.7		%		1	10
Percent Solids	68		68.3		%		0.5	10

Method: 9014 - Cyanide

Lab Sample ID: MB 550-4857/1-C — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4975 — **Prep Batch: 4857**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.40		mg/Kg		05/14/13 13:15	05/15/13 16:40	1

Lab Sample ID: LCS 550-4857/2-C — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4975 — **Prep Batch: 4857**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	2.48	2.69		mg/Kg		108	90 - 110

Lab Sample ID: LCSD 550-4857/14-C — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4975 — **Prep Batch: 4857**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	2.50	2.48		mg/Kg		99	90 - 110	8	20

Method: 9014 - Cyanide (Continued)

Lab Sample ID: 550-1883-C-1-N MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4975 — **Prep Batch: 4857**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	ND		4.84	5.46		mg/Kg		113	80 - 120

Lab Sample ID: 550-1883-C-1-O MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4975 — **Prep Batch: 4857**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	ND		4.99	5.78		mg/Kg		116	80 - 120	6	20

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 440-102891/2-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 102932 — **Prep Batch: 102891**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	ND		20		mg/Kg		05/07/13 19:12	05/07/13 22:34	1

Lab Sample ID: LCS 440-102891/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 102932 — **Prep Batch: 102891**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	100	88.0		mg/Kg		88	80 - 120

Lab Sample ID: 550-1954-1 MS — **Client Sample ID: Green Valley Drying Bed #5 25000-1970 1305013-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 102932 — **Prep Batch: 102891**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	ND		120	105		mg/Kg	☼	88	70 - 130

Lab Sample ID: 550-1954-1 MSD — **Client Sample ID: Green Valley Drying Bed #5 25000-1970 1305013-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 102932 — **Prep Batch: 102891**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	ND		120	95.7		mg/Kg	☼	80	70 - 130	10	30

QC Association Summary

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

GC Semi VOA

Prep Batch: 3911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1919-A-1-D MS	Matrix Spike	Total/NA	Solid	8151A	
550-1919-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8151A	
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	8151A	
LCS 550-3911/2-A	Lab Control Sample	Total/NA	Solid	8151A	
LCSD 550-3911/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	
MB 550-3911/1-A	Method Blank	Total/NA	Solid	8151A	

Analysis Batch: 4470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1919-A-1-D MS	Matrix Spike	Total/NA	Solid	8151A	3911
550-1919-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8151A	3911
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	8151A	3911
LCS 550-3911/2-A	Lab Control Sample	Total/NA	Solid	8151A	3911
LCSD 550-3911/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	3911
MB 550-3911/1-A	Method Blank	Total/NA	Solid	8151A	3911

General Chemistry

Analysis Batch: 3837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1823-A-1 DU	Duplicate	Total/NA	Solid	2540G	
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	2540G	
MB 550-3837/1	Method Blank	Total/NA	Solid	2540G	

Analysis Batch: 4568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	1030	

Prep Batch: 4857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1883-C-1-N MS	Matrix Spike	Total/NA	Solid	9013A	
550-1883-C-1-O MSD	Matrix Spike Duplicate	Total/NA	Solid	9013A	
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	9013A	
LCS 550-4857/2-C	Lab Control Sample	Total/NA	Solid	9013A	
LCSD 550-4857/14-C	Lab Control Sample Dup	Total/NA	Solid	9013A	
MB 550-4857/1-C	Method Blank	Total/NA	Solid	9013A	

Analysis Batch: 4975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1883-C-1-N MS	Matrix Spike	Total/NA	Solid	9014	4857
550-1883-C-1-O MSD	Matrix Spike Duplicate	Total/NA	Solid	9014	4857
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	9014	4857
LCS 550-4857/2-C	Lab Control Sample	Total/NA	Solid	9014	4857
LCSD 550-4857/14-C	Lab Control Sample Dup	Total/NA	Solid	9014	4857
MB 550-4857/1-C	Method Blank	Total/NA	Solid	9014	4857

Prep Batch: 102891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	9030B	
550-1954-1 MS	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	9030B	

QC Association Summary

General Chemistry (Continued)

Prep Batch: 102891 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1954-1 MSD	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	9030B	
LCS 440-102891/1-A	Lab Control Sample	Total/NA	Solid	9030B	
MB 440-102891/2-A	Method Blank	Total/NA	Solid	9030B	

Analysis Batch: 102932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	9034	102891
550-1954-1 MS	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	9034	102891
550-1954-1 MSD	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	9034	102891
LCS 440-102891/1-A	Lab Control Sample	Total/NA	Solid	9034	102891
MB 440-102891/2-A	Method Blank	Total/NA	Solid	9034	102891

Lab Chronicle

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Client Sample ID: Green Valley Drying Bed #5 25000-1970 1305013-01

Lab Sample ID: 550-1954-1

Date Collected: 05/01/13 08:15

Matrix: Solid

Date Received: 05/02/13 09:45

Percent Solids: 83.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			3911	05/03/13 09:34	RLB	TAL PHX
Total/NA	Analysis	8151A		1	4470	05/11/13 04:03	CL	TAL PHX
Total/NA	Prep	9030B			102891	05/07/13 19:12	NC	TAL IRV
Total/NA	Analysis	9034		1	102932	05/07/13 22:34	NC	TAL IRV
Total/NA	Analysis	2540G		1	3837		JE	TAL PHX
					(Start)	05/02/13 14:05		
					(End)	05/03/13 11:50		
Total/NA	Analysis	1030		1	4568	05/10/13 17:25	TS	TAL PHX
Total/NA	Prep	9013A			4857	05/14/13 16:25	TS	TAL PHX
Total/NA	Analysis	9014		1	4975	05/15/13 16:40	TS	TAL PHX

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL PHX = TestAmerica Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

Certification Summary

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Laboratory: TestAmerica Phoenix

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
AIHA	IHLAP		154268	07-01-13
Arizona	State Program	9	AZ0728	06-09-14
California	NELAP	9	01109CA	11-30-13
Nevada	State Program	9	AZ01030	07-31-13
New York	NELAP	2	11898	04-01-14
Oregon	NELAP	10	AZ100001	03-09-14
USDA	Federal		P330-09-00024	06-09-15

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-13
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	03-28-13 *
Hawaii	State Program	9	N/A	01-31-14
Nevada	State Program	9	CA015312007A	07-31-13
New Mexico	State Program	6	N/A	01-31-14
Northern Mariana Islands	State Program	9	MP0002	01-31-14
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

* Expired certification is currently pending renewal and is considered valid.

Method Summary

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Method	Method Description	Protocol	Laboratory
8151A	Herbicides (GC)	SW846	TAL PHX
1030	Ignitability, Solids	SW846	TAL PHX
2540G	SM 2540G	SM22	TAL PHX
9014	Cyanide	SW846	TAL PHX
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	TAL IRV

Protocol References:

SM22 = SM22

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL PHX = TestAmerica Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

Login Sample Receipt Checklist

Client: Pima County WWTP

Job Number: 550-1954-1

Login Number: 1954
List Number: 1
Creator: Malone, Sharon

List Source: TestAmerica Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Pima County WWTP

Job Number: 550-1954-1

Login Number: 1954
List Number: 1
Creator: Sung, Hubert

List Source: TestAmerica Irvine
List Creation: 05/04/13 12:37 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Nancy Powell

From: Houssam El Jerdi
Sent: Monday, June 10, 2013 21:24
To: Nancy Powell
Cc: Barbara Escobar
Subject: RE: Green Valley Biosolids

Nancy,

The AZPDES Permit for Green Valley WRF in III.G.2 requires 'Cyanide' and not amenable cyanide, in addition to the rest of the pollutants of concern.

Therefore, 'Cyanide' here is taken as total.

The equivalent conversion between TCLP [mg/L] and Total Concentration [mg/kg] for the herbicides is as follows

Herbicides / Pesticides

	TCLP Limit mg/L	Total Analysis Result mg/kg
2,4-D	10	200
2,4,5-TP (Silvex)	1	20
Chlordane	0.03	0.6
Endrin	0.02	0.4
Heptachlor	0.008	0.16
Heptachlor epoxide	0.008	0.16
Lindane	0.44	8.8
Methoxychlor	10	200
Toxaphene	0.5	10

The AZPDES requirements for Green Valley WRF Biosolids are as follows:

- Quarterly Priority Pollutant Scan
- Quarterly Pollutant of Concern Arsenic, Cadmium, Chromium, Copper, Cyanide, Lead, Mercury, Molybdenum, Nickel, Selenium, Silver, Zinc
- Quarterly 503 Metals
- Quarterly Nitrogen Series
- Annual Hazardous Waste Determination

The Pollutants of concern include the 503 metals.

The fecal coliform testing is done close enough to hauling and land application date.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Phoenix
4625 East Cotton Ctr Blvd
Suite 189
Phoenix, AZ 85040
Tel: (602)437-3340

TestAmerica Job ID: 550-1954-1
Client Project/Site: Green Valley BS

For:
Pima County WWTP
3035 W. El Camino Del Cerro
Tucson, Arizona 85745

Attn: Nancy Powell

Authorized for release by:
6/4/2013 4:49:07 PM
Kylie Emily, Project Manager II
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Designee for

TestAmerica Inc, Project Manager II
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LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample,
N1	See case narrative.
S7	Surrogate recovery was below laboratory acceptance limits and method acceptance limits. Unable to confirm matrix effect.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 550-1954-1

Laboratory: TestAmerica Phoenix

Narrative

CASE NARRATIVE

Client: Pima County WWTP

Project: Green Valley BS

Report Number: 550-1954-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Phoenix attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 05/02/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.8 C.

CHLORINATED HERBICIDES

Method(s) 8151A: Surrogate recovery was outside control limits for the following sample: Green Valley Drying Bed #5 25000-1970 1305013-01 (550-1954-1). Re-extraction required.
The sample was re-extracted past holding time (analytical batch 5551) confirming no analytes detected with good surrogate recovery.

Due to laboratory oversight the sample was analyzed for Total 8151 instead of the requested TCLP 8151. We reported the TCLP compounds only and the sample is ND; therefore the data should not be impacted as it is still below TCLP limits.

Sample Summary

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Solid	05/01/13 08:15	05/02/13 09:45

Detection Summary

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Client Sample ID: Green Valley Drying Bed #5 25000-1970 1305013-01

Lab Sample ID: 550-1954-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ignitability	Non-Ignitable				NONE	1		1030	Total/NA
Cyanide, Total	5.6		0.46		mg/Kg	1	☼	9014	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Client Sample ID: Green Valley Drying Bed #5 25000-1970 1305013-01

Lab Sample ID: 550-1954-1

Date Collected: 05/01/13 08:15
Date Received: 05/02/13 09:45

Matrix: Solid
Percent Solids: 83.3

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		0.060		mg/Kg	☼	05/03/13 09:34	05/11/13 04:03	1
2,4-D	ND	V1	0.060		mg/Kg	☼	05/03/13 09:34	05/11/13 04:03	1
Silvex (2,4,5-TP)	ND		0.060		mg/Kg	☼	05/03/13 09:34	05/11/13 04:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid (Surr)	*0*	*N1*	*10 - 131*	*05/03/13 09:34*	*05/11/13 04:03*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ignitability	**Non-Ignitable**				NONE			05/10/13 17:25	1
Percent Moisture	**17**		0.10		%			05/02/13 14:05	1
Percent Solids	**83**		0.10		%			05/02/13 14:05	1
Cyanide, Total	**5.6**		0.46		mg/Kg	☼	05/14/13 16:25	05/15/13 16:40	1
Sulfide	ND		24		mg/Kg	☼	05/07/13 19:12	05/07/13 22:34	1

Surrogate Summary

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Method: 8151A - Herbicides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	**Client Sample ID**	**DCPA1 (10-131)**							
550-1919-A-1-D MS	Matrix Spike	74							
550-1919-A-1-E MSD	Matrix Spike Duplicate	82							
550-1954-1	Green Valley Drying Bed #5 25000-'	0 N1							
LCS 550-3911/2-A	Lab Control Sample	77							
LCSD 550-3911/3-A	Lab Control Sample Dup	81							
MB 550-3911/1-A	Method Blank	9 S7							

Surrogate Legend

DCPA = 2,4-Dichlorophenylacetic acid (Surr)

QC Sample Results

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 550-3911/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4470 — **Prep Batch: 3911**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		0.050		mg/Kg		05/03/13 09:34	05/10/13 21:01	1
2,4-D	ND	V1	0.050		mg/Kg		05/03/13 09:34	05/10/13 21:01	1
Silvex (2,4,5-TP)	ND		0.050		mg/Kg		05/03/13 09:34	05/10/13 21:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid (Surr)	*9*	*S7*	*10 - 131*	*05/03/13 09:34*	*05/10/13 21:01*	*1*

Lab Sample ID: LCS 550-3911/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4470 — **Prep Batch: 3911**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Pentachlorophenol	0.200	0.117		mg/Kg		59	10 - 107
2,4-D	0.200	0.159	V1	mg/Kg		80	12 - 130
Silvex (2,4,5-TP)	0.200	0.142		mg/Kg		71	14 - 129

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid (Surr)	*77*		*10 - 131*

Lab Sample ID: LCSD 550-3911/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4470 — **Prep Batch: 3911**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pentachlorophenol	0.200	0.116		mg/Kg		58	10 - 107	1	40
2,4-D	0.200	0.181	V1	mg/Kg		91	12 - 130	13	40
Silvex (2,4,5-TP)	0.200	0.152		mg/Kg		76	14 - 129	7	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid (Surr)	*81*		*10 - 131*

Lab Sample ID: 550-1919-A-1-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4470 — **Prep Batch: 3911**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Pentachlorophenol	ND		0.198	0.0986		mg/Kg		50	10 - 116
2,4-D	ND	V1	0.198	0.163	V1	mg/Kg		82	12 - 130
Silvex (2,4,5-TP)	ND		0.198	0.148		mg/Kg		74	14 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid (Surr)	*74*		*10 - 131*

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: 550-1919-A-1-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4470 — **Prep Batch: 3911**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pentachlorophenol	ND		0.198	0.0816		mg/Kg		41	10 - 116	19	40
2,4-D	ND	V1	0.198	0.145	V1	mg/Kg		73	12 - 130	12	40
Silvex (2,4,5-TP)	ND		0.198	0.119		mg/Kg		60	14 - 120	21	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid (Surr)	*82*		*10 - 131*

Method: 2540G - SM 2540G

Lab Sample ID: MB 550-3837/1 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 3837

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	100		0.10		%			05/02/13 14:05	1
Percent Solids	0.00000233		0.10		%			05/02/13 14:05	1

Lab Sample ID: 550-1823-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 3837

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	32			31.7		%				1	10
Percent Solids	68			68.3		%				0.5	10

Method: 9014 - Cyanide

Lab Sample ID: MB 550-4857/1-C — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4975 — **Prep Batch: 4857**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.40		mg/Kg		05/14/13 13:15	05/15/13 16:40	1

Lab Sample ID: LCS 550-4857/2-C — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4975 — **Prep Batch: 4857**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total			2.48	2.69		mg/Kg		108	90 - 110		

Lab Sample ID: LCSD 550-4857/14-C — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4975 — **Prep Batch: 4857**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total			2.50	2.48		mg/Kg		99	90 - 110	8	20

Method: 9014 - Cyanide (Continued)

Lab Sample ID: 550-1883-C-1-N MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4975 — **Prep Batch: 4857**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total	ND		4.84	5.46		mg/Kg		113	80 - 120		

Lab Sample ID: 550-1883-C-1-O MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4975 — **Prep Batch: 4857**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	ND		4.99	5.78		mg/Kg		116	80 - 120	6	20

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 440-102891/2-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 102932 — **Prep Batch: 102891**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	ND		20		mg/Kg		05/07/13 19:12	05/07/13 22:34	1

Lab Sample ID: LCS 440-102891/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 102932 — **Prep Batch: 102891**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide			100	88.0		mg/Kg		88	80 - 120		

Lab Sample ID: 550-1954-1 MS — **Client Sample ID: Green Valley Drying Bed #5 25000-1970 1305013-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 102932 — **Prep Batch: 102891**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide	ND		120	105		mg/Kg	☼	88	70 - 130		

Lab Sample ID: 550-1954-1 MSD — **Client Sample ID: Green Valley Drying Bed #5 25000-1970 1305013-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 102932 — **Prep Batch: 102891**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	ND		120	95.7		mg/Kg	☼	80	70 - 130	10	30

QC Association Summary

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

GC Semi VOA

Prep Batch: 3911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1919-A-1-D MS	Matrix Spike	Total/NA	Solid	8151A	
550-1919-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8151A	
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	8151A	
LCS 550-3911/2-A	Lab Control Sample	Total/NA	Solid	8151A	
LCSD 550-3911/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	
MB 550-3911/1-A	Method Blank	Total/NA	Solid	8151A	

Analysis Batch: 4470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1919-A-1-D MS	Matrix Spike	Total/NA	Solid	8151A	3911
550-1919-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8151A	3911
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	8151A	3911
LCS 550-3911/2-A	Lab Control Sample	Total/NA	Solid	8151A	3911
LCSD 550-3911/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	3911
MB 550-3911/1-A	Method Blank	Total/NA	Solid	8151A	3911

General Chemistry

Analysis Batch: 3837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1823-A-1 DU	Duplicate	Total/NA	Solid	2540G	
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	2540G	
MB 550-3837/1	Method Blank	Total/NA	Solid	2540G	

Analysis Batch: 4568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	1030	

Prep Batch: 4857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1883-C-1-N MS	Matrix Spike	Total/NA	Solid	9013A	
550-1883-C-1-O MSD	Matrix Spike Duplicate	Total/NA	Solid	9013A	
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	9013A	
LCS 550-4857/2-C	Lab Control Sample	Total/NA	Solid	9013A	
LCSD 550-4857/14-C	Lab Control Sample Dup	Total/NA	Solid	9013A	
MB 550-4857/1-C	Method Blank	Total/NA	Solid	9013A	

Analysis Batch: 4975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1883-C-1-N MS	Matrix Spike	Total/NA	Solid	9014	4857
550-1883-C-1-O MSD	Matrix Spike Duplicate	Total/NA	Solid	9014	4857
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	9014	4857
LCS 550-4857/2-C	Lab Control Sample	Total/NA	Solid	9014	4857
LCSD 550-4857/14-C	Lab Control Sample Dup	Total/NA	Solid	9014	4857
MB 550-4857/1-C	Method Blank	Total/NA	Solid	9014	4857

Prep Batch: 102891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	9030B	
550-1954-1 MS	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	9030B	

General Chemistry (Continued)

Prep Batch: 102891 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1954-1 MSD	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	9030B	
LCS 440-102891/1-A	Lab Control Sample	Total/NA	Solid	9030B	
MB 440-102891/2-A	Method Blank	Total/NA	Solid	9030B	

Analysis Batch: 102932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	9034	102891
550-1954-1 MS	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	9034	102891
550-1954-1 MSD	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	9034	102891
LCS 440-102891/1-A	Lab Control Sample	Total/NA	Solid	9034	102891
MB 440-102891/2-A	Method Blank	Total/NA	Solid	9034	102891

Lab Chronicle

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Client Sample ID: Green Valley Drying Bed #5 25000-1970 1305013-01

Lab Sample ID: 550-1954-1

Date Collected: 05/01/13 08:15
Date Received: 05/02/13 09:45

Matrix: Solid
Percent Solids: 83.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			3911	05/03/13 09:34	RLB	TAL PHX
Total/NA	Analysis	8151A		1	4470	05/11/13 04:03	CL	TAL PHX
Total/NA	Prep	9030B			102891	05/07/13 19:12	NC	TAL IRV
Total/NA	Analysis	9034		1	102932	05/07/13 22:34	NC	TAL IRV
Total/NA	Analysis	2540G		1	3837		JE	TAL PHX
					(Start)	05/02/13 14:05		
					(End)	05/03/13 11:50		
Total/NA	Analysis	1030		1	4568	05/10/13 17:25	TS	TAL PHX
Total/NA	Prep	9013A			4857	05/14/13 16:25	TS	TAL PHX
Total/NA	Analysis	9014		1	4975	05/15/13 16:40	TS	TAL PHX

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL PHX = TestAmerica Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

Certification Summary

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Laboratory: TestAmerica Phoenix

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
AIHA	IHLAP		154268	07-01-13
Arizona	State Program	9	AZ0728	06-09-14
California	NELAP	9	01109CA	11-30-13
Nevada	State Program	9	AZ01030	07-31-13
New York	NELAP	2	11898	04-01-14
Oregon	NELAP	10	AZ100001	03-09-14
USDA	Federal		P330-09-00024	06-09-15

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-13
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	03-28-13 *
Hawaii	State Program	9	N/A	01-31-14
Nevada	State Program	9	CA015312007A	07-31-13
New Mexico	State Program	6	N/A	01-31-14
Northern Mariana Islands	State Program	9	MP0002	01-31-14
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

* Expired certification is currently pending renewal and is considered valid.

Method Summary

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Method	Method Description	Protocol	Laboratory
8151A	Herbicides (GC)	SW846	TAL PHX
1030	Ignitability, Solids	SW846	TAL PHX
2540G	SM 2540G	SM22	TAL PHX
9014	Cyanide	SW846	TAL PHX
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	TAL IRV

Protocol References:

SM22 = SM22

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL PHX = TestAmerica Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Nancy Powell	Site Contact:	Date:	COC No:
Pima County CRAO Lab	Tel/Fax: 520-724-6183	Lab Contact:	Carrier:	_____ of _____ COCs
3035 W El Camino Del Cerro	Analysis Turnaround Time			Job No. 550-1954
Tucson/AZ/85745	Calendar (C) or Work Days (W) _____			
(520) 724-6183 Phone	TAT if different from Below _____			
(520) 724-6071 FAX	☐ 2 weeks			
Project Name: Green Valley BS	☐ 1 week			
Site: Green Valley BS	☐ 2 days			
P O # 13-35325	☐ 1 day			

550-1954 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Total % solids for mg/kg	Cyanide amenable	TCLP herbicides	Sulfide	Ignitability	Sample Specific Notes:
Green Valley Drying bed #5 25000-1970 1305013-01	5/1/2013	815	Composite	BS	1		1					BS=biosolids
					1			1				
					1				1			
					1					1		
					1						1	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Greg Spence for Todd Mailloux	Pima County CRAO	5-1-13 1449		TA	5-1-13 1449
	TA	5-1-13 1500			
FEDEX	5/2/13	0945		5/2/13	0945

Form No. CA-C-WI-002, dated 04/07/2011

4.1

1.80

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04/23/2013

Login Sample Receipt Checklist

Client: Pima County WWTP

Job Number: 550-1954-1

Login Number: 1954

List Source: TestAmerica Phoenix

List Number: 1

Creator: Malone, Sharon

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Pima County WWTP

Job Number: 550-1954-1

Login Number: 1954
List Number: 1
Creator: Sung, Hubert

List Source: TestAmerica Irvine
List Creation: 05/04/13 12:37 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

The paint filter Test is required before disposal in the landfill.

Please feel free to contact me should you need further information.

Houssam

443.6077 (O)

419.1729 (C)

From: Nancy Powell
Sent: Wednesday, June 05, 2013 1:57 PM
To: Houssam El Jerdi
Cc: Barbara Escobar
Subject: Green Valley Biosolids

We sent Test America a Green Valley Biosolids Drying Bed #5 sample for TCLP Herbicides, Amenable Cyanide, sulfide, ignitability and total solids. Sample date 5/1/13.

What we got was Total Herbicide, Total Cyanide, sulfide and total solids. The cyanide result is 5.6mg/kg. TA isn't licensed for amenable cyanide in Biosolids.

I figure you can use the total cyanide if the units are correct and if the total cyanide is less than the limit. I don't know the limit. The units can be changed, if necessary.

I have no idea if Total Herbicides will work instead of TCLP. Barbara didn't think so, but told me to talk to you. All the Herbicide were ND, by the way.

The ignitability was fine and the sulfide was ND.

