PROJECT MEMORANDUM

To: Charles Mosley, PE, MPA
City of Sedona Director of Wastewater

Copies To: Andy Dickey, Roxanne Holland, Kelly Hanzel, Dave Sobeck, Eva Steinle-Darling

From: Brad Jeppson

Date: August 14, 2014 **Project No.:** 9363C.00

Subject: Phase III CEC Water Quality Evaluation and Other Water Quality Testing of Various Waters

INTRODUCTION

This Project Memorandum is prepared to summarize findings from the Phase III CEC Evaluation and Other Water Quality Testing of Various Waters. Carollo Engineers Inc (Carollo) previously assisted the City of Sedona (City) to complete multiple phases of testing for Constituents of Emerging Concern (CECs) at various locations at the Wastewater Reclamation Plant (WWRP). The City has requested additional sampling and water quality testing as summarized in Table 1.

Table 1 Sample Plan
Phase III CEC Evaluation and Other Water Quality Testing of Various Waters
City of Sedona

Sample ID	Location Description	Water Type	CEC Suite	Drinking Water Suite
Oak Creek near Page Springs	At bridge where North Page Springs Road crosses Oak Creek	Surface Water	X	X
Oak Creek upstream of WWRP	South of Sedona, near the Doodlebug Road Creek access	Surface Water	X	X
Oak Creek Water Company potable system	Water spigot at the North View Pump Station	Drinking Water	X	
Arizona Water Company potable system	Tap at Sedona City Hall	Drinking Water	X	
WWRP effluent	Downstream of UV Disinfection	Treated Wastewater	X	X
WWRP Point of Compliance Well	POC-1	Groundwater	X	

METHODOLOGY

Phase III CEC Evaluation

The CEC sampling campaign measured concentrations of 100 analytes. Table 2 lists the CECs that were analyzed as part of this study.

Table 2 CEC Compounds and their Typical Uses
Phase III CEC Evaluation and Other Water Quality Testing of Various Waters
City of Sedona

CEC Compound	Typical Use
1,7-Dimethylxanthine	Caffeine metabolite
2,4-D	Herbicide
4-nonylphenol	Member of alkylphenol family, detergent metabolite
4-tert-Octylphenol	Member of alkylphenol family, detergent metabolite
Acesulfame-K	Artificial sweetener
Acetaminophen	Nonsteroidal anti-inflammatory drug (NSAID)
Albuterol	Bronchial dilater (active ingredient in inhalers)
Amoxicillin	Antibiotic
Andorostenedione	Natural hormone
Atenolol	Beta blocker (used to treat hypertension)
Atrazine	Herbicide
Azithromycin	Antibiotic
Bendroflumethiazide	Diuretic (used to treat hypertension)
Bezafibrate	Fibrate drug (used to treat high cholesterol)
Bisphenol A (BPA)	Breakdown product of polycarbonate, a plastic commonly used to store water and food
Bromacil	Herbicide
Butalbital	Barbiturate drug (pain medication)
Butylparaben	Member of paraben family, used in lotions and body creams
Caffeine	Stimulant found in many beverages
Carbadox	Antibacterial drug used in animal husbandry
Carbamazepine	Anti-seizure drug
Carisoprodol	Muscle relaxant drug
Chloramphenicol	Antibiotic
Chloridazon	Herbicide
Chlorotoluron	Herbicide
Cimetidine	Heartburn / Reflux drug
Clofibric Acid	Herbicide
Cotinine	Nicotine metabolite
Cyanazine	Herbicide

Table 2 CEC Compounds and their Typical Uses Phase III CEC Evaluation and Other Water Quality Testing of Various Waters City of Sedona	
CEC Compound	**Typical Use**
DACT	Atrazine degradation product (see above)
DEA	Atrazine degradation product (see above)
DEET	Insect repellant
Dehydronifedipine	Metabolite of Nifedipine (see below)
DIA	Atrazine degradation product (see above)
Diazepam	Sedative, anti-epileptic, and muscle relaxant drug
(brand name Valium)	+
Diclofenac	Nonsteroidal anti-inflammatory drug (NSAID)
Dilantin	Anti-epileptic drug
	Antihistamine (brand name Benadryl)
Ditiazem	Calcium channel blocker (drug used to treat hypertension, angina, and some types of arrhythmia)
Diuron	Herbicide
Erythromycin	Antibiotic
Estradiol (E2)	Natural steroid hormone
Estrone (E1)	Natural steroid hormone
Ethinyl Estradiol - 17α	Synthetic steroid hormone (used in birth control pills)
Ethylparaben	Member of paraben family, used in lotions and body creams
Flumequine	Antibiotic
Fluoxetine	Antidepressant drug (brand name Prozac)
Gemfibrozil	Fibrate drug (used to lower blood lipid levels)
Ibuprofen	Nonsteroidal anti-inflammatory drug (NSAID)
Iohexal	X-ray contrast medium (helps make x-rays more visible)+
Iopromide	X-ray contrast medium (helps make x-rays more visible)
Isobutylparaben	Member of paraben family, used in lotions and body creams
Isoproturon	Herbicide
Ketoprofen	Nonsteroidal anti-inflammatory drug (NSAID)
Ketorolac	Nonsteroidal anti-inflammatory drug (NSAID)
Lidocaine	Local anesthetic and anti-arrhythmic drug
Lincomycin	Antibiotic
Linuron	Herbicide
Lopressor (metoprolol)	Anti-hypertension drug

Table 2 CEC Compounds and their Typical Uses Phase III CEC Evaluation and Other Water Quality Testing of Various Waters City of Sedona	
CEC Compound	**Typical Use**
Meclofenamic Acid	Nonsteroidal anti-inflammatory drug (NSAID)
Meprobamate	Anxiolytic drug (tranquilizer)
Metazachlor	Herbicide
Methylparaben	Member of paraben family, used in lotions and body creams
Metolachlor	Herbicide
Naproxen	Nonsteroidal anti-inflammatory drug (NSAID)
Nifedipine	Drug used to treat high blood pressure and angina
N-Nitrosodibutylamine (NDBA)	Member of the nitrosamine family, formed as disinfection byproducts primarily in chloramination.
N-Nitrosodiethylamine (NDEA)	Member of the nitrosamine family, formed as disinfection byproducts primarily in chloramination.
N-Nitrosodimethyl-amine (NDMA)	Member of the nitrosamine family, formed as disinfection byproducts primarily in chloramination.
N-Nitrosodi-n-propyl-amine (NDPA)	Member of the nitrosamine family, formed as disinfection byproducts primarily in chloramination.
N-Nitrosomethyl-ethyl-amine (NMEA)	Member of the nitrosamine family, formed as disinfection byproducts primarily in chloramination.
N-Nitrosomorpholine (NMOR)	Member of the nitrosamine family, formed as disinfection byproducts primarily in chloramination.
N-Nitrosopiperidine (NPIP)	Member of the nitrosamine family, formed as disinfection byproducts primarily in chloramination.
N-Nitrosopyrollidine (NPYR)	Member of the nitrosamine family, formed as disinfection byproducts primarily in chloramination.
Norethisterone	Synthetic hormone (used in birth control pills)
Oxolinic acid	Antibiotic
Pentoxifylline	Drug that improves blood flow
Phenazone	Analgesic and antipyretic drug (used to treat pain and reduce fever)
Primidone	Anticonvulsant drug
Progesterone	Natural steroid hormone
Propazine	Herbicide
Propylparaben	Member of paraben family, used in lotions and body creams
Quinoline	Used for many purposes, also an herbicide metabolite
Simazine	Herbicide
Sucralose	Artificial sweetener
Sulfachloropyridazine	Antibiotic

Table 2 CEC Compounds and their Typical Uses Phase III CEC Evaluation and Other Water Quality Testing of Various Waters City of Sedona	
CEC Compound	**Typical Use**
Sulfadiazine	Antibiotic
Sulfadimethoxine	Antibiotic
Sulfamerazine	Antibiotic
Sulfamethazine	Antibiotic
Sulfamethizole	Antibiotic
Sulfamethoxazole	Antibiotic
Sulfathiazole	Antibiotic
Tris(2-chloroethyl) phosphate (TCEP)	Flame retardant chemical
Tris(2-chloropropyl) phosphate TCPP	Flame retardant chemical
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	Flame retardant chemical
Testosterone	Natural steroid hormone
Theobromine	Chemical component of chocolate
Theophylline	Methylxanthine drug (used to treat respiratory diseases)
Triclocarban	Antimicrobial agent (used in hand soaps)
Triclosan	Antimicrobial agent (used in hand soaps)
Trimethoprim	Antibiotic
Warfarin	Anticoagulant (prevents blood clots), aka Coumadin

All samples were collected as grab samples and were sent to, and analyzed by, Eurofins-Eaton Laboratory, located in Monrovia, California (Eaton Lab).

The method for CEC quantification is based on isotope dilution and solid phase extraction (SPE) followed by liquid chromatography and mass spectrometry in tandem (LC MS/MS). Nine of the 100 compounds (the nitrosamine group) were analyzed using the EPA Method 521 for the Detection of Nitrosamines in Drinking Water based on gas chromatography and chemical ionization tandem mass spectrometry (GC MS/MS).

The lab also analyzed Quality Assurance/Quality Control (QA/QC) samples (a field blank and an equipment blank sample). No anomalies were identified in the QA/QC results.

Drinking Water Quality Testing

Drinking water parameters were analyzed from the Oak Creek and WWRP effluent samples. Results were compared to maximum contaminant levels (MCL) regulated by the EPA. It should be noted that this testing was not performed for the purpose of obtaining approvals for these sources as drinking water; testing was performed to more fully characterize the water quality of these sources.

Table 3 lists the drinking water quality parameters that were tested, along with the MCL, if applicable. Some parameters tested do not have MCLs, but are routinely measured as part of drinking water-related testing. Standard EPA-approved drinking water methods were employed. Analytical testing was performed by Legend Analytical, which is a certified drinking water laboratory in the state of Arizona.

Table 3 Drinking Water Quality Testing Suite
Phase III CEC Evaluation and Other Water Quality Testing of Various Waters
City of Sedona

Analyte	MCL	Units
Asbestos	7	MFL
Nitrate as N	10	mg/L
Barium	2	mg/L
Beryllium	0.004	mg/L
Calcium	-	mg/L
Chromium	0.1	mg/L
Copper	TT5; Action Level 1.3	mg/L
Magnesium	-	mg/L
Nickel	-	mg/L
Sodium	-	mg/L
Antimony	0.006	mg/L
Arsenic	0.01	mg/L
Cadmium	0.005	mg/L
Lead	TT5; Action Level 0.015	mg/L
Selenium	0.05	mg/L
Thallium	0.002	mg/L
Sulfate	-	mg/L
Dichloromethane	0.005	mg/L
trans-1,2-Dichloroethene	0.1	mg/L
cis-1,2-Dichloroethylene	0.07	mg/L
Chloroform	-	mg/L
1,1,1-Trichloroethane	0.2	mg/L
Carbon tetrachloride	0.005	mg/L
1,2-Dichloroethane	0.005	mg/L
Benzene	0.005	mg/L
Trichloroethene	0.005	mg/L
1,2-Dichloropropane	0.005	mg/L
Bromodichloromethane	-	mg/L
Toluene	1	mg/L

Table 3 Drinking Water Quality Testing Suite Phase III CEC Evaluation and Other Water Quality Testing of Various Waters City of Sedona		
Analyte	**MCL**	**Units**
Vinyl chloride	0.002	mg/L
1,1,2-Trichloroethane	0.005	mg/L
Tetrachloroethene	0.005	mg/L
Dibromochloromethane	-	mg/L
Chlorobenzene	0.1	mg/L
Ethylbenzene	0.7	mg/L
m,p-Xylene	10	mg/L
o-Xylene	10	mg/L
Styrene	0.1	mg/L
Bromoform	-	mg/L
Total THMs	0.08	mg/L
1,2-Dichlorobenzene-d4	0.075	mg/L
1,2-Dichloroethane-d4	0.005	mg/L
4-Bromofluorobenzene	-	mg/L
Pentafluorobenzene	-	mg/L
1,4-Dichlorobenzene	-	mg/L
1,2-Dichlorobenzene	-	mg/L
1,2,4-Trichlorobenzene	0.07	mg/L
Xylenes (total)	10	mg/L
1,1-Dichloroethene	0.007	mg/L
Aldicarb sulfoxide	-	mg/L
Aldicarb sulfone	-	mg/L
Oxamyl	0.2	mg/L
Methomyl	-	mg/L
3-Hydroxycarbofuran	-	mg/L
Aldicarb	-	mg/L
Carbofuran	0.04	mg/L
Carbaryl	-	mg/L
4-Bromo-3,5-dimethylphenyl-N-methylcarbamate	-	mg/L
Glyphosate	0.7	mg/L
Temperature	-	°C
Total Alkalinity as CaCO3	-	mg/L
Total Dissolved Solids	-	mg/L

Table 3 Drinking Water Quality Testing Suite Phase III CEC Evaluation and Other Water Quality Testing of Various Waters City of Sedona		
Analyte	**MCL**	**Units**
Cyanide, Total	0.2	mg/L
Fluoride	4	mg/L
Nitrite as N	1	mg/L
Nitrate + Nitrite as N	11	mg/L
pH	-	pH Units
Calcium Hardness as CaCO3	-	mg/L
Magnesium Hardness as CaCO3	-	mg/L
Total Hardness as CaCO3	-	mg/L
Mercury	0.0002	mg/L
Langlier Index	-	N/A
Total Coliforms	5.0%	P/A
E. coli	MCL[4]	P/A
Toxaphene	0.003	mg/L
Chlordane	0.002	mg/L
Decachlorobiphenyl	-	mg/L
Aroclor 1016	-	mg/L
Aroclor 1221	-	mg/L
Aroclor 1232	-	mg/L
Aroclor 1242	-	mg/L
Aroclor 1248	-	mg/L
Aroclor 1254	-	mg/L
Aroclor 1260	-	mg/L
13C-2,3,7,8-TCDD	-	mg/L
Dioxin	0.00000003	mg/L
Combined Radium	5	pCi/L
Gross Alpha Activity	15	pCi/L
Radium 226 Activity	-	pCi/L
Radium 228 Activity	-	pCi/L
1,2-Dibromo-3-chloropropane (DBCP)	0.0002	mg/L
1,2-Dibromoethane (EDB)	-	mg/L
2,4,5-TP (Silvex)	0.05	mg/L
2,4-D	0.07	mg/L
Dalapon	0.2	mg/L

Table 3	**Drinking Water Quality Testing Suite Phase III CEC Evaluation and Other Water Quality Testing of Various Waters City of Sedona**	
Analyte	**MCL**	**Units**
Dicamba	-	mg/L
Dinoseb	0.007	mg/L
Pentachlorophenol	0.001	mg/L
Picloram	0.5	mg/L
SS-2,4-Dichlorophenylacetic acid	-	mg/L
Alachlor	0.002	mg/L
Aldrin	-	mg/L
Atrazine	0.003	mg/L
Benzo(a)pyrene	0.0002	mg/L
Butachlor	-	mg/L
Di(2-ethylhexyl)adipate	0.4	mg/L
Di(2-ethylhexyl)phthalate	0.006	mg/L
Dieldrin	-	mg/L
Endrin	0.002	mg/L
gamma-BHC (Lindane)	0.0002	mg/L
Heptachlor	0.0004	mg/L
Heptachlor epoxide	0.0002	mg/L
Hexachlorobenzene	0.001	mg/L
Hexachlorocyclopentadiene	0.05	mg/L
Methoxychlor	0.04	mg/L
Metolachlor	-	mg/L
Metribuzin	-	mg/L
Propachlor	-	mg/L
Simazine	0.004	mg/L
SS-2,4,5,6-Tetrachloro-m-xylene	-	mg/L
SS-4,4'-Dichlorobiphenyl	-	mg/L
SS-Triphenylphosphate	-	mg/L
Endothall	0.1	mg/L
SS-2,4-Dichlorophenylacetic acid	-	mg/L
Diquat	0.02	mg/L

FINDINGS

Phase III CEC Evaluation

Table 4 summarizes the number of CECs detected in each sample. No CECs were detected in the two drinking water samples (Arizona Water Co. and Oak Creek Water Co.), or in Oak Creek near Page Springs. DEET (active ingredient in insect repellant) was detected in the Oak Creek Sample upstream of the WWRP, which is likely a reflection of human activity in the Creek. A number of CEC's were detected in the treated effluent that are typical in municipal wastewater, and are reflective of human use/consumption of personal care products, pharmaceuticals, food additives, etc. Detailed lab reports are included in Appendix A.

Table 4 CEC Detection Summary
Phase III CEC Evaluation and Other Water Quality Testing of Various Waters
City of Sedona

Sample Location	Number of CEC's Detected	Comments
Arizona Water Company	0	NA
Oak Creek Water Company	0	NA
WWRP POC-1 (Groundwater from POC well)	2	Acesulfame-K (artificial sweetener), BPA (plastic degredation byproduct)
Oak Creek Surface Water (upstream of WWRP) Phase III	1	DEET (active ingredient in insect repellant)
Oak Creek Page Springs Surface Water (downstream of WWRP) Phase III	0	NA
WWRP treated effluent	23	See Appendix A for complete list

Results were compared to human health threshold levels that have been recommended by the National Water Research Institute (NWRI) in the context of potable reuse applications. NWRI thresholds are NOT regulations, but are based on extensive research for those CECs believed to represent the highest human health impacts. Table 5 lists the NWRI thresholds compared to the results of this study. None of the detected CECs exceed the thresholds, and in most cases, results are orders of magnitude lower.

Table 5 NWRI Thresholds compared to Phase III CEC Analysis Results
Phase III CEC Evaluation and Other Water Quality Testing of Various Waters
City of Sedona

Analyte	Results in ng/L[1]			
	NWRI Threshold Concentration[2]	Oak Creek Upstream	Effluent	WWRP POC
Atenolol	4,000	ND	83	ND
Carbamazepine	10,000	ND	110	ND
Cotinine	1,000	ND	38	ND
DEET	200,000	34	78	ND
Meprobamate	200,000	ND	180	ND
N-Nitrosodi-n-propylamine	(NDMA 10)	ND	3.2	ND
Primidone	10,000	ND	51	ND
Sucralose	150,000,000	ND	28,000	ND
TCEP	5,000	ND	120	ND

Notes:
(1) Results are shown as provided by the analytical laboratory. Detections are shown in bold font. ND indicates the analyte was not detected above the respective method reporting limit (MRL). MRLs for each analyte are shown in the full laboratory reports provided in Appendix A.
(2) Threshold concentrations adopted from NWRI (2013), According to NWRI (2013) the criteria were selected for pharmaceuticals as the drinking water equivalent concentration for the lowest therapeutic dose/1,000 was used in recognition of the teratogenic potential of these drugs (primidone). However, the numbers for carbamazepine and phenyltoin are based on reported carcinogenicity.
In the case of the anticonvulsant drugs, the criteria were set to the lowest daily maintenance dose in adults/10,000. Sucralose was based upon ADI established by the U.S. FDA of 5 milligrams per kilogram (mg/kg) per day × 60 kg/2 L.
The criteria for TCEP and DEET were set based on the respective Minnesota Dept. of Health (2011) guidance values.

Figures 1 through 3 show CEC concentrations detected in each sample. (Note that sucralose (an artificial sweetener) is not included in these results. See Phase II, TM 2, Carollo Engineers, 2014 for rational for omitting sucralose data).