How should I proceed? Do we need to resample, the analysis will be free for the herbicides if necessary? Please let me know,

Nancy Powell
QA Chemist Specialist
Pima Co. RWRD
CRAO Laboratory
3035 W El Camino del Cerro
Tucson, Arizona 85745
(520) 724-6183

Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Nancy Powell	Site Contact:	Date:	COC No:
Pima County CRAO Lab	Tel/Fax: 520-724-6183	Lab Contact:	Carrier:	____ of ____ COCs
3035 W El Camino Del Cerro	Analysis Turnaround Time			Job No. 550-1954
Tucson/AZ/85745	Calendar (C) or Work Days (W) _____			
(520) 724-6183 Phone	TAT if different from Below _____			
(520) 724-6071 FAX	☐ 2 weeks			
Project Name: Green Valley BS	☐ 1 week			
Site: Green Valley BS	☐ 2 days			
P O # 13-35325	☐ 1 day			

550-1954 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Total % solids for mg/kg	Cyanide amenable	TCLP herbicides	Sulfide	Ignitability	Sample Specific Notes:
Green Valley Drying bed #5 25000-1970 1305013-01	5/1/2013	815	Composite	BS	1	1					BS=biosolids
					1		1				
					1			1			
					1				1		
					1					1	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Greg Spence for Todd Mailloux	Pima County CRAO	1449 5-1-13	[signature]	TA	5-1-13 1449
[signature]	TA	5-1-13 1500			
FEDEX	5/2/13	0945	[signature]	5/2/13	0945

Form No. CA-C-WI-002, dated 04/07/2011

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Phoenix
4625 East Cotton Ctr Blvd
Suite 189
Phoenix, AZ 85040
Tel: (602)437-3340

TestAmerica Job ID: 550-1954-1
Client Project/Site: Green Valley BS

For:
Pima County WWTP
3035 W. El Camino Del Cerro
Tucson, Arizona 85745

Attn: Nancy Powell

Authorized for release by:
6/4/2013 4:49:07 PM
Kylie Emily, Project Manager II
(602)659-7622
kylie.emily@testamericainc.com

Designee for

TestAmerica Inc, Project Manager II
testamericainc@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample,
N1	See case narrative.
S7	Surrogate recovery was below laboratory acceptance limits and method acceptance limits. Unable to confirm matrix effect.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 550-1954-1

Laboratory: TestAmerica Phoenix

Narrative

CASE NARRATIVE

Client: Pima County WWTP

Project: Green Valley BS

Report Number: 550-1954-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Phoenix attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 05/02/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.8 C.

CHLORINATED HERBICIDES

Method(s) 8151A: Surrogate recovery was outside control limits for the following sample: Green Valley Drying Bed #5 25000-1970 1305013-01 (550-1954-1). Re-extraction required.
The sample was re-extracted past holding time (analytical batch 5551) confirming no analytes detected with good surrogate recovery.

Due to laboratory oversight the sample was analyzed for Total 8151 instead of the requested TCLP 8151. We reported the TCLP compounds only and the sample is ND; therefore the data should not be impacted as it is still below TCLP limits.

Sample Summary

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Solid	05/01/13 08:15	05/02/13 09:45

Detection Summary

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Client Sample ID: Green Valley Drying Bed #5 25000-1970 1305013-01

Lab Sample ID: 550-1954-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ignitability	Non-Ignitable				NONE	1		1030	Total/NA
Cyanide, Total	5.6		0.46		mg/Kg	1	☼	9014	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Client Sample ID: Green Valley Drying Bed #5 25000-1970 1305013-01

Lab Sample ID: 550-1954-1

Date Collected: 05/01/13 08:15
Date Received: 05/02/13 09:45

Matrix: Solid
Percent Solids: 83.3

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		0.060		mg/Kg	☼	05/03/13 09:34	05/11/13 04:03	1
2,4-D	ND	V1	0.060		mg/Kg	☼	05/03/13 09:34	05/11/13 04:03	1
Silvex (2,4,5-TP)	ND		0.060		mg/Kg	☼	05/03/13 09:34	05/11/13 04:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid (Surr)	*0*	*N1*	*10 - 131*	*05/03/13 09:34*	*05/11/13 04:03*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ignitability	**Non-Ignitable**				NONE			05/10/13 17:25	1
Percent Moisture	**17**		0.10		%			05/02/13 14:05	1
Percent Solids	**83**		0.10		%			05/02/13 14:05	1
Cyanide, Total	**5.6**		0.46		mg/Kg	☼	05/14/13 16:25	05/15/13 16:40	1
Sulfide	ND		24		mg/Kg	☼	05/07/13 19:12	05/07/13 22:34	1

Surrogate Summary

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Method: 8151A - Herbicides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	**Client Sample ID**	**DCPA1 (10-131)**							
550-1919-A-1-D MS	Matrix Spike	74							
550-1919-A-1-E MSD	Matrix Spike Duplicate	82							
550-1954-1	Green Valley Drying Bed #5 25000-'	0 N1							
LCS 550-3911/2-A	Lab Control Sample	77							
LCSD 550-3911/3-A	Lab Control Sample Dup	81							
MB 550-3911/1-A	Method Blank	9 S7							

Surrogate Legend

DCPA = 2,4-Dichlorophenylacetic acid (Surr)

QC Sample Results

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 550-3911/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4470 — **Prep Batch: 3911**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		0.050		mg/Kg		05/03/13 09:34	05/10/13 21:01	1
2,4-D	ND	V1	0.050		mg/Kg		05/03/13 09:34	05/10/13 21:01	1
Silvex (2,4,5-TP)	ND		0.050		mg/Kg		05/03/13 09:34	05/10/13 21:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid (Surr)	*9*	*S7*	*10 - 131*	*05/03/13 09:34*	*05/10/13 21:01*	*1*

Lab Sample ID: LCS 550-3911/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4470 — **Prep Batch: 3911**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Pentachlorophenol	0.200	0.117		mg/Kg		59	10 - 107
2,4-D	0.200	0.159	V1	mg/Kg		80	12 - 130
Silvex (2,4,5-TP)	0.200	0.142		mg/Kg		71	14 - 129

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid (Surr)	*77*		*10 - 131*

Lab Sample ID: LCSD 550-3911/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4470 — **Prep Batch: 3911**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pentachlorophenol	0.200	0.116		mg/Kg		58	10 - 107	1	40
2,4-D	0.200	0.181	V1	mg/Kg		91	12 - 130	13	40
Silvex (2,4,5-TP)	0.200	0.152		mg/Kg		76	14 - 129	7	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid (Surr)	*81*		*10 - 131*

Lab Sample ID: 550-1919-A-1-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4470 — **Prep Batch: 3911**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Pentachlorophenol	ND		0.198	0.0986		mg/Kg		50	10 - 116
2,4-D	ND	V1	0.198	0.163	V1	mg/Kg		82	12 - 130
Silvex (2,4,5-TP)	ND		0.198	0.148		mg/Kg		74	14 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid (Surr)	*74*		*10 - 131*

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: 550-1919-A-1-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4470 — **Prep Batch: 3911**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pentachlorophenol	ND		0.198	0.0816		mg/Kg		41	10 - 116	19	40
2,4-D	ND	V1	0.198	0.145	V1	mg/Kg		73	12 - 130	12	40
Silvex (2,4,5-TP)	ND		0.198	0.119		mg/Kg		60	14 - 120	21	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid (Surr)	*82*		*10 - 131*

Method: 2540G - SM 2540G

Lab Sample ID: MB 550-3837/1 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 3837

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	100		0.10		%			05/02/13 14:05	1
Percent Solids	0.00000233		0.10		%			05/02/13 14:05	1

Lab Sample ID: 550-1823-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 3837

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	32			31.7		%				1	10
Percent Solids	68			68.3		%				0.5	10

Method: 9014 - Cyanide

Lab Sample ID: MB 550-4857/1-C — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4975 — **Prep Batch: 4857**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.40		mg/Kg		05/14/13 13:15	05/15/13 16:40	1

Lab Sample ID: LCS 550-4857/2-C — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4975 — **Prep Batch: 4857**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total			2.48	2.69		mg/Kg		108	90 - 110		

Lab Sample ID: LCSD 550-4857/14-C — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4975 — **Prep Batch: 4857**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total			2.50	2.48		mg/Kg		99	90 - 110	8	20

Method: 9014 - Cyanide (Continued)

Lab Sample ID: 550-1883-C-1-N MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4975 — **Prep Batch: 4857**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total	ND		4.84	5.46		mg/Kg		113	80 - 120		

Lab Sample ID: 550-1883-C-1-O MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4975 — **Prep Batch: 4857**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	ND		4.99	5.78		mg/Kg		116	80 - 120	6	20

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 440-102891/2-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 102932 — **Prep Batch: 102891**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	ND		20		mg/Kg		05/07/13 19:12	05/07/13 22:34	1

Lab Sample ID: LCS 440-102891/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 102932 — **Prep Batch: 102891**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide			100	88.0		mg/Kg		88	80 - 120		

Lab Sample ID: 550-1954-1 MS — **Client Sample ID: Green Valley Drying Bed #5 25000-1970 1305013-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 102932 — **Prep Batch: 102891**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide	ND		120	105		mg/Kg	☼	88	70 - 130		

Lab Sample ID: 550-1954-1 MSD — **Client Sample ID: Green Valley Drying Bed #5 25000-1970 1305013-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 102932 — **Prep Batch: 102891**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	ND		120	95.7		mg/Kg	☼	80	70 - 130	10	30

QC Association Summary

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

GC Semi VOA

Prep Batch: 3911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1919-A-1-D MS	Matrix Spike	Total/NA	Solid	8151A	
550-1919-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8151A	
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	8151A	
LCS 550-3911/2-A	Lab Control Sample	Total/NA	Solid	8151A	
LCSD 550-3911/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	
MB 550-3911/1-A	Method Blank	Total/NA	Solid	8151A	

Analysis Batch: 4470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1919-A-1-D MS	Matrix Spike	Total/NA	Solid	8151A	3911
550-1919-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8151A	3911
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	8151A	3911
LCS 550-3911/2-A	Lab Control Sample	Total/NA	Solid	8151A	3911
LCSD 550-3911/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	3911
MB 550-3911/1-A	Method Blank	Total/NA	Solid	8151A	3911

General Chemistry

Analysis Batch: 3837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1823-A-1 DU	Duplicate	Total/NA	Solid	2540G	
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	2540G	
MB 550-3837/1	Method Blank	Total/NA	Solid	2540G	

Analysis Batch: 4568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	1030	

Prep Batch: 4857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1883-C-1-N MS	Matrix Spike	Total/NA	Solid	9013A	
550-1883-C-1-O MSD	Matrix Spike Duplicate	Total/NA	Solid	9013A	
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	9013A	
LCS 550-4857/2-C	Lab Control Sample	Total/NA	Solid	9013A	
LCSD 550-4857/14-C	Lab Control Sample Dup	Total/NA	Solid	9013A	
MB 550-4857/1-C	Method Blank	Total/NA	Solid	9013A	

Analysis Batch: 4975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1883-C-1-N MS	Matrix Spike	Total/NA	Solid	9014	4857
550-1883-C-1-O MSD	Matrix Spike Duplicate	Total/NA	Solid	9014	4857
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	9014	4857
LCS 550-4857/2-C	Lab Control Sample	Total/NA	Solid	9014	4857
LCSD 550-4857/14-C	Lab Control Sample Dup	Total/NA	Solid	9014	4857
MB 550-4857/1-C	Method Blank	Total/NA	Solid	9014	4857

Prep Batch: 102891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	9030B	
550-1954-1 MS	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	9030B	

General Chemistry (Continued)

Prep Batch: 102891 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1954-1 MSD	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	9030B	
LCS 440-102891/1-A	Lab Control Sample	Total/NA	Solid	9030B	
MB 440-102891/2-A	Method Blank	Total/NA	Solid	9030B	

Analysis Batch: 102932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-1954-1	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	9034	102891
550-1954-1 MS	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	9034	102891
550-1954-1 MSD	Green Valley Drying Bed #5 25000-1970 1305013-01	Total/NA	Solid	9034	102891
LCS 440-102891/1-A	Lab Control Sample	Total/NA	Solid	9034	102891
MB 440-102891/2-A	Method Blank	Total/NA	Solid	9034	102891

Lab Chronicle

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Client Sample ID: Green Valley Drying Bed #5 25000-1970 1305013-01

Lab Sample ID: 550-1954-1

Date Collected: 05/01/13 08:15
Date Received: 05/02/13 09:45

Matrix: Solid
Percent Solids: 83.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			3911	05/03/13 09:34	RLB	TAL PHX
Total/NA	Analysis	8151A		1	4470	05/11/13 04:03	CL	TAL PHX
Total/NA	Prep	9030B			102891	05/07/13 19:12	NC	TAL IRV
Total/NA	Analysis	9034		1	102932	05/07/13 22:34	NC	TAL IRV
Total/NA	Analysis	2540G		1	3837		JE	TAL PHX
					(Start)	05/02/13 14:05		
					(End)	05/03/13 11:50		
Total/NA	Analysis	1030		1	4568	05/10/13 17:25	TS	TAL PHX
Total/NA	Prep	9013A			4857	05/14/13 16:25	TS	TAL PHX
Total/NA	Analysis	9014		1	4975	05/15/13 16:40	TS	TAL PHX

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL PHX = TestAmerica Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

Certification Summary

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Laboratory: TestAmerica Phoenix

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
AIHA	IHLAP		154268	07-01-13
Arizona	State Program	9	AZ0728	06-09-14
California	NELAP	9	01109CA	11-30-13
Nevada	State Program	9	AZ01030	07-31-13
New York	NELAP	2	11898	04-01-14
Oregon	NELAP	10	AZ100001	03-09-14
USDA	Federal		P330-09-00024	06-09-15

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-13
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	03-28-13 *
Hawaii	State Program	9	N/A	01-31-14
Nevada	State Program	9	CA015312007A	07-31-13
New Mexico	State Program	6	N/A	01-31-14
Northern Mariana Islands	State Program	9	MP0002	01-31-14
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

* Expired certification is currently pending renewal and is considered valid.

Method Summary

Client: Pima County WWTP
Project/Site: Green Valley BS

TestAmerica Job ID: 550-1954-1

Method	Method Description	Protocol	Laboratory
8151A	Herbicides (GC)	SW846	TAL PHX
1030	Ignitability, Solids	SW846	TAL PHX
2540G	SM 2540G	SM22	TAL PHX
9014	Cyanide	SW846	TAL PHX
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	TAL IRV

Protocol References:

SM22 = SM22

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL PHX = TestAmerica Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Nancy Powell	Site Contact:	Date:	COC No:
Pima County CRAO Lab	Tel/Fax: 520-724-6183	Lab Contact:	Carrier:	_____ of _____ COCs
3035 W El Camino Del Cerro	Analysis Turnaround Time			Job No. 550-1954
Tucson/AZ/85745	Calendar (C) or Work Days (W) _____			
(520) 724-6183 Phone	TAT if different from Below _____			
(520) 724-6071 FAX	☐ 2 weeks			
Project Name: Green Valley BS	☐ 1 week			
Site: Green Valley BS	☐ 2 days			
P O # 13-35325	☐ 1 day			

550-1954 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Total % solids for mg/kg	Cyanide amenable	TCLP herbicides	Sulfide	Ignitability	Sample Specific Notes:
Green Valley Drying bed #5 25000-1970 1305013-01	5/1/2013	815	Composite	BS	1		1					BS=biosolids
					1			1				
					1				1			
					1					1		
					1						1	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Greg Spence for Todd Mailloux	Pima County CRAO	5-1-13 1449		TA	5-1-13 1449
	TA	5-1-13 1500			
FEDEX	5/2/13	0945		5/2/13	0945

Form No. CA-C-WI-002, dated 04/07/2011

4.1

1.80

Page 17 of 19

04/23/2013

Login Sample Receipt Checklist

Client: Pima County WWTP

Job Number: 550-1954-1

Login Number: 1954

List Source: TestAmerica Phoenix

List Number: 1

Creator: Malone, Sharon

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Pima County WWTP

Job Number: 550-1954-1

Login Number: 1954
List Number: 1
Creator: Sung, Hubert

List Source: TestAmerica Irvine
List Creation: 05/04/13 12:37 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office (CRAO) Laboratory
2955 W. Calle Agua Nueva, Tucson Arizona 85745-9750, Phone (520) 724-6200

Report Date: 10/18/2013
Laboratory License: AZO159

Sample Analysis Report
Green Valley WRF
July 2013

Sample Integrity

SAMPLE RECEIPT: Samples were received intact at the required temperature, unless otherwise noted with a data qualifier below. Please refer to the Chain of Custody for sample receipt details.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Pima County CRAO Laboratory Quality Manual.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS:

Notes and Definitions:
See attached

Case Narratives:
See attached

All results on this report intended for compliance submission must have the associated chain(s) of custody attached for the results to meet reporting requirements as per ADHS Laboratory licensure rules. If you have received this report for compliance purposes and it is not complete, please contact the Compliance and Regulatory Affairs Office for a final report in its entirety.

Reviewed By:

10/18/13
Date

Laboratory Director or Designee
Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

Sample Qualifiers

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Sample Qualifiers
BNROD-Final Effluent-AZPDES-compliance	1307084-01	Water	7/11/2013 8:30:00	7/11/2013 10:03:00	Q6
Box 5	1307077-01	Water	7/10/2013 8:20:00	7/10/2013 11:42:00	Q6
BNROD-Raw Influent-Process Control	1307077-02	Water	7/10/2013 8:00:00	7/10/2013 11:42:00	Q6
Discharge from BNROD	1307077-03	Water	7/10/2013 8:15:00	7/10/2013 11:42:00	Q6
Effluent	1307077-04	Water	7/10/2013 8:05:00	7/10/2013 11:42:00	Q6
Effluent	1307077-06	Water	7/10/2013 8:00:00	7/10/2013 11:42:00	Q6
Effluent - APP	1307077-05	Water	7/10/2013 8:05:00	7/10/2013 11:42:00	Q6

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1307234-01	D	Sulfate	07/30/13 10:57	SM4500-SO4 F	8/11/13 11:39	90.8	mg/L	7.50	50.00		KKH
1307234-01RE1	D	Barium	07/30/13 10:57	EPA 200.8	8/19/13 17:09	137	ug/L	0.26	5.00	D2	JB
1307234-01RE1	D	Zinc	07/30/13 10:57	EPA 200.8	8/19/13 17:09	160	ug/L	0.90	5.00	D2	JB
1307234-01	D	Alkalinity Total	07/30/13 10:57	SM 2320B	7/31/13 6:55	212	mg/L		20.00		JRV
1307234-01	D	Bicarbonate Alkalinity	07/30/13 10:57	SM 2320B	7/31/13 6:55	212	mg/L		20.00		JRV
1307234-01	D	Total Dissolved Solids	07/30/13 10:57	SM 2540C	8/1/13 14:32	930	mg/L		10.00		SA
1307234-01	D	Coliform, Total	07/30/13 10:57	SM 9223B	7/31/13 14:35	Absent	CFU/100 ml				JAH

Well GV-02-APP (25000-1500)

1307234-02	D	Nitrate	07/30/13 11:50	Calculated	8/6/13 11:26	4.43	mg/L	0.05	0.20		KKH
1307234-02	D	Nitrogen Total Water	07/30/13 11:50	Calculated	8/13/13 11:25	4.43	mg/L	0.26	0.80		KKH
1307234-02	D	Calcium	07/30/13 11:50	EPA 200.7	8/13/13 11:04	166	mg/L	0.04	4.00		MLB
1307234-02	D	Magnesium	07/30/13 11:50	EPA 200.7	8/13/13 11:04	25.1	mg/L	0.002	2.00		MLB
1307234-02	D	Potassium	07/30/13 11:50	EPA 200.7	8/13/13 11:04	5.00	mg/L	0.06	2.00		MLB
1307234-02	D	Sodium	07/30/13 11:50	EPA 200.7	8/13/13 11:04	73.2	mg/L	0.08	4.00		MLB
1307234-02	D	Antimony	07/30/13 11:50	EPA 200.8	8/19/13 15:52	ND	ug/L	0.17	1.00		JB
1307234-02	D	Arsenic	07/30/13 11:50	EPA 200.8	8/19/13 15:52	4.63	ug/L	0.13	1.00		JB
1307234-02	D	Beryllium	07/30/13 11:50	EPA 200.8	8/19/13 15:52	ND	ug/L	0.22	1.00		JB
1307234-02	D	Cadmium	07/30/13 11:50	EPA 200.8	8/19/13 15:52	ND	ug/L	0.41	1.00		JB
1307234-02	D	Chromium	07/30/13 11:50	EPA 200.8	8/19/13 15:52	0.60	ug/L	0.40	1.00	J	JB
1307234-02	D	Copper	07/30/13 11:50	EPA 200.8	8/19/13 15:52	ND	ug/L	0.66	1.00		JB
1307234-02	D	Lead	07/30/13 11:50	EPA 200.8	8/19/13 15:52	0.50	ug/L	0.11	1.00	J	JB
1307234-02	D	Nickel	07/30/13 11:50	EPA 200.8	8/19/13 15:52	1.90	ug/L	0.29	1.00		JB
1307234-02	D	Selenium	07/30/13 11:50	EPA 200.8	8/19/13 15:52	ND	ug/L	0.50	1.00		JB
1307234-02	D	Silver	07/30/13 11:50	EPA 200.8	8/19/13 15:52	ND	ug/L	0.11	1.00		JB
1307234-02	D	Thallium	07/30/13 11:50	EPA 200.8	8/19/13 15:52	ND	ug/L	0.13	1.00		JB
1307234-02	D	Total Kjeldahl Nitrogen	07/30/13 11:50	EPA 351.2	8/13/13 11:25	ND	mg/L	0.26	0.80		KKH
1307234-02	D	Nitrate/Nitrite	07/30/13 11:50	EPA 353.2	8/6/13 11:26	4.43	mg/L	0.05	0.20		KB
1307234-02	D	Mercury	07/30/13 11:50	EPA 7470	8/13/13 11:54	ND	ug/L	0.111	0.20		DDO
1307234-02	D	Hardness	07/30/13 11:50	SM 2340B	8/13/13 11:04	519	mg/L	0.10	9.99		MLB
1307234-02	D	Cyanide Amenable	07/30/13 11:50	SM 4500-CN-G	7/31/13 14:54	NA	ug/L	1.20	5.00	N7	KB
1307234-02	D	Chloride	07/30/13 11:50	SM4500-Cl-E	8/18/13 11:07	226	mg/L	1.10	4.00		KKH
1307234-02	D	Cyanide	07/30/13 11:50	SM4500-CN-E	7/31/13 14:54	ND	ug/L	1.20	5.00		KB
1307234-02	D	Fluoride	07/30/13 11:50	SM4500-F-C	7/31/13 13:06	0.279	mg/L	0.009	0.10		DDO
1307234-02	D	Ammonia	07/30/13 11:50	SM4500-NH3-D	8/7/13 14:39	ND	mg/L	0.08	0.50	B4	KKH
1307234-02	D	Nitrite	07/30/13 11:50	SM4500-NO2 B	7/30/13 13:53	ND	mg/L	0.02	0.20		KKH
1307234-02	D	Sulfate	07/30/13 11:50	SM4500-SO4 F	8/11/13 11:41	98.8	mg/L	7.50	50.00		KKH
1307234-02RE1	D	Barium	07/30/13 11:50	EPA 200.8	8/19/13 17:20	138	ug/L	0.26	5.00	D2	JB
1307234-02RE1	D	Zinc	07/30/13 11:50	EPA 200.8	8/19/13 17:20	174	ug/L	0.90	5.00	D2	JB
1307234-02	D	Alkalinity Total	07/30/13 11:50	SM 2320B	7/31/13 6:55	251	mg/L		20.00		JRV
1307234-02	D	Bicarbonate Alkalinity	07/30/13 11:50	SM 2320B	7/31/13 6:55	251	mg/L		20.00		JRV
1307234-02	D	Total Dissolved Solids	07/30/13 11:50	SM 2540C	8/1/13 14:32	988	mg/L		10.00		SA
1307234-02	D	Coliform, Total	07/30/13 11:50	SM 9223B	7/31/13 14:35	Absent	CFU/100 ml				JAH

BNROD-Raw Influent-AZPDES-compliance (25000-1903)

1307095-02	C	Antimony	07/12/13 7:10	EPA 200.8	8/6/13 15:23	0.78	ug/L	0.17	1.00	J	JB
1307095-02	C	Arsenic	07/12/13 7:10	EPA 200.8	8/6/13 15:23	4.79	ug/L	0.13	1.00		JB
1307095-02	C	Beryllium	07/12/13 7:10	EPA 200.8	8/6/13 15:23	ND	ug/L	0.22	1.00		JB
1307095-02	C	Cadmium	07/12/13 7:10	EPA 200.8	8/6/13 15:23	ND	ug/L	0.41	1.00		JB
1307095-02	C	Chromium	07/12/13 7:10	EPA 200.8	8/6/13 15:23	1.87	ug/L	0.40	1.00		JB
1307095-02	C	Copper	07/12/13 7:10	EPA 200.8	8/6/13 15:23	77.5	ug/L	0.66	1.00		JB
1307095-02	C	Lead	07/12/13 7:10	EPA 200.8	8/6/13 15:23	1.15	ug/L	0.11	1.00		JB
1307095-02	C	Nickel	07/12/13 7:10	EPA 200.8	8/6/13 15:23	2.15	ug/L	0.29	1.00		JB
1307095-02	C	Selenium	07/12/13 7:10	EPA 200.8	8/6/13 15:23	1.42	ug/L	0.50	1.00		JB
1307095-02	C	Silver	07/12/13 7:10	EPA 200.8	8/6/13 15:23	0.53	ug/L	0.11	1.00	J	JB
1307095-02	C	Thallium	07/12/13 7:10	EPA 200.8	8/6/13 15:23	ND	ug/L	0.13	1.00		JB
1307095-02	C	Mercury	07/12/13 7:10	EPA 245.1	7/19/13 11:42	0.350	ug/L	0.111	0.20		AMK
1307095-02	C	Cyanide	07/12/13 7:10	SM4500-CN-E	7/16/13 15:04	1.77	ug/L	1.20	5.00	J	KB
1307095-02RE1	C	Zinc	07/12/13 7:10	EPA 200.8	8/6/13 17:47	162	ug/L	0.90	5.00	D2	JB
1307095-02	C	Acrolein	07/12/13 7:10	EPA 624	7/15/13 20:11	ND	ug/L	1.11	5.00		ev
1307095-02	C	Acrylonitrile	07/12/13 7:10	EPA 624	7/15/13 20:11	ND	ug/L	1.16	5.00		ev
1307095-02	C	Benzene	07/12/13 7:10	EPA 624	7/15/13 22:27	0.05	ug/L	0.03	0.50	J	DLC
1307095-02	C	Trichlorofluoromethane	07/12/13 7:10	EPA 624	7/15/13 22:27	0.23	ug/L	0.07	0.50	J	DLC
1307095-02	C	Toluene	07/12/13 7:10	EPA 624	7/15/13 22:27	0.30	ug/L	0.06	0.50	J	DLC

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1307095-02	C	1,4-Dichlorobenzene	07/12/13 7:10	EPA 624	7/15/13 22:27	0.62	ug/L	0.06	0.50		DLC
1307095-02	C	Chloroform	07/12/13 7:10	EPA 624	7/15/13 22:27	1.48	ug/L	0.03	0.50	M1	DLC
1307095-02	C	Total Trihalomethanes	07/12/13 7:10	EPA 624	7/15/13 22:27	1.48	ug/L	0.09	0.50		DLC
1307095-02	C	1,1,1-Trichloroethane	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.06	0.50	M1, R4	DLC
1307095-02	C	1,1,2,2-Tetrachloroethane	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.05	0.50		DLC
1307095-02	C	1,1,2-Trichloroethane	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.04	0.50	M1	DLC
1307095-02	C	1,1-Dichloroethane	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.05	0.50	N1, V1	DLC
1307095-02	C	1,1-Dichloroethene	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.17	0.50		DLC
1307095-02	C	1,2-Dichlorobenzene	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.06	0.50		DLC
1307095-02	C	1,2-Dichloroethane	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.06	0.50	M1	DLC
1307095-02	C	1,2-Dichloropropane	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.07	0.50	M1	DLC
1307095-02	C	1,3-Dichlorobenzene	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.06	0.50		DLC
1307095-02	C	2-Chloroethyl vinyl ether	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.06	1.00		DLC
1307095-02	C	Bromodichloromethane	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.06	0.50	M1	DLC
1307095-02	C	Bromoform	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.07	0.50		DLC
1307095-02	C	Bromomethane	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.14	0.50		DLC
1307095-02	C	Carbon Tetrachloride	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.09	0.50		DLC
1307095-02	C	Chlorobenzene	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.02	0.50		DLC
1307095-02	C	Chloroethane	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.10	0.50		DLC
1307095-02	C	Chloromethane	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.11	0.50		DLC
1307095-02	C	cis-1,3-Dichloropropene	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.07	0.50		DLC
1307095-02	C	Dibromochloromethane	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.09	0.50		DLC
1307095-02	C	Ethyl Benzene	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.03	0.50		DLC
1307095-02	C	Methylene Chloride	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.05	0.50		DLC
1307095-02	C	Tetrachloroethene	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.05	0.50	M1	DLC
1307095-02	C	trans-1,2-Dichloroethene	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.13	0.50		DLC
1307095-02	C	trans-1,3-Dichloropropene	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.06	0.50		DLC
1307095-02	C	Trichloroethene	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.05	0.50		DLC
1307095-02	C	Vinyl chloride	07/12/13 7:10	EPA 624	7/15/13 22:27	ND	ug/L	0.05	0.50		DLC
1307095-02	C	4,4-DDD	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.06	1.25	D1, D7	mam-z
1307095-02	C	4,4-DDE	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.05	1.25	D1, D7	mam-z
1307095-02	C	4,4-DDT	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.04	1.25	D1, D7	mam-z
1307095-02	C	Aldrin	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.10	1.25	D1, D7, N1	mam-z
1307095-02	C	alpha-BHC	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.09	1.25	D1, D7	mam-z
1307095-02	C	beta-BHC	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.10	1.25	D1, D7	mam-z
1307095-02	C	Chlordane	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.70	30.00	D1, D7	mam-z
1307095-02	C	delta-BHC	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.08	1.25	D1, D7	mam-z
1307095-02	C	Dieldrin	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.07	1.25	D1, D7	mam-z
1307095-02	C	Endosulfan I	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.05	5.00	D1, D7	mam-z
1307095-02	C	Endosulfan II	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.03	5.00	D1, D7	mam-z
1307095-02	C	Endosulfan sulfate	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.05	1.25	D1, D7	mam-z
1307095-02	C	Endrin	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.10	1.25	D1, D7	mam-z
1307095-02	C	Endrin aldehyde	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.07	1.25	D1, D7	mam-z
1307095-02	C	gamma-BHC (Lindane)	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.09	1.25	D1, D7, N1	mam-z
1307095-02	C	Heptachlor	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.10	1.25	D1, D7	mam-z
1307095-02	C	Heptachlor Epoxide	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.11	1.25	D1, D7	mam-z
1307095-02	C	PCB 1016	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.10	2.50	D1, D7	mam-z
1307095-02	C	PCB 1221	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.09	3.00	D1, D7	mam-z
1307095-02	C	PCB 1232	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.16	3.00	D1, D7	mam-z
1307095-02	C	PCB 1242	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.10	3.00	D1, D7	mam-z
1307095-02	C	PCB 1248	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.16	3.00	D1, D7	mam-z
1307095-02	C	PCB 1254	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.07	3.00	D1, D7	mam-z
1307095-02	C	PCB 1260	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.25	3.00	D1, D7	mam-z
1307095-02	C	Total PCBs	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	0.25	3.00	D1, D7	mam-z
1307095-02	C	Toxaphene	07/12/13 7:10	EPA 625	8/2/13 18:04	ND	ug/L	5.08	60.00	D1, D7	mam-z
1307095-02	C	2,3,7,8-TCDD - Dioxin Scan	07/12/13 7:10	EPA 625	8/15/13 11:39	ND	ug/L		0.03		SJM
1307095-02	C	1,2,4-Trichlorobenzene	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.06	8.00	D7	SJM
1307095-02	C	1,2-Diphenylhydrazine	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.23	60.00	D7	SJM
1307095-02	C	2,3-Dichloroaniline	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.04	8.00	D7	SJM
1307095-02	C	2,4,6-Trichlorophenol	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.20	8.00	D7	SJM
1307095-02	C	2,4-Dichlorophenol	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.16	8.00	D7	SJM
1307095-02	C	2,4-Dimethylphenol	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	2.89	24.00	D7, V1	SJM
1307095-02	C	2,4-Dinitrophenol	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	9.43	40.00	D7	SJM
1307095-02	C	2,4-Dinitrotoluene	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.20	8.00	D7	SJM
1307095-02	C	2,6-Dinitrotoluene	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.94	8.00	D7	SJM
1307095-02	C	2-Chloronaphthalene	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.13	8.00	D7	SJM
1307095-02	C	2-Chlorophenol	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.51	8.00	D7	SJM
1307095-02	C	2-Methyl-4,6-dinitrophenol	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	3.73	24.00	D7	SJM
1307095-02	C	2-Methylphenol	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.52	8.00	D7	SJM
1307095-02	C	2-Nitrophenol	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	2.18	24.00	D7	SJM
1307095-02	C	3,3-Dichlorobenzidine	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	2.23	40.00	D7	SJM

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1307095-02	C	4-Bromophenyl phenyl ether	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.45	8.00	D7, V1	SJM
1307095-02	C	4-Chloro-3-methylphenol	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.42	8.00	D7, V1	SJM
1307095-02	C	4-Chlorophenyl phenyl ether	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.15	24.00	D7	SJM
1307095-02	C	4-Methylphenol	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	2.94	24.00	D7	SJM
1307095-02	C	4-Nitrophenol	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	4.95	24.00	D7	SJM
1307095-02	C	Acenaphthene	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.17	8.00	D7	SJM
1307095-02	C	Acenaphthylene	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	0.84	8.00	D7	SJM
1307095-02	C	Anthracene	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.09	8.00	D7	SJM
1307095-02	C	Benzidine	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	24.9	140.00	D7, N1	SJM
1307095-02	C	Benzo[a]anthracene	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.44	8.00	D7, V1	SJM
1307095-02	C	Benzo[a]pyrene	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.55	60.00	D7	SJM
1307095-02	C	Benzo[b]fluoranthene	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.57	8.00	D7	SJM
1307095-02	C	Benzo[ghi]perylene	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.78	8.00	D7, V1	SJM
1307095-02	C	Benzo[k]fluoranthene	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	2.28	24.00	D7	SJM
1307095-02	C	bis(2-chloroethoxy)methane	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.06	8.00	D7	SJM
1307095-02	C	bis(2-chloroethyl)ether	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	0.99	8.00	D7	SJM
1307095-02	C	bis(2-chloroisopropyl)ether	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.14	8.00	D7	SJM
1307095-02	C	bis(2-ethylhexyl)phthalate	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	2.67	24.00	D7	SJM
1307095-02	C	Butylbenzylphthalate	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.53	8.00	D7	SJM
1307095-02	C	Carbazole	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.27	8.00	D7, N1, V1	SJM
1307095-02	C	Chrysene	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.47	8.00	D7	SJM
1307095-02	C	Dibenzo(a,h)anthracene	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.87	8.00	D7	SJM
1307095-02	C	Diethyl phthalate	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.05	8.00	D7	SJM
1307095-02	C	Dimethyl phthalate	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	0.72	8.00	D7, R4	SJM
1307095-02	C	Di-n-butyl phthalate	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.67	8.00	D7	SJM
1307095-02	C	Di-n-octyl phthalate	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.83	8.00	D7	SJM
1307095-02	C	Fluoranthene	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.45	8.00	D7	SJM
1307095-02	C	Fluorene	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.28	8.00	D7	SJM
1307095-02	C	Hexachlorobenzene	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	0.80	40.00	D7	SJM
1307095-02	C	Hexachlorobutadiene	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.19	8.00	D7, M2a	SJM
1307095-02	C	Hexachlorocyclopentadiene	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	2.59	24.00	D7	SJM
1307095-02	C	Hexachloroethane	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.21	8.00	D7	SJM
1307095-02	C	Indeno(1,2,3-cd)pyrene	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	2.25	24.00	D7, V1	SJM
1307095-02	C	Isophorone	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.35	80.00	D7, M2a	SJM
1307095-02	C	Naphthalene	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.26	8.00	D7	SJM
1307095-02	C	n-Decane	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.66	8.00	D7	SJM
1307095-02	C	Nitrobenzene	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	2.86	40.00	D7, M2a, V1	SJM
1307095-02	C	N-Nitrosodimethylamine	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	4.23	24.00	D7, R4	SJM
1307095-02	C	N-Nitroso-di-n-propylamine	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.13	8.00	D7, M1	SJM
1307095-02	C	N-Nitrosodiphenylamine	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.83	8.00	D7, V1	SJM
1307095-02	C	n-Octadecane	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.66	8.00	D7, L3	SJM
1307095-02	C	Pentachlorophenol	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	3.20	24.00	D7	SJM
1307095-02	C	Phenanthrene	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.15	8.00	D7	SJM
1307095-02	C	Phenol	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	2.30	24.00	D7	SJM
1307095-02	C	Pyrene	07/12/13 7:10	EPA 625	8/13/13 17:21	ND	ug/L	1.29	8.00	D7	SJM
1307095-02	C	1,2,4-Trichlorobenzene	07/12/13 7:10	EPA 8260B	7/15/13 22:27	ND	ug/L	0.08	0.50		DLC
1307095-02	C	1,2-Dibromo-3-chloropropane	07/12/13 7:10	EPA 8260B	7/15/13 22:27	ND	ug/L	0.09	0.50		DLC
1307095-02	C	1,2-Dibromoethane	07/12/13 7:10	EPA 8260B	7/15/13 22:27	ND	ug/L	0.04	0.50		DLC
1307095-02	C	cis-1,2-Dichloroethene	07/12/13 7:10	EPA 8260B	7/15/13 22:27	ND	ug/L	0.06	0.50	N1, V1	DLC
1307095-02	C	m,p-Xylenes	07/12/13 7:10	EPA 8260B	7/15/13 22:27	ND	ug/L	0.06	0.50		DLC
1307095-02	C	o-Xylene	07/12/13 7:10	EPA 8260B	7/15/13 22:27	ND	ug/L	0.05	0.50		DLC
1307095-02	C	Styrene	07/12/13 7:10	EPA 8260B	7/15/13 22:27	ND	ug/L	0.18	0.50		DLC
1307095-02	C	Xylenes, total	07/12/13 7:10	EPA 8260B	7/15/13 22:27	ND	ug/L	0.06	0.50		DLC
1307095-02	C	Methoxychlor	07/12/13 7:10	EPA 8270C	8/2/13 18:04	ND	ug/L	0.0600	1.25	D1, D7	mam-z
1307095-02	C	1,2-Diphenylhydrazine	07/12/13 7:10	EPA 8270C	8/13/13 17:21	ND	ug/L	1.23	60.00	D7	SJM

BNROD-Raw Influent-Process Control (25000-1905)

1307028-01	C	Nitrogen Total Water	07/03/13 8:00	Calculated	7/9/13 13:48	47.3	mg/L	0.26	3.20		DDO
1307028-01	C	Ammonia	07/03/13 8:00	EPA 350.1	7/8/13 11:06	31.0	mg/L	0.20	8.00	D2	AMK
1307028-01	C	Total Kjeldahl Nitrogen	07/03/13 8:00	EPA 351.2	7/9/13 13:48	47.2	mg/L	0.26	3.20	D2	DDO
1307028-01	C	Nitrate/Nitrite	07/03/13 8:00	EPA 353.2	7/7/13 11:57	0.05	mg/L	0.02	0.20	J	KKH
1307077-02	C	Nitrogen Total Water	07/10/13 8:00	Calculated	7/22/13 9:38	45.4	mg/L	0.26	3.20		DDO
1307077-02	C	Ammonia	07/10/13 8:00	EPA 350.1	7/11/13 12:32	29.3	mg/L	0.20	8.00	D2	AMK
1307077-02	C	Nitrate/Nitrite	07/10/13 8:00	EPA 353.2	7/14/13 11:06	0.06	mg/L	0.02	0.20	J	KKH
1307077-02RE1	C	Total Kjeldahl Nitrogen	07/10/13 8:00	EPA 351.2	7/22/13 9:38	45.6	mg/L	0.26	1.60		DDO
1307028-01	C	Alkalinity Total	07/03/13 8:00	SM 2320B	7/9/13 17:45	285	mg/L		20.00		AFNE
1307028-01	C	Bicarbonate Alkalinity	07/03/13 8:00	SM 2320B	7/9/13 17:45	285	mg/L		20.00		AFNE
1307028-01	C	Total Suspended Solids	07/03/13 8:00	SM 2540D	7/4/13 14:19	254	mg/L		2.50		JAH

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1307028-01	C	Biochemical Oxygen Demand	07/03/13 8:00	SM 5210B	7/9/13 6:53	263	mg/L		2.00		AFNE
1307077-02	C	Alkalinity Total	07/10/13 8:00	SM 2320B	7/11/13 15:42	289	mg/L		20.00		JRV
1307077-02	C	Bicarbonate Alkalinity	07/10/13 8:00	SM 2320B	7/11/13 15:42	289	mg/L		20.00		JRV
1307077-02	C	Total Suspended Solids	07/10/13 8:00	SM 2540D	7/11/13 10:41	226	mg/L		2.50	R8	SJD
1307077-02	C	Biochemical Oxygen Demand	07/10/13 8:00	SM 5210B	7/16/13 6:54	180	mg/L		2.00		JVR

Discharge from BNROD (25000-1921)

1307028-03	D	Nitrogen Total Water	07/03/13 8:19	Calculated	7/9/13 13:49	1.95	mg/L	0.26	0.80		DDO
1307028-03	D	Ammonia	07/03/13 8:19	EPA 350.1	7/8/13 11:07	ND	mg/L	0.20	0.50		AMK
1307028-03	D	Total Kjeldahl Nitrogen	07/03/13 8:19	EPA 351.2	7/9/13 13:49	0.82	mg/L	0.26	0.80		DDO
1307028-03	D	Nitrate/Nitrite	07/03/13 8:19	EPA 353.2	7/7/13 11:58	1.13	mg/L	0.02	0.20		KKH
1307077-03	D	Calcium	07/10/13 8:15	EPA 200.7	7/17/13 16:39	43.9	mg/L	0.04	4.00		MLB
1307077-03	D	Magnesium	07/10/13 8:15	EPA 200.7	7/17/13 16:39	5.18	mg/L	0.01	2.00		MLB
1307077-03	D	Antimony	07/10/13 8:15	EPA 200.8	8/1/13 15:06	0.39	ug/L	0.17	1.00	J	JB
1307077-03	D	Arsenic	07/10/13 8:15	EPA 200.8	8/1/13 15:06	4.27	ug/L	0.13	1.00		JB
1307077-03	D	Barium	07/10/13 8:15	EPA 200.8	8/1/13 15:06	15.4	ug/L	0.26	1.00		JB
1307077-03	D	Beryllium	07/10/13 8:15	EPA 200.8	8/1/13 15:06	ND	ug/L	0.22	1.00		JB
1307077-03	D	Cadmium	07/10/13 8:15	EPA 200.8	8/1/13 15:06	ND	ug/L	0.41	1.00		JB
1307077-03	D	Chromium	07/10/13 8:15	EPA 200.8	8/1/13 15:06	ND	ug/L	0.40	1.00		JB
1307077-03	D	Copper	07/10/13 8:15	EPA 200.8	8/1/13 15:06	2.29	ug/L	0.66	1.00		JB
1307077-03	D	Lead	07/10/13 8:15	EPA 200.8	8/1/13 15:06	0.25	ug/L	0.11	1.00	J	JB
1307077-03	D	Nickel	07/10/13 8:15	EPA 200.8	8/1/13 15:06	0.73	ug/L	0.29	1.00	J	JB
1307077-03	D	Selenium	07/10/13 8:15	EPA 200.8	8/1/13 15:06	ND	ug/L	0.50	1.00		JB
1307077-03	D	Silver	07/10/13 8:15	EPA 200.8	8/1/13 15:06	0.13	ug/L	0.11	1.00	J	JB
1307077-03	D	Thallium	07/10/13 8:15	EPA 200.8	8/1/13 15:06	ND	ug/L	0.13	1.00		JB
1307077-03	D	Mercury	07/10/13 8:15	EPA 245.1	7/19/13 11:13	ND	ug/L	0.111	0.20		AMK
1307077-03	D	Hardness	07/10/13 8:15	SM 2340B	7/17/13 16:39	131	mg/L	0.10	9.99		MLB
1307077-03	D	Cyanide Amenable	07/10/13 8:15	SM 4500-CN-G	7/15/13 9:26	NA	ug/L	1.20	5.00	N7	KKH
1307077-03	D	Cyanide	07/10/13 8:15	SM4500-CN-E	7/15/13 9:26	1.58	ug/L	1.20	5.00	J	KKH
1307077-03	D	Fluoride	07/10/13 8:15	SM4500-F-C	7/17/13 13:19	0.950	mg/L	0.009	0.10		KKH
1307077-03RE1	D	Zinc	07/10/13 8:15	EPA 200.8	8/1/13 18:30	57.3	ug/L	0.90	2.00	D1	JB
1307028-02	D	E. Coli	07/03/13 8:30	SM 9223B	7/4/13 13:15	<1	MPN/100 mL		1.00		AFNE

BNROD-Final Effluent-AZPDES-compliance data (25000-1923)