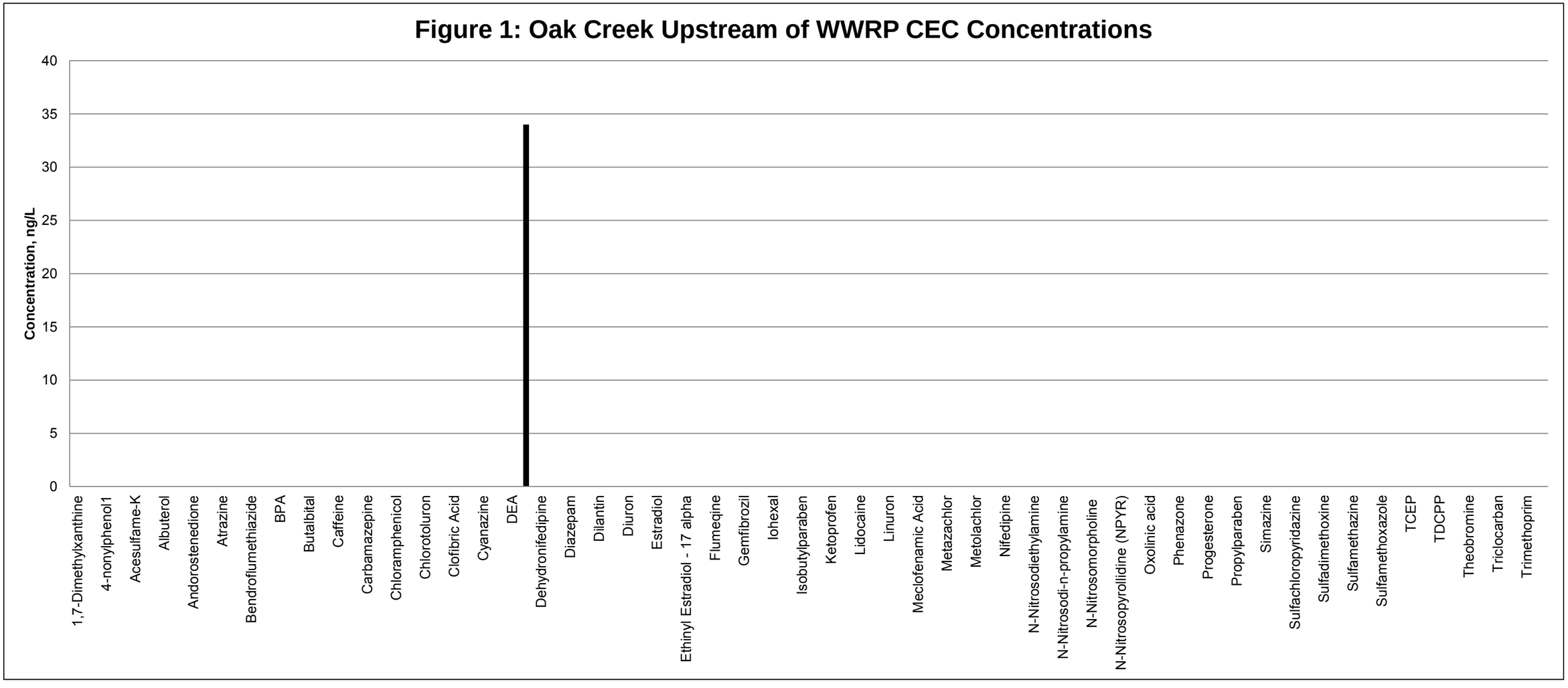


Figure 1: Oak Creek Upstream of WWRP CEC Concentrations
Concentration, ng/L
40
35
30
25
20
15
10
5
0
1,7-Dimethylxanthine
4-nonylphenol1
Acesulfame-K
Albuterol
Andorostenedione
Atrazine
Bendroflumethiazide
BPA
Butalbital
Caffeine
Carbamazepine
Chloramphenicol
Chlorotoluron
Clofibric Acid
Cyanazine
DEA
Dehydronifedipine
Diazepam
Dilantin
Diuron
Estradiol
Ethinyl Estradiol - 17 alpha
Flumeqine
Gemfibrozil
Iohexal
Isobutylparaben
Ketoprofen
Lidocaine
Linuron
Meclofenamic Acid
Metazachlor
Metolachlor
Nifedipine
N-Nitrosodiethylamine
N-Nitrosodi-n-propylamine
N-Nitrosomorpholine
N-Nitrosopyrollidine (NPYR)
Oxolinic acid
Phenazone
Progesterone
Propylparaben
Simazine
Sulfachloropyridazine
Sulfadimethoxine
Sulfamethazine
Sulfamethoxazole
TCEP
TDCPP
Theobromine
Triclocarban
Trimethoprim

Figure 2: WWRP Effluent CEC Concentrations

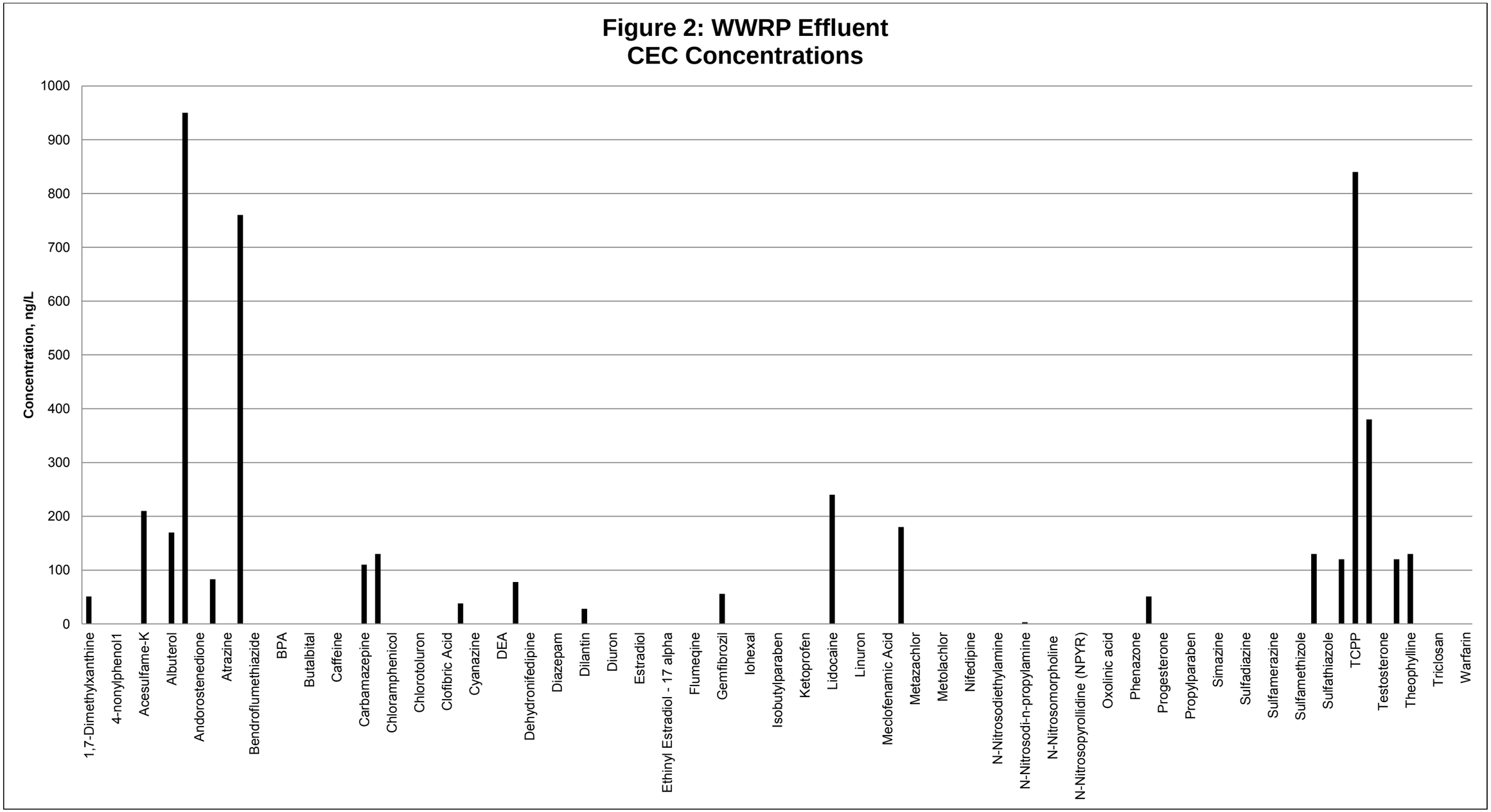
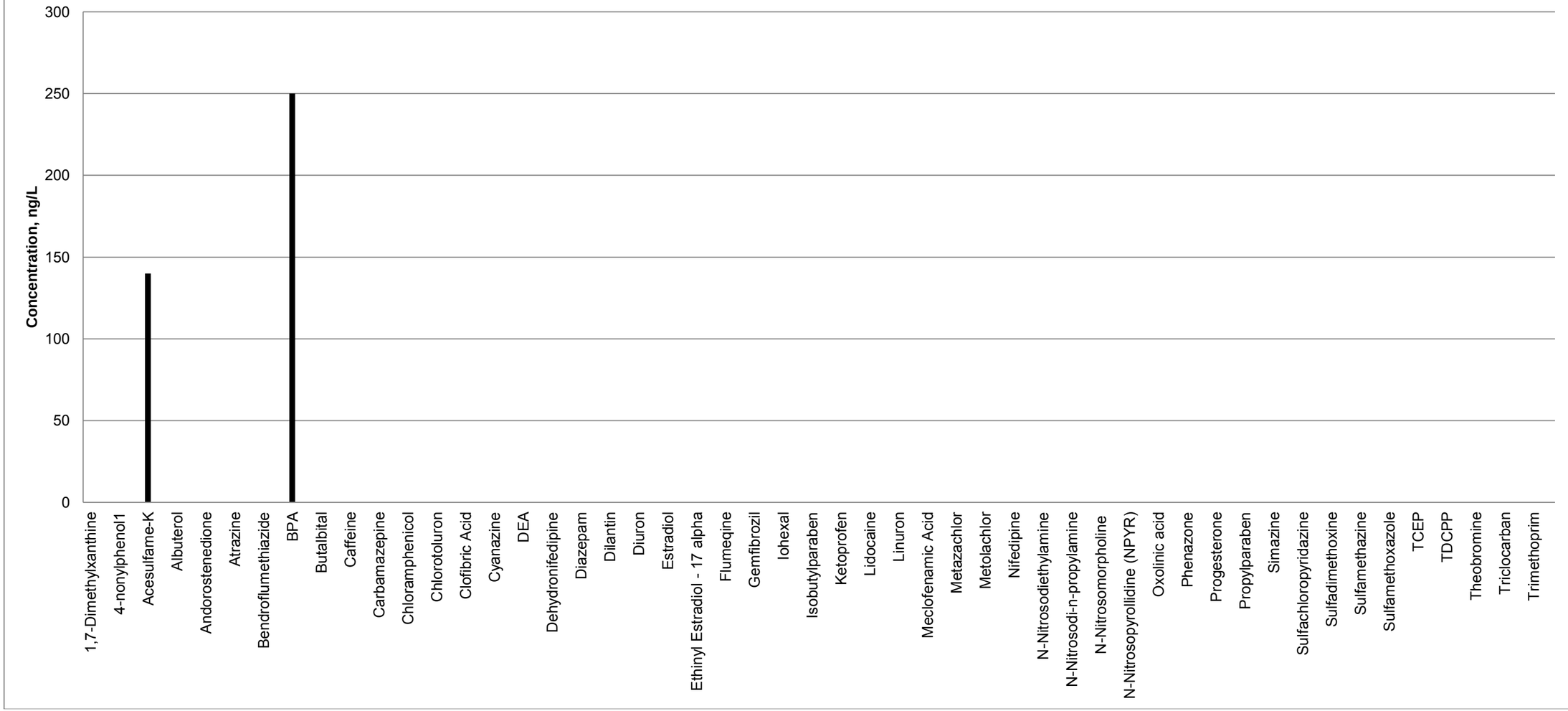


Figure 3: WWRP Point of Compliance Well CEC Concentrations



Drinking Water Quality Testing

Table 6 lists detected analytes, the MCL (if applicable) and the measured concentrations for each sample. The majority of analytes were not detected (see Appendix B for complete results).

Table 6 Detected Drinking Water Analytes
Phase III CEC Evaluation and Other Water Quality Testing of Various Waters
City of Sedona

Analyte	WWRP Effluent	Oak Creek Downstream	Oak Creek Upstream	Units	MCL
Nitrate as N	5.85	<0.20	<0.20	mg/L	10
Barium	0.15	0.16	0.23	mg/L	2
Calcium	58	47	34	mg/L	-
Copper	0.02	<0.01	<0.01	mg/L	TT5; Action Level 1.3
Magnesium	27	21	17	mg/L	-
Sodium	114	11	5	mg/L	-
Arsenic	0.0057	0.0128	0.0059	mg/L	0.01
Sulfate	18.1	<5.0	<5.0	mg/L	-
1,2-Dichlorobenzene-d4	0.0040	0.0040	0.0040	mg/L	0.075
1,2-Dichloroethane-d4	0.0037	0.0038	0.0037	mg/L	0.005
4-Bromofluorobenzene	0.0034	0.0035	0.0035	mg/L	-
Pentafluorobenzene	0.0039	0.0039	0.0039	mg/L	-
4-Bromo-3,5-dimethylphenyl-N-methylcarbamate	0.00223	0.00213	0.00217	mg/L	-
Temperature	17.6	16.0	15.5	°C	-
Total Alkalinity as CaCO3	264	213	169	mg/L	-
Total Dissolved Solids	537	215	180	mg/L	-
Fluoride	0.40	0.10	<0.10	mg/L	4
Nitrate + Nitrite as N	5.85	<0.20	<0.20	mg/L	11
pH	7.5	8.2	8.7	pH Units	-
Calcium Hardness as CaCO3	144	117	85	mg/L	-
Magnesium Hardness as CaCO3	109	86	70	mg/L	-

Table 6 Detected Drinking Water Analytes
Phase III CEC Evaluation and Other Water Quality Testing of Various Waters
City of Sedona

Analyte	WWRP Effluent	Oak Creek Downstream	Oak Creek Upstream	Units	MCL
Total Hardness as CaCO3	254	204	155	mg/L	-
Langlier Index	0.0220	0.568	0.827	N/A	-
Total Coliforms	Present	Present	Present	P/A	See note 1
E. coli	Absent	Present	Present	P/A	See note 1
Decachlorobiphenyl	0.0000210	0.0000310	0.0000300	mg/L	-
13C-2,3,7,8-TCDD	0.0000013	0.0000015	0.0000015	mg/L	-
Gross Alpha Activity	1.9 ± 0.9	1.4 ± 0.5	1.9 ± 0.7	pCi/L	15
SS-2,4-Dichlorophenylacetic acid	0.028	0.026	0.025	mg/L	-
SS-2,4,5,6-Tetrachloro-m-xylene	0.0045	0.0048	0.0045	mg/L	-
SS-4,4'-Dichlorobiphenyl	0.0048	0.0049	0.0049	mg/L	-
SS-Triphenylphosphate	0.0048	0.0050	0.0048	mg/L	-
SS-2,4-Dichlorophenylacetic acid	0.43	0.47	0.40	mg/L	-

Note:

1. No more than 5.0% samples total coliform-positive (TC-positive) in a month. (For water systems that collect fewer than 40 routine samples per month, no more than one sample can be total coliform-positive per month.) Every sample that has total coliform must be analyzed for either fecal coliforms or E. coli if two consecutive TC-positive samples, and one is also positive for E.coli fecal coliforms, system has an acute MCL violation.

Table 7 summarizes analytes that were detected at levels above the MCL. The presence of total coliform and E. *coli* are typical for untreated surface waters.

Table 7 Drinking Water Analytes Above the MCL Concentration
Phase III CEC Evaluation and Other Water Quality Testing of Various Waters
City of Sedona

Sample Location	Analytes Detected Above Drinking Water MCL	Comments
WWRP Effluent	None	Total Coliform was present. Additional testing required to determine if MCL would be exceeded.
Oak Creek near Page Springs	Arsenic (0.0128 mg/L)	Total Coliform and E. *Coli* were present. Additional testing required to determine if MCL would be exceeded.
Oak Creek Upstream of WWRP	None	Total Coliform and E. *Coli* were present. Additional testing required to determine if MCL would be exceeded.

CONCLUSIONS

Phase III CEC Evaluation

The Phase III CEC Evaluation results can be summarized by the following conclusions.

- CECs were not detected in the potable water samples or in Oak Creek near Page Springs.
- DEET (insect repellant) was detected at very low levels in the sample at Oak Creek upstream of the WWRP. This is likely a result of human activity in the creek near the sample location.
- Several CECs were detected in the wastewater effluent sample, though generally at concentrations in the lower or medium ng/L range. All CECs detected in the wastewater effluent were two or three orders of magnitude lower in concentrations compared to the threshold concentrations proposed by NRWI (2013). It is emphasized that the NWRI panel's recommendations are based on a direct potable reuse scenario, which means that they assume no further treatment of the reclaimed water occurs before it is used for potable purposes. Therefore, the recommendations provided by the NWRI panel should be seen as a very conservative benchmark for groundwater recharge as additional attenuation occurs in the aquifer.

- The compound with the highest concentration in the wastewater effluent sample was the artificial sweetener Sucralose (28,000 ng/L). A safe consumption level as recommended by the NWRI study cited previously is 150,000,000 ng/L. While sucralose does not pose a health impact at the levels detected in this study, NWRI suggests that sucralose could be used as a tracer for detecting wastewater impacts on surface or groundwaters; sucralose has not been detected in the point of compliance well or in downstream surface waters.
- Two CEC compounds were detected in the WWRP Point of Compliance Well (POC-1): Acesulfame-K (artificial sweetener) and BPA (plastic degredation byproduct). The low levels of the artificial sweetener do not represent a human health concern and the BPA is likely from the rubber hose used at the well to sample. The POC well does not appear to be impacted from CECs in the reclaimed water.

Drinking Water Quality Testing

The drinking water quality testing results can be summarized by the following conclusions.

- The majority of contaminants measured in the drinking water suite were not detected in any of the samples.
- Arsenic in the Oak Creek Sample near Page Springs was the only drinking water quality parameter tested that was present at a higher concentration than the respective MCL.