1307084-05	D	Dissolved Oxygen	07/11/13 8:10	Hach 10360	7/11/13 8:10	0.96	mg/L		0.10		SMPLR
1307084-05	D	Temperature	07/11/13 8:10	SM2550B	7/11/13 8:10	28.5	°C		0.01		SMPLR
1307084-05	D	pH	07/11/13 8:10	SM4500 H B	7/11/13 8:10	7.20	pH Units				SMPLR
1307084-05	D	Temp at time of pH, °C	07/11/13 8:10	SM4500 H B	7/11/13 8:10	28.5	°C				SMPLR
1307084-03	C	Nitrogen Total Water	07/11/13 8:30	Calculated	7/22/13 9:10	1.99	mg/L	0.26	0.80		DDO
1307084-03	C	Boron	07/11/13 8:30	EPA 200.7	7/18/13 16:01	311	ug/L	4.27	25.00		MLB
1307084-03	C	Calcium	07/11/13 8:30	EPA 200.7	7/17/13 16:48	45.1	mg/L	0.04	4.00		MLB
1307084-03	C	Magnesium	07/11/13 8:30	EPA 200.7	7/17/13 16:48	5.26	mg/L	0.01	2.00		MLB
1307084-03	C	Antimony	07/11/13 8:30	EPA 200.8	7/18/13 18:27	0.33	ug/L	0.17	1.00	J	JB
1307084-03	C	Arsenic	07/11/13 8:30	EPA 200.8	7/18/13 18:27	4.47	ug/L	0.13	1.00		JB
1307084-03	C	Barium	07/11/13 8:30	EPA 200.8	7/18/13 18:27	16.5	ug/L	0.26	1.00		JB
1307084-03	C	Beryllium	07/11/13 8:30	EPA 200.8	7/18/13 18:27	ND	ug/L	0.22	1.00		JB
1307084-03	C	Cadmium	07/11/13 8:30	EPA 200.8	7/18/13 18:27	ND	ug/L	0.41	1.00		JB
1307084-03	C	Chromium	07/11/13 8:30	EPA 200.8	7/18/13 18:27	ND	ug/L	0.40	1.00		JB
1307084-03	C	Copper	07/11/13 8:30	EPA 200.8	7/18/13 18:27	2.69	ug/L	0.66	1.00		JB
1307084-03	C	Lead	07/11/13 8:30	EPA 200.8	7/18/13 18:27	0.22	ug/L	0.11	1.00	J	JB
1307084-03	C	Manganese	07/11/13 8:30	EPA 200.8	7/18/13 18:27	12.3	ug/L	0.12	1.00		JB
1307084-03	C	Nickel	07/11/13 8:30	EPA 200.8	7/18/13 18:27	0.71	ug/L	0.29	1.00	J	JB
1307084-03	C	Selenium	07/11/13 8:30	EPA 200.8	7/18/13 18:27	0.76	ug/L	0.50	1.00	J	JB
1307084-03	C	Silver	07/11/13 8:30	EPA 200.8	7/18/13 18:27	ND	ug/L	0.11	1.00		JB
1307084-03	C	Thallium	07/11/13 8:30	EPA 200.8	7/18/13 18:27	0.38	ug/L	0.13	1.00	J	JB
1307084-03	C	Zinc	07/11/13 8:30	EPA 200.8	7/18/13 18:27	42.6	ug/L	0.90	1.00		JB
1307084-03	C	Mercury	07/11/13 8:30	EPA 245.1	7/19/13 11:22	ND	ug/L	0.111	0.20		AMK
1307084-03	C	Mercury	07/11/13 8:30	EPA 245.7	7/17/13 12:09	ND	ng/L		5.00	T1, T6	DDO
1307084-03	C	Total Kjeldahl Nitrogen	07/11/13 8:30	EPA 351.2	7/22/13 9:10	0.88	mg/L	0.26	0.80		DDO
1307084-03	C	Nitrate/Nitrite	07/11/13 8:30	EPA 353.2	7/14/13 11:27	1.11	mg/L	0.02	0.20		KKH
1307084-03	C	Phosphorus	07/11/13 8:30	EPA 365.1	7/28/13 14:05	3.09	mg/L	0.06	0.50		KKH
1307084-03	C	Hardness	07/11/13 8:30	SM 2340B	7/17/13 16:48	134	mg/L	0.10	9.99		MLB
1307084-03	C	Fluoride	07/11/13 8:30	SM4500-F-C	7/17/13 13:28	0.954	mg/L	0.009	0.10		KKH
1307084-03RE1	C	Zinc	07/11/13 8:30	EPA 200.8	7/18/13 20:38	52.1	ug/L	0.90	1.00		JB
1307084-05	D	Chromium, Hexavalent	07/11/13 8:10	EPA 200.8		NA	ug/L	0.400	1.00	N7	

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1307084-05	D	Sulfide	07/11/13 8:10	Hach 8131	7/15/13 10:34	ND	mg/L	0.007	0.10		DDO
1307084-05	D	Cyanide	07/11/13 8:10	SM4500-CN-E	7/16/13 14:58	ND	ug/L	1.20	5.00		KB
1307084-05	D	Ammonia	07/11/13 8:10	SM4500-NH3-D	7/25/13 12:25	0.08	mg/L	0.08	0.50	J	DDO
1307084-06	D	Chromium (Dissolved)	07/11/13 8:10	EPA 200.8	8/1/13 15:28	0.60	ug/L	0.40	1.00	H6, J	JB
1307084-08	FB	Mercury	07/11/13 8:30	EPA 245.7	7/17/13 12:06	ND	ng/L		5.00	T1, T6	DDO
1307095-01	C	Antimony	07/12/13 7:30	EPA 200.8	8/6/13 14:29	0.49	ug/L	0.17	1.00	J	JB
1307095-01	C	Arsenic	07/12/13 7:30	EPA 200.8	8/6/13 14:29	4.45	ug/L	0.13	1.00		JB
1307095-01	C	Beryllium	07/12/13 7:30	EPA 200.8	8/6/13 14:29	ND	ug/L	0.22	1.00		JB
1307095-01	C	Cadmium	07/12/13 7:30	EPA 200.8	8/6/13 14:29	ND	ug/L	0.41	1.00		JB
1307095-01	C	Chromium	07/12/13 7:30	EPA 200.8	8/6/13 14:29	ND	ug/L	0.40	1.00		JB
1307095-01	C	Copper	07/12/13 7:30	EPA 200.8	8/6/13 14:29	2.93	ug/L	0.66	1.00		JB
1307095-01	C	Lead	07/12/13 7:30	EPA 200.8	8/6/13 14:29	0.26	ug/L	0.11	1.00	J	JB
1307095-01	C	Nickel	07/12/13 7:30	EPA 200.8	8/6/13 14:29	0.74	ug/L	0.29	1.00	J	JB
1307095-01	C	Selenium	07/12/13 7:30	EPA 200.8	8/6/13 14:29	0.62	ug/L	0.50	1.00	J	JB
1307095-01	C	Silver	07/12/13 7:30	EPA 200.8	8/6/13 14:29	ND	ug/L	0.11	1.00		JB
1307095-01	C	Thallium	07/12/13 7:30	EPA 200.8	8/6/13 14:29	ND	ug/L	0.13	1.00		JB
1307095-01	C	Mercury	07/12/13 7:30	EPA 245.1	7/19/13 11:40	ND	ug/L	0.111	0.20		AMK
1307095-01	C	Cyanide	07/12/13 7:30	SM4500-CN-E	7/18/13 14:19	ND	ug/L	1.20	5.00		KB
1307095-01RE1	C	Zinc	07/12/13 7:30	EPA 200.8	8/6/13 16:52	54.5	ug/L	0.90	2.00	D1	JB
1307084-03	C	Total Dissolved Solids	07/11/13 8:30	SM 2540C	7/12/13 15:42	779	mg/L		10.00		JVR
1307084-03	C	Total Suspended Solids	07/11/13 8:30	SM 2540D	7/12/13 12:24	ND	mg/L		2.50		JVR
1307084-03	C	Biochemical Oxygen Demand	07/11/13 8:30	SM 5210B	7/17/13 7:25	<2	mg/L		2.00	K1	JVR
1307084-05	D	E. Coli	07/11/13 8:10	SM 9223B	7/12/13 12:41	<1	MPN/100 mL		1.00		MGA
1307084-03	C	Acrolein	07/11/13 8:30	EPA 624	7/15/13 18:02	ND	ug/L	1.11	5.00		ev
1307084-03	C	Acrylonitrile	07/11/13 8:30	EPA 624	7/15/13 18:02	ND	ug/L	1.16	5.00		ev
1307084-03	C	Dibromochloromethane	07/11/13 8:30	EPA 624	7/11/13 20:38	0.64	ug/L	0.09	0.50		DLC
1307084-03	C	Chloroform	07/11/13 8:30	EPA 624	7/11/13 20:38	72.8	ug/L	0.03	0.50		DLC
1307084-03	C	Total Trihalomethanes	07/11/13 8:30	EPA 624	7/11/13 20:38	82.5	ug/L	0.09	0.50		DLC
1307084-03	C	Bromodichloromethane	07/11/13 8:30	EPA 624	7/11/13 20:38	9.05	ug/L	0.06	0.50		DLC
1307084-03	C	1,1,1-Trichloroethane	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.06	0.50		DLC
1307084-03	C	1,1,2,2-Tetrachloroethane	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.05	0.50		DLC
1307084-03	C	1,1,2-Trichloroethane	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.04	0.50	M1	DLC
1307084-03	C	1,1-Dichloroethane	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.05	0.50		DLC
1307084-03	C	1,1-Dichloroethene	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.17	0.50		DLC
1307084-03	C	1,2-Dichlorobenzene	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.06	0.50		DLC
1307084-03	C	1,2-Dichloroethane	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.06	0.50	M1	DLC
1307084-03	C	1,2-Dichloropropane	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.07	0.50		DLC
1307084-03	C	1,3-Dichlorobenzene	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.06	0.50		DLC
1307084-03	C	1,4-Dichlorobenzene	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.06	0.50		DLC
1307084-03	C	2-Chloroethyl vinyl ether	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.06	1.00		DLC
1307084-03	C	Benzene	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.03	0.50		DLC
1307084-03	C	Bromoform	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.07	0.50		DLC
1307084-03	C	Bromomethane	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.14	0.50		DLC
1307084-03	C	Carbon Tetrachloride	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.09	0.50		DLC
1307084-03	C	Chlorobenzene	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.02	0.50		DLC
1307084-03	C	Chloroethane	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.10	0.50		DLC
1307084-03	C	Chloromethane	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.11	0.50		DLC
1307084-03	C	cis-1,3-Dichloropropene	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.07	0.50		DLC
1307084-03	C	Ethyl Benzene	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.03	0.50		DLC
1307084-03	C	Methylene Chloride	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.05	0.50		DLC
1307084-03	C	Tetrachloroethene	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.05	0.50		DLC
1307084-03	C	Toluene	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.06	0.50		DLC
1307084-03	C	trans-1,2-Dichloroethene	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.13	0.50		DLC
1307084-03	C	trans-1,3-Dichloropropene	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.06	0.50	M1	DLC
1307084-03	C	Trichloroethene	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.05	0.50		DLC
1307084-03	C	Trichlorofluoromethane	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.07	0.50	M2a	DLC
1307084-03	C	Vinyl chloride	07/11/13 8:30	EPA 624	7/11/13 20:38	ND	ug/L	0.05	0.50		DLC
1307084-03	C	4,4-DDD	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.06	0.13		MAMZ
1307084-03	C	4,4-DDE	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.05	0.13		MAMZ
1307084-03	C	4,4-DDT	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.04	0.13		MAMZ
1307084-03	C	Aldrin	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.10	0.13	N1	MAMZ
1307084-03	C	alpha-BHC	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.09	0.13		MAMZ
1307084-03	C	beta-BHC	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.10	0.13		MAMZ
1307084-03	C	Chlordane	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.70	3.00		MAMZ
1307084-03	C	delta-BHC	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.08	0.13		MAMZ
1307084-03	C	Dieldrin	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.07	0.13		MAMZ
1307084-03	C	Endosulfan I	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.05	0.50		MAMZ
1307084-03	C	Endosulfan II	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.03	0.50		MAMZ

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1307084-03	C	Endosulfan sulfate	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.05	0.13		MAMZ
1307084-03	C	Endrin	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.10	0.13		MAMZ
1307084-03	C	Endrin aldehyde	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.07	0.13		MAMZ
1307084-03	C	gamma-BHC (Lindane)	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.09	0.13	N1	MAMZ
1307084-03	C	Heptachlor	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.10	0.13		MAMZ
1307084-03	C	Heptachlor Epoxide	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.11	0.13		MAMZ
1307084-03	C	PCB 1016	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.10	0.25		MAMZ
1307084-03	C	PCB 1221	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.09	0.30		MAMZ
1307084-03	C	PCB 1232	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.16	0.30		MAMZ
1307084-03	C	PCB 1242	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.10	0.30		MAMZ
1307084-03	C	PCB 1248	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.16	0.30		MAMZ
1307084-03	C	PCB 1254	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.07	0.30		MAMZ
1307084-03	C	PCB 1260	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.25	0.30		MAMZ
1307084-03	C	Total PCBs	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	0.25	0.30		MAMZ
1307084-03	C	Toxaphene	07/11/13 8:30	EPA 625	7/16/13 17:21	ND	ug/L	5.08	6.00		MAMZ
1307084-03	C	1,2,4-Trichlorobenzene	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.06	2.12		SJM
1307084-03	C	1,2-Diphenylhydrazine	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.23	15.90		SJM
1307084-03	C	2,3-Dichloroaniline	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.04	2.12		SJM
1307084-03	C	2,4,6-Trichlorophenol	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.20	2.12		SJM
1307084-03	C	2,4-Dichlorophenol	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.16	2.12		SJM
1307084-03	C	2,4-Dimethylphenol	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	2.89	6.36	V1	SJM
1307084-03	C	2,4-Dinitrophenol	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	9.43	10.60		SJM
1307084-03	C	2,4-Dinitrotoluene	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.20	2.12		SJM
1307084-03	C	2,6-Dinitrotoluene	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.94	2.12		SJM
1307084-03	C	2-Chloronaphthalene	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.13	2.12		SJM
1307084-03	C	2-Chlorophenol	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.51	2.12		SJM
1307084-03	C	2-Methyl-4,6-dinitrophenol	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	3.73	6.36		SJM
1307084-03	C	2-Methylphenol	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.52	2.12		SJM
1307084-03	C	2-Nitrophenol	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	2.18	6.36		SJM
1307084-03	C	3,3-Dichlorobenzidine	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	2.23	10.60		SJM
1307084-03	C	4-Bromophenyl phenyl ether	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.45	2.12	V1	SJM
1307084-03	C	4-Chloro-3-methylphenol	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.42	2.12	V1	SJM
1307084-03	C	4-Chlorophenyl phenyl ether	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.15	6.36		SJM
1307084-03	C	4-Methylphenol	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	2.94	6.36		SJM
1307084-03	C	4-Nitrophenol	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	4.95	6.36		SJM
1307084-03	C	Acenaphthene	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.17	2.12		SJM
1307084-03	C	Acenaphthylene	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	0.84	2.12		SJM
1307084-03	C	Anthracene	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.09	2.12		SJM
1307084-03	C	Benzidine	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	24.9	37.10	N1	SJM
1307084-03	C	Benzo[a]anthracene	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.44	2.12	V1	SJM
1307084-03	C	Benzo[a]pyrene	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.55	15.90		SJM
1307084-03	C	Benzo[b]fluoranthene	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.57	2.12		SJM
1307084-03	C	Benzo[ghi]perylene	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.78	2.12	V1	SJM
1307084-03	C	Benzo[k]fluoranthene	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	2.28	6.36		SJM
1307084-03	C	bis(2-chloroethoxy)methane	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.06	2.12		SJM
1307084-03	C	bis(2-chloroethyl)ether	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	0.99	2.12		SJM
1307084-03	C	bis(2-chloroisopropyl)ether	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.14	2.12		SJM
1307084-03	C	bis(2-ethylhexyl)phthalate	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	2.67	6.36		SJM
1307084-03	C	Butylbenzylphthalate	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.53	2.12		SJM
1307084-03	C	Carbazole	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.27	2.12	N1, V1	SJM
1307084-03	C	Chrysene	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.47	2.12		SJM
1307084-03	C	Dibenzo(a,h)anthracene	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.87	2.12		SJM
1307084-03	C	Diethyl phthalate	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.05	2.12		SJM
1307084-03	C	Dimethyl phthalate	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	0.72	2.12	N1	SJM
1307084-03	C	Di-n-butyl phthalate	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.67	2.12		SJM
1307084-03	C	Di-n-octyl phthalate	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.83	2.12		SJM
1307084-03	C	Fluoranthene	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.45	2.12		SJM
1307084-03	C	Fluorene	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.28	2.12		SJM
1307084-03	C	Hexachlorobenzene	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	0.80	10.60		SJM
1307084-03	C	Hexachlorobutadiene	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.19	2.12	N1	SJM
1307084-03	C	Hexachlorocyclopentadiene	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	2.59	6.36		SJM
1307084-03	C	Hexachloroethane	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.21	2.12		SJM
1307084-03	C	Indeno(1,2,3-cd)pyrene	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	2.25	6.36	V1	SJM
1307084-03	C	Isophorone	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.35	21.20	N1	SJM
1307084-03	C	Naphthalene	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.26	2.12		SJM
1307084-03	C	n-Decane	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.66	2.12		SJM
1307084-03	C	Nitrobenzene	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	2.86	10.60	N1, V1	SJM
1307084-03	C	N-Nitrosodimethylamine	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	4.23	6.36	N1	SJM
1307084-03	C	N-Nitroso-di-n-propylamine	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.13	2.12	N1	SJM
1307084-03	C	N-Nitrosodiphenylamine	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.83	2.12	V1	SJM
1307084-03	C	n-Octadecane	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.66	2.12	L3	SJM

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1307084-03	C	Pentachlorophenol	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	3.20	6.36		SJM
1307084-03	C	Phenanthrene	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.15	2.12		SJM
1307084-03	C	Phenol	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	2.30	6.36		SJM
1307084-03	C	Pyrene	07/11/13 8:30	EPA 625	8/13/13 19:50	ND	ug/L	1.29	2.12		SJM
1307084-03	C	1,2,4-Trichlorobenzene	07/11/13 8:30	EPA 8260B	7/11/13 20:38	ND	ug/L	0.08	0.50		DLC
1307084-03	C	1,2-Dibromo-3-chloropropan	07/11/13 8:30	EPA 8260B	7/11/13 20:38	ND	ug/L	0.09	0.50		DLC
1307084-03	C	1,2-Dibromoethane	07/11/13 8:30	EPA 8260B	7/11/13 20:38	ND	ug/L	0.04	0.50		DLC
1307084-03	C	cis-1,2-Dichloroethene	07/11/13 8:30	EPA 8260B	7/11/13 20:38	ND	ug/L	0.06	0.50		DLC
1307084-03	C	m,p-Xylenes	07/11/13 8:30	EPA 8260B	7/11/13 20:38	ND	ug/L	0.06	0.50		DLC
1307084-03	C	o-Xylene	07/11/13 8:30	EPA 8260B	7/11/13 20:38	ND	ug/L	0.05	0.50		DLC
1307084-03	C	Styrene	07/11/13 8:30	EPA 8260B	7/11/13 20:38	ND	ug/L	0.18	0.50		DLC
1307084-03	C	Xylenes, total	07/11/13 8:30	EPA 8260B	7/11/13 20:38	ND	ug/L	0.06	0.50		DLC
1307084-03	C	Methoxychlor	07/11/13 8:30	EPA 8270C	7/16/13 17:21	ND	ug/L	0.0600	0.10		MAMZ
1307084-03	C	1,2-Diphenylhydrazine	07/11/13 8:30	EPA 8270C	8/13/13 19:50	ND	ug/L	1.23	15.90		SJM
1307084-05	D	Oil & Grease	07/11/13 8:10	EPA 1664B	7/18/13 12:35	ND	mg/L	0.83	11.43		EVS
1307095-01	C	Acrolein	07/12/13 7:30	EPA 624	7/15/13 19:06	ND	ug/L	1.11	5.00		ev
1307095-01	C	Acrylonitrile	07/12/13 7:30	EPA 624	7/15/13 19:06	ND	ug/L	1.16	5.00		ev
1307095-01	C	Bromomethane	07/12/13 7:30	EPA 624	7/22/13 20:12	0.25	ug/L	0.08	2.00	Q5, J	DLC
1307095-01	C	Dibromochloromethane	07/12/13 7:30	EPA 624	7/22/13 20:12	0.44	ug/L	0.07	0.50	Q5, J	DLC
1307095-01	C	Chloroform	07/12/13 7:30	EPA 624	7/22/13 20:12	40.4	ug/L	0.11	0.50	Q5	DLC
1307095-01	C	Total Trihalomethanes	07/12/13 7:30	EPA 624	7/22/13 20:12	47.2	ug/L	0.11	0.50	Q5	DLC
1307095-01	C	Bromodichloromethane	07/12/13 7:30	EPA 624	7/22/13 20:12	6.36	ug/L	0.07	0.50	Q5	DLC
1307095-01	C	1,1,1-Trichloroethane	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.05	0.50	Q5	DLC
1307095-01	C	1,1,2,2-Tetrachloroethane	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.16	0.50	N1, Q5	DLC
1307095-01	C	1,1,2-Trichloroethane	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.07	0.50	N1, Q5	DLC
1307095-01	C	1,1-Dichloroethane	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.05	0.50	Q5	DLC
1307095-01	C	1,1-Dichloroethene	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.10	0.50	Q5	DLC
1307095-01	C	1,2-Dichlorobenzene	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.13	0.50	N1, Q5	DLC
1307095-01	C	1,2-Dichloroethane	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.08	5.00	Q5	DLC
1307095-01	C	1,2-Dichloropropane	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.13	0.50	Q5	DLC
1307095-01	C	1,3-Dichlorobenzene	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.09	0.50	N1, Q5	DLC
1307095-01	C	1,4-Dichlorobenzene	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.14	0.50	N1, Q5	DLC
1307095-01	C	2-Chloroethyl vinyl ether	07/12/13 7:30	EPA 624	7/26/13 0:52	ND	ug/L	0.10	0.50		DLC
1307095-01	C	Benzene	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.08	0.50	Q5	DLC
1307095-01	C	Bromoform	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.08	0.50	N1, Q5	DLC
1307095-01	C	Carbon Tetrachloride	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.09	0.50	Q5	DLC
1307095-01	C	Chlorobenzene	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.08	0.50	N1, Q5	DLC
1307095-01	C	Chloroethane	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.17	0.50	Q5	DLC
1307095-01	C	Chloromethane	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.14	5.00	Q5	DLC
1307095-01	C	cis-1,3-Dichloropropene	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.08	0.50	Q5	DLC
1307095-01	C	Ethyl Benzene	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.07	0.50	N1, Q5	DLC
1307095-01	C	Methylene Chloride	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.11	0.50	Q5	DLC
1307095-01	C	Tetrachloroethene	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.07	0.50	Q5	DLC
1307095-01	C	Toluene	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.05	0.50	Q5	DLC
1307095-01	C	trans-1,2-Dichloroethene	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.07	0.50	Q5	DLC
1307095-01	C	trans-1,3-Dichloropropene	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.07	0.50	Q5	DLC
1307095-01	C	Trichloroethene	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.09	0.50	Q5	DLC
1307095-01	C	Trichlorofluoromethane	07/12/13 7:30	EPA 624	7/22/13 20:12	ND	ug/L	0.07	0.50	Q5	DLC
1307095-01	C	Vinyl chloride	07/12/13 7:30	EPA 624	7/26/13 0:52	ND	ug/L	0.09	0.50	N1	DLC
1307095-01	C	4,4-DDD	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.06	0.13		MAMZ
1307095-01	C	4,4-DDE	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.05	0.13		MAMZ
1307095-01	C	4,4-DDT	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.04	0.13		MAMZ
1307095-01	C	Aldrin	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.10	0.13	N1	MAMZ
1307095-01	C	alpha-BHC	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.09	0.13		MAMZ
1307095-01	C	beta-BHC	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.10	0.13		MAMZ
1307095-01	C	Chlordane	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.70	3.00		MAMZ
1307095-01	C	delta-BHC	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.08	0.13		MAMZ
1307095-01	C	Dieldrin	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.07	0.13		MAMZ
1307095-01	C	Endosulfan I	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.05	0.50		MAMZ
1307095-01	C	Endosulfan II	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.03	0.50		MAMZ
1307095-01	C	Endosulfan sulfate	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.05	0.13		MAMZ
1307095-01	C	Endrin	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.10	0.13		MAMZ
1307095-01	C	Endrin aldehyde	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.07	0.13		MAMZ
1307095-01	C	gamma-BHC (Lindane)	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.09	0.13	N1	MAMZ
1307095-01	C	Heptachlor	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.10	0.13		MAMZ
1307095-01	C	Heptachlor Epoxide	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.11	0.13		MAMZ
1307095-01	C	PCB 1016	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.10	0.25		MAMZ
1307095-01	C	PCB 1221	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.09	0.30		MAMZ
1307095-01	C	PCB 1232	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.16	0.30		MAMZ
1307095-01	C	PCB 1242	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.10	0.30		MAMZ
1307095-01	C	PCB 1248	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.16	0.30		MAMZ