Appendix A

PHASE III CEC LABORATORY REPORT

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

NELAP ACCREDITED TNI LABORATORY ORELAP 4034

ilac-MRA

ACLASS ACCREDITED TESTING AT-1807

Laboratory Report

for

Carollo
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034
Attention: Brad Jeppson
Fax: 602-265-1422

Date of Issue
08/07/2014

EUROFINS EATON ANALYTICAL

DEB: Debbie.L.Frank

Project Manager

Report: 491260
Project: SEDONA-AZ
Group: SEDONA-WRP CEC Study

* Accredited in accordance with TNI 2009 and ISO/IEC 17025:2005.
* Laboratory certifies that the test results meet all **TNI 2009 and ISO/IEC 17025:2005** requirements unless noted under the individual analysis.
* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.
* Test results relate only to the sample(s) tested.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	**Mississippi**	Certified
Alaska	CA00006	**Montana**	Cert 0035
Arizona	AZ0778	**Nebraska**	Certified
Arkansas	Certified	**Nevada**	CA00006-2014-1
California-Monrovia-ELAP	2813	**New Hampshire ***	2959
California-Colton- ELAP	2812	**New Jersey ***	CA 008
California-Folsom- ELAP	2820	**New Mexico**	Certified
Colorado	Certified	**New York ***	11320
Connecticut	PH-0107	**North Carolina**	06701
Delaware	CA 006	**North Dakota**	R-009
Florida *	E871024	**Oregon (Primary AB) ***	**ORELAP 4034**
Georgia	947	**Pennsylvania ***	68-565
Guam	14-003r	**Rhode Island**	LAO00326
Hawaii	Certified	**South Carolina**	87016
Idaho	Certified	**South Dakota**	Certified
Illinois *	200033	**Tennessee**	TN02839
Indiana	C-CA-01	**Texas ***	T104704230-14-6
Kansas *	E-10268	**Utah ***	CA000062014-7
Kentucky	90107	**Vermont**	VT0114
Louisiana *	LA140009	**Virginia ***	460260
Maine	CA0006	**Washington**	C838
Maryland	224	**West Virginia**	9943 C
Commonwealth of Northern Marianas Is.	MP0004	**Wisconsin**	998316660
Massachusetts	M-CA006	**Wyoming**	8TMS-L
Michigan	9906	**EPA Region 5**	Certified
Los Angeles County Sanitation Districts	10264		

* NELAP/TNI Recognized Accreditation Bodies

The tests listed below are accredited and meet the requirements of ISO 17025 as verified by the ANSI-ASQ National Accreditation Board/ACLASS.
Refer to Certificate and scope of accreditation (AT 1807) found at: http://www.eatonanalytical.com

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Drinking Water	Food & Beverage	Waste Water
1,4-Dioxane	EPA 522	x	x	
2,3,7,8-TCDD	Modified EPA 1613B	x	x	
Acrylamide	In House Method	x	x	
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H (18th)		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x	x	
Asbestos	EPA 100.2	x		
Bicarbonate Alkalinity as HCO3	SM 2330B	x	x	x
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method	x	x	
Carbamates	EPA 531.2	x	x	
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x	x	
COD	EPA 410.4 / SM 5220D			x
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x	x	
Chlorinated Acids	EPA 555	x	x	
Chlorine Dioxide	SM 4500-CLO2 D	x	x	
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1			x
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x	x	
Cyanide, Amenable	SM 4500-CN G	x		x
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method	x	x	
Diquat and Paraquat	EPA 549.2	x	x	
DBP/HAA	SM 6251B	x	x	
Dissolved Oxygen	SM 4500-O G		x	x
E. Coli	(MTF/EC+MUG)	x		
E. Coli	CFR 141.21(f)(6)(i)		x	x
E. Coli	SM 9223			x
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x	x	
E. Coli (Enumeration)	SM 9223B	x	x	
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x	x	
EDTA and NTA	In House Method	x	x	
Endothall	EPA 548.1	x	x	
Enterococci	SM 9230B	x		x
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)			x
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x	x	
Fecal Coliform with Chlorine Present	SM 9221E			x
Fecal Streptococci	SM 9230B	x		x
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x	x	
Gross Alpha/Beta	EPA 900.0	x	x	x
HAAs/ Dalapon	EPA 552.3	x	x	
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method	x	x	
Heterotrophic Bacteria	SM 9215 B	x	x	
Hexavalent Chromium	EPA 218.6	x	x	x
Hexavalent Chromium	EPA 218.7	x	x	
Hexavalent Chromium	SM 3500-Cr B or C (20th)			x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Drinking Water	Food & Beverage	Waste Water
Hormones	EPA 539	x	x	
Hydroxide as OH Calc.	SM 2330B	x	x	
Kjeldahl Nitrogen	EPA 351.2			x
Mercury	EPA 245.1	x	x	x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA	x	x	
NDMA	EPA 521	x	x	
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x	x	
Ortho Phosphate	EPA 365.1	x	x	
Ortho Phosphate and Total Phosphorous	EPA 365.1/SM 4500-P E			x
Ortho Phosphorous	SM 4500P E	x	x	
Oxyhalides Disinfection Byproducts	EPA 317.0	x	x	
Perchlorate	EPA 331.0	x	x	
Perchlorate	EPA 314.0	x	x	
Perfluorinated Alkyl Acids	EPA 537	x	x	
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method	x	x	
Pseudomonas	IDEXX Pseudalert	x	x	
Radium-226	RA-226 GA	x	x	
Radium-228	RA-228 GA	x	x	
Radon-222	SM 7500RN	x	x	
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D			x
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4			x
Semi-VOC	EPA 525.2	x	x	
Semi-VOC	EPA 625	x	x	x
Silica	SM 4500-Si D	x	x	x
Silica	SM 4500-SiO2 C	x		x
Sulfide	SM 4500-$S^{=}$ D			x
Sulfite	SM 4500-SO^{3}B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x	x	
Total Coliform	SM 9221 A, B	x	x	
Total Coliform (Enumeration)	SM 9221 A, B, C	x	x	
Total Coliform / E. coli	Colisure	x	x	
Total Coliform	SM 9221B			x
Total Coliform with Chlorine Present	SM 9221B			x
Total Coliform / E.coli	SM 9223	x	x	
TOC	SM 5310C		x	x
TOC/DOC	SM 5310C	x	x	
TOX	SM 5320B			x
Total Phenols	EPA 420.1			x
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P F			x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x		x
Uranium by ICP/MS	EPA 200.8	x	x	
UV 254	SM 5910B	x		
VOC	EPA 524.2/EPA 524.3	x	x	
VOC	EPA 624	x	x	x
VOC	EPA SW 846 8260	x	x	
VOC	In House Method	x	x	
Yeast and Mold	SM 9610	x	x	

eurofins | Eaton Analytical

Acknowledgement of Samples Received

Addr: **Carollo**
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Attn: Brad Jeppson
Phone: 602-474-4132

Client ID: CAROLLO
Folder #: 491260
Project: SEDONA-AZ
Sample Group: SEDONA-WRP CEC Study

Project Manager: Debbie.L.Frank
Phone: (626) 386-1149
PO #: 9363C.00

The following samples were received from you on **July 26, 2014** at **10:12**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical.

Sample #	Sample ID			Sample Date
201407260039	Oak Creek Page Springs			07/24/2014 1400
	@DX_ABI_NEG	@DX_ABI_POS	@ML521_SPE8	
201407260040	Oak Creek Upstream			07/24/2014 1600
	@DX_ABI_NEG	@DX_ABI_POS	@ML521_SPE8	
201407260041	Oak Creek Water Co.			07/24/2014 1515
	@DX_ABI_NEG	@DX_ABI_POS	@ML521_SPE8	
201407260042	Arizona Water Co.			07/24/2014 1445
	@DX_ABI_NEG	@DX_ABI_POS	@ML521_SPE8	
201407260043	WWRP Effluent			07/24/2014 1310
	@DX_ABI_NEG	@DX_ABI_POS	@ML521_SPE8	
201407260044	WWRP POC-1			07/24/2014 1335
	@DX_ABI_NEG	@DX_ABI_POS	@ML521_SPE8	
201407260045	Field Blank			07/24/2014 1400
	@DX_ABI_NEG	@DX_ABI_POS	@ML521_SPE8	
201407260046	Equipment Blank			07/24/2014 1400
	@DX_ABI_NEG	@DX_ABI_POS	@ML521_SPE8	
201407260048	DI + Return Freight			07/24/2014 0000
	Freight - Return	Miscellaneous Charges		

Test Description

@DX_ABI_NEG -- Endocrine Disruptors Negative Mode - SPE

@DX_ABI_POS -- Endocrine Disruptors Positive Mode - SPE

@ML521_SPE8 -- Nitrosamines by GCMS

CHAIN OF CUSTODY RECORD

eurofins | Eaton Analytical

491260

750 Royal Oaks Drive, Suite 100
Monrovia, CA 91016-3629

Phone: 626 386 1100
Fax: 626 386 1101

800 566 LABS (800 566 5227)

EUROFINS EATON ANALYTICAL USE ONLY:

LOGIN COMMENTS: ______

SAMPLES CHECKED AGAINST COC BY: JS
SAMPLES LOGGED IN BY: JS
SAMPLES REC'D DAY OF COLLECTION? ☐ (check for yes)

SAMPLE TEMP RECEIVED AT:
☐ Colton / No. California / Arizona ____ °C (Compliance: 4 ± 2 °C)
☑ Monrovia 3.4 °C (Compliance: 4 ± 2 °C)

CONDITION OF BLUE ICE: Frozen ____ Partially Frozen ____ Thawed ____ Wet Ice ✓ No Ice ____

METHOD OF SHIPMENT: Pick-Up / Walk-In / (FedEx) / UPS / DHL / Area Fast / Top Line / Other: ______

TO BE COMPLETED BY SAMPLER:

COMPANY/AGENCY NAME:	PROJECT CODE:
CAROLLO ENGINEERS	9363C.00
EEA CLIENT CODE: / **COC ID:**	**SAMPLE GROUP:**

COMPLIANCE SAMPLES ☐ (check for yes) - Requires state forms ☐
NON-COMPLIANCE SAMPLES ☒ (check for yes)
REGULATION INVOLVED: ______
Type of samples (circle one): ROUTINE SPECIAL CONFIRMATION (eg. SDWA, Phase V, NPDES, FDA,...)

SEE ATTACHED BOTTLE ORDER FOR ANALYSES ☐ (check for yes), ***OR***
list ANALYSES REQUIRED (enter number of bottles sent for each test for each sample)

TAT requested: rush by adv notice only STD ___ 1 wk ___ 3 day ___ 2 day ___ 1 day ___

SAMPLE DATE	SAMPLE TIME	SAMPLE ID	CLIENT LAB ID	MATRIX *	FIELD DATA	FIELD DATA	@ML521_SPE	@DX_ABI_POS	@DX_ABI_NEG	SAMPLER COMMENTS
7/24	2:00	Oak Creek Page Springs					X	X		
	4:00	Oak Creek Upstream					X	X		
	3:15	Oak Creek Water Co.					X	X		
	2:45	Arizona Water Co.					X	X		
	1:10	WWRP Effluent					X	X		
	1:35	WWRP POC-1					X	X		
	2:00	Field Blank					X	X		
	2:00	Equipment Blank					X	X		

*** MATRIX TYPES:** **RSW** = Raw Surface Water **RGW** = Raw Ground Water **CFW** = Chlor(am)inated Finished Water **FW** = Other Finished Water **SEAW** = Sea Water **WW** = Waste Water **BW** = Bottled Water **SW** = Storm Water **SO** = Soil **SL** = Sludge **O** = Other - Please Identify

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
SAMPLED BY:					
RELINQUISHED BY:					
RECEIVED BY:	[signature]	Joe Sanchez	EEA	7/26/14	1012
RELINQUISHED BY:					
RECEIVED BY:					

QA FO 0029 (06/26/2013)

eurofins | Eaton Analytical
formerly MWH Laboratories
750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
(626) 386-1100 FAX (626) 386-1101

SHIPPING

- 626-386-1149 - Debbie

Kit Order for Carollo Engineers

Debbie.L.Frank is your Eurofins Eaton Analytical Project Manager

Note: Sampler Please return this paper with your samples

- standard overnight

- call if shipping on Friday
- deliver w/out reciept signature
- saturday delivery

Kit #: 94015
Created By: ADT
Deliver By: 07/15/2014
STG: Bottle Orders
Ice Type: W

Client ID: CAROLLO
Project Code: SEDONA-AZ Bottle Orders
Group Name: SEDONA-WRP CEC Study
PO#/JOB#:

Ship Sample Kits to
Sedona Wastewater Reclamation Plant
19655 W State Route 89A
Sedona, AZ 86336

Attn: Kelly Parlin, Chief Chemist
Phone: 928-203-5029

Send Report to
Carollo
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Attn: Brad Jeppson
Phone: 602-474-4132
Fax: 602-265-1422

Billing Address
Carollo Engineers
4600 East Washington Street, Suite 500
Phoenix, AZ 85034

Attn: Accounts Payable

# of Sample	Tests	Bottles - Qty for each sample, type & preservative if ai	UN DOT #
12	@DX_ABI_NEG, @DX_ABI_POS	2 40ml amber glass vial 80ul 32g/l NaOmadine + 5mg AA	
(12)	@ML521_SPE8	(3) 500ml amber glass 40-50 mg Na Thiosulfate	

Comments

Deliver No later than Tues 7/22/14
"Be sure Shipping sends DI for the Field Blank transfer and Equipment Blank– HPLC grade from Chuck

"Field Blank (FB) include on the side 1L+250ml HPLC Grade DI for Field Blank"
"Equipment Blank (EB) include on the side 2L HPLC Grade DI for Field Blank"

Code	Status	Date Shipped	Via	Tracking #	# of Coolers	Prepared By

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Comments
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Folder Comments

M2/MC: Oak Creek Page Springs (201407260039) was chosen for MS/MSD part of Batch QC for PPCPs by DX-ABI-EDC. See applicable qualifications regarding recoveries.

Flags Legend:

BF - Target analyte detected in method blank is at or above the method acceptance limits, but below the method reporting limit (MRL) and analyte not present in the sample.

M2 - Matrix spike recovery was low; the associated blank spike recovery was acceptable.

MC - Matrix spike recovery was high; the associated blank spike recovery was acceptable. MS/MSD RPD met acceptance criteria.

R7 - LFB/LFBD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.

The Comments Report may be blank if there are no comments for this report.

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Hits
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	201407260040	**Oak Creek Upstream**				
08/01/2014 23:15	DEET		34		ng/L	10
	201407260043	**WWRP Effluent**				
08/02/2014 01:18	1,7-Dimethylxanthine		51		ng/L	10
07/28/2014 20:24	Acesulfame-K		210		ng/L	20
08/02/2014 01:18	Albuterol		170		ng/L	5
08/02/2014 01:18	Amoxicillin (semi-quantitative)		950		ng/L	20
08/02/2014 01:18	Atenolol		83		ng/L	5
08/02/2014 01:18	Azithromycin		760		ng/L	20
08/02/2014 01:18	Carbamazepine		110		ng/L	5
08/02/2014 01:18	Carisoprodol		130		ng/L	5
08/02/2014 01:18	Cotinine		38		ng/L	10
08/02/2014 01:18	DEET		78		ng/L	10
08/02/2014 01:18	Dilantin		28		ng/L	20
07/28/2014 20:24	Gemfibrozil		56		ng/L	5
08/02/2014 01:18	Lidocaine		240		ng/L	5
08/02/2014 01:18	Meprobamate		180		ng/L	5
08/03/2014 09:17	N-Nitrosodi-n-propylamine (NDPA)		3.2		ng/L	2
08/02/2014 01:18	Primidone		51		ng/L	5
07/28/2014 20:24	Sucralose		28000		ng/L	1000
08/02/2014 01:18	Sulfamethoxazole		130		ng/L	5
08/02/2014 01:18	TCEP		120		ng/L	10
08/02/2014 01:18	TCPP		840		ng/L	100
08/02/2014 01:18	TDCPP		380		ng/L	100
08/02/2014 01:18	Theobromine		120		ng/L	10
08/02/2014 01:18	Theophylline		130		ng/L	20
	201407260044	**WWRP POC-1**				
07/28/2014 20:44	Acesulfame-K		140		ng/L	20
07/28/2014 20:44	BPA		250		ng/L	10

SUMMARY OF POSITIVE DATA ONLY

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
Oak Creek Page Springs (201407260039)						**Sampled on 07/24/2014 1400**		
			EPA 521 - Nitrosamines by GCMS					
7/30/2014	08/03/2014	03:01 784545	(EPA 521)	N-Nitrosodibutylamine (NDBA)	ND (BF)	ng/L	2	1
7/30/2014	08/03/2014	03:01 784545	(EPA 521)	N-Nitrosodiethylamine (NDEA)	ND	ng/L	2	1
7/30/2014	08/03/2014	03:01 784545	(EPA 521)	N-Nitroso-dimethylamine (NDMA)	ND	ng/L	2	1
7/30/2014	08/03/2014	03:01 784545	(EPA 521)	N-Nitrosodi-n-propylamine (NDPA)	ND	ng/L	2	1
7/30/2014	08/03/2014	03:01 784545	(EPA 521)	N-Nitrosomethylethylamine (NMEA)	ND	ng/L	2	1
7/30/2014	08/03/2014	03:01 784545	(EPA 521)	N-Nitrosomorpholine	ND	ng/l	2	1
7/30/2014	08/03/2014	03:01 784545	(EPA 521)	N-Nitrosopiperidine (NPIP)	ND	ng/L	2	1
7/30/2014	08/03/2014	03:01 784545	(EPA 521)	N-Nitrosopyrollidine (NPYR)	ND	ng/L	2	1
7/30/2014	08/03/2014	03:01 784545	(EPA 521)	NDMA-D6	97	%		1
			LC-MS-MS - Endocrine Disruptors Positive Mode - SPE					
	08/01/2014	22:55 783877	(LC-MS-MS)	1,7-Dimethylxanthine	ND (M2)	ng/L	10	1
	08/01/2014	22:55 783877	(LC-MS-MS)	Acetaminophen	ND	ng/L	5	1
	08/01/2014	22:55 783877	(LC-MS-MS)	Albuterol	ND	ng/L	5	1
	08/01/2014	22:55 783877	(LC-MS-MS)	Amoxicillin (semi-quantitative)	ND	ng/L	20	1
	08/01/2014	22:55 783877	(LC-MS-MS)	Andorostenedione	ND	ng/L	5	1
	08/01/2014	22:55 783877	(LC-MS-MS)	Atenolol	ND	ng/L	5	1
	08/01/2014	22:55 783877	(LC-MS-MS)	Atrazine	ND	ng/L	5	1
	08/01/2014	22:55 783877	(LC-MS-MS)	Azithromycin	ND	ng/L	20	1
	08/01/2014	22:55 783877	(LC-MS-MS)	Bezafibrate	ND	ng/L	5	1
	08/01/2014	22:55 783877	(LC-MS-MS)	Bromacil	ND	ng/L	5	1
	08/01/2014	22:55 783877	(LC-MS-MS)	Caffeine	ND	ng/L	5	1
	08/01/2014	22:55 783877	(LC-MS-MS)	Carbadox	ND	ng/L	5	1
	08/01/2014	22:55 783877	(LC-MS-MS)	Carbamazepine	ND	ng/L	5	1
	08/01/2014	22:55 783877	(LC-MS-MS)	Carisoprodol	ND	ng/L	5	1
	08/01/2014	22:55 783877	(LC-MS-MS)	Chloridazon	ND	ng/L	5	1
	08/01/2014	22:55 783877	(LC-MS-MS)	Chlorotoluron	ND	ng/L	5	1
	08/01/2014	22:55 783877	(LC-MS-MS)	Cimetidine	ND	ng/L	5	1
	08/01/2014	22:55 783877	(LC-MS-MS)	Cotinine	ND	ng/L	10	1
	08/01/2014	22:55 783877	(LC-MS-MS)	Cyanazine	ND	ng/L	5	1
	08/01/2014	22:55 783877	(LC-MS-MS)	DACT	ND	ng/L	5	1
	08/01/2014	22:55 783877	(LC-MS-MS)	DEA	ND	ng/L	5	1
	08/01/2014	22:55 783877	(LC-MS-MS)	DEET	ND	ng/L	10	1
	08/01/2014	22:55 783877	(LC-MS-MS)	Dehydronifedipine	ND	ng/L	5	1
	08/01/2014	22:55 783877	(LC-MS-MS)	DIA	ND	ng/L	5	1