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1307095-01	C	PCB 1254	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.07	0.30		MAMZ
1307095-01	C	PCB 1260	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.25	0.30		MAMZ
1307095-01	C	Total PCBs	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	0.25	0.30		MAMZ
1307095-01	C	Toxaphene	07/12/13 7:30	EPA 625	7/16/13 18:14	ND	ug/L	5.08	6.00		MAMZ
1307095-01	C	2,3,7,8-TCDD - Dioxin Scan	07/12/13 7:30	EPA 625	8/15/13 11:00	ND	ug/L		0.03		SJM
1307095-01	C	1,2,4-Trichlorobenzene	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.06	2.00	N1	SJM
1307095-01	C	1,2-Diphenylhydrazine	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.23	2.00		SJM
1307095-01	C	2,3-Dichloroaniline	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.04	2.00		SJM
1307095-01	C	2,4,6-Trichlorophenol	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.20	2.00		SJM
1307095-01	C	2,4-Dimethylphenol	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	2.89	6.00	N1	SJM
1307095-01	C	2,4-Dinitrophenol	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	9.43	10.00		SJM
1307095-01	C	2,4-Dinitrotoluene	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.20	2.00		SJM
1307095-01	C	2,6-Dinitrotoluene	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.94	2.00		SJM
1307095-01	C	2-Chloronaphthalene	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.13	2.00		SJM
1307095-01	C	2-Chlorophenol	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.51	2.00		SJM
1307095-01	C	2-Methyl-4,6-dinitrophenol	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	3.73	6.00		SJM
1307095-01	C	2-Methylphenol	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.52	2.00		SJM
1307095-01	C	2-Nitrophenol	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	2.18	6.00	N1	SJM
1307095-01	C	3,3-Dichlorobenzidine	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	2.23	6.00	V1	SJM
1307095-01	C	4-Bromophenyl phenyl ether	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.45	2.00	N1	SJM
1307095-01	C	4-Chloro-3-methylphenol	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.42	2.00		SJM
1307095-01	C	4-Chlorophenyl phenyl ether	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.15	2.00		SJM
1307095-01	C	4-Methylphenol	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	2.94	6.00		SJM
1307095-01	C	4-Nitrophenol	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	4.95	6.00		SJM
1307095-01	C	Acenaphthene	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.17	2.00		SJM
1307095-01	C	Acenaphthylene	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	0.84	2.00		SJM
1307095-01	C	Anthracene	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.09	2.00		SJM
1307095-01	C	Benzidine	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	24.9	35.00	N1	SJM
1307095-01	C	Benzo[a]anthracene	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.44	2.00		SJM
1307095-01	C	Benzo[a]pyrene	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.55	2.00		SJM
1307095-01	C	Benzo[b]fluoranthene	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.57	2.00	V1	SJM
1307095-01	C	Benzo[ghi]perylene	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.78	2.00		SJM
1307095-01	C	Benzo[k]fluoranthene	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	2.28	6.00		SJM
1307095-01	C	bis(2-chloroethoxy)methane	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.06	2.00		SJM
1307095-01	C	bis(2-chloroethyl)ether	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	0.99	2.00		SJM
1307095-01	C	bis(2-chloroisopropyl)ether	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.14	2.00		SJM
1307095-01	C	bis(2-ethylhexyl)phthalate	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	2.67	6.00	V9	SJM
1307095-01	C	Butylbenzylphthalate	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.53	2.00		SJM
1307095-01	C	Carbazole	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.27	2.00	L3, N1, V1	SJM
1307095-01	C	Chrysene	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.47	2.00		SJM
1307095-01	C	Dibenzo(a,h)anthracene	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.87	2.00		SJM
1307095-01	C	Diethyl phthalate	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.05	2.00		SJM
1307095-01	C	Dimethyl phthalate	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	0.72	2.00		SJM
1307095-01	C	Di-n-butyl phthalate	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.67	2.00	N1	SJM
1307095-01	C	Di-n-octyl phthalate	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.83	2.00	N1	SJM
1307095-01	C	Fluoranthene	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.45	2.00		SJM
1307095-01	C	Fluorene	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.28	2.00	L3	SJM
1307095-01	C	Hexachlorobenzene	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	0.80	2.00	N1	SJM
1307095-01	C	Hexachlorobutadiene	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.19	2.00	N1	SJM
1307095-01	C	Hexachlorocyclopentadiene	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	2.59	6.00		SJM
1307095-01	C	Hexachloroethane	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.21	2.00		SJM
1307095-01	C	Indeno(1,2,3-cd)pyrene	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	2.25	6.00		SJM
1307095-01	C	Isophorone	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.35	2.00		SJM
1307095-01	C	Naphthalene	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.26	2.00		SJM
1307095-01	C	n-Decane	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.66	2.00		SJM
1307095-01	C	Nitrobenzene	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	2.86	6.00		SJM
1307095-01	C	N-Nitrosodimethylamine	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	4.23	6.00		SJM
1307095-01	C	N-Nitroso-di-n-propylamine	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.13	2.00	N1	SJM
1307095-01	C	N-Nitrosodiphenylamine	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.83	2.00		SJM
1307095-01	C	n-Octadecane	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.66	2.00	L3	SJM
1307095-01	C	Pentachlorophenol	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	3.20	6.00	N1	SJM
1307095-01	C	Phenanthrene	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.15	2.00		SJM
1307095-01	C	Phenol	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	2.30	6.00		SJM
1307095-01	C	Pyrene	07/12/13 7:30	EPA 625	8/26/13 15:51	ND	ug/L	1.29	2.00	L3	SJM
1307095-01	C	2,4-Dichlorophenol	07/12/13 7:30	EPA 625	8/26/13 15:51	NR	ug/L	1.16	2.00	N1	SJM
1307095-01	C	1,2,4-Trichlorobenzene	07/12/13 7:30	EPA 8260B	7/22/13 20:12	ND	ug/L	0.12	0.50	N1, Q5	DLC
1307095-01	C	1,2-Dibromo-3-chloropropan	07/12/13 7:30	EPA 8260B	7/22/13 20:12	ND	ug/L	0.24	0.50	N1, Q5	DLC
1307095-01	C	1,2-Dibromoethane	07/12/13 7:30	EPA 8260B	7/22/13 20:12	ND	ug/L	0.08	0.50	Q5	DLC
1307095-01	C	cis-1,2-Dichloroethene	07/12/13 7:30	EPA 8260B	7/22/13 20:12	ND	ug/L	0.08	2.00	Q5	DLC
1307095-01	C	m,p-Xylenes	07/12/13 7:30	EPA 8260B	7/22/13 20:12	ND	ug/L	0.10	0.50	Q5	DLC
1307095-01	C	o-Xylene	07/12/13 7:30	EPA 8260B	7/22/13 20:12	ND	ug/L	0.08	0.50	Q5	DLC

Lab ID:	Sample Type	Parameter	Sample Date/Time	Analysis Method	Analysis Date/Time	Analysis Value	Units	MDL	MRL	Sample/Data Qualifiers	Analyst
1307095-01	C	Styrene	07/12/13 7:30	EPA 8260B	7/26/13 0:52	ND	ug/L	0.14	0.50		DLC
1307095-01	C	Xylenes, total	07/12/13 7:30	EPA 8260B	7/22/13 20:12	ND	ug/L	0.10	1.00	Q5	DLC
1307095-01	C	Methoxychlor	07/12/13 7:30	EPA 8270C	7/16/13 18:14	ND	ug/L	0.0600	0.10		MAMZ
1307095-01	C	1,2-Diphenylhydrazine	07/12/13 7:30	EPA 8270C	8/26/13 15:51	ND	ug/L	1.23	2.00		SJM
CL Selenastrum capricornutum											
1307084-01	C	TUc (NOEC Based)	07/11/13 8:30	EPA 1003	7/12/13 16:10	1.0	N/A	1.0	1.0		OTHER
1307084-01	C	NOEC % Effluent	07/11/13 8:30	EPA 1003	7/12/13 16:10	100	N/A	1.0	1.0		OTHER
1307084-01	C	LOEC % Effluent	07/11/13 8:30	EPA 1003	7/12/13 16:10	NC	N/A	1.0	1.0		OTHER
1307084-01	C	TUc (IC25 Based)	07/11/13 8:30	EPA 1003	7/12/13 16:10	NC	N/A	1.0	1.0		OTHER
* Analysis Performed by:Bio-Aquatic Testing, Inc. - See attached contract lab report for official results.											
1307084-02	C	Tributyltin	07/11/13 8:30	Organotins/GC	7/19/13 16:15	ND	ug/L		0.046		WBR*
* Analysis Performed by:TestAmerica Burlington - See attached contract lab report for official results.											
1307084-02	C	1,2-Dibromo-3-Chloropropan	07/11/13 8:30	504.1	7/18/13 3:09	ND	mg/L		0.000019		DD *
1307084-02	C	1,2-Dibromoethane	07/11/13 8:30	504.1	7/18/13 3:09	ND	mg/L		0.0000097		DD *
* Analysis Performed by:TestAmerica Irvine - See attached contract lab report for official results.											
1307084-02	C	2,4,5-T	07/11/13 8:30	515.4	7/17/13 19:54	ND	mg/L		0.00099	R6	DD *
1307084-02	C	2,4,5-TP (Silvex)	07/11/13 8:30	515.4	7/17/13 19:54	ND	mg/L		0.00099		DD *
1307084-02	C	2,4-D	07/11/13 8:30	515.4	7/17/13 19:54	ND	mg/L		0.0099		DD *
1307084-02	C	2,4-DB	07/11/13 8:30	515.4	7/17/13 19:54	ND	mg/L		0.0020		DD *
1307084-02	C	3,5-Dichlorobenzoic acid	07/11/13 8:30	515.4	7/17/13 19:54	ND	mg/L		0.00099		DD *
1307084-02	C	Bentazon	07/11/13 8:30	515.4	7/17/13 19:54	ND	mg/L		0.0020		DD *
1307084-02	C	Dacthal acid metabolites	07/11/13 8:30	515.4	7/17/13 19:54	ND	mg/L		0.0020		DD *
1307084-02	C	Dalapon	07/11/13 8:30	515.4	7/17/13 19:54	ND	mg/L		0.0099		DD *
1307084-02	C	Dicamba	07/11/13 8:30	515.4	7/17/13 19:54	ND	mg/L		0.0015		DD *
1307084-02	C	Dichlorprop	07/11/13 8:30	515.4	7/17/13 19:54	ND	mg/L		0.00099		DD *
1307084-02	C	Dinoseb	07/11/13 8:30	515.4	7/17/13 19:54	ND	mg/L		0.0020		DD *
1307084-02	C	Pentachlorophenol	07/11/13 8:30	515.4	7/17/13 19:54	ND	mg/L		0.00020		DD *
1307084-02	C	Picloram	07/11/13 8:30	515.4	7/17/13 19:54	ND	mg/L		0.00099		DD *
* Analysis Performed by:TestAmerica Irvine - See attached contract lab report for official results.											
1307084-02	C	Di (2-ethylhexyl)phthalate	07/11/13 8:30	525.2	7/17/13 4:16	0.0050	mg/L		0.00059	B1	CP *
1307084-02	C	Alachlor	07/11/13 8:30	525.2	7/17/13 4:16	ND	mg/L		0.00020		CP *
1307084-02	C	Atrazine	07/11/13 8:30	525.2	7/17/13 4:16	ND	mg/L		0.000099		CP *
1307084-02	C	Benzo[a]pyrene	07/11/13 8:30	525.2	7/17/13 4:16	ND	mg/L		0.000020		CP *
1307084-02	C	Di(2-ethylhexyl)adipate	07/11/13 8:30	525.2	7/17/13 4:16	ND	mg/L		0.00059		CP *
1307084-02	C	Hexachlorobenzene	07/11/13 8:30	525.2	7/17/13 4:16	ND	mg/L		0.000099		CP *
1307084-02	C	Hexachlorocyclopentadiene	07/11/13 8:30	525.2	7/17/13 4:16	ND	mg/L		0.000099		CP *
1307084-02	C	Simazine	07/11/13 8:30	525.2	7/17/13 4:16	ND	mg/L		0.000069		CP *
* Analysis Performed by:TestAmerica Irvine - See attached contract lab report for official results.											
1307084-02	C	3-Hydroxycarbofuran	07/11/13 8:30	531.1	7/17/13 2:10	ND	mg/L		0.0010		DD *
1307084-02	C	Aldicarb	07/11/13 8:30	531.1	7/17/13 2:10	ND	mg/L		0.0030		DD *
1307084-02	C	Aldicarb sulfone	07/11/13 8:30	531.1	7/17/13 2:10	ND	mg/L		0.0040		DD *
1307084-02	C	Aldicarb sulfoxide	07/11/13 8:30	531.1	7/17/13 2:10	ND	mg/L		0.0030		DD *
1307084-02	C	Carbaryl	07/11/13 8:30	531.1	7/17/13 2:10	ND	mg/L		0.0010		DD *
1307084-02	C	Carbofuran	07/11/13 8:30	531.1	7/17/13 2:10	ND	mg/L		0.00090		DD *
1307084-02	C	Methomyl	07/11/13 8:30	531.1	7/17/13 2:10	ND	mg/L		0.0010		DD *
1307084-02	C	Oxamyl	07/11/13 8:30	531.1	7/17/13 2:10	ND	mg/L		0.0020		DD *
* Analysis Performed by:TestAmerica Irvine - See attached contract lab report for official results.											
1307084-02	C	Glyphosate	07/11/13 8:30	547	7/19/13 18:44	ND	mg/L		0.0060		CP *
* Analysis Performed by:TestAmerica Irvine - See attached contract lab report for official results.											
1307084-02	C	Endothall	07/11/13 8:30	548.1	7/19/13 3:30	ND	mg/L		0.0090		CP *
* Analysis Performed by:TestAmerica Irvine - See attached contract lab report for official results.											
1307084-02	C	Diquat	07/11/13 8:30	549.2	7/19/13 13:36	0.00051	mg/L		0.00040		DD *
* Analysis Performed by:TestAmerica Irvine - See attached contract lab report for official results.											
1307084-02	C	Paraquat	07/11/13 8:30	549.2	7/19/13 13:36	ND	ug/L		20		DD *
* Analysis Performed by:TestAmerica Irvine - See attached contract lab report for official results.											
1307084-02	C	Mirex	07/11/13 8:30	8081A	7/19/13 19:19	ND	ug/L		0.22		KS *
* Analysis Performed by:TestAmerica Irvine - See attached contract lab report for official results.											
1307084-04	C	Mercury, Total	07/11/13 8:30	1631E	7/16/13 14:12	0.00050	ug/L		0.00050		VLC *
* Analysis Performed by:TestAmerica Pensacola - See attached contract lab report for official results.											
1307084-07	FB	Mercury, Total	07/11/13 8:30	1631E	7/16/13 14:20	ND	ug/L		0.00050		VLC *
* Analysis Performed by:TestAmerica Pensacola - See attached contract lab report for official results.											
1307084-02	C	Uranium	07/11/13 8:30	200.8	7/17/13 16:07	2.7	ug/L		1.0		TEK *

Qualifier Definitions

<	<1
<a	<2
A	Absent
B1	Target analyte detected in method blank at or above the method reporting limit.
B4	Target analyte detected in blank at or above method acceptance criteria.
D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of target analyte.
D7	Minimum Reporting Limit adjusted to reflect sample dilution.
H6	The filtration was not done within the required 15 minutes of sampling, the sample was filtered in the laboratory.
J	Concentration estimated. Analyte was detected below laboratory minimum reporting limit (MRL) but above MDL.
K1	The sample dilutions set-up for the BOD/CBOD analysis did not meet the oxygen depletion criteria of at least 2 mg/L. Any reported result is an estimated value.
L3	The associated blank spike recovery was above method acceptance limits.
M1	Matrix spike recovery was high; the associated blank spike recovery was acceptable.
M2a	Matrix spike recovery was low; the associated blank spike recovery was acceptable.
N1	See case narrative.
N7	Additional analysis was not performed based on the "Total" result which was below the requested analyte's MCL/Action level/Trigger Level.
NA	Not Analyzed
NC	Not Calculable
NR	Not Reported
Q5	Sample received with inadequate chemical preservation, but preserved by the laboratory.
Q6	Sample was received above recommended temperature.
R4	MS/MSD RPD exceeded the method acceptance limit. Recovery met acceptance criteria.
R6	LFB/LFBD RPD exceeded method control limit. Recovery met acceptance criteria.
R8	Sample RPD exceeded the method acceptance limit.
S11	Surrogate recovery was high. Data reported per ADEQ policy 0154.000
T1	Method approved by EPA, but not yet licensed by ADHS.
T6	The reported result cannot be used for compliance purposes.
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.
V9	CCV recovery was below method acceptance limits.

General Notes and Definitions

C	Sample Type - Composite
D	Sample Type - Discrete
DD	Sample Type - Discrete Duplicate
ND	Analyte NOT DETECTED at or above the reporting limit (MDL)
NR	Not Reported
DET	Analyte DETECTED
DRY	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1307095-02

SITE & LOCATION: Green Valley WRF - BNROD - Raw Influent - AZPDES - Compliance Data

SITE-LOCATION NUMBER: 25001-1903 (XXXXX-XXXX)

SAMPLE START DATE: 07-11-13 (MM / DD / YYYY)

SAMPLE START TIME: ~~0715~~ 0710 (24 Hour Clock)

SUBMITTER: IWC

SAMPLE END DATE: 07-12-13 (MM / DD / YYYY)

SAMPLE END TIME: ~~0715~~ 0710 (24 Hour Clock)

SAMPLER: Silva, Horney, Chavez, Valencia (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ■ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ☐ Biosolids ☐ Soil ■ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	■
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐			
Cobalt	☐	☐			
Copper	☐	☐			
Hardness	☐	☐			
Iron	☐	☐			
Lead	☐	☐			
Magnesium	☐	☐			
Manganese	☐	☐			
Mercury *	☐	■			
Molybdenum	☐	☐			
Nickel	☐	☐			
Potassium	☐	☐			
Selenium	☐	☐			
Silver	☐	☐			
Sodium	☐	☐			
Strontium	☐	☐			
Thallium	☐	☐			
Tin	☐	☐			

WET METHODS	D	C
Ammonia as N	☐	☐
Chloride	☐	☐
Cyanide, Total *	☐	■
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	☐
Nitrite as N	☐	☐
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	☐
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile *	■	☐
Dioxin GC/SIM/MS Scan *	☐	■
Organochlorine Pesticides & PCBs *	☐	■
Purgeable Organics (GCMS) *	■	☐
Semivolatile Organics (GCMS) *	☐	■
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:
The lab shall composite the four discrete purgeable organics and AC/AC samples. The AC/AC is pH adjusted 4-5 SU.

# of Bottles Delivered: 7X40

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials: 06-25-13 LEJ

Chain of Custody Record (Signatures Only)

Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	[signature]	7/11/13	1600
[signature]	Fridge	7/12/13	0130
Fridge	[signature]	7-12-13	0600
[signature]	[signature]	07-12-13	0842

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	3	°C
Initials:	GOS	
Non-Preserved	4	#
HNO_3	1	#
H_2SO_4		#
HCl	1	#
NaOH	1	#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:

	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☒	☐
Received from a refrigerator?	☐	☒	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1307084-05 + 06

SITE & LOCATION: Green Valley WRF - BNROD - Final Effluent - AZPDES - Compliance Data

SITE-LOCATION NUMBER: 25000-1923 (XXXXX-XXXX)

SAMPLE START DATE: — (MM/DD/YYYY)

SAMPLE START TIME: — (24 Hour Clock)

SUBMITTER: CRAO/Water Quality

SAMPLE END DATE: 07/11/2013 (MM/DD/YYYY)

SAMPLE END TIME: 0810 (24 Hour Clock)

SAMPLER: Grodman, Cuebara (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ■ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ☐ Biosolids ☐ Soil ■ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C
Aluminum		
Antimony		
Arsenic		
Barium		
Beryllium		
Boron		
Cadmium		
Calcium		
Chromium		
Cobalt		
Copper		
Hardness		
Iron		
Lead		
Magnesium		
Manganese		
Mercury		
Molybdenum		
Nickel		
Potassium		
Selenium		
Silver		
Sodium		
Strontium		
Thallium		
Tin		

METALS	D	C
Titanium		
Vanadium		
Zinc		
Priority Pollutant Metals *		
TCLP Metals		
503 Metals **		
Chromium, Hexavalent	■	
Chromium, Trivalent		

WET METHODS	D	C
Ammonia as N	■	
Chloride		
Cyanide, Total	■	
Cyanide, Amenable		
Fluoride		
Ignitability		
Nitrate as N		
Nitrite as N		
Nitrate/Nitrite as N		
Nitrogen, Total Kjeldahl		
Nitrogen, Total as N		
Orthophosphate as P		
Phosphorus, Total as P		
Sulfate		
Sulfide	■	
Turbidity		

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile		
Dioxin GC/SIM/MS Scan		
Organochlorine Pesticides & PCBs		
Purgeable Organics (GCMS)		
Semivolatile Organics (GCMS)		
Other		

MISCELLANEOUS METHODS	D	C
4,4-DDE		
Bis(2-ethylhexyl) phthalate		
Digester Gas		
Oil and Grease	■	
Organic Carbon, Total		
Organic Carbon, Dissolved		
TCLP Herbicides (Contract Lab)		
TCLP Pesticides		
TCLP Semivolatile Organics		
TCLP Volatile Organics		
Total Petroleum Hydrocarbons		
Volatile Acids		

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*		
Chronic *C. dubia*		
Chronic *Selenastrum capricornutum*		
Other		

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity		
BOD		
COD		
Coliform, Fecal		
Coliform, Total		
Conductivity		
E. coli	■	
Oxygen, Dissolved		
pH		
Solids, Settleable		
Solids, Total		
Solids, Total Dissolved		
Solids, Total Suspended		
Solids, Total Volatile		
Solids, Volatile Suspended		
Other		

OTHER	D	C

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
■ Oxygen, Dissolved *SM 4500-O G*	0.96	mg/L
■ pH / pH Temp *SM 4500-H B*	7.2 / 28.5	pH Units/ °C
■ Temperature *SM 2550 B*	28.5	°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions: D.O. analysis by HACH 10360

# of Bottles Delivered: 6 GOS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials:

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	1.5	°C
Initials:	GOS	
Non-Preserved	1	#
HNO_3		#
H_2SO_4	1	#
HCl	1	#
NaOH	2	#
$Na_2S_2O_3$	1	#
$Zn(C_2H_3O_2)_2$	1	#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☒		
Sample labels match Chain of Custody?	☒		
Correct number of samples were delivered?	☒		
Custody seals intact?	☒		
Within holding time?	☒		
Sufficient sample volume for analysis?	☒		
Samples are in proper containers?	☒		
Sample containers damaged/leaking/frozen?		☒	
40 ml vials headspace, > pea-sized air bubble?			☒
Received from a refrigerator?		☒	

Chain of Custody Record (Signatures Only)

Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	[signature]	07-11-13	1003

* Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)
** As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1307084-03 +04+07+08

SITE & LOCATION: Green Valley WRF - BNROD - Final Effluent - AZPDES - Compliance Data

SITE-LOCATION NUMBER: 25000-1923 (XXXXX-XXXX)

SAMPLE START DATE: 07/10/2013 (MM/DD/YYYY)

SAMPLE START TIME: 0830 (24 Hour Clock)

SUBMITTER: CRAO/Water Quality

SAMPLE END DATE: 07/11/2013 (MM/DD/YYYY)

SAMPLE END TIME: 0830 (24 Hour Clock)

SAMPLER: Goodman, Cuebera (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ☐ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ☐ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum			Titanium		
Antimony			Vanadium		
Arsenic			Zinc		
Barium *		■	Priority Pollutant Metals *		■
Beryllium			TCLP Metals		
Boron *		■	503 Metals **		
Cadmium			Chromium, Hexavalent		
Calcium			Chromium, Trivalent		
Chromium			**WET METHODS**	D	C
Cobalt			Ammonia as N		
Copper			Chloride		
Hardness *		■	Cyanide, Total		
Iron			Cyanide, Amenable		
Lead			Fluoride *		■
Magnesium			Ignitability		
Manganese *		■	Nitrate as N		
Mercury *		■	Nitrite as N		
Molybdenum			Nitrate/Nitrite as N *		■
Nickel			Nitrogen, Total Kjeldahl *		■
Potassium			Nitrogen, Total as N		
Selenium			Orthophosphate as P		
Silver			Phosphorus, Total as P *		■
Sodium			Sulfate		
Strontium			Sulfide		
Thallium			Turbidity		
Tin					