Rounding on totals after summation.
(c) - indicates calculated results

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
	08/01/2014 22:55	783877	(LC-MS-MS)	Diazepam	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Dilantin	ND	ng/L	20	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Diltiazem	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Diuron	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Erythromycin	ND (R7)	ng/L	10	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Flumeqine	ND	ng/L	10	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Fluoxetine	ND	ng/L	10	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Isoproturon	ND	ng/L	100	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Ketoprofen	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Ketorolac	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Lidocaine	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Lincomycin	ND	ng/L	10	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Linuron	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Lopressor	ND	ng/L	20	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Meclofenamic Acid	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Meprobamate	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Metazachlor	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Metolachlor	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Nifedipine	ND	ng/L	20	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Norethisterone	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Oxolinic acid	ND	ng/L	10	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Pentoxifylline	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Phenazone	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Primidone	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Progesterone	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Propazine	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Quinoline	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Simazine	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Sulfachloropyridazine	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Sulfadiazine	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Sulfadimethoxine	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Sulfamerazine	ND (M2)	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Sulfamethazine	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Sulfamethizole	ND (M2)	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Sulfamethoxazole	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Sulfathiazole	ND	ng/L	5	1

Rounding on totals after summation.
(c) - indicates calculated results

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
	08/01/2014 22:55	783877	(LC-MS-MS)	TCEP	ND	ng/L	10	1
	08/01/2014 22:55	783877	(LC-MS-MS)	TCPP	ND	ng/L	100	1
	08/01/2014 22:55	783877	(LC-MS-MS)	TDCPP	ND	ng/L	100	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Testosterone	ND	ng/L	5	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Theobromine	ND	ng/L	10	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Theophylline	ND (M2)	ng/L	20	1
	08/01/2014 22:55	783877	(LC-MS-MS)	Trimethoprim	ND	ng/L	5	1
	LC-MS-MS - Endocrine Disruptors Negative Mode - SPE							
	07/28/2014 19:07	783859	(LC-MS-MS)	2,4-D	ND	ng/L	5	1
	07/28/2014 19:07	783859	(LC-MS-MS)	4-nonylphenol - semi quantitative	ND (MC)	ng/L	100	1
	07/28/2014 19:07	783859	(LC-MS-MS)	4-tert-Octylphenol	ND	ng/L	50	1
	07/28/2014 19:07	783859	(LC-MS-MS)	Acesulfame-K	ND	ng/L	20	1
	07/28/2014 19:07	783859	(LC-MS-MS)	Bendroflumethiazide	ND	ng/L	5	1
	07/28/2014 19:07	783859	(LC-MS-MS)	BPA	ND	ng/L	10	1
	07/28/2014 19:07	783859	(LC-MS-MS)	Butalbital	ND	ng/L	5	1
	07/28/2014 19:07	783859	(LC-MS-MS)	Butylparaben	ND	ng/L	5	1
	07/28/2014 19:07	783859	(LC-MS-MS)	Chloramphenicol	ND	ng/L	10	1
	07/28/2014 19:07	783859	(LC-MS-MS)	Clofibric Acid	ND	ng/L	5	1
	07/28/2014 19:07	783859	(LC-MS-MS)	Diclofenac	ND	ng/L	5	1
	07/28/2014 19:07	783859	(LC-MS-MS)	Estradiol	ND	ng/L	5	1
	07/28/2014 19:07	783859	(LC-MS-MS)	Estrone	ND	ng/L	5	1
	07/28/2014 19:07	783859	(LC-MS-MS)	Ethinyl Estradiol - 17 alpha	ND	ng/L	5	1
	07/28/2014 19:07	783859	(LC-MS-MS)	Ethylparaben	ND	ng/L	20	1
	07/28/2014 19:07	783859	(LC-MS-MS)	Gemfibrozil	ND	ng/L	5	1
	07/28/2014 19:07	783859	(LC-MS-MS)	Ibuprofen	ND	ng/L	10	1
	07/28/2014 19:07	783859	(LC-MS-MS)	Iohexal	ND	ng/L	10	1
	07/28/2014 19:07	783859	(LC-MS-MS)	Iopromide	ND	ng/L	5	1
	07/28/2014 19:07	783859	(LC-MS-MS)	Isobutylparaben	ND	ng/L	5	1
	07/28/2014 19:07	783859	(LC-MS-MS)	Methylparaben	ND	ng/L	20	1
	07/28/2014 19:07	783859	(LC-MS-MS)	Naproxen	ND	ng/L	10	1
	07/28/2014 19:07	783859	(LC-MS-MS)	Propylparaben	ND	ng/L	5	1
	07/28/2014 19:07	783859	(LC-MS-MS)	Sucralose	ND	ng/L	100	1
	07/28/2014 19:07	783859	(LC-MS-MS)	Triclocarban	ND	ng/L	5	1
	07/28/2014 19:07	783859	(LC-MS-MS)	Triclosan	ND	ng/L	10	1
	07/28/2014 19:07	783859	(LC-MS-MS)	Warfarin	ND	ng/L	5	1

Oak Creek Upstream (201407260040) **Sampled on 07/24/2014 1600**

Rounding on totals after summation.
(c) - indicates calculated results

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
		EPA 521 - Nitrosamines by GCMS						
7/30/2014	08/03/2014 16:40	784545	(EPA 521)	N-Nitrosodibutylamine (NDBA)	ND (BF)	ng/L	2	1
7/30/2014	08/03/2014 16:40	784545	(EPA 521)	N-Nitrosodiethylamine (NDEA)	ND	ng/L	2	1
7/30/2014	08/03/2014 16:40	784545	(EPA 521)	N-Nitroso-dimethylamine (NDMA)	ND	ng/L	2	1
7/30/2014	08/03/2014 16:40	784545	(EPA 521)	N-Nitrosodi-n-propylamine (NDPA)	ND	ng/L	2	1
7/30/2014	08/03/2014 16:40	784545	(EPA 521)	N-Nitrosomethylethylamine (NMEA)	ND	ng/L	2	1
7/30/2014	08/03/2014 16:40	784545	(EPA 521)	N-Nitrosomorpholine	ND	ng/l	2	1
7/30/2014	08/03/2014 16:40	784545	(EPA 521)	N-Nitrosopiperidine (NPIP)	ND	ng/L	2	1
7/30/2014	08/03/2014 16:40	784545	(EPA 521)	N-Nitrosopyrollidine (NPYR)	ND	ng/L	2	1
7/30/2014	08/03/2014 16:40	784545	(EPA 521)	NDMA-D6	76	%		1
		LC-MS-MS - Endocrine Disruptors Positive Mode - SPE						
	08/01/2014 23:15	783877	(LC-MS-MS)	1,7-Dimethylxanthine	ND	ng/L	10	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Acetaminophen	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Albuterol	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Amoxicillin (semi-quantitative)	ND	ng/L	20	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Andorostenedione	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Atenolol	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Atrazine	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Azithromycin	ND	ng/L	20	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Bezafibrate	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Bromacil	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Caffeine	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Carbadox	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Carbamazepine	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Carisoprodol	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Chloridazon	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Chlorotoluron	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Cimetidine	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Cotinine	ND	ng/L	10	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Cyanazine	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	DACT	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	DEA	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	DEET	34	ng/L	10	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Dehydronifedipine	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	DIA	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Diazepam	ND	ng/L	5	1

Rounding on totals after summation.
(c) - indicates calculated results

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
	08/01/2014 23:15	783877	(LC-MS-MS)	Dilantin	ND	ng/L	20	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Diltiazem	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Diuron	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Erythromycin	ND (R7)	ng/L	10	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Flumeqine	ND	ng/L	10	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Fluoxetine	ND	ng/L	10	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Isoproturon	ND	ng/L	100	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Ketoprofen	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Ketorolac	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Lidocaine	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Lincomycin	ND	ng/L	10	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Linuron	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Lopressor	ND	ng/L	20	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Meclofenamic Acid	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Meprobamate	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Metazachlor	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Metolachlor	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Nifedipine	ND	ng/L	20	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Norethisterone	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Oxolinic acid	ND	ng/L	10	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Pentoxifylline	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Phenazone	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Primidone	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Progesterone	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Propazine	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Quinoline	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Simazine	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Sulfachloropyridazine	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Sulfadiazine	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Sulfadimethoxine	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Sulfamerazine	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Sulfamethazine	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Sulfamethizole	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Sulfamethoxazole	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Sulfathiazole	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	TCEP	ND	ng/L	10	1

Rounding on totals after summation.
(c) - indicates calculated results

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
	08/01/2014 23:15	783877	(LC-MS-MS)	TCPP	ND	ng/L	100	1
	08/01/2014 23:15	783877	(LC-MS-MS)	TDCPP	ND	ng/L	100	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Testosterone	ND	ng/L	5	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Theobromine	ND	ng/L	10	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Theophylline	ND	ng/L	20	1
	08/01/2014 23:15	783877	(LC-MS-MS)	Trimethoprim	ND	ng/L	5	1
	LC-MS-MS - Endocrine Disruptors Negative Mode - SPE							
	07/28/2014 19:26	783859	(LC-MS-MS)	2,4-D	ND	ng/L	5	1
	07/28/2014 19:26	783859	(LC-MS-MS)	4-nonylphenol - semi quantitative	ND	ng/L	100	1
	07/28/2014 19:26	783859	(LC-MS-MS)	4-tert-Octylphenol	ND	ng/L	50	1
	07/28/2014 19:26	783859	(LC-MS-MS)	Acesulfame-K	ND	ng/L	20	1
	07/28/2014 19:26	783859	(LC-MS-MS)	Bendroflumethiazide	ND	ng/L	5	1
	07/28/2014 19:26	783859	(LC-MS-MS)	BPA	ND	ng/L	10	1
	07/28/2014 19:26	783859	(LC-MS-MS)	Butalbital	ND	ng/L	5	1
	07/28/2014 19:26	783859	(LC-MS-MS)	Butylparaben	ND	ng/L	5	1
	07/28/2014 19:26	783859	(LC-MS-MS)	Chloramphenicol	ND	ng/L	10	1
	07/28/2014 19:26	783859	(LC-MS-MS)	Clofibric Acid	ND	ng/L	5	1
	07/28/2014 19:26	783859	(LC-MS-MS)	Diclofenac	ND	ng/L	5	1
	07/28/2014 19:26	783859	(LC-MS-MS)	Estradiol	ND	ng/L	5	1
	07/28/2014 19:26	783859	(LC-MS-MS)	Estrone	ND	ng/L	5	1
	07/28/2014 19:26	783859	(LC-MS-MS)	Ethinyl Estradiol - 17 alpha	ND	ng/L	5	1
	07/28/2014 19:26	783859	(LC-MS-MS)	Ethylparaben	ND	ng/L	20	1
	07/28/2014 19:26	783859	(LC-MS-MS)	Gemfibrozil	ND	ng/L	5	1
	07/28/2014 19:26	783859	(LC-MS-MS)	Ibuprofen	ND	ng/L	10	1
	07/28/2014 19:26	783859	(LC-MS-MS)	Iohexal	ND	ng/L	10	1
	07/28/2014 19:26	783859	(LC-MS-MS)	Iopromide	ND	ng/L	5	1
	07/28/2014 19:26	783859	(LC-MS-MS)	Isobutylparaben	ND	ng/L	5	1
	07/28/2014 19:26	783859	(LC-MS-MS)	Methylparaben	ND	ng/L	20	1
	07/28/2014 19:26	783859	(LC-MS-MS)	Naproxen	ND	ng/L	10	1
	07/28/2014 19:26	783859	(LC-MS-MS)	Propylparaben	ND	ng/L	5	1
	07/28/2014 19:26	783859	(LC-MS-MS)	Sucralose	ND	ng/L	100	1
	07/28/2014 19:26	783859	(LC-MS-MS)	Triclocarban	ND	ng/L	5	1
	07/28/2014 19:26	783859	(LC-MS-MS)	Triclosan	ND	ng/L	10	1
	07/28/2014 19:26	783859	(LC-MS-MS)	Warfarin	ND	ng/L	5	1

Oak Creek Water Co. (201407260041) **Sampled on 07/24/2014 1515**

Rounding on totals after summation.
(c) - indicates calculated results

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
		EPA 521 - Nitrosamines by GCMS						
7/30/2014	08/03/2014 07:11	784545	(EPA 521)	N-Nitrosodibutylamine (NDBA)	ND (BF)	ng/L	2	1
7/30/2014	08/03/2014 07:11	784545	(EPA 521)	N-Nitrosodiethylamine (NDEA)	ND	ng/L	2	1
7/30/2014	08/03/2014 07:11	784545	(EPA 521)	N-Nitroso-dimethylamine (NDMA)	ND	ng/L	2	1
7/30/2014	08/03/2014 07:11	784545	(EPA 521)	N-Nitrosodi-n-propylamine (NDPA)	ND	ng/L	2	1
7/30/2014	08/03/2014 07:11	784545	(EPA 521)	N-Nitrosomethylethylamine (NMEA)	ND	ng/L	2	1
7/30/2014	08/03/2014 07:11	784545	(EPA 521)	N-Nitrosomorpholine	ND	ng/l	2	1
7/30/2014	08/03/2014 07:11	784545	(EPA 521)	N-Nitrosopiperidine (NPIP)	ND	ng/L	2	1
7/30/2014	08/03/2014 07:11	784545	(EPA 521)	N-Nitrosopyrollidine (NPYR)	ND	ng/L	2	1
7/30/2014	08/03/2014 07:11	784545	(EPA 521)	NDMA-D6	89	%		1
		LC-MS-MS - Endocrine Disruptors Positive Mode - SPE						
	08/01/2014 23:36	783877	(LC-MS-MS)	1,7-Dimethylxanthine	ND	ng/L	10	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Acetaminophen	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Albuterol	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Amoxicillin (semi-quantitative)	ND	ng/L	20	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Andorostenedione	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Atenolol	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Atrazine	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Azithromycin	ND	ng/L	20	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Bezafibrate	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Bromacil	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Caffeine	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Carbadox	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Carbamazepine	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Carisoprodol	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Chloridazon	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Chlorotoluron	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Cimetidine	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Cotinine	ND	ng/L	10	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Cyanazine	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	DACT	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	DEA	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	DEET	ND	ng/L	10	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Dehydronifedipine	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	DIA	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Diazepam	ND	ng/L	5	1

Rounding on totals after summation.
(c) - indicates calculated results

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
	08/01/2014 23:36	783877	(LC-MS-MS)	Dilantin	ND	ng/L	20	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Diltiazem	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Diuron	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Erythromycin	ND (R7)	ng/L	10	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Flumeqine	ND	ng/L	10	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Fluoxetine	ND	ng/L	10	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Isoproturon	ND	ng/L	100	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Ketoprofen	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Ketorolac	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Lidocaine	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Lincomycin	ND	ng/L	10	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Linuron	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Lopressor	ND	ng/L	20	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Meclofenamic Acid	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Meprobamate	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Metazachlor	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Metolachlor	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Nifedipine	ND	ng/L	20	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Norethisterone	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Oxolinic acid	ND	ng/L	10	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Pentoxifylline	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Phenazone	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Primidone	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Progesterone	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Propazine	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Quinoline	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Simazine	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Sulfachloropyridazine	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Sulfadiazine	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Sulfadimethoxine	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Sulfamerazine	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Sulfamethazine	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Sulfamethizole	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Sulfamethoxazole	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Sulfathiazole	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	TCEP	ND	ng/L	10	1

Rounding on totals after summation.
(c) - indicates calculated results

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
	08/01/2014 23:36	783877	(LC-MS-MS)	TCPP	ND	ng/L	100	1
	08/01/2014 23:36	783877	(LC-MS-MS)	TDCPP	ND	ng/L	100	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Testosterone	ND	ng/L	5	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Theobromine	ND	ng/L	10	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Theophylline	ND	ng/L	20	1
	08/01/2014 23:36	783877	(LC-MS-MS)	Trimethoprim	ND	ng/L	5	1
	LC-MS-MS - Endocrine Disruptors Negative Mode - SPE							
	07/28/2014 19:46	783859	(LC-MS-MS)	2,4-D	ND	ng/L	5	1
	07/28/2014 19:46	783859	(LC-MS-MS)	4-nonylphenol - semi quantitative	ND	ng/L	100	1
	07/28/2014 19:46	783859	(LC-MS-MS)	4-tert-Octylphenol	ND	ng/L	50	1
	07/28/2014 19:46	783859	(LC-MS-MS)	Acesulfame-K	ND	ng/L	20	1
	07/28/2014 19:46	783859	(LC-MS-MS)	Bendroflumethiazide	ND	ng/L	5	1
	07/28/2014 19:46	783859	(LC-MS-MS)	BPA	ND	ng/L	10	1
	07/28/2014 19:46	783859	(LC-MS-MS)	Butalbital	ND	ng/L	5	1
	07/28/2014 19:46	783859	(LC-MS-MS)	Butylparaben	ND	ng/L	5	1
	07/28/2014 19:46	783859	(LC-MS-MS)	Chloramphenicol	ND	ng/L	10	1
	07/28/2014 19:46	783859	(LC-MS-MS)	Clofibric Acid	ND	ng/L	5	1
	07/28/2014 19:46	783859	(LC-MS-MS)	Diclofenac	ND	ng/L	5	1
	07/28/2014 19:46	783859	(LC-MS-MS)	Estradiol	ND	ng/L	5	1
	07/28/2014 19:46	783859	(LC-MS-MS)	Estrone	ND	ng/L	5	1
	07/28/2014 19:46	783859	(LC-MS-MS)	Ethinyl Estradiol - 17 alpha	ND	ng/L	5	1
	07/28/2014 19:46	783859	(LC-MS-MS)	Ethylparaben	ND	ng/L	20	1
	07/28/2014 19:46	783859	(LC-MS-MS)	Gemfibrozil	ND	ng/L	5	1
	07/28/2014 19:46	783859	(LC-MS-MS)	Ibuprofen	ND	ng/L	10	1
	07/28/2014 19:46	783859	(LC-MS-MS)	Iohexal	ND	ng/L	10	1
	07/28/2014 19:46	783859	(LC-MS-MS)	Iopromide	ND	ng/L	5	1
	07/28/2014 19:46	783859	(LC-MS-MS)	Isobutylparaben	ND	ng/L	5	1
	07/28/2014 19:46	783859	(LC-MS-MS)	Methylparaben	ND	ng/L	20	1
	07/28/2014 19:46	783859	(LC-MS-MS)	Naproxen	ND	ng/L	10	1
	07/28/2014 19:46	783859	(LC-MS-MS)	Propylparaben	ND	ng/L	5	1
	07/28/2014 19:46	783859	(LC-MS-MS)	Sucralose	ND	ng/L	100	1
	07/28/2014 19:46	783859	(LC-MS-MS)	Triclocarban	ND	ng/L	5	1
	07/28/2014 19:46	783859	(LC-MS-MS)	Triclosan	ND	ng/L	10	1
	07/28/2014 19:46	783859	(LC-MS-MS)	Warfarin	ND	ng/L	5	1

Arizona Water Co. (201407260042) **Sampled on 07/24/2014 1445**

Rounding on totals after summation.
(c) - indicates calculated results

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
		EPA 521 - Nitrosamines by GCMS						
7/30/2014	08/03/2014	08:14 784545	(EPA 521)	N-Nitrosodibutylamine (NDBA)	ND (BF)	ng/L	2	1
7/30/2014	08/03/2014	08:14 784545	(EPA 521)	N-Nitrosodiethylamine (NDEA)	ND	ng/L	2	1
7/30/2014	08/03/2014	08:14 784545	(EPA 521)	N-Nitroso-dimethylamine (NDMA)	ND	ng/L	2	1
7/30/2014	08/03/2014	08:14 784545	(EPA 521)	N-Nitrosodi-n-propylamine (NDPA)	ND	ng/L	2	1
7/30/2014	08/03/2014	08:14 784545	(EPA 521)	N-Nitrosomethylethylamine (NMEA)	ND	ng/L	2	1
7/30/2014	08/03/2014	08:14 784545	(EPA 521)	N-Nitrosomorpholine	ND	ng/l	2	1
7/30/2014	08/03/2014	08:14 784545	(EPA 521)	N-Nitrosopiperidine (NPIP)	ND	ng/L	2	1
7/30/2014	08/03/2014	08:14 784545	(EPA 521)	N-Nitrosopyrollidine (NPYR)	ND	ng/L	2	1
7/30/2014	08/03/2014	08:14 784545	(EPA 521)	NDMA-D6	105	%		1
		LC-MS-MS - Endocrine Disruptors Positive Mode - SPE						
	08/01/2014	23:56 783877	(LC-MS-MS)	1,7-Dimethylxanthine	ND	ng/L	10	1
	08/01/2014	23:56 783877	(LC-MS-MS)	Acetaminophen	ND	ng/L	5	1
	08/01/2014	23:56 783877	(LC-MS-MS)	Albuterol	ND	ng/L	5	1
	08/01/2014	23:56 783877	(LC-MS-MS)	Amoxicillin (semi-quantitative)	ND	ng/L	20	1
	08/01/2014	23:56 783877	(LC-MS-MS)	Andorostenedione	ND	ng/L	5	1
	08/01/2014	23:56 783877	(LC-MS-MS)	Atenolol	ND	ng/L	5	1
	08/01/2014	23:56 783877	(LC-MS-MS)	Atrazine	ND	ng/L	5	1
	08/01/2014	23:56 783877	(LC-MS-MS)	Azithromycin	ND	ng/L	20	1
	08/01/2014	23:56 783877	(LC-MS-MS)	Bezafibrate	ND	ng/L	5	1
	08/01/2014	23:56 783877	(LC-MS-MS)	Bromacil	ND	ng/L	5	1
	08/01/2014	23:56 783877	(LC-MS-MS)	Caffeine	ND	ng/L	5	1
	08/01/2014	23:56 783877	(LC-MS-MS)	Carbadox	ND	ng/L	5	1
	08/01/2014	23:56 783877	(LC-MS-MS)	Carbamazepine	ND	ng/L	5	1
	08/01/2014	23:56 783877	(LC-MS-MS)	Carisoprodol	ND	ng/L	5	1
	08/01/2014	23:56 783877	(LC-MS-MS)	Chloridazon	ND	ng/L	5	1
	08/01/2014	23:56 783877	(LC-MS-MS)	Chlorotoluron	ND	ng/L	5	1
	08/01/2014	23:56 783877	(LC-MS-MS)	Cimetidine	ND	ng/L	5	1
	08/01/2014	23:56 783877	(LC-MS-MS)	Cotinine	ND	ng/L	10	1
	08/01/2014	23:56 783877	(LC-MS-MS)	Cyanazine	ND	ng/L	5	1
	08/01/2014	23:56 783877	(LC-MS-MS)	DACT	ND	ng/L	5	1
	08/01/2014	23:56 783877	(LC-MS-MS)	DEA	ND	ng/L	5	1
	08/01/2014	23:56 783877	(LC-MS-MS)	DEET	ND	ng/L	10	1
	08/01/2014	23:56 783877	(LC-MS-MS)	Dehydronifedipine	ND	ng/L	5	1
	08/01/2014	23:56 783877	(LC-MS-MS)	DIA	ND	ng/L	5	1
	08/01/2014	23:56 783877	(LC-MS-MS)	Diazepam	ND	ng/L	5	1

Rounding on totals after summation.
(c) - indicates calculated results

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
	08/01/2014 23:56	783877	(LC-MS-MS)	Dilantin	ND	ng/L	20	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Diltiazem	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Diuron	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Erythromycin	ND (R7)	ng/L	10	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Flumeqine	ND	ng/L	10	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Fluoxetine	ND	ng/L	10	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Isoproturon	ND	ng/L	100	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Ketoprofen	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Ketorolac	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Lidocaine	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Lincomycin	ND	ng/L	10	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Linuron	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Lopressor	ND	ng/L	20	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Meclofenamic Acid	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Meprobamate	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Metazachlor	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Metolachlor	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Nifedipine	ND	ng/L	20	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Norethisterone	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Oxolinic acid	ND	ng/L	10	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Pentoxifylline	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Phenazone	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Primidone	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Progesterone	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Propazine	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Quinoline	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Simazine	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Sulfachloropyridazine	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Sulfadiazine	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Sulfadimethoxine	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Sulfamerazine	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Sulfamethazine	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Sulfamethizole	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Sulfamethoxazole	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Sulfathiazole	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	TCEP	ND	ng/L	10	1

Rounding on totals after summation.
(c) - indicates calculated results

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
	08/01/2014 23:56	783877	(LC-MS-MS)	TCPP	ND	ng/L	100	1
	08/01/2014 23:56	783877	(LC-MS-MS)	TDCPP	ND	ng/L	100	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Testosterone	ND	ng/L	5	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Theobromine	ND	ng/L	10	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Theophylline	ND	ng/L	20	1
	08/01/2014 23:56	783877	(LC-MS-MS)	Trimethoprim	ND	ng/L	5	1
	LC-MS-MS - Endocrine Disruptors Negative Mode - SPE							
	07/28/2014 20:05	783859	(LC-MS-MS)	2,4-D	ND	ng/L	5	1
	07/28/2014 20:05	783859	(LC-MS-MS)	4-nonylphenol - semi quantitative	ND	ng/L	100	1
	07/28/2014 20:05	783859	(LC-MS-MS)	4-tert-Octylphenol	ND	ng/L	50	1
	07/28/2014 20:05	783859	(LC-MS-MS)	Acesulfame-K	ND	ng/L	20	1
	07/28/2014 20:05	783859	(LC-MS-MS)	Bendroflumethiazide	ND	ng/L	5	1
	07/28/2014 20:05	783859	(LC-MS-MS)	BPA	ND	ng/L	10	1
	07/28/2014 20:05	783859	(LC-MS-MS)	Butalbital	ND	ng/L	5	1
	07/28/2014 20:05	783859	(LC-MS-MS)	Butylparaben	ND	ng/L	5	1
	07/28/2014 20:05	783859	(LC-MS-MS)	Chloramphenicol	ND	ng/L	10	1
	07/28/2014 20:05	783859	(LC-MS-MS)	Clofibric Acid	ND	ng/L	5	1
	07/28/2014 20:05	783859	(LC-MS-MS)	Diclofenac	ND	ng/L	5	1
	07/28/2014 20:05	783859	(LC-MS-MS)	Estradiol	ND	ng/L	5	1
	07/28/2014 20:05	783859	(LC-MS-MS)	Estrone	ND	ng/L	5	1
	07/28/2014 20:05	783859	(LC-MS-MS)	Ethinyl Estradiol - 17 alpha	ND	ng/L	5	1
	07/28/2014 20:05	783859	(LC-MS-MS)	Ethylparaben	ND	ng/L	20	1
	07/28/2014 20:05	783859	(LC-MS-MS)	Gemfibrozil	ND	ng/L	5	1
	07/28/2014 20:05	783859	(LC-MS-MS)	Ibuprofen	ND	ng/L	10	1
	07/28/2014 20:05	783859	(LC-MS-MS)	Iohexal	ND	ng/L	10	1
	07/28/2014 20:05	783859	(LC-MS-MS)	Iopromide	ND	ng/L	5	1
	07/28/2014 20:05	783859	(LC-MS-MS)	Isobutylparaben	ND	ng/L	5	1
	07/28/2014 20:05	783859	(LC-MS-MS)	Methylparaben	ND	ng/L	20	1
	07/28/2014 20:05	783859	(LC-MS-MS)	Naproxen	ND	ng/L	10	1
	07/28/2014 20:05	783859	(LC-MS-MS)	Propylparaben	ND	ng/L	5	1
	07/28/2014 20:05	783859	(LC-MS-MS)	Sucralose	ND	ng/L	100	1
	07/28/2014 20:05	783859	(LC-MS-MS)	Triclocarban	ND	ng/L	5	1
	07/28/2014 20:05	783859	(LC-MS-MS)	Triclosan	ND	ng/L	10	1
	07/28/2014 20:05	783859	(LC-MS-MS)	Warfarin	ND	ng/L	5	1

WWRP Effluent (201407260043) **Sampled on 07/24/2014 1310**

Rounding on totals after summation.
(c) - indicates calculated results

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
		EPA 521 - Nitrosamines by GCMS						
7/30/2014	08/03/2014 09:17	784545	(EPA 521)	N-Nitrosodibutylamine (NDBA)	ND (BF)	ng/L	2	1
7/30/2014	08/03/2014 09:17	784545	(EPA 521)	N-Nitrosodiethylamine (NDEA)	ND	ng/L	2	1
7/30/2014	08/03/2014 09:17	784545	(EPA 521)	N-Nitroso-dimethylamine (NDMA)	ND	ng/L	2	1
7/30/2014	08/03/2014 09:17	784545	(EPA 521)	N-Nitrosodi-n-propylamine (NDPA)	3.2	ng/L	2	1
7/30/2014	08/03/2014 09:17	784545	(EPA 521)	N-Nitrosomethylethylamine (NMEA)	ND	ng/L	2	1
7/30/2014	08/03/2014 09:17	784545	(EPA 521)	N-Nitrosomorpholine	ND	ng/l	2	1
7/30/2014	08/03/2014 09:17	784545	(EPA 521)	N-Nitrosopiperidine (NPIP)	ND	ng/L	2	1
7/30/2014	08/03/2014 09:17	784545	(EPA 521)	N-Nitrosopyrollidine (NPYR)	ND	ng/L	2	1
7/30/2014	08/03/2014 09:17	784545	(EPA 521)	NDMA-D6	102	%		1
		LC-MS-MS - Endocrine Disruptors Positive Mode - SPE						
	08/02/2014 01:18	783877	(LC-MS-MS)	1,7-Dimethylxanthine	51	ng/L	10	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Acetaminophen	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Albuterol	170	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Amoxicillin (semi-quantitative)	950	ng/L	20	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Andorostenedione	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Atenolol	83	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Atrazine	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Azithromycin	760	ng/L	20	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Bezafibrate	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Bromacil	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Caffeine	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Carbadox	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Carbamazepine	110	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Carisoprodol	130	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Chloridazon	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Chlorotoluron	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Cimetidine	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Cotinine	38	ng/L	10	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Cyanazine	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	DACT	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	DEA	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	DEET	78	ng/L	10	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Dehydronifedipine	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	DIA	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Diazepam	ND	ng/L	5	1

Rounding on totals after summation.
(c) - indicates calculated results

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
	08/02/2014 01:18	783877	(LC-MS-MS)	Dilantin	28	ng/L	20	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Diltiazem	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Diuron	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Erythromycin	ND (R7)	ng/L	10	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Flumeqine	ND	ng/L	10	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Fluoxetine	ND	ng/L	10	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Isoproturon	ND	ng/L	100	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Ketoprofen	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Ketorolac	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Lidocaine	240	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Lincomycin	ND	ng/L	10	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Linuron	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Lopressor	ND	ng/L	20	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Meclofenamic Acid	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Meprobamate	180	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Metazachlor	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Metolachlor	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Nifedipine	ND	ng/L	20	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Norethisterone	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Oxolinic acid	ND	ng/L	10	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Pentoxifylline	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Phenazone	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Primidone	51	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Progesterone	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Propazine	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Quinoline	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Simazine	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Sulfachloropyridazine	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Sulfadiazine	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Sulfadimethoxine	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Sulfamerazine	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Sulfamethazine	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Sulfamethizole	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Sulfamethoxazole	130	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Sulfathiazole	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	TCEP	120	ng/L	10	1

Rounding on totals after summation.
(c) - indicates calculated results

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
	08/02/2014 01:18	783877	(LC-MS-MS)	TCPP	840	ng/L	100	1
	08/02/2014 01:18	783877	(LC-MS-MS)	TDCPP	380	ng/L	100	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Testosterone	ND	ng/L	5	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Theobromine	120	ng/L	10	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Theophylline	130	ng/L	20	1
	08/02/2014 01:18	783877	(LC-MS-MS)	Trimethoprim	ND	ng/L	5	1
	LC-MS-MS - Endocrine Disruptors Negative Mode - SPE							
	07/28/2014 20:24	783859	(LC-MS-MS)	2,4-D	ND	ng/L	5	1
	07/28/2014 20:24	783859	(LC-MS-MS)	4-nonylphenol - semi quantitative	ND	ng/L	100	1
	07/28/2014 20:24	783859	(LC-MS-MS)	4-tert-Octylphenol	ND	ng/L	50	1
	07/28/2014 20:24	783859	(LC-MS-MS)	Acesulfame-K	210	ng/L	20	1
	07/28/2014 20:24	783859	(LC-MS-MS)	Bendroflumethiazide	ND	ng/L	5	1
	07/28/2014 20:24	783859	(LC-MS-MS)	BPA	ND	ng/L	10	1
	07/28/2014 20:24	783859	(LC-MS-MS)	Butalbital	ND	ng/L	5	1
	07/28/2014 20:24	783859	(LC-MS-MS)	Butylparaben	ND	ng/L	5	1
	07/28/2014 20:24	783859	(LC-MS-MS)	Chloramphenicol	ND	ng/L	10	1
	07/28/2014 20:24	783859	(LC-MS-MS)	Clofibric Acid	ND	ng/L	5	1
	07/28/2014 20:24	783859	(LC-MS-MS)	Diclofenac	ND	ng/L	5	1
	07/28/2014 20:24	783859	(LC-MS-MS)	Estradiol	ND	ng/L	5	1
	07/28/2014 20:24	783859	(LC-MS-MS)	Estrone	ND	ng/L	5	1
	07/28/2014 20:24	783859	(LC-MS-MS)	Ethinyl Estradiol - 17 alpha	ND	ng/L	5	1
	07/28/2014 20:24	783859	(LC-MS-MS)	Ethylparaben	ND	ng/L	20	1
	07/28/2014 20:24	783859	(LC-MS-MS)	Gemfibrozil	56	ng/L	5	1
	07/28/2014 20:24	783859	(LC-MS-MS)	Ibuprofen	ND	ng/L	10	1
	07/28/2014 20:24	783859	(LC-MS-MS)	Iohexal	ND	ng/L	10	1
	07/28/2014 20:24	783859	(LC-MS-MS)	Iopromide	ND	ng/L	5	1
	07/28/2014 20:24	783859	(LC-MS-MS)	Isobutylparaben	ND	ng/L	5	1
	07/28/2014 20:24	783859	(LC-MS-MS)	Methylparaben	ND	ng/L	20	1
	07/28/2014 20:24	783859	(LC-MS-MS)	Naproxen	ND	ng/L	10	1
	07/28/2014 20:24	783859	(LC-MS-MS)	Propylparaben	ND	ng/L	5	1
	07/28/2014 20:24	783859	(LC-MS-MS)	Sucralose	28000	ng/L	1000	10
	07/28/2014 20:24	783859	(LC-MS-MS)	Triclocarban	ND	ng/L	5	1
	07/28/2014 20:24	783859	(LC-MS-MS)	Triclosan	ND	ng/L	10	1
	07/28/2014 20:24	783859	(LC-MS-MS)	Warfarin	ND	ng/L	5	1

WWRP POC-1 (201407260044) **Sampled on 07/24/2014 1335**

Rounding on totals after summation.
(c) - indicates calculated results

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
		EPA 521 - Nitrosamines by GCMS						
8/4/2014	08/06/2014 17:05	785155	(EPA 521)	N-Nitrosodibutylamine (NDBA)	ND	ng/L	2	1
8/4/2014	08/06/2014 17:05	785155	(EPA 521)	N-Nitrosodiethylamine (NDEA)	ND	ng/L	2	1
8/4/2014	08/06/2014 17:05	785155	(EPA 521)	N-Nitroso-dimethylamine (NDMA)	ND	ng/L	2	1
8/4/2014	08/06/2014 17:05	785155	(EPA 521)	N-Nitrosodi-n-propylamine (NDPA)	ND	ng/L	2	1
8/4/2014	08/06/2014 17:05	785155	(EPA 521)	N-Nitrosomethylethylamine (NMEA)	ND	ng/L	2	1
8/4/2014	08/06/2014 17:05	785155	(EPA 521)	N-Nitrosomorpholine	ND	ng/l	2	1
8/4/2014	08/06/2014 17:05	785155	(EPA 521)	N-Nitrosopiperidine (NPIP)	ND	ng/L	2	1
8/4/2014	08/06/2014 17:05	785155	(EPA 521)	N-Nitrosopyrollidine (NPYR)	ND	ng/L	2	1
8/4/2014	08/06/2014 17:05	785155	(EPA 521)	NDMA-D6	86	%		1
		LC-MS-MS - Endocrine Disruptors Positive Mode - SPE						
	08/02/2014 00:17	783877	(LC-MS-MS)	1,7-Dimethylxanthine	ND	ng/L	10	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Acetaminophen	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Albuterol	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Amoxicillin (semi-quantitative)	ND	ng/L	20	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Andorostenedione	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Atenolol	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Atrazine	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Azithromycin	ND	ng/L	20	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Bezafibrate	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Bromacil	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Caffeine	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Carbadox	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Carbamazepine	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Carisoprodol	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Chloridazon	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Chlorotoluron	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Cimetidine	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Cotinine	ND	ng/L	10	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Cyanazine	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	DACT	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	DEA	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	DEET	ND	ng/L	10	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Dehydronifedipine	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	DIA	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Diazepam	ND	ng/L	5	1

Rounding on totals after summation.
(c) - indicates calculated results

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
	08/02/2014 00:17	783877	(LC-MS-MS)	Dilantin	ND	ng/L	20	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Diltiazem	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Diuron	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Erythromycin	ND (R7)	ng/L	10	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Flumeqine	ND	ng/L	10	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Fluoxetine	ND	ng/L	10	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Isoproturon	ND	ng/L	100	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Ketoprofen	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Ketorolac	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Lidocaine	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Lincomycin	ND	ng/L	10	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Linuron	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Lopressor	ND	ng/L	20	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Meclofenamic Acid	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Meprobamate	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Metazachlor	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Metolachlor	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Nifedipine	ND	ng/L	20	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Norethisterone	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Oxolinic acid	ND	ng/L	10	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Pentoxifylline	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Phenazone	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Primidone	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Progesterone	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Propazine	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Quinoline	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Simazine	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Sulfachloropyridazine	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Sulfadiazine	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Sulfadimethoxine	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Sulfamerazine	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Sulfamethazine	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Sulfamethizole	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Sulfamethoxazole	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Sulfathiazole	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	TCEP	ND	ng/L	10	1