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile *	■	
Dioxin GC/SIM/MS Scan		
Organochlorine Pesticides & PCBs *		■
Purgeable Organics (GCMS)	■	
Semivolatile Organics (GCMS) *		■
Other		

MISCELLANEOUS METHODS	D	C
4,4-DDE		
Bis(2-ethylhexyl) phthalate		
Digester Gas		
Oil and Grease		
Organic Carbon, Total		
Organic Carbon, Dissolved		
TCLP Herbicides (Contract Lab)		
TCLP Pesticides		
TCLP Semivolatile Organics		
TCLP Volatile Organics		
Total Petroleum Hydrocarbons		
Volatile Acids		

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*		
Chronic *C. dubia*		
Chronic *Selenastrum capricomutum*		
Other		

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity		
BOD *		■
COD		
Coliform, Fecal		
Coliform, Total		
Conductivity		
E. coli		
Oxygen, Dissolved		
pH		
Solids, Settleable		
Solids, Total		
Solids, Total Dissolved *		■
Solids, Total Suspended *		■
Solids, Total Volatile		
Solids, Volatile Suspended		
Other		

OTHER	D	C
LL Mercury, Total contract		■
LL Mercury, Total (In-lab)		■

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:
The lab shall composite the 4 Purgeable Organic and Acrolein/Acrylonitrile samples. DO#14-1217
1 LL Hg sent to TA. GOS 07-11-13

# of Bottles Delivered: (12) GOS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials: 06-25-13 LEJ

Chain of Custody Record (Signatures Only)

		Date:	Time: (24 Hour Clock)
Relinquished by Sampler:		07-11-13	1003
Relinquished by:	Received by:	7-11-13	1328
Relinquished by:	Received by:		
Relinquished by:	Received by:		
Relinquished by:	Received by:		

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	3	°C
Initials:	GOS	
Non-Preserved	9	#
HNO_3	1	#
H_2SO_4	1	#
HCl	1	#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☒		
Sample labels match Chain of Custody?	☒		
Correct number of samples were delivered?	☒		
Custody seals intact?			☒
Within holding time?	☒		
Sufficient sample volume for analysis?	☒		
Samples are in proper containers?	☒		
Sample containers damaged/leaking/frozen?		☒	
40 ml vials headspace, > pea-sized air bubble?		☒	
Received from a refrigerator?		☒	

* Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)
** As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-0013-550 (10/10)

CHAIN OF CUSTODY FORM

[ ] Phoenix - 4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303
[ ] Tucson - 1870 W. Prince Road, Suite 59, Tucson, AZ 85705 (520) 807-3801 FAX (520) 807-3803
[ ] Las Vegas - 6000 S Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

Page 1 of 1

Client Name/Address: CRAO Lab
Pima County RWRD
2955 W. Calle Agua Nueva
Tucson AZ 85745

Project/PO Number: Green Valley LL Hg
PO# 14-1217

Project Manager: Janice Hughes / Nancy Powell

Phone Number: 520-724-6183 / 6016

Sampler: Jason Gardner + Mike Silva

Fax Number: 520-724-6071

Analysis Required: LL Mercury (F); LL mercury blank

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	LL Mercury (F)	LL mercury blank	Special Instructions
Green Valley WRF - Effluent	WW	glass vials	1 Pak	7-11-13	0830	None	X	X	composite
25000-1933									
1307084-04									
07 is blank									
Avra Valley WRF - final eff	WW	glass vials	1 bag	07-11-13	0830	none	X	X	composite
25003-1350									
1307083-02									
04 is blank									

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	7-11-13 1003	[signature]	07-11-13 1003
Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	07-11-13 1328	[signature]	7-11-13 1328
Relinquished By:	Date/Time:	Received in Lab By:	Date/Time:

Turnaround Time: (Check)
same day ____ 72 hours ____
24 hours ____ 5 days ____
48 hours ____ normal ✓

Sample Integrity: (Check)
intact X on ice X

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

4.2

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-0013-550 (10/10)

CHAIN OF CUSTODY FORM

[ ] Phoenix - 4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303
[ ] Tucson - 1870 W. Prince Road, Suite 59, Tucson, AZ 85705 (520) 807-3801 FAX (520) 807-3803
[ ] Las Vegas - 6000 S Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

Client Name/Address: CRAO Lab
Pima County RWRD
2955 W. Calle Agua Nueva
Tucson AZ 85745

Project/PO Number: Green Valley LL Hg
DO# 14-1217

Project Manager: Janice Hughes/Nancy Powell

Phone Number: 520-724-6183/6016

Sampler: Jason Gradam + Mike Silva

Fax Number: 520-724-6071

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	LL Mercury (T)	LL mercury blank								Special Instructions
Green Valley WRF-Effluent	WW	glass vials	1 Pack	7-11-13	0830	None	X	X								composite
25000-1923																
1307084-04																
07 is blank																
Avra Valley WRF-final eff	WW	glass vials	1 bag	07-11-13	0630	none	X	X								composite
25003-1350																
1307083-02																
04 is blank																

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	7-11-13 1003	[signature]	07-11-13 1003
Relinquished By: [signature]	Date/Time: 07-11-13 1328	Received By: [signature]	Date/Time: 7-11-13 1328
Relinquished By:	Date/Time:	Received in Lab By:	Date/Time:

Turnaround Time: (Check)
same day ____ 72 hours ____
24 hours ____ 5 days ____
48 hours ____ normal ✓

Sample Integrity: (Check)
intact X on ice X

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

4.2

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1307095-01

SITE & LOCATION: Green Valley WRF - BNROD Final Effluent - AZPDES - Compliance Data

SITE-LOCATION NUMBER: 25001-1923 (XXXXX-XXXX)

SAMPLE START DATE: 07-11-13 (MM / DD / YYYY)

SAMPLE START TIME: 0730 (24 Hour Clock)

SUBMITTER: IWC

SAMPLE END DATE: 07-12-13 (MM / DD / YYYY)

SAMPLE END TIME: 0730 (24 Hour Clock)

SAMPLER: Silva, Horney, Chavez, Valencia (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ☐ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ☐ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum			Titanium		
Antimony			Vanadium		
Arsenic			Zinc		
Barium			Priority Pollutant Metals *		■
Beryllium			TCLP Metals		
Boron			503 Metals **		
Cadmium			Chromium, Hexavalent		
Calcium			Chromium, Trivalent		
Chromium					
Cobalt					
Copper					
Hardness					
Iron					
Lead					
Magnesium					
Manganese					
Mercury *		■			
Molybdenum					
Nickel					
Potassium					
Selenium					
Silver					
Sodium					
Strontium					
Thallium					
Tin					

WET METHODS	D	C
Ammonia as N		
Chloride		
Cyanide, Total *		■
Cyanide, Amenable		
Fluoride		
Ignitability		
Nitrate as N		
Nitrite as N		
Nitrate/Nitrite as N		
Nitrogen, Total Kjeldahl		
Nitrogen, Total as N		
Orthophosphate as P		
Phosphorus, Total as P		
Sulfate		
Sulfide		
Turbidity		

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile *	■	
Dioxin GC/SIM/MS Scan *		■
Organochlorine Pesticides & PCBs *		■
Purgeable Organics (GCMS) *	■	
Semivolatile Organics (GCMS) *		■
Other		

MISCELLANEOUS METHODS	D	C
4,4-DDE		
Bis(2-ethylhexyl) phthalate		
Digester Gas		
Oil and Grease		
Organic Carbon, Total		
Organic Carbon, Dissolved		
TCLP Herbicides (Contract Lab)		
TCLP Pesticides		
TCLP Semivolatile Organics		
TCLP Volatile Organics		
Total Petroleum Hydrocarbons		
Volatile Acids		

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*		
Chronic *C. dubia*		
Chronic *Selenastrum capricornutum*		
Other		

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity		
BOD		
COD		
Coliform, Fecal		
Coliform, Total		
Conductivity		
E. coli		
Oxygen, Dissolved		
pH		
Solids, Settleable		
Solids, Total		
Solids, Total Dissolved		
Solids, Total Suspended		
Solids, Total Volatile		
Solids, Volatile Suspended		
Other		

OTHER	D	C

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:
The lab shall composite the four discrete purgeable organics and AC/AC samples. The AC/AC is pH adjusted 4-5 SU.

# of Bottles Delivered: (7) GOS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials: 06-25-13 LEJ

Chain of Custody Record (Signatures Only)

Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	[signature]	7/11/13	1600
[signature]	Fridge	7/12/13	0130
Fridge	[signature]	7-12-13	0600
[signature]	[signature]	07-12-13	0842

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	3	°C
Initials:	GOS	
Non-Preserved	4	#
HNO_3	1	#
H_2SO_4		#
HCl	1	#
NaOH	1	#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☒		
Sample labels match Chain of Custody?	☒		
Correct number of samples were delivered?	☒		
Custody seals intact?			☒
Within holding time?	☒		
Sufficient sample volume for analysis?	☒		
Samples are in proper containers?	☒		
Sample containers damaged/leaking/frozen?		☒	
40 ml vials headspace, > pea-sized air bubble?		☒	
Received from a refrigerator?		☒	

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1307084-01

SITE & LOCATION: Green Valley WRF - Effluent - AZPDES

SITE-LOCATION NUMBER: 25000-1923 (XXXXX-XXXX)

SAMPLE START DATE: 07/10/2013 (MM/DD/YYYY)

SAMPLE START TIME: 0830 (24 Hour Clock)

SAMPLE END DATE: 07/11/2013 (MM/DD/YYYY)

SAMPLE END TIME: 0830 (24 Hour Clock)

SUBMITTER: CRAO/Water Quality

SAMPLER: Goodman, Graham (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ☐ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ☐ Biosolids ☐ Soil ☐ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum			Titanium		
Antimony			Vanadium		
Arsenic			Zinc		
Barium			Priority Pollutant Metals *		
Beryllium			TCLP Metals		
Boron			503 Metals **		
Cadmium			Chromium, Hexavalent		
Calcium			Chromium, Trivalent		
Chromium					
Cobalt					
Copper					
Hardness					
Iron					
Lead					
Magnesium					
Manganese					
Mercury					
Molybdenum					
Nickel					
Potassium					
Selenium					
Silver					
Sodium					
Strontium					
Thallium					
Tin					

WET METHODS	D	C
Ammonia as N		
Chloride		
Cyanide, Total		
Cyanide, Amenable		
Fluoride		
Ignitability		
Nitrate as N		
Nitrite as N		
Nitrate/Nitrite as N		
Nitrogen, Total Kjeldahl		
Nitrogen, Total as N		
Orthophosphate as P		
Phosphorus, Total as P		
Sulfate		
Sulfide		
Turbidity		

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile		
Dioxin GC/SIM/MS Scan		
Organochlorine Pesticides & PCBs		
Purgeable Organics (GCMS)		
Semivolatile Organics (GCMS)		
Other		

MISCELLANEOUS METHODS	D	C
4,4-DDE		
Bis(2-ethylhexyl) phthalate		
Digester Gas		
Oil and Grease		
Organic Carbon, Total		
Organic Carbon, Dissolved		
TCLP Herbicides (Contract Lab)		
TCLP Pesticides		
TCLP Semivolatile Organics		
TCLP Volatile Organics		
Total Petroleum Hydrocarbons		
Volatile Acids		

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*		
Chronic *C. dubia*		
Chronic *Selenastrum capricornutum*		■
Other		

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity		
BOD		
COD		
Coliform, Fecal		
Coliform, Total		
Conductivity		
E. coli		
Oxygen, Dissolved		
pH		
Solids, Settleable		
Solids, Total		
Solids, Total Dissolved		
Solids, Total Suspended		
Solids, Total Volatile		
Solids, Volatile Suspended		
Other		

OTHER	D	C

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions: Sent to BIO Aquatic Testing GOS 07-11-13 PO# 14-1209

# of Bottles Delivered: 1 GOS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	[signature]	07-11-13	1003
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	16	°C
Initials:	GOS	
Non-Preserved	1	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:

	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☐	☐	☒
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☒
Received from a refrigerator?	☐	☒	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

FedEx Express **NEW Package US Airbill**

FedEx Tracking Number 8771 1282 9445

MUR3

Form ID No. 0215

Sender's Copy

1 From *Please print and press hard.*

Date 07-11-13 Sender's FedEx Account Number SENDER'S FEDEX ACCOUNT NUMBER ONLY

Sender's Name Greg Spence Phone (520) 724-6016

Company Pima County CRAO Lab

Address 2955 W Calle Agua Nueva

Dept./Floor/Suite/Room

City Tucson State AZ ZIP 85745

2 Your Internal Billing Reference
First 24 characters will appear on invoice. OPTIONAL

3 To

Recipient's Name Andy Solomon Phone (866) 822-7250

Company BIO-AQUATIC TESTING

Address 2501 MAYES RD STE 100
We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

Address
Use this line for the HOLD location address or for continuation of your shipping address.

City CARROLLTON State TX ZIP 75006-1378

☐ HOLD Weekday — FedEx location address REQUIRED. NOT available for FedEx First Overnight.

☐ HOLD Saturday — FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

TUSA219

0442266723

The FedEx US Airbill has changed. See Section 4.
For shipments over 150 lbs., order the new FedEx Express Freight US Airbill.

4 Express Package Service • To most locations.
NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs.
For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☒ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

☐ NEW FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.

☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging • Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☒ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required — Package may be left without obtaining a signature for delivery.

☐ Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*

☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

Does this shipment contain dangerous goods?
One box must be checked.

☒ No ☐ Yes — As per attached Shipper's Declaration. ☐ Yes — Shipper's Declaration not required. ☐ Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

☐ Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below.

☐ Sender — Acct. No. in Section 1 will be billed. ☒ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

FedEx Acct. No. Credit Card No. 1226-1317-8 Exp. Date

Total Packages	Total Weight	Total Declared Value†
1	30 lbs.	$ ____ .00

†Our liability is limited to $100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

611

Rev. Date 11/10 • Part #163134 • ©1994-2010 FedEx • PRINTED IN U.S.A. SRS

PULL AND RETAIN THIS COPY BEFORE AFFIXING TO THE PACKAGE. NO POUCH NEEDED.

BIO-AQUATIC TESTING, INC.
2501 MAYES RD., STE. 100
CARROLLTON, TX 75006
PH: 972-242-7750 FAX: 972-242-7749

CHAIN OF CUSTODY

☐ Bio Only: No Sample Left

Lab Id : 54208

Please Review & Complete Sections A, B, C, & D.

Sample No: 54208 – ____

Check Sample No. : ✓ First, ____ Second, or ____ Third.

P.O. No:

Client: Pima County RWRD CHAO Lab 2955 W. Calle Agua Nueva Tucson AZ 85745

Facility: Green Valley

Permit No: AZ0024937

Outfall:

Client Contact: ROB SPEIR / Samra Hughes / Nancy Powell

Client Phone: 520-724-6256 / 520-724-6208 / 520-724-6016 / 520-724-6183

A. REVIEW SCHEDULED TEST(s):

96 Hr Acute	Selenastrum capricornutum

Concentration: 12.5 25 50 75 100

To Ship the 1st Sample on: ~~7/10/2013~~ 7/11/2013

(For TX) Setup separate 24hr Acute Test? ☐

B. Use area below to make changes, if the Scheduled Test(s) in "A" are incorrect:

Freshwater Species					Saltwater Species	
C. dubia (water flea)	*D. pulex* (water flea)	*D. magna* (water flea)	*P. promelas* (minnow)	*Selenastrum* (green algae)	*M. beryllina* (minnow)	*Mysidopsis* (shrimp)
☐Chronic	☐Chronic	☐Chronic	☐Chronic	☒96 Hour	☐Chronic	☐Chronic
☐96 Hour	☐96 Hour	☐96 Hour	☐96 Hour	☐48 Hour	☐96 Hour	☐96 Hour
☐48 Hour	☐48 Hour	☐48 Hour	☐48 Hour	☐24 Hour	☐48 Hour	☐48 Hour
☐24 Hour	☐24 Hour	☐24 Hour	☐24 Hour		☐24 Hour	☐24 Hour

Notes: Algae Temp prior to shipping 16°C Pima LIMS# 1307034-01 DO# 14-1209

Field Notes: pH= 7.62 Temp 21.1°C D.O. = 4.93 TRC=<0.0

C.

Sample ID or Location: (Outfall No. or Name)	Sample Type: E = Effluent, RS = Rec. Stream, S = Sediment	Sample Date From	Sample Date To	Sample Time (military) From	Sample Time (military) To	Grab or Composite	Sampled By: (Sign and Print Name)	Number Of Containers Shipped
1 Green Valley WRF 25000-1123 Effluent	E	07-10-11	07-11-11	0830	0830	Composite	[signature] / Jason Grodman	1
2								
3								

D.

	Relinquished By:	Date	Time	Received By:	Date	Time
1	[signature]	7-11-13	1003	[signature]	07-11-13	1003
2	[signature]	07-11-13	1500	FedEx	07-11-13	1500
3						

Bio-Aquatic Sample Login

BAT sample personnel: ○ Yes ◉ No

Check for Ammonia: ○ Yes ○ No

Dechlorinate Sample: ○ Yes ◉ No

Dilution Water: ○ Receiving Stream ◉ Synthetic Lab

Date:	Time:	By:	
Temperature: (C)	IR#:	Int. Salinity: ppt	Adj. Salinity: ppt
Chlorine: mg/l	Ammonia:	Other:	
pH:	DO: mg/l	Condition:	

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

07-11-13 GOS

LAB ID: 1307084-01-02

SITE & LOCATION: Green Valley WRF - BNROD - Final Effluent - AZPDES - Compliance Data

SITE-LOCATION NUMBER: 25000-1923 (XXXXX-XXXX)

SAMPLE START DATE: 07/10/2013 (MM/DD/YYYY) SAMPLE START TIME: 0830 (24 Hour Clock)

SUBMITTER: CRAO/Water Quality

SAMPLE END DATE: 07/11/2013 (MM/DD/YYYY) SAMPLE END TIME: 0830 (24 Hour Clock)

SAMPLER: Goodman, Guebara (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ■ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ☐ Biosolids ☐ Soil ■ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐			
Cobalt	☐	☐			
Copper	☐	☐			
Hardness	☐	☐			
Iron	☐	☐			
Lead	☐	☐			
Magnesium	☐	☐			
Manganese	☐	☐			
Mercury	☐	☐			
Molybdenum	☐	☐			
Nickel	☐	☐			
Potassium	☐	☐			
Selenium	☐	☐			
Silver	☐	☐			
Sodium	☐	☐			
Strontium	☐	☐			
Thallium	☐	☐			
Tin	☐	☐			

WET METHODS	D	C
Ammonia as N	☐	☐
Chloride	☐	☐
Cyanide, Total	☐	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	☐
Nitrite as N	☐	☐
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	☐
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
SOCs contract	☐	■
Uranium contract	☐	■
	☐	☐
See Outside Lab Chain	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions: All sent to Test America GOS 07-11-13 PO# 14-1213

# of Bottles Delivered: 27 GOS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
		07-11-13	1003
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
		7-11-13	1328
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	3	°C
Initials:	GOS	
Non-Preserved	14	#
HNO_3	1	#
H_2SO_4	1	#
HCl		#
NaOH		#
$Na_2S_2O_3$	12	#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☒
Received from a refrigerator?	☐	☒	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-0013-550 (10/10)

CHAIN OF CUSTODY FORM

[ ] Phoenix - 4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303
[ ] Tucson - 1870 W. Prince Road, Suite 59, Tucson, AZ 85705 (520) 807-3801 FAX (520) 807-3803
[ ] Las Vegas - 6000 S Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

Client Name/Address: CRAO Lab, Pima County RWRD, 2955 W. Ajo Way, Tucson AZ 85715

Project/PO Number: Green Valley SOCs, DO#14-1213

Project Manager: Jesse Hughes / Nancy Powell

Phone Number: 520-724-6183/6016

Sampler: Jesse Goodman

Fax Number: 520-724-6071

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	504.1	515.1	525.2	531	547	548.1	549.2	1613B	608.1 Pesticides	Special Instructions
Green Valley MRF - Flow 1	WW	various	9	7-11-13	0830	$Na_2S_2O_3$	X			X	X					composites
25000-1923			4			Na_2SO_3		X				X				
1307084-02			4			Na_2SO_3 + HCl			X							
			1			$Na_2S_2O_3$ + H_2SO_4							X			
			~~108~~ 109			None								X	X	

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	7-11-13 / 1003	[signature]	07-11-13 1003
[signature]	07-11-13 1328	[signature]	7-11-13 1328
Relinquished By:	Date/Time:	Received in Lab By:	Date/Time:

Turnaround Time: (Check)
same day ____ 72 hours ____
24 hours ____ 5 days ____
48 hours ____ normal ✓

Sample Integrity: (Check)
intact X on ice X

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

4.2

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-0013-550 (10/10)

CHAIN OF CUSTODY FORM

[ ] Phoenix - 4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303
[ ] Tucson - 1870 W. Prince Road, Suite 59, Tucson, AZ 85705 (520) 807-3801 FAX (520) 807-3803
[ ] Las Vegas - 6000 S Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

Client Name/Address: CRAO Lab
Pima County RWRD
2955 W. Calle Agua Nueva
Tucson AZ 85745

Project/PO Number: Green Valley SOCs
DO# 14-1213

Project Manager: Sarah Hughes / Nancy Powell

Phone Number: 520-724-6183/6016

Sampler: Jason Grodman

Fax Number: 520-724-6071

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	8141 Gutthion Malathion Parathion	200.8 Uranium	Tributyltin							Special Instructions
Green Valley WRF Fall 1	NW	various	6	7-11-13	0830	None	X		X							composites
25000-1923			1			HNO_3		X								
1307084-02																

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	7-11-13 / 1003	[signature]	07-11-13 1003
[signature]	07-11-13 1328	[signature]	7-11-13 1328

Turnaround Time: (Check)
same day ____ 72 hours ____
24 hours ____ 5 days ____
48 hours ____ normal ✓

Received in Lab By: ____ Date/Time: ____

Sample Integrity: (Check)
intact X on ice X

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

4.2

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-0013-550 (10/10)

CHAIN OF CUSTODY FORM

[ ] Phoenix - 4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303
[ ] Tucson - 1870 W. Prince Road, Suite 59, Tucson, AZ 85705 (520) 807-3801 FAX (520) 807-3803
[ ] Las Vegas - 6000 S Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

Client Name/Address: CRAO Lab
Pima County RWRD
2955 W Che Agua Nueva
Tucson AZ 85745

Project/PO Number: Green Valley SOCs
DO#14-1213

Project Manager: Janice Hughes / Nancy Powell

Phone Number: 520-724-6183/6016

Sampler: Jason Goodman

Fax Number: 520-724-6071

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	504.1	515.4	525.2	531	547	548.1	549.2	1613B	8081 Mirex	Special Instructions
Green Valley WRF-Effluent	Wtr	various	9	7-11-13	0830	$Na_2S_2O_3$	X			X	X					composites
25000-1923			4			Na_2SO_3		X				X				
1307084-02			4			$Na_2S_2O_3$ + HCl			X							
			1			$Na_2S_2O_3$ + H_2SO_4							X			
			108			None								X	X	
			13-10-13													

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	7-11-13 / 1003	[signature]	07-11-13 1003
[signature]	07-11-13 1328	[signature]	7-11-13 1328
Relinquished By:	Date/Time:	Received in Lab By:	Date/Time:

Turnaround Time: (Check)
same day ____ 72 hours ____
24 hours ____ 5 days ____
48 hours ____ normal ✓

Sample Integrity: (Check)
intact X on ice X

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

4.2

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-0013-550 (10/10)

CHAIN OF CUSTODY FORM

[ ] Phoenix - 4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303
[ ] Tucson - 1870 W. Prince Road, Suite 59, Tucson, AZ 85705 (520) 807-3801 FAX (520) 807-3803
[ ] Las Vegas - 6000 S Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

Client Name/Address: CRAO Lab
Pima County RWRD
2955 W. Calle Agua Nueva
Tucson AZ 85745