Rounding on totals after summation.
(c) - indicates calculated results

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
	08/02/2014 00:17	783877	(LC-MS-MS)	TCPP	ND	ng/L	100	1
	08/02/2014 00:17	783877	(LC-MS-MS)	TDCPP	ND	ng/L	100	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Testosterone	ND	ng/L	5	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Theobromine	ND	ng/L	10	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Theophylline	ND	ng/L	20	1
	08/02/2014 00:17	783877	(LC-MS-MS)	Trimethoprim	ND	ng/L	5	1
	LC-MS-MS - Endocrine Disruptors Negative Mode - SPE							
	07/28/2014 20:44	783859	(LC-MS-MS)	2,4-D	ND	ng/L	5	1
	07/28/2014 20:44	783859	(LC-MS-MS)	4-nonylphenol - semi quantitative	ND	ng/L	100	1
	07/28/2014 20:44	783859	(LC-MS-MS)	4-tert-Octylphenol	ND	ng/L	50	1
	07/28/2014 20:44	783859	(LC-MS-MS)	Acesulfame-K	140	ng/L	20	1
	07/28/2014 20:44	783859	(LC-MS-MS)	Bendroflumethiazide	ND	ng/L	5	1
	07/28/2014 20:44	783859	(LC-MS-MS)	BPA	250	ng/L	10	1
	07/28/2014 20:44	783859	(LC-MS-MS)	Butalbital	ND	ng/L	5	1
	07/28/2014 20:44	783859	(LC-MS-MS)	Butylparaben	ND	ng/L	5	1
	07/28/2014 20:44	783859	(LC-MS-MS)	Chloramphenicol	ND	ng/L	10	1
	07/28/2014 20:44	783859	(LC-MS-MS)	Clofibric Acid	ND	ng/L	5	1
	07/28/2014 20:44	783859	(LC-MS-MS)	Diclofenac	ND	ng/L	5	1
	07/28/2014 20:44	783859	(LC-MS-MS)	Estradiol	ND	ng/L	5	1
	07/28/2014 20:44	783859	(LC-MS-MS)	Estrone	ND	ng/L	5	1
	07/28/2014 20:44	783859	(LC-MS-MS)	Ethinyl Estradiol - 17 alpha	ND	ng/L	5	1
	07/28/2014 20:44	783859	(LC-MS-MS)	Ethylparaben	ND	ng/L	20	1
	07/28/2014 20:44	783859	(LC-MS-MS)	Gemfibrozil	ND	ng/L	5	1
	07/28/2014 20:44	783859	(LC-MS-MS)	Ibuprofen	ND	ng/L	10	1
	07/28/2014 20:44	783859	(LC-MS-MS)	Iohexal	ND	ng/L	10	1
	07/28/2014 20:44	783859	(LC-MS-MS)	Iopromide	ND	ng/L	5	1
	07/28/2014 20:44	783859	(LC-MS-MS)	Isobutylparaben	ND	ng/L	5	1
	07/28/2014 20:44	783859	(LC-MS-MS)	Methylparaben	ND	ng/L	20	1
	07/28/2014 20:44	783859	(LC-MS-MS)	Naproxen	ND	ng/L	10	1
	07/28/2014 20:44	783859	(LC-MS-MS)	Propylparaben	ND	ng/L	5	1
	07/28/2014 20:44	783859	(LC-MS-MS)	Sucralose	ND	ng/L	100	1
	07/28/2014 20:44	783859	(LC-MS-MS)	Triclocarban	ND	ng/L	5	1
	07/28/2014 20:44	783859	(LC-MS-MS)	Triclosan	ND	ng/L	10	1
	07/28/2014 20:44	783859	(LC-MS-MS)	Warfarin	ND	ng/L	5	1

Field Blank (201407260045) **Sampled on 07/24/2014 1400**

Rounding on totals after summation.
(c) - indicates calculated results

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
		EPA 521 - Nitrosamines by GCMS						
7/30/2014	08/03/2014	11:23 784545	(EPA 521)	N-Nitrosodibutylamine (NDBA)	ND (BF)	ng/L	2	1
7/30/2014	08/03/2014	11:23 784545	(EPA 521)	N-Nitrosodiethylamine (NDEA)	ND	ng/L	2	1
7/30/2014	08/03/2014	11:23 784545	(EPA 521)	N-Nitroso-dimethylamine (NDMA)	ND	ng/L	2	1
7/30/2014	08/03/2014	11:23 784545	(EPA 521)	N-Nitrosodi-n-propylamine (NDPA)	ND	ng/L	2	1
7/30/2014	08/03/2014	11:23 784545	(EPA 521)	N-Nitrosomethylethylamine (NMEA)	ND	ng/L	2	1
7/30/2014	08/03/2014	11:23 784545	(EPA 521)	N-Nitrosomorpholine	ND	ng/l	2	1
7/30/2014	08/03/2014	11:23 784545	(EPA 521)	N-Nitrosopiperidine (NPIP)	ND	ng/L	2	1
7/30/2014	08/03/2014	11:23 784545	(EPA 521)	N-Nitrosopyrollidine (NPYR)	ND	ng/L	2	1
7/30/2014	08/03/2014	11:23 784545	(EPA 521)	NDMA-D6	88	%		1
		LC-MS-MS - Endocrine Disruptors Positive Mode - SPE						
	08/02/2014	00:37 783877	(LC-MS-MS)	1,7-Dimethylxanthine	ND	ng/L	10	1
	08/02/2014	00:37 783877	(LC-MS-MS)	Acetaminophen	ND	ng/L	5	1
	08/02/2014	00:37 783877	(LC-MS-MS)	Albuterol	ND	ng/L	5	1
	08/02/2014	00:37 783877	(LC-MS-MS)	Amoxicillin (semi-quantitative)	ND	ng/L	20	1
	08/02/2014	00:37 783877	(LC-MS-MS)	Andorostenedione	ND	ng/L	5	1
	08/02/2014	00:37 783877	(LC-MS-MS)	Atenolol	ND	ng/L	5	1
	08/02/2014	00:37 783877	(LC-MS-MS)	Atrazine	ND	ng/L	5	1
	08/02/2014	00:37 783877	(LC-MS-MS)	Azithromycin	ND	ng/L	20	1
	08/02/2014	00:37 783877	(LC-MS-MS)	Bezafibrate	ND	ng/L	5	1
	08/02/2014	00:37 783877	(LC-MS-MS)	Bromacil	ND	ng/L	5	1
	08/02/2014	00:37 783877	(LC-MS-MS)	Caffeine	ND	ng/L	5	1
	08/02/2014	00:37 783877	(LC-MS-MS)	Carbadox	ND	ng/L	5	1
	08/02/2014	00:37 783877	(LC-MS-MS)	Carbamazepine	ND	ng/L	5	1
	08/02/2014	00:37 783877	(LC-MS-MS)	Carisoprodol	ND	ng/L	5	1
	08/02/2014	00:37 783877	(LC-MS-MS)	Chloridazon	ND	ng/L	5	1
	08/02/2014	00:37 783877	(LC-MS-MS)	Chlorotoluron	ND	ng/L	5	1
	08/02/2014	00:37 783877	(LC-MS-MS)	Cimetidine	ND	ng/L	5	1
	08/02/2014	00:37 783877	(LC-MS-MS)	Cotinine	ND	ng/L	10	1
	08/02/2014	00:37 783877	(LC-MS-MS)	Cyanazine	ND	ng/L	5	1
	08/02/2014	00:37 783877	(LC-MS-MS)	DACT	ND	ng/L	5	1
	08/02/2014	00:37 783877	(LC-MS-MS)	DEA	ND	ng/L	5	1
	08/02/2014	00:37 783877	(LC-MS-MS)	DEET	ND	ng/L	10	1
	08/02/2014	00:37 783877	(LC-MS-MS)	Dehydronifedipine	ND	ng/L	5	1
	08/02/2014	00:37 783877	(LC-MS-MS)	DIA	ND	ng/L	5	1
	08/02/2014	00:37 783877	(LC-MS-MS)	Diazepam	ND	ng/L	5	1

Rounding on totals after summation.
(c) - indicates calculated results

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
	08/02/2014 00:37	783877	(LC-MS-MS)	Dilantin	ND	ng/L	20	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Diltiazem	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Diuron	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Erythromycin	ND (R7)	ng/L	10	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Flumeqine	ND	ng/L	10	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Fluoxetine	ND	ng/L	10	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Isoproturon	ND	ng/L	100	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Ketoprofen	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Ketorolac	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Lidocaine	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Lincomycin	ND	ng/L	10	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Linuron	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Lopressor	ND	ng/L	20	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Meclofenamic Acid	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Meprobamate	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Metazachlor	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Metolachlor	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Nifedipine	ND	ng/L	20	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Norethisterone	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Oxolinic acid	ND	ng/L	10	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Pentoxifylline	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Phenazone	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Primidone	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Progesterone	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Propazine	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Quinoline	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Simazine	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Sulfachloropyridazine	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Sulfadiazine	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Sulfadimethoxine	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Sulfamerazine	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Sulfamethazine	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Sulfamethizole	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Sulfamethoxazole	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Sulfathiazole	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	TCEP	ND	ng/L	10	1

Rounding on totals after summation.
(c) - indicates calculated results

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
	08/02/2014 00:37	783877	(LC-MS-MS)	TCPP	ND	ng/L	100	1
	08/02/2014 00:37	783877	(LC-MS-MS)	TDCPP	ND	ng/L	100	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Testosterone	ND	ng/L	5	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Theobromine	ND	ng/L	10	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Theophylline	ND	ng/L	20	1
	08/02/2014 00:37	783877	(LC-MS-MS)	Trimethoprim	ND	ng/L	5	1
	LC-MS-MS - Endocrine Disruptors Negative Mode - SPE							
	07/28/2014 21:03	783859	(LC-MS-MS)	2,4-D	ND	ng/L	5	1
	07/28/2014 21:03	783859	(LC-MS-MS)	4-nonylphenol - semi quantitative	ND	ng/L	100	1
	07/28/2014 21:03	783859	(LC-MS-MS)	4-tert-Octylphenol	ND	ng/L	50	1
	07/28/2014 21:03	783859	(LC-MS-MS)	Acesulfame-K	ND	ng/L	20	1
	07/28/2014 21:03	783859	(LC-MS-MS)	Bendroflumethiazide	ND	ng/L	5	1
	07/28/2014 21:03	783859	(LC-MS-MS)	BPA	ND	ng/L	10	1
	07/28/2014 21:03	783859	(LC-MS-MS)	Butalbital	ND	ng/L	5	1
	07/28/2014 21:03	783859	(LC-MS-MS)	Butylparaben	ND	ng/L	5	1
	07/28/2014 21:03	783859	(LC-MS-MS)	Chloramphenicol	ND	ng/L	10	1
	07/28/2014 21:03	783859	(LC-MS-MS)	Clofibric Acid	ND	ng/L	5	1
	07/28/2014 21:03	783859	(LC-MS-MS)	Diclofenac	ND	ng/L	5	1
	07/28/2014 21:03	783859	(LC-MS-MS)	Estradiol	ND	ng/L	5	1
	07/28/2014 21:03	783859	(LC-MS-MS)	Estrone	ND	ng/L	5	1
	07/28/2014 21:03	783859	(LC-MS-MS)	Ethinyl Estradiol - 17 alpha	ND	ng/L	5	1
	07/28/2014 21:03	783859	(LC-MS-MS)	Ethylparaben	ND	ng/L	20	1
	07/28/2014 21:03	783859	(LC-MS-MS)	Gemfibrozil	ND	ng/L	5	1
	07/28/2014 21:03	783859	(LC-MS-MS)	Ibuprofen	ND	ng/L	10	1
	07/28/2014 21:03	783859	(LC-MS-MS)	Iohexal	ND	ng/L	10	1
	07/28/2014 21:03	783859	(LC-MS-MS)	Iopromide	ND	ng/L	5	1
	07/28/2014 21:03	783859	(LC-MS-MS)	Isobutylparaben	ND	ng/L	5	1
	07/28/2014 21:03	783859	(LC-MS-MS)	Methylparaben	ND	ng/L	20	1
	07/28/2014 21:03	783859	(LC-MS-MS)	Naproxen	ND	ng/L	10	1
	07/28/2014 21:03	783859	(LC-MS-MS)	Propylparaben	ND	ng/L	5	1
	07/28/2014 21:03	783859	(LC-MS-MS)	Sucralose	ND	ng/L	100	1
	07/28/2014 21:03	783859	(LC-MS-MS)	Triclocarban	ND	ng/L	5	1
	07/28/2014 21:03	783859	(LC-MS-MS)	Triclosan	ND	ng/L	10	1
	07/28/2014 21:03	783859	(LC-MS-MS)	Warfarin	ND	ng/L	5	1

Equipment Blank (201407260046) **Sampled on 07/24/2014 1400**

Rounding on totals after summation.
(c) - indicates calculated results

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
		EPA 521 - Nitrosamines by GCMS						
8/4/2014	08/06/2014 17:59	785155	(EPA 521)	N-Nitrosodibutylamine (NDBA)	ND	ng/L	2	1
8/4/2014	08/06/2014 17:59	785155	(EPA 521)	N-Nitrosodiethylamine (NDEA)	ND	ng/L	2	1
8/4/2014	08/06/2014 17:59	785155	(EPA 521)	N-Nitroso-dimethylamine (NDMA)	ND	ng/L	2	1
8/4/2014	08/06/2014 17:59	785155	(EPA 521)	N-Nitrosodi-n-propylamine (NDPA)	ND	ng/L	2	1
8/4/2014	08/06/2014 17:59	785155	(EPA 521)	N-Nitrosomethylethylamine (NMEA)	ND	ng/L	2	1
8/4/2014	08/06/2014 17:59	785155	(EPA 521)	N-Nitrosomorpholine	ND	ng/l	2	1
8/4/2014	08/06/2014 17:59	785155	(EPA 521)	N-Nitrosopiperidine (NPIP)	ND	ng/L	2	1
8/4/2014	08/06/2014 17:59	785155	(EPA 521)	N-Nitrosopyrollidine (NPYR)	ND	ng/L	2	1
8/4/2014	08/06/2014 17:59	785155	(EPA 521)	NDMA-D6	97	%		1
		LC-MS-MS - Endocrine Disruptors Positive Mode - SPE						
	08/02/2014 00:58	783877	(LC-MS-MS)	1,7-Dimethylxanthine	ND	ng/L	10	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Acetaminophen	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Albuterol	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Amoxicillin (semi-quantitative)	ND	ng/L	20	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Andorostenedione	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Atenolol	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Atrazine	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Azithromycin	ND	ng/L	20	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Bezafibrate	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Bromacil	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Caffeine	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Carbadox	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Carbamazepine	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Carisoprodol	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Chloridazon	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Chlorotoluron	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Cimetidine	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Cotinine	ND	ng/L	10	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Cyanazine	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	DACT	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	DEA	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	DEET	ND	ng/L	10	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Dehydronifedipine	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	DIA	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Diazepam	ND	ng/L	5	1

Rounding on totals after summation.
(c) - indicates calculated results

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
	08/02/2014 00:58	783877	(LC-MS-MS)	Dilantin	ND	ng/L	20	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Diltiazem	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Diuron	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Erythromycin	ND (R7)	ng/L	10	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Flumeqine	ND	ng/L	10	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Fluoxetine	ND	ng/L	10	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Isoproturon	ND	ng/L	100	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Ketoprofen	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Ketorolac	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Lidocaine	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Lincomycin	ND	ng/L	10	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Linuron	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Lopressor	ND	ng/L	20	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Meclofenamic Acid	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Meprobamate	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Metazachlor	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Metolachlor	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Nifedipine	ND	ng/L	20	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Norethisterone	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Oxolinic acid	ND	ng/L	10	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Pentoxifylline	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Phenazone	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Primidone	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Progesterone	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Propazine	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Quinoline	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Simazine	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Sulfachloropyridazine	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Sulfadiazine	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Sulfadimethoxine	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Sulfamerazine	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Sulfamethazine	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Sulfamethizole	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Sulfamethoxazole	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Sulfathiazole	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	TCEP	ND	ng/L	10	1

Rounding on totals after summation.
(c) - indicates calculated results

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 491260

Carollo
Brad Jeppson
Carollo Engineers, Inc
4600 E Washington St, Suite 500
Phoenix, AZ 85034

Samples Received on:
07/26/2014 10:12

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
	08/02/2014 00:58	783877	(LC-MS-MS)	TCPP	ND	ng/L	100	1
	08/02/2014 00:58	783877	(LC-MS-MS)	TDCPP	ND	ng/L	100	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Testosterone	ND	ng/L	5	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Theobromine	ND	ng/L	10	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Theophylline	ND	ng/L	20	1
	08/02/2014 00:58	783877	(LC-MS-MS)	Trimethoprim	ND	ng/L	5	1
	LC-MS-MS - Endocrine Disruptors Negative Mode - SPE							
	07/28/2014 21:23	783859	(LC-MS-MS)	2,4-D	ND	ng/L	5	1
	07/28/2014 21:23	783859	(LC-MS-MS)	4-nonylphenol - semi quantitative	ND	ng/L	100	1
	07/28/2014 21:23	783859	(LC-MS-MS)	4-tert-Octylphenol	ND	ng/L	50	1
	07/28/2014 21:23	783859	(LC-MS-MS)	Acesulfame-K	ND	ng/L	20	1
	07/28/2014 21:23	783859	(LC-MS-MS)	Bendroflumethiazide	ND	ng/L	5	1
	07/28/2014 21:23	783859	(LC-MS-MS)	BPA	ND	ng/L	10	1
	07/28/2014 21:23	783859	(LC-MS-MS)	Butalbital	ND	ng/L	5	1
	07/28/2014 21:23	783859	(LC-MS-MS)	Butylparaben	ND	ng/L	5	1
	07/28/2014 21:23	783859	(LC-MS-MS)	Chloramphenicol	ND	ng/L	10	1
	07/28/2014 21:23	783859	(LC-MS-MS)	Clofibric Acid	ND	ng/L	5	1
	07/28/2014 21:23	783859	(LC-MS-MS)	Diclofenac	ND	ng/L	5	1
	07/28/2014 21:23	783859	(LC-MS-MS)	Estradiol	ND	ng/L	5	1
	07/28/2014 21:23	783859	(LC-MS-MS)	Estrone	ND	ng/L	5	1
	07/28/2014 21:23	783859	(LC-MS-MS)	Ethinyl Estradiol - 17 alpha	ND	ng/L	5	1
	07/28/2014 21:23	783859	(LC-MS-MS)	Ethylparaben	ND	ng/L	20	1
	07/28/2014 21:23	783859	(LC-MS-MS)	Gemfibrozil	ND	ng/L	5	1
	07/28/2014 21:23	783859	(LC-MS-MS)	Ibuprofen	ND	ng/L	10	1
	07/28/2014 21:23	783859	(LC-MS-MS)	Iohexal	ND	ng/L	10	1
	07/28/2014 21:23	783859	(LC-MS-MS)	Iopromide	ND	ng/L	5	1
	07/28/2014 21:23	783859	(LC-MS-MS)	Isobutylparaben	ND	ng/L	5	1
	07/28/2014 21:23	783859	(LC-MS-MS)	Methylparaben	ND	ng/L	20	1
	07/28/2014 21:23	783859	(LC-MS-MS)	Naproxen	ND	ng/L	10	1
	07/28/2014 21:23	783859	(LC-MS-MS)	Propylparaben	ND	ng/L	5	1
	07/28/2014 21:23	783859	(LC-MS-MS)	Sucralose	ND	ng/L	100	1
	07/28/2014 21:23	783859	(LC-MS-MS)	Triclocarban	ND	ng/L	5	1
	07/28/2014 21:23	783859	(LC-MS-MS)	Triclosan	ND	ng/L	10	1
	07/28/2014 21:23	783859	(LC-MS-MS)	Warfarin	ND	ng/L	5	1

Rounding on totals after summation.
(c) - indicates calculated results

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Carollo

QC Ref # 783859 - Endocrine Disruptors Negative Mode - SPE **Analysis Date: 07/28/2014**

201407260039	Oak Creek Page Springs	Analyzed by: ARH
201407260040	Oak Creek Upstream	Analyzed by: ARH
201407260041	Oak Creek Water Co.	Analyzed by: ARH
201407260042	Arizona Water Co.	Analyzed by: ARH
201407260043	WWRP Effluent	Analyzed by: ARH
201407260044	WWRP POC-1	Analyzed by: ARH
201407260045	Field Blank	Analyzed by: ARH
201407260046	Equipment Blank	Analyzed by: ARH

QC Ref # 783877 - Endocrine Disruptors Positive Mode - SPE **Analysis Date: 08/01/2014**

201407260039	Oak Creek Page Springs	Analyzed by: ARH
201407260040	Oak Creek Upstream	Analyzed by: ARH
201407260041	Oak Creek Water Co.	Analyzed by: ARH
201407260042	Arizona Water Co.	Analyzed by: ARH
201407260043	WWRP Effluent	Analyzed by: ARH
201407260044	WWRP POC-1	Analyzed by: ARH
201407260045	Field Blank	Analyzed by: ARH
201407260046	Equipment Blank	Analyzed by: ARH

QC Ref # 784545 - Nitrosamines by GCMS **Analysis Date: 08/03/2014**

201407260039	Oak Creek Page Springs	Analyzed by: KDT
201407260040	Oak Creek Upstream	Analyzed by: KDT
201407260041	Oak Creek Water Co.	Analyzed by: KDT
201407260042	Arizona Water Co.	Analyzed by: KDT
201407260043	WWRP Effluent	Analyzed by: KDT
201407260045	Field Blank	Analyzed by: KDT

QC Ref # 785155 - Nitrosamines by GCMS **Analysis Date: 08/06/2014**

201407260044	WWRP POC-1	Analyzed by: KDT
201407260046	Equipment Blank	Analyzed by: KDT

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory QC
Report: 491260

Carollo

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
QC Ref# 783859 - Endocrine Disruptors Negative Mode - SPE by LC-MS-MS						**Analysis Date: 07/28/2014**			
LCS1	2,4-D		100	106	ng/L	106	(60-140)		
LCS2	2,4-D		100	102	ng/L	102	(60-140)	40	3.9
MBLK	2,4-D			<5	ng/L				
MRL_CHK	2,4-D		5.0	3.22	ng/L	64	(50-150)		
MS_201407260039	2,4-D	ND	100	93.3	ng/L	93	(60-140)		
MSD_201407260039	2,4-D	ND	100	102	ng/L	102	(60-140)	40	8.9
LCS1	4-nonylphenol - semi quantitative		200	160	ng/L	80	(60-140)		
LCS2	4-nonylphenol - semi quantitative		200	204	ng/L	102	(60-140)	40	24
MBLK	4-nonylphenol - semi quantitative			<100	ng/L				
MRL_CHK	4-nonylphenol - semi quantitative		10	8.48	ng/L	85	(50-150)		
MS_201407260039	4-nonylphenol - semi quantitative	ND	200	448	ng/L	**224**	(60-140)		
MSD_201407260039	4-nonylphenol - semi quantitative	ND	200	617	ng/L	**309**	(60-140)	40	32
LCS1	4-tert-octylphenol		100	111	ng/L	111	(60-140)		
LCS2	4-tert-octylphenol		100	110	ng/L	110	(60-140)	40	0.91
MBLK	4-tert-octylphenol			<100	ng/L				
MRL_CHK	4-tert-octylphenol		5.0	7.01	ng/L	140	(50-150)		
MS_201407260039	4-tert-octylphenol	ND	100	94.4	ng/L	95	(60-140)		
MSD_201407260039	4-tert-octylphenol	ND	100	98.3	ng/L	98	(60-140)	40	3.9
LCS1	Acesulfame-K		400	404	ng/L	101	(60-140)		
LCS2	Acesulfame-K		400	357	ng/L	89	(60-140)	40	12
MBLK	Acesulfame-K			<20	ng/L				
MRL_CHK	Acesulfame-K		20	18.8	ng/L	94	(50-150)		
MS_201407260039	Acesulfame-K	ND	400	362	ng/L	87	(60-140)		
MSD_201407260039	Acesulfame-K	ND	400	330	ng/L	79	(60-140)	40	9.3
LCS1	Bendroflumethiazide		100	104	ng/L	104	(60-140)		
LCS2	Bendroflumethiazide		100	91.8	ng/L	92	(60-140)	40	13
MBLK	Bendroflumethiazide			<5	ng/L				
MRL_CHK	Bendroflumethiazide		5.0	4.90	ng/L	98	(50-150)		
MS_201407260039	Bendroflumethiazide	ND	100	63.8	ng/L	64	(60-140)		
MSD_201407260039	Bendroflumethiazide	ND	100	67.9	ng/L	68	(60-140)	40	6.2
LCS1	BPA		100	80.4	ng/L	80	(60-140)		
LCS2	BPA		100	91.0	ng/L	91	(60-140)	40	12
MBLK	BPA			<10	ng/L				
MRL_CHK	BPA		5.0	6.68	ng/L	134	(50-150)		
MS_201407260039	BPA	ND	100	90.0	ng/L	90	(60-140)		
MSD_201407260039	BPA	ND	100	99.9	ng/L	100	(60-140)	40	10

Spike recovery is already corrected for native results.
Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
RPD not calculated for LCS2 when different a concentration than LCS1 is used.
RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
(S) - Indicates surrogate compound.
(I) - Indicates internal standard compound.

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory QC
Report: 491260

Carollo

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
LCS1	Butalbital		100	97.1	ng/L	97	(60-140)		
LCS2	Butalbital		100	76.4	ng/L	76	(60-140)	40	24
MBLK	Butalbital			<5	ng/L				
MRL_CHK	Butalbital		5.0	4.40	ng/L	88	(50-150)		
MS_201407260039	Butalbital	ND	100	96.9	ng/L	97	(60-140)		
MSD_201407260039	Butalbital	ND	100	109	ng/L	109	(60-140)	40	12
LCS1	Butylparben		100	103	ng/L	103	(60-140)		
LCS2	Butylparben		100	104	ng/L	104	(60-140)	40	0.97
MBLK	Butylparben			<5	ng/L				
MRL_CHK	Butylparben		5.0	3.96	ng/L	79	(50-150)		
MS_201407260039	Butylparben	ND	100	99.2	ng/L	99	(60-140)		
MSD_201407260039	Butylparben	ND	100	97.1	ng/L	97	(60-140)	40	2.1
LCS1	Chloramphenicol		100	98.2	ng/L	98	(60-140)		
LCS2	Chloramphenicol		100	88.3	ng/L	88	(60-140)	40	11
MBLK	Chloramphenicol			<10	ng/L				
MRL_CHK	Chloramphenicol		5.0	6.05	ng/L	121	(50-150)		
MS_201407260039	Chloramphenicol	ND	100	96.7	ng/L	97	(60-140)		
MSD_201407260039	Chloramphenicol	ND	100	94.8	ng/L	95	(60-140)	40	2.0
LCS1	Clofibric Acid		100	106	ng/L	107	(60-140)		
LCS2	Clofibric Acid		100	100	ng/L	101	(60-140)	40	5.8
MBLK	Clofibric Acid			<5	ng/L				
MRL_CHK	Clofibric Acid		5.0	5.15	ng/L	103	(50-150)		
MS_201407260039	Clofibric Acid	ND	100	96.0	ng/L	96	(60-140)		
MSD_201407260039	Clofibric Acid	ND	100	102	ng/L	102	(60-140)	40	6.1
LCS1	Diclofenac		100	105	ng/L	105	(60-140)		
LCS2	Diclofenac		100	99.2	ng/L	99	(60-140)	40	5.7
MBLK	Diclofenac			<5	ng/L				
MRL_CHK	Diclofenac		5.0	4.66	ng/L	93	(50-150)		
MS_201407260039	Diclofenac	ND	100	88.9	ng/L	89	(60-140)		
MSD_201407260039	Diclofenac	ND	100	84.8	ng/L	85	(60-140)	40	4.7
LCS1	Estradiol		100	89.4	ng/L	89	(60-140)		
LCS2	Estradiol		100	84.9	ng/L	85	(60-140)	40	5.2
MBLK	Estradiol			<5	ng/L				
MRL_CHK	Estradiol		5.0	3.21	ng/L	64	(50-150)		
MS_201407260039	Estradiol	ND	100	114	ng/L	115	(60-140)		
MSD_201407260039	Estradiol	ND	100	104	ng/L	105	(60-140)	40	9.1
LCS1	Estrone		100	90.3	ng/L	90	(60-140)		
LCS2	Estrone		100	96.4	ng/L	96	(60-140)	40	6.5

Spike recovery is already corrected for native results.
Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
RPD not calculated for LCS2 when different a concentration than LCS1 is used.
RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
(S) - Indicates surrogate compound.
(I) - Indicates internal standard compound.

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory QC
Report: 491260

Carollo

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MBLK	Estrone			<5	ng/L				
MRL_CHK	Estrone		5.0	5.21	ng/L	104	(50-150)		
MS_201407260039	Estrone	ND	100	90.0	ng/L	87	(60-140)		
MSD_201407260039	Estrone	ND	100	92.2	ng/L	89	(60-140)	40	2.4
LCS1	Ethinyl Estradiol - 17 alpha		100	103	ng/L	103	(60-140)		
LCS2	Ethinyl Estradiol - 17 alpha		100	92.4	ng/L	92	(60-140)	40	11
MBLK	Ethinyl Estradiol - 17 alpha			<5	ng/L				
MRL_CHK	Ethinyl Estradiol - 17 alpha		5.0	5.73	ng/L	115	(50-150)		
MS_201407260039	Ethinyl Estradiol - 17 alpha	ND	100	94.8	ng/L	95	(60-140)		
MSD_201407260039	Ethinyl Estradiol - 17 alpha	ND	100	87.5	ng/L	88	(60-140)	40	8.1
LCS1	Ethylparaben		400	462	ng/L	115	(60-140)		
LCS2	Ethylparaben		400	382	ng/L	96	(60-140)	40	19
MBLK	Ethylparaben			<20	ng/L				
MRL_CHK	Ethylparaben		20	13.6	ng/L	68	(50-150)		
MS_201407260039	Ethylparaben	ND	400	476	ng/L	119	(60-140)		
MSD_201407260039	Ethylparaben	ND	400	513	ng/L	128	(60-140)	40	7.5
LCS1	Gemfibrozil		100	96.3	ng/L	96	(60-140)		
LCS2	Gemfibrozil		100	92.1	ng/L	92	(60-140)	40	4.5
MBLK	Gemfibrozil			<5	ng/L				
MRL_CHK	Gemfibrozil		5.0	6.20	ng/L	124	(50-150)		
MS_201407260039	Gemfibrozil	ND	100	92.8	ng/L	92	(60-140)		
MSD_201407260039	Gemfibrozil	ND	100	102	ng/L	101	(60-140)	40	9.4
LCS1	Ibuprofen		200	204	ng/L	102	(60-140)		
LCS2	Ibuprofen		200	199	ng/L	100	(60-140)	40	2.5
MBLK	Ibuprofen			<15	ng/L				
MRL_CHK	Ibuprofen		10	7.29	ng/L	73	(50-150)		
MS_201407260039	Ibuprofen	ND	200	189	ng/L	94	(60-140)		
MSD_201407260039	Ibuprofen	ND	200	213	ng/L	106	(60-140)	40	12
LCS1	Iohexal		200	211	ng/L	106	(60-140)		
LCS2	Iohexal		200	205	ng/L	103	(60-140)	40	2.9
MBLK	Iohexal			<10	ng/L				
MRL_CHK	Iohexal		10	10.4	ng/L	104	(50-150)		
MS_201407260039	Iohexal	ND	200	213	ng/L	107	(50-150)		
MSD_201407260039	Iohexal	ND	200	248	ng/L	124	(50-150)	50	15
LCS1	Iopromide		100	94.1	ng/L	94	(60-140)		
LCS2	Iopromide		100	106	ng/L	106	(60-140)	40	12
MBLK	Iopromide			<5	ng/L				
MRL_CHK	Iopromide		5.0	4.29	ng/L	86	(50-150)		

Spike recovery is already corrected for native results.
Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
RPD not calculated for LCS2 when different a concentration than LCS1 is used.
RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
(S) - Indicates surrogate compound.
(I) - Indicates internal standard compound.

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory QC
Report: 491260

Carollo

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MS_201407260039	Iopromide	ND	100	112	ng/L	111	(50-150)		
MSD_201407260039	Iopromide	ND	100	128	ng/L	128	(50-150)	50	14
LCS1	Isobutylparaben		100	107	ng/L	107	(60-140)		
LCS2	Isobutylparaben		100	107	ng/L	107	(60-140)	40	0.0
MBLK	Isobutylparaben			<5	ng/L				
MRL_CHK	Isobutylparaben		5.0	4.98	ng/L	100	(50-150)		
MS_201407260039	Isobutylparaben	ND	100	104	ng/L	104	(60-140)		
MSD_201407260039	Isobutylparaben	ND	100	107	ng/L	107	(60-140)	40	2.8
LCS1	Methylparaben		400	296	ng/L	74	(60-140)		
LCS2	Methylparaben		400	288	ng/L	72	(60-140)	40	2.4
MBLK	Methylparaben			<20	ng/L				
MRL_CHK	Methylparaben		20	17.5	ng/L	88	(50-150)		
MS_201407260039	Methylparaben	ND	400	442	ng/L	109	(60-140)		
MSD_201407260039	Methylparaben	ND	400	441	ng/L	109	(60-140)	40	0.23
LCS1	Naproxen		200	172	ng/L	86	(60-140)		
LCS2	Naproxen		200	127	ng/L	63	(60-140)	40	30
MBLK	Naproxen			<10	ng/L				
MRL_CHK	Naproxen		10	14.4	ng/L	144	(50-150)		
MS_201407260039	Naproxen	ND	200	176	ng/L	84	(60-140)		
MSD_201407260039	Naproxen	ND	200	150	ng/L	71	(60-140)	40	16
LCS1	Propylparaben		100	101	ng/L	101	(60-140)		
LCS2	Propylparaben		100	105	ng/L	105	(60-140)	40	3.9
MBLK	Propylparaben			<5	ng/L				
MRL_CHK	Propylparaben		5.0	6.06	ng/L	121	(50-150)		
MS_201407260039	Propylparaben	ND	100	104	ng/L	104	(60-140)		
MSD_201407260039	Propylparaben	ND	100	107	ng/L	107	(60-140)	40	2.8
LCS1	Sucralose		2000	1880	ng/L	94	(60-140)		
LCS2	Sucralose		2000	1660	ng/L	83	(60-140)	40	12
MBLK	Sucralose			<100	ng/L				
MRL_CHK	Sucralose		100	81.7	ng/L	82	(50-150)		
MS_201407260039	Sucralose	ND	2000	2380	ng/L	119	(60-140)		
MSD_201407260039	Sucralose	ND	2000	2190	ng/L	109	(60-140)	40	8.3
LCS1	Triclocarban		100	76.8	ng/L	77	(60-140)		
LCS2	Triclocarban		100	74.1	ng/L	74	(60-140)	40	3.6
MBLK	Triclocarban			<5	ng/L				
MRL_CHK	Triclocarban		5.0	7.28	ng/L	146	(50-150)		
MS_201407260039	Triclocarban	ND	100	108	ng/L	108	(60-140)		
MSD_201407260039	Triclocarban	ND	100	77.5	ng/L	78	(60-140)	40	33

Spike recovery is already corrected for native results.
Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
RPD not calculated for LCS2 when different a concentration than LCS1 is used.
RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
(S) - Indicates surrogate compound.
(I) - Indicates internal standard compound.

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory QC
Report: 491260

Carollo

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
LCS1	Triclosan		200	205	ng/L	103	(60-140)		
LCS2	Triclosan		200	211	ng/L	105	(60-140)	40	2.9
MBLK	Triclosan			<10	ng/L				
MRL_CHK	Triclosan		10	13.8	ng/L	138	(50-150)		
MS_201407260039	Triclosan	ND	200	203	ng/L	100	(60-140)		
MSD_201407260039	Triclosan	ND	200	216	ng/L	106	(60-140)	40	6.2
LCS1	Warfarin		100	92.4	ng/L	92	(60-140)		
LCS2	Warfarin		100	89.9	ng/L	90	(60-140)	40	2.7
MBLK	Warfarin			<5	ng/L				
MRL_CHK	Warfarin		5.0	4.21	ng/L	84	(50-150)		
MS_201407260039	Warfarin	ND	100	96.8	ng/L	97	(60-140)		
MSD_201407260039	Warfarin	ND	100	90.5	ng/L	90	(60-140)	40	6.7
QC Ref# 783877 - Endocrine Disruptors Positive Mode - SPE by LC-MS-MS						**Analysis Date: 08/01/2014**			
LCS1	1,7-Dimethylxanthine		100	98.5	ng/L	99	(60-140)		
LCS2	1,7-Dimethylxanthine		100	94.2	ng/L	94	(60-140)	30	4.5
MBLK	1,7-Dimethylxanthine			<5	ng/L				
MRL_CHK	1,7-Dimethylxanthine		5.0	4.95	ng/L	99	(50-150)		
MS_201407260039	1,7-Dimethylxanthine	ND	100	6.21	ng/L	**5.1**	(60-140)		
MSD_201407260039	1,7-Dimethylxanthine	ND	100	5.25	ng/L	**4.2**	(60-140)	40	17
LCS1	Acetaminophen		100	104	ng/L	104	(60-140)		
LCS2	Acetaminophen		100	98.7	ng/L	99	(60-140)	30	5.2
MBLK	Acetaminophen			<5	ng/L				
MRL_CHK	Acetaminophen		5.0	6.11	ng/L	122	(50-150)		
MS_201407260039	Acetaminophen	ND	100	121	ng/L	121	(60-140)		
MSD_201407260039	Acetaminophen	ND	100	120	ng/L	120	(60-140)	40	0.83
LCS1	Albuterol		100	107	ng/L	107	(60-140)		
LCS2	Albuterol		100	98.8	ng/L	99	(60-140)	30	8.0
MBLK	Albuterol			<5	ng/L				
MRL_CHK	Albuterol		5.0	5.86	ng/L	117	(50-150)		
MS_201407260039	Albuterol	ND	100	243	ng/L	**243**	(60-140)		
MSD_201407260039	Albuterol	ND	100	255	ng/L	**255**	(60-140)	40	4.8
LCS1	Amoxicillin (semi-quantitative)		400	466	ng/L	117	(60-140)		
LCS2	Amoxicillin (semi-quantitative)		400	468	ng/L	117	(60-140)	30	0.43
MBLK	Amoxicillin (semi-quantitative)			<20	ng/L				
MRL_CHK	Amoxicillin (semi-quantitative)		20	29.0	ng/L	145	(50-150)		
MS_201407260039	Amoxicillin (semi-quantitative)	ND	400	373	ng/L	93	(60-140)		
MSD_201407260039	Amoxicillin (semi-quantitative)	ND	400	538	ng/L	134	(60-140)	40	36
LCS1	Andorostenedione		100	103	ng/L	103	(60-140)		

Spike recovery is already corrected for native results.
Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
RPD not calculated for LCS2 when different a concentration than LCS1 is used.
RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
(S) - Indicates surrogate compound.
(I) - Indicates internal standard compound.