Project/PO Number: Green Valley SOCs
DO#14-1213

Project Manager: Jason Hughes / Nancy Powell

Phone Number: 520-724-6133/6010

Sampler: Jason Graham

Fax Number: 520-724-6071

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	8141 Carbaryl Malathion Parathion	200.8 Uranium	Triabutylthio							Special Instructions
Green Valley WRF-EQ Effluent	WW	various	6	7-11-13	0830	None	X		X							composites
25000-1923			1			HNO_3		X								
1307084-02																

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	7-11-13 / 1003	[signature]	07-11-13 1003
[signature]	07-11-13 1328	[signature]	7-11-13 1328
Relinquished By:	Date/Time:	Received in Lab By:	Date/Time:

Turnaround Time: (Check)
same day ____ 72 hours ____
24 hours ____ 5 days ____
48 hours ____ normal 1

Sample Integrity: (Check)
intact X on ice X

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

4.2

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1307028-04

SITE & LOCATION: GREEN VALLEY WWTF-BNROD-NORTH AEROBIC DIGESTER SLUDGE

SITE-LOCATION NUMBER: 25000-1950 (XXXXX-XXXX)

SAMPLE START DATE: (MM / DD / YYYY)

SAMPLE START TIME: (24 Hour Clock)

SUBMITTER: Sub-Regional Facilities

SAMPLE END DATE: 07/03/2013 (MM / DD / YYYY)

SAMPLE END TIME: 0800 (24 Hour Clock)

SAMPLER: GARRISON (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ☐ AZPDES ☐ Reuse ■ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ☐ Biosolids ☐ Soil ■ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐			
Cobalt	☐	☐			
Copper	☐	☐			
Hardness	☐	☐			
Iron	☐	☐			
Lead	☐	☐			
Magnesium	☐	☐			
Manganese	☐	☐			
Mercury	☐	☐			
Molybdenum	☐	☐			
Nickel	☐	☐			
Potassium	☐	☐			
Selenium	☐	☐			
Silver	☐	☐			
Sodium	☐	☐			
Strontium	☐	☐			
Thallium	☐	☐			
Tin	☐	☐			

WET METHODS	D	C
Ammonia as N	☐	☐
Chloride	☐	☐
Cyanide, Total	☐	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	☐
Nitrite as N	☐	☐
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	☐
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	■	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	■	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:

# of Bottles Delivered: (1) GOS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by	Received by	Date	Time (24 Hour Clock)
Sampler:	Refrigerator	7/3/13	0810
Refrigerator		7/3/13	1048
		07-03-13	1229

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	1	°C
Initials:	GOS	
Non-Preserved	1	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☒
Received from a refrigerator?	☐	☒	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Nancy Powell	Site Contact:	Date:	COC No:
Pima County CRAO Lab	Tel/Fax: 520-724-6183	Lab Contact:	Carrier:	1 of 1 COCs
2955 W Calle Agua Nueva	Analysis Turnaround Time			Job No.
Tucson/AZ/85745	Calendar (C) or Work Days (W) _____			
(520) 724-6183 Phone	TAT if different from Below _____			SDG No.
(520) 724-6071 FAX	☐ 2 weeks			
Project Name: Green Valley SOCs	☐ 1 week			
Site: Green Valley	☐ 2 days			
P O # 14-12451	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	EPA 504.1	EPA 515.4	EPA 525.2	EPA 531.1	EPA 547	EPA 548.1	EPA 549.2	EPA 1613 (dioxin)	EPA 8141 Guthion, Malathion & Parathi	EPA 8081 Mirex	Tributyltin	EPA 200.8 Uranium	Sample Specific Notes:
Green Valley WRF-Bypass-Final Effluent 25000-1423	10-10-13	1000	Composite	WW	33													
1310084-02						3	2	4	3	3	2	1	6	4	2	2	1	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Pima County CRAO	10-10-13 1300	[signature]	PC CRAO	10-10-13 1300
Relinquished by: [signature]	Company: PC CRAO	Date/Time: 10-11-13 805	Received by: [signature]	Company: TA	Date/Time: 10-11-13 805
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1310096-02

SITE & LOCATION: Green Valley WRF - BNROD Final Effluent - AZPDES - Compliance Data

SITE-LOCATION NUMBER: 25001-1923 (XXXXX-XXXX)

SAMPLE START DATE: 10/10/13 (MM / DD / YYYY)

SAMPLE START TIME: 0715 (24 Hour Clock)

SUBMITTER: IWC

SAMPLE END DATE: 10/11/13 (MM / DD / YYYY)

SAMPLE END TIME: 0715 (24 Hour Clock)

SAMPLER: Horney, Guebara, Way, Riccabona (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ■ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ☐ Biosolids ☐ Soil ■ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	■
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐			
Cobalt	☐	☐			
Copper	☐	☐			
Hardness	☐	☐			
Iron	☐	☐			
Lead	☐	☐			
Magnesium	☐	☐			
Manganese	☐	☐			
Mercury	☐	■			
Molybdenum	☐	☐			
Nickel	☐	☐			
Potassium	☐	☐			
Selenium	☐	☐			
Silver	☐	☐			
Sodium	☐	☐			
Strontium	☐	☐			
Thallium	☐	☐			
Tin	☐	☐			

WET METHODS	D	C
Ammonia as N	☐	☐
Chloride	☐	☐
Cyanide, Total	☐	■
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	☐
Nitrite as N	☐	☐
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	☐
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	■	☐
Dioxin GC/SIM/MS Scan	☐	■
Organochlorine Pesticides & PCBs	☐	■
Purgeable Organics (GCMS)	■	☐
Semivolatile Organics (GCMS)	☐	■
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:
The lab shall composite the four discrete purgeable organics and AC/AC samples. The AC/AC is pH adjusted 4-5 SU.

# of Bottles Delivered: 7 601

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials: 09-27-13 LEJ

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	[signature]	10.10.13	1600
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
[signature]	Fridge	10/11/13	0200
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Fridge	Andrea Horney	10/11/13	0600
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Andrea Horney	[signature]	10-11-13	0814

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	6	°C
Initials:	GOS	
Non-Preserved	4	#
HNO_3	1	#
H_2SO_4		#
HCl	1	#
NaOH	1	#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☒	☐
Received from a refrigerator?	☐	☒	☐

* *Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)*
** *As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn*

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1310192-01

SITE & LOCATION: Green Valley WRF - BNROD - Final Effluent - AZPDES - Compliance Data

SITE-LOCATION NUMBER: 25000-1923 (XXXXX-XXXX)

SAMPLE START DATE: 10/22/13 (MM / DD / YYYY)

SAMPLE START TIME: 0900 (24 Hour Clock)

SAMPLE END DATE: 10/23/13 (MM / DD / YYYY)

SAMPLE END TIME: 0900 (24 Hour Clock)

SUBMITTER: CRAO/Water Quality

SAMPLER: Valencia, Riccabona, Silva (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ■ AZPDES ☐ Reuse ☐ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ☐ Biosolids ☐ Soil ■ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐			
Cobalt	☐	☐			
Copper	☐	☐			
Hardness	☐	☐			
Iron	☐	☐			
Lead	☐	☐			
Magnesium	☐	☐			
Manganese	☐	☐			
Mercury	☐	☐			
Molybdenum	☐	☐			
Nickel	☐	☐			
Potassium	☐	☐			
Selenium	☐	☐			
Silver	☐	☐			
Sodium	☐	☐			
Strontium	☐	☐			
Thallium	☐	☐			
Tin	☐	☐			

WET METHODS	D	C
Ammonia as N	☐	☐
Chloride	☐	☐
Cyanide, Total	☐	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	☐
Nitrite as N	☐	☐
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	☐
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	☐	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	☐	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
SOCs (Contract)	☐	■
	☐	☐
	☐	☐
See Outside Lab Chain	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions: Sent to Test America, Micro only. Resample of previous event. DO#14-12451

# of Bottles Delivered: 2 GG

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials:

Chain of Custody Record (Signatures Only)

Relinquished by Sampler:	Received by:	Date:	Time: (24 Hour Clock)
		10-23-13	1051
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
		10-23-13	1351
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	4	°C
Initials:	GG	
Non-Preserved	2	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:

	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☒
Received from a refrigerator?	☐	☒	☐

* Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)
** As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn

Phoenix
4625 E Cotton Center Blvd
Suite 189
Phoenix, AZ 85040
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Nancy Powell	Site Contact:	Date:	COC No:
Pima County CRAO Lab	Tel/Fax: 520-724-6183	Lab Contact:	Carrier:	( ) of ( ) COCs
2955 W Calle Agua Nueva	Analysis Turnaround Time			Job No.
Tucson/AZ/85745	Calendar (C) or Work Days (W) _____			
(520) 724-6183 Phone	TAT if different from Below _____			
(520) 724-6071 FAX	☐ 2 weeks			SDG No.
Project Name: Green Valley WRF	☐ 1 week			
Site: Green Valley Final Effluent	☐ 2 days			
P O # 14-12451	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	EPA 1051 M. Rex	Sample Specific Notes:
Final EFFluent - 25000-1923	10/22/13 10/23/13	0900	Comp	WW	1		Resample event.
1310192-01						X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Pima County CRAO	10-23-13 1051	[signature] Greg Spence	PC CRAO Lab	10-23-13 1051
[signature] Greg Spence	PC CRAO Lab	10-23-13 1351	[signature]	TA	10-23-13 1351
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office Laboratory

CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

LAB ID: 1310015-06

SITE & LOCATION: GREEN VALLEY WWTF-BNROD-NORTH AEROBIC DIGESTER SLUDGE

SITE-LOCATION NUMBER: 25000-1950 (XXXXX-XXXX)

SAMPLE START DATE: (MM / DD / YYYY)

SAMPLE START TIME: (24 Hour Clock)

SUBMITTER: Sub-Regional Facilities

SAMPLE END DATE: 10/02/2013 (MM / DD / YYYY)

SAMPLE END TIME: 0955 (24 Hour Clock)

SAMPLER: Everhart (Print Last Names Only)

Permit Type: ☐ APP ☐ Investigative ☐ 503 ☐ AZPDES ☐ Reuse ■ Process Control ☐ IWC ☐ USFS ☐ Other

Sample Matrix: ☐ Biosolids ☐ Soil ■ Wastewater ☐ Groundwater ☐ Stormwater ☐ Other ☐ Industrial ☐ Surface Water

INORGANIC CHEMISTRY

METALS	D	C	METALS	D	C
Aluminum	☐	☐	Titanium	☐	☐
Antimony	☐	☐	Vanadium	☐	☐
Arsenic	☐	☐	Zinc	☐	☐
Barium	☐	☐	Priority Pollutant Metals *	☐	☐
Beryllium	☐	☐	TCLP Metals	☐	☐
Boron	☐	☐	503 Metals **	☐	☐
Cadmium	☐	☐	Chromium, Hexavalent	☐	☐
Calcium	☐	☐	Chromium, Trivalent	☐	☐
Chromium	☐	☐			
Cobalt	☐	☐			
Copper	☐	☐			
Hardness	☐	☐			
Iron	☐	☐			
Lead	☐	☐			
Magnesium	☐	☐			
Manganese	☐	☐			
Mercury	☐	☐			
Molybdenum	☐	☐			
Nickel	☐	☐			
Potassium	☐	☐			
Selenium	☐	☐			
Silver	☐	☐			
Sodium	☐	☐			
Strontium	☐	☐			
Thallium	☐	☐			
Tin	☐	☐			

WET METHODS	D	C
Ammonia as N	☐	☐
Chloride	☐	☐
Cyanide, Total	☐	☐
Cyanide, Amenable	☐	☐
Fluoride	☐	☐
Ignitability	☐	☐
Nitrate as N	☐	☐
Nitrite as N	☐	☐
Nitrate/Nitrite as N	☐	☐
Nitrogen, Total Kjeldahl	☐	☐
Nitrogen, Total as N	☐	☐
Orthophosphate as P	☐	☐
Phosphorus, Total as P	☐	☐
Sulfate	☐	☐
Sulfide	☐	☐
Turbidity	☐	☐

ORGANIC CHEMISTRY

PRIORITY POLLUTANTS	D	C
Acrolein and Acrylonitrile	☐	☐
Dioxin GC/SIM/MS Scan	☐	☐
Organochlorine Pesticides & PCBs	☐	☐
Purgeable Organics (GCMS)	☐	☐
Semivolatile Organics (GCMS)	☐	☐
Other	☐	☐

MISCELLANEOUS METHODS	D	C
4,4-DDE	☐	☐
Bis(2-ethylhexyl) phthalate	☐	☐
Digester Gas	☐	☐
Oil and Grease	☐	☐
Organic Carbon, Total	☐	☐
Organic Carbon, Dissolved	☐	☐
TCLP Herbicides (Contract Lab)	☐	☐
TCLP Pesticides	☐	☐
TCLP Semivolatile Organics	☐	☐
TCLP Volatile Organics	☐	☐
Total Petroleum Hydrocarbons	☐	☐
Volatile Acids	☐	☐

EFFLUENT TOXICITY TESTING	D	C
Chronic *P. promelas*	☐	☐
Chronic *C. dubia*	☐	☐
Chronic *Selenastrum capricornutum*	☐	☐
Other	☐	☐

MICROBIOLOGY - WET CHEM

	D	C
Alkalinity	☐	☐
BOD	☐	☐
COD	☐	☐
Coliform, Fecal	☐	☐
Coliform, Total	☐	☐
Conductivity	☐	☐
E. coli	☐	☐
Oxygen, Dissolved	☐	☐
pH	☐	☐
Solids, Settleable	☐	☐
Solids, Total	■	☐
Solids, Total Dissolved	☐	☐
Solids, Total Suspended	☐	☐
Solids, Total Volatile	■	☐
Solids, Volatile Suspended	☐	☐
Other	☐	☐

OTHER	D	C
	☐	☐
	☐	☐
	☐	☐
	☐	☐

COMPLIANCE FIELD MEASUREMENTS

	Result	Units
☐ Chlorine *Hach 10014*		µg/L
☐ Conductivity *SM 2510 B*		µmhos/cm
☐ Oxygen, Dissolved *SM 4500-O G*		mg/L
☐ pH / pH Temp *SM 4500-H B*	/	pH Units/ °C
☐ Temperature *SM 2550 B*		°C
☐ Total Depth of Well		feet
☐ Depth to Water		feet
☐ Other		

Comments/Instructions:

# of Bottles Delivered: 1 COS

Transported on Ice: ☒ YES ☐ NO

Septum Blank Prep Date & Initials:

LAB USE ONLY

Sample Integrity/Preservation:

Temperature:	4	°C
Initials:	GCO	
Non-Preserved	1	#
HNO_3		#
H_2SO_4		#
HCl		#
NaOH		#
$Na_2S_2O_3$		#
$Zn(C_2H_3O_2)_2$		#

Sample Inspection:	Yes	No	NA
Chain of Custody Record completed appropriately?	☒	☐	☐
Sample labels match Chain of Custody?	☒	☐	☐
Correct number of samples were delivered?	☒	☐	☐
Custody seals intact?	☐	☐	☒
Within holding time?	☒	☐	☐
Sufficient sample volume for analysis?	☒	☐	☐
Samples are in proper containers?	☒	☐	☐
Sample containers damaged/leaking/frozen?	☐	☒	☐
40 ml vials headspace, > pea-sized air bubble?	☐	☐	☒
Received from a refrigerator?	☐	☒	☐

Chain of Custody Record (Signatures Only)

Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Sampler	Refrigerator	10-2-13	1000
Refrigerator	[signature]	10-2-13	1027
[signature]	[signature]	10-02-13	1225
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)
Relinquished by:	Received by:	Date:	Time: (24 Hour Clock)

* Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn, Mercury(Cold Vapor)
** As, Cd, Cr, Cu, Pb, Mercury, Mo, Ni, Se, Zn

PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT
COMPLIANCE AND REGULATORY AFFAIRS OFFICE LABORATORY SERVICES
3035 W. El Camino del Cerro, Tucson, AZ 85745
Telephone: (520) 724-6200, Fax: (520)724-6071

LIMS CHECKLIST FOR SUBCONTRACT DATA

LIMS ID	**1310192-01**	**DO**	**14-12451**
CONTRACT LAB	**TestAmerica Irvine**	**SAMPLE GROUP**	**Green Valley WRF**
ANALYSES	**Mirex**	**REPORT ID**	**550-13189-1**

TRANSFER & COMMENT FILES:	
Was the contract lab spreadsheet file saved to \\Splimsapp\elementshare\TransferIn ?	Y
Was the above mentioned file converted from a .xls file to a .mdb file for each WO#, and further, for each subcontract location, or separate analysis (as applicable), on the contract lab report? (Element>Project Management>Reports)	Y
Was the converted file attached to the sample in LIMS?	Y
VALIDATING CONTRACT LAB REPORT , CHAIN OF CUSTODY(S), AND DO:	
Contract Lab Report signed and dated?	Y
Copy of contract lab COC included with contract Lab Report?	Y
Contract lab COC verified with CRAO COC(s) for Sample ID, Sample Date, Analysis Requested?	Y
Sample dates and received dates on the CL report, match the CL COC?	Y
CL report includes all requested analysis?	Y
CL licensed in AZ for reported the reported methods?	Y
Check that DO matches COC in types and number of tests?	NA
DO received in Pima Core?	NA
CONTRACT LAB REPORT, EXCEL SPREADSHEET, and QC:	
CL report and CL spreadsheet report the same sample results, sample date, and analysis date?	Y
Was a Case Narrative Included in Contract Lab report?	Y
Data packet includes QC Report from primary lab and any secondary subcontract labs?	Y
Did CL report list applicable AZ Data Qualifiers?	NA
Were there any dilutions made to samples that were reported as ND?	N
If so, were they qualified due to matrix interference?	NA
Was QC included for every analysis method: typically Blk, LCS, MS, MSD?	Y
Did QC pass stated acceptance limits, or was it qualified?	Y
Were samples analyzed within required holding times?	Y
Check that MDLs are below water quality standards, If not notify Tom Berry? (Cyanide, Hexachlorobenzene)	NA
Semivolatiles & Volatiles: Check that all analytes were delivered?	NA
COMPLIANCE LIMIT REVIEW	
Were results compared to the discharge permit?.	Y
Was Tom Berry notified of any exceedences?	NA
WET TESTING SPECIFIC REQUIREMENTS	
Statement of Pass/Fail reflected in End Points?	NA
Report states if zeolite treatment was utilized?	NA
Survival and Reproduction or Growth Data included (P. promelas or Ceriodaphnia only)?	NA
Chemistry data included?	NA
Reference Toxicant Test Results and Control Chart within limits?	NA
PMSD Determination included and within acceptable range? (minimum acceptable= 13)	NA
End Points include TUc, NOEC, LOEC, and IC25?	NA
Statistics verify endpoints	NA

Reviewer Initials:	**SN**	**Review Date:**	**11-14-13**

Work Order Results for 1311060

Sub-regional Facilities	**Project:**	**Green Valley WRF**	**Prepared: 2/19/2014 3:21:53 PM**
4527 W Walker Road	**Project number:**	**25000**	
Tucson ARIZONA 85743	**Project manager:**	**Ken Weber**	

Sample name: BNROD-Biosolids from drying bed #5 Matrix: Biosolids Sampled: 11/7/2013 8:00:00 AM US Mountain

503 Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes

Acrolein and Acrylonitrile Volatile Organic Compounds by EPA 624

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Acrolein	**ND**	10.0	mg/kg dry	0.0223	B312290	11/14/2013 5:05:00 PM	11/14/2013 5:05:00 PM	EPA 624	
Acrylonitrile	**ND**	10.0	mg/kg dry	0.0223	B312290	11/14/2013 5:05:00 PM	11/14/2013 5:05:00 PM	EPA 624	
Dibromofluoromethane [surr]	*0.0197*	(70 - 130)	ug/L	1	B312290	11/14/2013 5:05:00 PM	11/14/2013 5:05:00 PM	EPA 624	
Pentafluorobenzene	10.0		ug/L	1	B312290	11/14/2013 5:05:00 PM	11/14/2013 5:05:00 PM	EPA 624	
Toluene-d8 [surr]	*0.0209*	(70 - 130)	ug/L	1	B312290	11/14/2013 5:05:00 PM	11/14/2013 5:05:00 PM	EPA 624	

Antimony Total 6010B Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Antimony	4.88	8.68	mg/kg dry	1	B312054	12/3/2013 5:51:00 PM	12/5/2013 4:38:46 PM	EPA 6010B	J

Arsenic Total 6010B Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Arsenic	12.8	8.68	mg/kg dry	1	B312054	12/3/2013 5:51:00 PM	12/5/2013 2:47:01 PM	EPA 6010B	

Beryllium Total 6010B Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Beryllium	0.141	1.74	mg/kg dry	1	B312054	12/3/2013 5:51:00 PM	12/5/2013 2:47:01 PM	EPA 6010B	J

Cadmium Total 6010B Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Cadmium	2.09	3.47	mg/kg dry	1	B312054	12/3/2013 5:51:00 PM	12/5/2013 2:47:01 PM	EPA 6010B	J

Chromium Total 6010B Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Chromium	25.6	8.68	mg/kg dry	1	B312054	12/3/2013 5:51:00 PM	12/5/2013 2:47:01 PM	EPA 6010B	

CL TCLP Herbicides Chlorinated Herbicides in Hazardous Waste

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes

Copper Total 6010B Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Copper	540	8.68	mg/kg dry	1	B312054	12/3/2013 5:51:00 PM	12/5/2013 2:47:01 PM	EPA 6010B	

Cyanide Cyanide

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Cyanide, Total	6.5	0.46	mg/Kg dry	1	20291	11/12/2013 3:20:00 PM	11/13/2013 10:48:00 AM	9014	M2

Cyanide Sludge Miscellaneous Inorganic Analysis

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes

Herbicides (GC) P Herbicides (GC) TCLP

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
2,4-D	**ND**	0.013	mg/L	1	20350	11/20/2013 10:25:00 AM	11/22/2013 2:14:00 PM	8151A	
Pentachlorophenol	**ND**	0.013	mg/L	1	20350	11/20/2013 10:25:00 AM	11/22/2013 2:14:00 PM	8151A	
Silvex (2,4,5-TP)	**ND**	0.013	mg/L	1	20350	11/20/2013 10:25:00 AM	11/22/2013 2:14:00 PM	8151A	

Ignitability Miscellaneous Inorganic Analysis

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes

Ignitability, Solids Ignitability, Solids

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Ignitability	nonignitable		NONE	1	20779	11/19/2013 11:45:00 AM	11/19/2013 11:45:00 AM	1030	

Lead Total 6010B Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Lead	16.7	8.68	mg/kg dry	1	B312054	12/3/2013 5:51:00 PM	12/5/2013 2:47:01 PM	EPA 6010B	

Mercury - Solid Waste Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes

Molybdenum Total 6010B Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Molybdenum	20.3	3.47	mg/kg dry	1	B312054	12/3/2013 5:51:00 PM	12/5/2013 2:47:01 PM	EPA 6010B	

Nickel Total 6010B Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Nickel	14.2	8.68	mg/kg dry	1	B312054	12/3/2013 5:51:00 PM	12/5/2013 2:47:01 PM	EPA 6010B	

Nitrate/Nitrite Miscellaneous Inorganic Analysis

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Nitrate/Nitrite	265.02	0.89	mg/kg dry	5	B311246	11/17/2013 8:30:00 AM	11/17/2013 12:19:24 PM	EPA 353.2	D2

Nitrogen - Kjeldahl Miscellaneous Inorganic Analysis

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Total Kjeldahl Nitrogen	46908	111.35	mg/kg dry	10	B311259	11/18/2013 9:14:00 AM	11/21/2013 12:38:42 PM	EPA 351.2	D2

Nitrogen Total Biosolids Wet Chemistry

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Nitrogen Total Biosolids	47173	100.00	mg/kg dry	10	[CALC]	11/18/2013 9:14:00 AM	11/21/2013 12:38:42 PM	Calculated	

Pesticides 625 Semi-Volatile Organic Compounds by EPA 625

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
4,4-DDD	**ND**	0.00012	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7
4,4-DDE	**ND**	0.00012	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7
4,4-DDT	**ND**	0.00012	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7
Aldrin	**ND**	0.00012	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7
alpha-BHC	**ND**	0.00012	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7
beta-BHC	**ND**	0.00012	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7
Chlordane	**ND**	0.00100	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7
delta-BHC	**ND**	0.00012	mg/kg	0.5568	B311211	11/14/2013	11/26/2013	EPA 625	D1

			dry			7:26:00 AM	8:19:56 PM		D7
Dibutyl chlorendate [surr]	*76.4*	(5 - 142)	ug/L	1	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	
Dieldrin	**ND**	0.00012	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7
Endosulfan I	**ND**	0.00012	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7
Endosulfan II	**ND**	0.00012	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7
Endosulfan sulfate	**ND**	0.00012	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7
Endrin	**ND**	0.00012	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7
Endrin aldehyde	**ND**	0.00012	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7
gamma-BHC (Lindane)	**ND**	0.00012	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7
Heptachlor	**ND**	0.00012	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7
Heptachlor Epoxide	**ND**	0.00012	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7
PCB 1016	**ND**	0.00025	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7
PCB 1221	**ND**	0.00030	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7
PCB 1232	**ND**	0.00030	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7
PCB 1242	**ND**	0.00030	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7
PCB 1248	**ND**	0.00030	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7
PCB 1254	**ND**	0.00030	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7
PCB 1260	**ND**	0.00030	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7
Phenanthrene-d10	5.0000		ug/L	1	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	
TCMX [surr]	*59.2*	(5 - 103)	ug/L	1	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	
Total PCBs	**ND**	0.00030	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7
Toxaphene	**ND**	0.00600	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 625	D1 D7

Pesticides 625+ Pesticides and PCBs by EPA 8270C

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Dibutyl chlorendate [surr]	*76.4*	(5 - 142)	ug/L	1	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 8270C	
Methoxychlor	**ND**	0.00012	mg/kg dry	0.5568	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 8270C	D1 D7

Phenanthrene-d10	5.00		ug/L	1	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 8270C
TCMX [surr]	*59.2*	(5 - 103)	ug/L	1	B311211	11/14/2013 7:26:00 AM	11/26/2013 8:19:56 PM	EPA 8270C

PPM Sludge

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes

Purgeable Organics 624 Volatile Organic Compounds by EPA 624

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
1,1,1-Trichloroethane	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
1,1,2,2-Tetrachloroethane	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
1,1,2-Trichloroethane	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	N1
1,1-Dichloroethane	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
1,1-Dichloroethene	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
1,2-Dichlorobenzene	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
1,2-Dichloroethane	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
1,2-Dichloropropane	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
1,3-Dichlorobenzene	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
1,4-Dichlorobenzene	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
1,4-Dichlorobenzene-d4	10.000		ug/L	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
1,4-Difluorobenzene	10.000		ug/L	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
2-Chloroethyl vinyl ether	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
4-Bromofluorobenzene [surr]	*83.3*	(70 - 130)	ug/L	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
Benzene	**ND**	0.0005	mg/kg	0.0223	B312209	11/18/2013	11/18/2013	EPA 624	

			dry			6:05:00 PM	6:05:00 PM		
Bromodichloromethane	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
Bromoform	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
Bromomethane	0.003	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
Carbon Tetrachloride	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
Chlorobenzene	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
Chlorobenzene-d5	10.000		ug/L	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
Chloroethane	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
Chloroform	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
Chloromethane	0.005	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
cis-1,3-Dichloropropene	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
Dibromochloromethane	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
Dibromofluoromethane [surr]	*100*	(70 - 130)	ug/L	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
Ethyl Benzene	0.0002	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	J
Methylene Chloride	0.004	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
Pentafluorobenzene	10.000		ug/L	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
Tetrachloroethene	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
Toluene	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624	
Toluene-d8 [surr]	*98.1*	(70 - 130)	ug/L	0.0223	B312209	11/18/2013 6:05:00	11/18/2013 6:05:00	EPA 624	

						PM	PM	
Total Trihalomethanes	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624
trans-1,2-Dichloroethene	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624
trans-1,3-Dichloropropene	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624
Trichloroethene	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624
Trichlorofluoromethane	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624
Vinyl chloride	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 624

Purgeable Organics 624+ Volatile Organic Compounds by 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
1,2,4-Trichlorobenzene	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 8260	
1,2-Dibromo-3-chloropropane	**ND**	0.001	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 8260	
1,2-Dibromoethane	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 8260	N1
1,4-Dichlorobenzene-d4	10.0		ug/L	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 8260	
1,4-Difluorobenzene	10.0		ug/L	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 8260	
4-Bromofluorobenzene [surr]	*83.3*	(70 - 130)	ug/L	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 8260	
Chlorobenzene-d5	10.0		ug/L	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 8260	
cis-1,2-Dichloroethene	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 8260	
Dibromofluoromethane [surr]	*100*	(70 - 130)	ug/L	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 8260	
m,p-Xylenes	**ND**	0.001	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 8260	
o-Xylene	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 8260	
Pentafluorobenzene	10.0		ug/L	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 8260	
Styrene	**ND**	0.0005	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 8260	
Toluene-d8 [surr]	*98.1*	(70 - 130)	ug/L	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 8260	
Xylenes, total	**ND**	0.001	mg/kg dry	0.0223	B312209	11/18/2013 6:05:00 PM	11/18/2013 6:05:00 PM	EPA 8260	

Selenium Total 6010B Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Selenium	9.02	8.68	mg/kg dry	1	B312054	12/3/2013 5:51:00 PM	12/5/2013 2:47:01 PM	EPA 6010B	

Semi Volatile Organics - Dioxin Scan Semi-Volatile Organic Compounds by EPA 625

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
2,3,7,8-TCDD - Dioxin Scan	**ND**	27.8	ug/kg dry	1	B311213	11/14/2013 12:00:00 PM	11/27/2013 11:52:00 AM	EPA 625	

Semi Volatile Organics 625 Semi-Volatile Organic Compounds by EPA 625

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
1,2,4-Trichlorobenzene	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
1,2-Diphenylhydrazine	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
1,4-Dichlorobenzene-d4	10.00		ug/L	1	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	
2,3-Dichloroaniline	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
2,4,6-Tribromophenol [surr]	*54.6*	(19.2 - 78)	ug/L	1	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	
2,4,6-Trichlorophenol	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
2,4-Dichlorophenol	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
2,4-Dimethylphenol	**ND**	6.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
2,4-Dinitrophenol	**ND**	10.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
2,4-Dinitrotoluene	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
2,6-Dinitrotoluene	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
2-Chloronaphthalene	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
2-Chlorophenol	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7

2-Fluorobiphenyl [surr]	*67.4*	(23.8 - 90.7)	ug/L	1	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	
2-Fluorophenol [surr]	*61.2*	(17.3 - 70.6)	ug/L	1	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	
2-Methyl-4,6-dinitrophenol	**ND**	6.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
2-Methylphenol	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
2-Nitrophenol	**ND**	6.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
3,3-Dichlorobenzidine	**ND**	15.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
4-Bromophenyl phenyl ether	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
4-Chloro-3-methylphenol	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
4-Chlorophenyl phenyl ether	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
4-Methylphenol	**ND**	6.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
4-Nitrophenol	**ND**	6.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Acenaphthene	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Acenaphthene-d10	10.00		ug/L	1	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	
Acenaphthylene	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Anthracene	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Benzidine	**ND**	25.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Benzo[a]anthracene	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Benzo[a]pyrene	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Benzo[b]fluoranthene	**ND**	2.00	mg/kg	1.11	B311214	11/14/2013	11/26/2013	EPA 625	D1

			dry		12:00:00 PM	6:43:00 PM		D7
Benzo[ghi]perylene	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Benzo[k]fluoranthene	**ND**	6.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
bis(2-chloroethoxy) methane	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
bis(2-chloroethyl)ether	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
bis(2-chloroisopropyl)ether	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
bis(2-ethylhexyl)phthalate	4.60	6.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7 J
Butylbenzylphthalate	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Carbazole	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Chrysene	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Dibenzo(a,h)anthracene	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Diethyl phthalate	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Dimethyl phthalate	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Di-n-butyl phthalate	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Di-n-octyl phthalate	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Fluoranthene	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Fluorene	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Hexachlorobenzene	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Hexachlorobutadiene	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00	11/26/2013 6:43:00	EPA 625	D1 D7

						PM	PM		
Hexachlorocyclopentadiene	**ND**	6.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Hexachloroethane	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Indeno(1,2,3-cd)pyrene	**ND**	6.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Isophorone	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Naphthalene	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Naphthalene-d8	10.00		ug/L	1	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	
n-Decane	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Nitrobenzene	**ND**	6.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Nitrobenzene-d5 [surr]	*79.9*	(27.1 - 89.6)	ug/L	1	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	
N-Nitrosodimethylamine	**ND**	6.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
N-Nitroso-di-n-propylamine	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
N-Nitrosodiphenylamine	**ND**	10.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
n-Octadecane	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Pentachlorophenol	**ND**	6.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Perylene-d12	10.00		ug/L	1	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	
Phenanthrene	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7
Phenanthrene-d10	10.00		ug/L	1	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	
Phenol	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7

Phenol-d5 [surr]	*56.5*	(18.4 - 72.9)	ug/L	1	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	
p-Terphenyl-d14 [surr]	*27.8*	(4 - 91.5)	ug/L	1	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	
Pyrene	**ND**	2.00	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 625	D1 D7

Semi Volatile Organics 625+ Semi-Volatile Organic Compounds by EPA 8270C

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
1,2-Diphenylhydrazine	**ND**	2.23	mg/kg dry	1.11	B311214	11/14/2013 12:00:00 PM	11/26/2013 6:43:00 PM	EPA 8270C	D1 D7

Silver Total 6010B Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Silver	7.36	0.868	mg/kg dry	1	B312054	12/3/2013 5:51:00 PM	12/5/2013 5:38:12 PM	EPA 6010B	

SM 2540G SM 2540G

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Percent Solids	89	0.10	%	1	19955	11/8/2013 3:45:00 PM	11/8/2013 3:45:00 PM	2540G	

SM 2540G M SM 2540G

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Percent Moisture	11	0.10	%	1	19955	11/8/2013 3:45:00 PM	11/8/2013 3:45:00 PM	2540G	

Solids Total (%) Microbiological Testing

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
% Solids	89.8	0.005	%	1	B311128	11/8/2013 11:46:00 AM	11/10/2013 12:45:20 PM	SM 2540G	

Solids Total Volatile (%) Microbiological Testing

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
% Solids, Total Volatile	58.0	0.005	%	1	B311128	11/8/2013 11:46:00 AM	11/10/2013 12:45:20 PM	SM 2540G	

Sulfide - Hach 8131 Miscellaneous Inorganic Analysis

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes

Sulfide, Acid soluble and Insoluble (Titrimetric) Sulfide, Acid soluble and Insoluble (Titrimetric)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes

Sulfide	**ND**	45	mg/Kg dry	1	144476	11/14/2013 3:43:00 PM	11/14/2013 3:48:00 PM	9034	M2

TCLP Arsenic 6010B TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Arsenic	0.177	0.0250	mg/L	1	B312148	12/10/2013 8:19:00 AM	12/11/2013 9:47:40 AM	TCLP/EPA 6010B	

TCLP Barium 6010B TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Barium	0.0551	0.0250	mg/L	1	B312148	12/10/2013 8:19:00 AM	12/11/2013 11:30:17 AM	TCLP/EPA 6010B	

TCLP Cadmium 6010B TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Cadmium	0.00126	0.0100	mg/L	1	B312148	12/10/2013 8:19:00 AM	12/11/2013 9:47:40 AM	TCLP/EPA 6010B	J

TCLP Chromium 6010B TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Chromium	0.0149	0.0250	mg/L	1	B312148	12/10/2013 8:19:00 AM	12/11/2013 9:47:40 AM	TCLP/EPA 6010B	J

TCLP Extraction - Metals TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes

TCLP Extraction Pesticides Total Characteristic Leachate Procedure EPA 1311

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes

TCLP Extraction Purgeables Total Characteristic Leachate Procedure EPA 1311

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes

TCLP Extraction Semi-Volatiles Total Characteristic Leachate Procedure EPA 1311

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes

TCLP Lead 6010B TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Lead	**ND**	0.0250	mg/L	1	B312148	12/10/2013 8:19:00 AM	12/11/2013 11:30:17 AM	TCLP/EPA 6010B	

TCLP Mercury TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Mercury	0.000385	0.000200	mg/L	1	B312037	12/3/2013 11:04:00 AM	12/4/2013 2:49:36 PM	TCLP/EPA 7470	

TCLP Pesticides Pesticides and PCBs in TCLP Extract

Reporting

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Chlordane	**ND**	2.00	ug/L	10	B312282	11/21/2013 1:18:00 PM	12/11/2013 10:02:09 PM	TCLP/EPA 8270C	D1 D7
Chrysene-d12	5.00		ug/L	1	B312282	11/21/2013 1:18:00 PM	12/11/2013 10:02:09 PM	TCLP/EPA 8270C	
Dibutyl chlorendate [surr]	*36.0*	(5 - 104)	ug/L	1	B312282	11/21/2013 1:18:00 PM	12/11/2013 10:02:09 PM	TCLP/EPA 8270C	
Endrin	**ND**	0.500	ug/L	10	B312282	11/21/2013 1:18:00 PM	12/11/2013 10:02:09 PM	TCLP/EPA 8270C	D1 D7
gamma-BHC (Lindane)	**ND**	0.500	ug/L	10	B312282	11/21/2013 1:18:00 PM	12/11/2013 10:02:09 PM	TCLP/EPA 8270C	D1 D7
Heptachlor	**ND**	0.500	ug/L	10	B312282	11/21/2013 1:18:00 PM	12/11/2013 10:02:09 PM	TCLP/EPA 8270C	D1 D7
Heptachlor Epoxide	**ND**	0.500	ug/L	10	B312282	11/21/2013 1:18:00 PM	12/11/2013 10:02:09 PM	TCLP/EPA 8270C	D1 D7
Methoxychlor	**ND**	0.500	ug/L	10	B312282	11/21/2013 1:18:00 PM	12/11/2013 10:02:09 PM	TCLP/EPA 8270C	D1 D7
Phenanthrene-d10	5.00		ug/L	1	B312282	11/21/2013 1:18:00 PM	12/11/2013 10:02:09 PM	TCLP/EPA 8270C	
TCMX [surr]	*46.4*	(22 - 78)	ug/L	1	B312282	11/21/2013 1:18:00 PM	12/11/2013 10:02:09 PM	TCLP/EPA 8270C	
Toxaphene	**ND**	6.00	ug/L	10	B312282	11/21/2013 1:18:00 PM	12/11/2013 10:02:09 PM	TCLP/EPA 8270C	D1 D7

TCLP Purgeables Volatile Organic Compounds in TCLP Extract

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
1,1-Dichloroethene	**ND**	0.500	ug/L	1	B312197	11/25/2013 3:56:00 PM	11/25/2013 3:56:00 PM	TCLP/EPA 8260B	
1,2-Dichloroethane	**ND**	0.500	ug/L	1	B312197	11/25/2013 3:56:00 PM	11/25/2013 3:56:00 PM	TCLP/EPA 8260B	
1,4-Dichlorobenzene	**ND**	0.500	ug/L	1	B312197	11/25/2013 3:56:00 PM	11/25/2013 3:56:00 PM	TCLP/EPA 8260B	
1,4-Dichlorobenzene-d4	10.0		ug/L	1	B312197	11/25/2013 3:56:00 PM	11/25/2013 3:56:00 PM	TCLP/EPA 8260B	
1,4-Difluorobenzene	10.0		ug/L	1	B312197	11/25/2013 3:56:00 PM	11/25/2013 3:56:00 PM	TCLP/EPA 8260B	
4-Bromofluorobenzene [surr]	*84.6*	(70 - 130)	ug/L	1	B312197	11/25/2013 3:56:00 PM	11/25/2013 3:56:00 PM	TCLP/EPA 8260B	
Benzene	**ND**	0.500	ug/L	1	B312197	11/25/2013 3:56:00 PM	11/25/2013 3:56:00 PM	TCLP/EPA 8260B	
Carbon Tetrachloride	**ND**	0.500	ug/L	1	B312197	11/25/2013 3:56:00 PM	11/25/2013 3:56:00 PM	TCLP/EPA 8260B	
Chlorobenzene	**ND**	0.500	ug/L	1	B312197	11/25/2013 3:56:00	11/25/2013 3:56:00	TCLP/EPA 8260B	

						PM	PM		
Chlorobenzene-d5	10.0		ug/L	1	B312197	11/25/2013 3:56:00 PM	11/25/2013 3:56:00 PM	TCLP/EPA 8260B	
Chloroform	**ND**	0.500	ug/L	1	B312197	11/25/2013 3:56:00 PM	11/25/2013 3:56:00 PM	TCLP/EPA 8260B	
Dibromofluoromethane [surr]	*89.6*	(70 - 130)	ug/L	1	B312197	11/25/2013 3:56:00 PM	11/25/2013 3:56:00 PM	TCLP/EPA 8260B	
Hexachlorobutadiene	**ND**	1.00	ug/L	1	B312197	11/25/2013 3:56:00 PM	11/25/2013 3:56:00 PM	TCLP/EPA 8260B	
Methyl Ethyl Ketone	1.90	0.500	ug/L	1	B312197	11/25/2013 3:56:00 PM	11/25/2013 3:56:00 PM	TCLP/EPA 8260B	
Pentafluorobenzene	10.0		ug/L	1	B312197	11/25/2013 3:56:00 PM	11/25/2013 3:56:00 PM	TCLP/EPA 8260B	
Tetrachloroethene	**ND**	0.500	ug/L	1	B312197	11/25/2013 3:56:00 PM	11/25/2013 3:56:00 PM	TCLP/EPA 8260B	
Toluene-d8 [surr]	*101*	(70 - 130)	ug/L	1	B312197	11/25/2013 3:56:00 PM	11/25/2013 3:56:00 PM	TCLP/EPA 8260B	
Trichloroethene	**ND**	0.500	ug/L	1	B312197	11/25/2013 3:56:00 PM	11/25/2013 3:56:00 PM	TCLP/EPA 8260B	
Vinyl chloride	**ND**	0.500	ug/L	1	B312197	11/25/2013 3:56:00 PM	11/25/2013 3:56:00 PM	TCLP/EPA 8260B	V1

TCLP Selenium 6010B TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Selenium	0.0283	0.0250	mg/L	1	B312148	12/10/2013 8:19:00 AM	12/11/2013 9:47:40 AM	TCLP/EPA 6010B	

TCLP Semi-Volatiles Semi-Volatile Organic Compounds in TCLP Extract

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
1,4-Dichlorobenzene	**ND**	2.00	ug/L	10	B311300	11/20/2013 10:10:00 AM	12/12/2013 12:07:00 PM	TCLP/EPA 8270C	
1,4-Dichlorobenzene-d4	10.0		ug/L	1	B311300	11/20/2013 10:10:00 AM	12/12/2013 12:07:00 PM	TCLP/EPA 8270C	
2,4,5-Trichlorophenol	**ND**	25.0	ug/L	10	B311300	11/20/2013 10:10:00 AM	12/12/2013 12:07:00 PM	TCLP/EPA 8270C	
2,4,6-Tribromophenol [surr]	*58.6*	(11 - 112)	ug/L	1	B311300	11/20/2013 10:10:00 AM	12/12/2013 12:07:00 PM	TCLP/EPA 8270C	
2,4,6-Trichlorophenol	**ND**	25.0	ug/L	10	B311300	11/20/2013	12/12/2013	TCLP/EPA	

						10:10:00 AM	12:07:00 PM	8270C
2,4-Dinitrotoluene	**ND**	25.0	ug/L	10	B311300	11/20/2013 10:10:00 AM	12/12/2013 12:07:00 PM	TCLP/EPA 8270C
2-Fluorobiphenyl [surr]	*80.2*	(24 - 95)	ug/L	1	B311300	11/20/2013 10:10:00 AM	12/12/2013 12:07:00 PM	TCLP/EPA 8270C
2-Fluorophenol [surr]	*50.9*	(3 - 93)	ug/L	1	B311300	11/20/2013 10:10:00 AM	12/12/2013 12:07:00 PM	TCLP/EPA 8270C
2-Methylphenol	**ND**	2.00	ug/L	10	B311300	11/20/2013 10:10:00 AM	12/12/2013 12:07:00 PM	TCLP/EPA 8270C
3 & 4-Methylphenol	**ND**	2.00	ug/L	10	B311300	11/20/2013 10:10:00 AM	12/12/2013 12:07:00 PM	TCLP/EPA 8270C
Acenaphthene-d10	10.0		ug/L	1	B311300	11/20/2013 10:10:00 AM	12/12/2013 12:07:00 PM	TCLP/EPA 8270C
Chrysene-d12	10.0		ug/L	1	B311300	11/20/2013 10:10:00 AM	12/12/2013 12:07:00 PM	TCLP/EPA 8270C
Hexachlorobenzene	**ND**	2.00	ug/L	10	B311300	11/20/2013 10:10:00 AM	12/12/2013 12:07:00 PM	TCLP/EPA 8270C
Hexachlorobutadiene	**ND**	2.00	ug/L	10	B311300	11/20/2013 10:10:00 AM	12/12/2013 12:07:00 PM	TCLP/EPA 8270C
Hexachloroethane	**ND**	2.00	ug/L	10	B311300	11/20/2013 10:10:00 AM	12/12/2013 12:07:00 PM	TCLP/EPA 8270C
Naphthalene-d8	10.0		ug/L	1	B311300	11/20/2013 10:10:00 AM	12/12/2013 12:07:00 PM	TCLP/EPA 8270C
Nitrobenzene	**ND**	2.00	ug/L	10	B311300	11/20/2013 10:10:00 AM	12/12/2013 12:07:00 PM	TCLP/EPA 8270C
Nitrobenzene-d5 [surr]	*82.9*	(15 - 109)	ug/L	1	B311300	11/20/2013 10:10:00 AM	12/12/2013 12:07:00 PM	TCLP/EPA 8270C
Pentachlorophenol	**ND**	10.0	ug/L	10	B311300	11/20/2013 10:10:00 AM	12/12/2013 12:07:00 PM	TCLP/EPA 8270C
Phenol-d5 [surr]	*49.0*	(3 - 96)	ug/L	1	B311300	11/20/2013 10:10:00 AM	12/12/2013 12:07:00 PM	TCLP/EPA 8270C
p-Terphenyl-d14 [surr]	*27.5*	(4 - 95)	ug/L	1	B311300	11/20/2013 10:10:00 AM	12/12/2013 12:07:00 PM	TCLP/EPA 8270C
Pyridine	**ND**	2.00	ug/L	10	B311300	11/20/2013 10:10:00 AM	12/12/2013 12:07:00 PM	TCLP/EPA 8270C

TCLP Silver 6010B TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Silver	0.00197	0.00250	mg/L	1	B312148	12/10/2013 8:19:00 AM	12/11/2013 9:47:40 AM	TCLP/EPA 6010B	J

Thallium Total 6010B Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Thallium	**ND**	8.68	mg/kg dry	1	B312054	12/3/2013 5:51:00 PM	12/5/2013 4:38:46 PM	EPA 6010B	

Zinc Total 6010B Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Zinc	855	8.68	mg/kg dry	1	B312054	12/3/2013 5:51:00 PM	12/5/2013 2:47:01 PM	EPA 6010B	

Sample name: BNROD-Biosolids from drying bed #5 Matrix: Biosolids Sampled: 11/7/2013 8:00:00 AM US Mountain

Mercury - Solid Waste Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Analysis	Notes
Mercury	2.12	0.0557	mg/kg dry	2	B311280	11/19/2013 9:57:00 AM	11/21/2013 11:43:41 AM	EPA 7471A	D2

End Of Report