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory QC
Report: 491260

Carollo

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
LCS2	Andorostenedione		100	95.9	ng/L	96	(60-140)	30	7.1
MBLK	Andorostenedione			<5	ng/L				
MRL_CHK	Andorostenedione		5.0	5.82	ng/L	116	(50-150)		
MS_201407260039	Andorostenedione	ND	100	106	ng/L	104	(60-140)		
MSD_201407260039	Andorostenedione	ND	100	115	ng/L	113	(60-140)	40	8.1
LCS1	Atenolol		100	96.4	ng/L	96	(60-140)		
LCS2	Atenolol		100	94.1	ng/L	94	(60-140)	30	2.4
MBLK	Atenolol			<5	ng/L				
MRL_CHK	Atenolol		5.0	6.18	ng/L	124	(50-150)		
MS_201407260039	Atenolol	ND	100	85.1	ng/L	81	(60-140)		
MSD_201407260039	Atenolol	ND	100	94.9	ng/L	90	(60-140)	40	11
LCS1	Atrazine		100	104	ng/L	104	(60-140)		
LCS2	Atrazine		100	95.2	ng/L	95	(60-140)	30	8.8
MBLK	Atrazine			<5	ng/L				
MRL_CHK	Atrazine		5.0	5.12	ng/L	102	(50-150)		
MS_201407260039	Atrazine	ND	100	98.0	ng/L	98	(60-140)		
MSD_201407260039	Atrazine	ND	100	102	ng/L	102	(60-140)	40	4.0
LCS1	Azithromycin		400	340	ng/L	85	(60-140)		
LCS2	Azithromycin		400	306	ng/L	77	(60-140)	30	11
MBLK	Azithromycin			<20	ng/L				
MRL_CHK	Azithromycin		20	20.4	ng/L	102	(50-150)		
MS_201407260039	Azithromycin	ND	400	2200	ng/L	**551**	(60-140)		
MSD_201407260039	Azithromycin	ND	400	1670	ng/L	**417**	(60-140)	40	27
LCS1	Bezafibrate		100	104	ng/L	104	(60-140)		
LCS2	Bezafibrate		100	98.4	ng/L	98	(60-140)	30	5.5
MBLK	Bezafibrate			<5	ng/L				
MRL_CHK	Bezafibrate		5.0	5.25	ng/L	105	(50-150)		
MS_201407260039	Bezafibrate	ND	100	110	ng/L	110	(60-140)		
MSD_201407260039	Bezafibrate	ND	100	119	ng/L	119	(60-140)	40	7.9
LCS1	Bromacil		100	105	ng/L	105	(60-140)		
LCS2	Bromacil		100	104	ng/L	104	(60-140)	30	0.96
MBLK	Bromacil			<5	ng/L				
MRL_CHK	Bromacil		5.0	5.32	ng/L	106	(50-150)		
MS_201407260039	Bromacil	ND	100	68.5	ng/L	68	(60-140)		
MSD_201407260039	Bromacil	ND	100	79.5	ng/L	79	(60-140)	40	15
LCS1	Caffeine		100	106	ng/L	106	(70-130)		
LCS2	Caffeine		100	98.4	ng/L	98	(70-130)	30	7.4
MBLK	Caffeine			<5	ng/L				

Spike recovery is already corrected for native results.
Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
RPD not calculated for LCS2 when different a concentration than LCS1 is used.
RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
(S) - Indicates surrogate compound.
(I) - Indicates internal standard compound.

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory QC
Report: 491260

Carollo

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MRL_CHK	Caffeine		5.0	6.04	ng/L	121	(50-150)		
MS_201407260039	Caffeine	ND	100	91.0	ng/L	90	(60-140)		
MSD_201407260039	Caffeine	ND	100	93.5	ng/L	93	(60-140)	40	2.7
LCS1	Carbadox		100	106	ng/L	106	(60-140)		
LCS2	Carbadox		100	106	ng/L	106	(60-140)	30	0.0
MBLK	Carbadox			<5	ng/L				
MRL_CHK	Carbadox		5.0	5.56	ng/L	111	(50-150)		
MS_201407260039	Carbadox	ND	100	73.5	ng/L	72	(60-140)		
MSD_201407260039	Carbadox	ND	100	82.0	ng/L	81	(60-140)	40	11
LCS1	Carbamazepine		100	104	ng/L	104	(60-140)		
LCS2	Carbamazepine		100	96.6	ng/L	97	(60-140)	30	7.4
MBLK	Carbamazepine			<5	ng/L				
MRL_CHK	Carbamazepine		5.0	4.81	ng/L	96	(50-150)		
MS_201407260039	Carbamazepine	ND	100	88.1	ng/L	88	(60-140)		
MSD_201407260039	Carbamazepine	ND	100	94.1	ng/L	94	(60-140)	40	6.6
LCS1	Carisoprodol		100	126	ng/L	126	(60-140)		
LCS2	Carisoprodol		100	99.2	ng/L	99	(60-140)	30	24
MBLK	Carisoprodol			<5	ng/L				
MRL_CHK	Carisoprodol		5.0	7.04	ng/L	141	(50-150)		
MS_201407260039	Carisoprodol	ND	100	79.7	ng/L	79	(60-140)		
MSD_201407260039	Carisoprodol	ND	100	95.1	ng/L	95	(60-140)	40	18
LCS1	Chloridazon		100	103	ng/L	103	(60-140)		
LCS2	Chloridazon		100	98.9	ng/L	99	(60-140)	30	4.1
MBLK	Chloridazon			<5	ng/L				
MRL_CHK	Chloridazon		5.0	5.69	ng/L	114	(50-150)		
MS_201407260039	Chloridazon	ND	100	66.8	ng/L	65	(60-140)		
MSD_201407260039	Chloridazon	ND	100	67.2	ng/L	66	(60-140)	40	0.60
LCS1	Chlorotoluron		100	102	ng/L	102	(60-140)		
LCS2	Chlorotoluron		100	97.1	ng/L	97	(60-140)	30	4.9
MBLK	Chlorotoluron			<5	ng/L				
MRL_CHK	Chlorotoluron		5.0	5.56	ng/L	111	(50-150)		
MS_201407260039	Chlorotoluron	ND	100	89.6	ng/L	90	(60-140)		
MSD_201407260039	Chlorotoluron	ND	100	89.4	ng/L	89	(60-140)	40	0.22
LCS1	Cimetidine		100	111	ng/L	111	(60-140)		
LCS2	Cimetidine		100	100	ng/L	100	(60-140)	30	10
MBLK	Cimetidine			<5	ng/L				
MRL_CHK	Cimetidine		5.0	6.38	ng/L	128	(50-150)		
MS_201407260039	Cimetidine	ND	100	66.7	ng/L	67	(60-140)		

Spike recovery is already corrected for native results.
Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
RPD not calculated for LCS2 when different a concentration than LCS1 is used.
RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
(S) - Indicates surrogate compound.
(I) - Indicates internal standard compound.

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory QC
Report: 491260

Carollo

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MSD_201407260039	Cimetidine	ND	100	72.7	ng/L	73	(60-140)	40	8.6
LCS1	Cotinine		200	197	ng/L	99	(60-140)		
LCS2	Cotinine		200	193	ng/L	96	(60-140)	30	2.0
MBLK	Cotinine			<10	ng/L				
MRL_CHK	Cotinine		10	9.81	ng/L	98	(50-150)		
MS_201407260039	Cotinine	ND	200	171	ng/L	84	(60-140)		
MSD_201407260039	Cotinine	ND	200	175	ng/L	87	(60-140)	40	2.3
LCS1	Cyanazine		100	106	ng/L	106	(60-140)		
LCS2	Cyanazine		100	100	ng/L	100	(60-140)	30	5.8
MBLK	Cyanazine			<5	ng/L				
MRL_CHK	Cyanazine		5.0	5.37	ng/L	107	(50-150)		
MS_201407260039	Cyanazine	ND	100	107	ng/L	107	(60-140)		
MSD_201407260039	Cyanazine	ND	100	113	ng/L	113	(60-140)	40	5.5
LCS1	DACT		100	110	ng/L	110	(60-140)		
LCS2	DACT		100	106	ng/L	106	(60-140)	30	3.7
MBLK	DACT			<5	ng/L				
MRL_CHK	DACT		5.0	3.58	ng/L	72	(50-150)		
MS_201407260039	DACT	ND	100	71.1	ng/L	71	(60-140)		
MSD_201407260039	DACT	ND	100	68.8	ng/L	69	(60-140)	40	3.3
LCS1	DEA		100	101	ng/L	101	(60-140)		
LCS2	DEA		100	102	ng/L	102	(60-140)	30	0.99
MBLK	DEA			<5	ng/L				
MRL_CHK	DEA		5.0	5.14	ng/L	103	(50-150)		
MS_201407260039	DEA	ND	100	120	ng/L	120	(60-140)		
MSD_201407260039	DEA	ND	100	134	ng/L	134	(60-140)	40	11
LCS1	DEET		40	41.3	ng/L	103	(70-130)		
LCS2	DEET		40	38.9	ng/L	97	(70-130)	30	6.0
MBLK	DEET			<6	ng/L				
MRL_CHK	DEET		2.0	2.02	ng/L	101	(50-150)		
MS_201407260039	DEET	ND	40	42.2	ng/L	95	(60-140)		
MSD_201407260039	DEET	ND	40	44.3	ng/L	101	(60-140)	40	4.9
LCS1	Dehydronifedipine		100	104	ng/L	104	(60-140)		
LCS2	Dehydronifedipine		100	100	ng/L	100	(60-140)	30	3.9
MBLK	Dehydronifedipine			<5	ng/L				
MRL_CHK	Dehydronifedipine		5.0	5.11	ng/L	102	(50-150)		
MS_201407260039	Dehydronifedipine	ND	100	121	ng/L	121	(60-140)		
MSD_201407260039	Dehydronifedipine	ND	100	124	ng/L	124	(60-140)	40	2.5
LCS1	DIA		100	107	ng/L	107	(60-140)		

Spike recovery is already corrected for native results.
Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
RPD not calculated for LCS2 when different a concentration than LCS1 is used.
RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
(S) - Indicates surrogate compound.
(I) - Indicates internal standard compound.

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory QC
Report: 491260

Carollo

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
LCS2	DIA		100	92.0	ng/L	92	(60-140)	30	15
MBLK	DIA			<5	ng/L				
MRL_CHK	DIA		5.0	5.18	ng/L	104	(50-150)		
MS_201407260039	DIA	ND	100	99.7	ng/L	99	(60-140)		
MSD_201407260039	DIA	ND	100	99.2	ng/L	99	(60-140)	40	0.50
LCS1	Diazepam		100	110	ng/L	110	(60-140)		
LCS2	Diazepam		100	105	ng/L	105	(60-140)	30	4.7
MBLK	Diazepam			<5	ng/L				
MRL_CHK	Diazepam		5.0	5.12	ng/L	102	(50-150)		
MS_201407260039	Diazepam	ND	100	109	ng/L	109	(60-140)		
MSD_201407260039	Diazepam	ND	100	116	ng/L	116	(60-140)	40	6.2
LCS1	Dilantin		400	424	ng/L	106	(60-140)		
LCS2	Dilantin		400	386	ng/L	97	(60-140)	30	9.6
MBLK	Dilantin			<20	ng/L				
MRL_CHK	Dilantin		20	20.7	ng/L	104	(50-150)		
MS_201407260039	Dilantin	ND	400	399	ng/L	100	(60-140)		
MSD_201407260039	Dilantin	ND	400	425	ng/L	106	(60-140)	40	6.3
LCS1	Diltiazem		100	105	ng/L	105	(60-140)		
LCS2	Diltiazem		100	97.8	ng/L	98	(60-140)	30	7.1
MBLK	Diltiazem			<5	ng/L				
MRL_CHK	Diltiazem		5.0	5.88	ng/L	118	(50-150)		
MS_201407260039	Diltiazem	ND	100	126	ng/L	124	(60-140)		
MSD_201407260039	Diltiazem	ND	100	120	ng/L	118	(60-140)	40	4.9
LCS1	Diuron		100	104	ng/L	104	(60-140)		
LCS2	Diuron		100	97.6	ng/L	98	(60-140)	30	6.3
MBLK	Diuron			<5	ng/L				
MRL_CHK	Diuron		5.0	5.69	ng/L	114	(50-150)		
MS_201407260039	Diuron	ND	100	87.0	ng/L	86	(60-140)		
MSD_201407260039	Diuron	ND	100	89.2	ng/L	88	(60-140)	40	2.5
LCS1	Erythromycin		200	226	ng/L	113	(60-140)		
LCS2	Erythromycin		200	163	ng/L	81	(60-140)	30	**32**
MBLK	Erythromycin			<10	ng/L				
MRL_CHK	Erythromycin		10	13.5	ng/L	135	(50-150)		
MS_201407260039	Erythromycin	ND	200	414	ng/L	**204**	(60-140)		
MSD_201407260039	Erythromycin	ND	200	282	ng/L	138	(60-140)	40	38
LCS1	Flumeqine		200	194	ng/L	97	(60-140)		
LCS2	Flumeqine		200	172	ng/L	86	(60-140)	30	12
MBLK	Flumeqine			<10	ng/L				

Spike recovery is already corrected for native results.
Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
RPD not calculated for LCS2 when different a concentration than LCS1 is used.
RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
(S) - Indicates surrogate compound.
(I) - Indicates internal standard compound.

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory QC
Report: 491260

Carollo

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MRL_CHK	Flumeqine		10	10.5	ng/L	105	(50-150)		
MS_201407260039	Flumeqine	ND	200	170	ng/L	85	(60-140)		
MSD_201407260039	Flumeqine	ND	200	134	ng/L	67	(60-140)	40	23
LCS1	Fluoxetine		100	97.7	ng/L	98	(60-140)		
LCS2	Fluoxetine		100	86.4	ng/L	86	(60-140)	30	12
MBLK	Fluoxetine			<10	ng/L				
MRL_CHK	Fluoxetine		5.0	6.85	ng/L	137	(50-150)		
MS_201407260039	Fluoxetine	ND	100	79.7	ng/L	75	(60-140)		
MSD_201407260039	Fluoxetine	ND	100	85.9	ng/L	82	(60-140)	40	7.5
LCS1	Isoproturon		400	411	ng/L	103	(60-140)		
LCS2	Isoproturon		400	377	ng/L	94	(60-140)	30	8.6
MBLK	Isoproturon			<20	ng/L				
MRL_CHK	Isoproturon		20	21.6	ng/L	108	(50-150)		
MS_201407260039	Isoproturon	ND	400	304	ng/L	75	(60-140)		
MSD_201407260039	Isoproturon	ND	400	308	ng/L	76	(60-140)	40	1.3
LCS1	Ketoprofen		100	101	ng/L	101	(60-140)		
LCS2	Ketoprofen		100	98.1	ng/L	98	(60-140)	30	2.9
MBLK	Ketoprofen			<5	ng/L				
MRL_CHK	Ketoprofen		5.0	5.17	ng/L	103	(50-150)		
MS_201407260039	Ketoprofen	ND	100	101	ng/L	101	(60-140)		
MSD_201407260039	Ketoprofen	ND	100	117	ng/L	116	(60-140)	40	15
LCS1	Ketorolac		100	104	ng/L	104	(60-140)		
LCS2	Ketorolac		100	96.6	ng/L	97	(60-140)	30	7.4
MBLK	Ketorolac			<5	ng/L				
MRL_CHK	Ketorolac		5.0	4.80	ng/L	96	(50-150)		
MS_201407260039	Ketorolac	ND	100	66.5	ng/L	66	(60-140)		
MSD_201407260039	Ketorolac	ND	100	80.4	ng/L	80	(60-140)	40	19
LCS1	Lidocaine		100	109	ng/L	109	(60-140)		
LCS2	Lidocaine		100	106	ng/L	106	(60-140)	30	2.8
MBLK	Lidocaine			<5	ng/L				
MRL_CHK	Lidocaine		5.0	5.78	ng/L	116	(50-150)		
MS_201407260039	Lidocaine	ND	100	107	ng/L	106	(60-140)		
MSD_201407260039	Lidocaine	ND	100	116	ng/L	116	(60-140)	40	8.1
LCS1	Lincomycin		200	207	ng/L	104	(60-140)		
LCS2	Lincomycin		200	195	ng/L	98	(60-140)	30	6.0
MBLK	Lincomycin			<10	ng/L				
MRL_CHK	Lincomycin		10	9.38	ng/L	94	(50-150)		
MS_201407260039	Lincomycin	ND	200	254	ng/L	127	(60-140)		

Spike recovery is already corrected for native results.
Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
RPD not calculated for LCS2 when different a concentration than LCS1 is used.
RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
(S) - Indicates surrogate compound.
(I) - Indicates internal standard compound.

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory QC
Report: 491260

Carollo

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MSD_201407260039	Lincomycin	ND	200	264	ng/L	132	(60-140)	40	3.9
LCS1	Linuron		100	97.1	ng/L	97	(60-140)		
LCS2	Linuron		100	88.5	ng/L	89	(60-140)	30	9.3
MBLK	Linuron			<5	ng/L				
MRL_CHK	Linuron		5.0	4.20	ng/L	84	(50-150)		
MS_201407260039	Linuron	ND	100	74.4	ng/L	74	(60-140)		
MSD_201407260039	Linuron	ND	100	76.6	ng/L	77	(60-140)	40	2.9
LCS1	Lopressor		400	402	ng/L	101	(60-140)		
LCS2	Lopressor		400	388	ng/L	97	(60-140)	30	3.8
MBLK	Lopressor			<20	ng/L				
MRL_CHK	Lopressor		20	20.2	ng/L	101	(50-150)		
MS_201407260039	Lopressor	ND	400	356	ng/L	89	(60-140)		
MSD_201407260039	Lopressor	ND	400	384	ng/L	96	(60-140)	40	7.6
LCS1	Meclofenamic Acid		100	82.5	ng/L	83	(60-140)		
LCS2	Meclofenamic Acid		100	82.8	ng/L	83	(60-140)	30	0.36
MBLK	Meclofenamic Acid			<5	ng/L				
MRL_CHK	Meclofenamic Acid		5.0	5.31	ng/L	106	(50-150)		
MS_201407260039	Meclofenamic Acid	ND	100	116	ng/L	116	(60-140)		
MSD_201407260039	Meclofenamic Acid	ND	100	132	ng/L	132	(60-140)	40	13
LCS1	Meprobamate		100	104	ng/L	104	(60-140)		
LCS2	Meprobamate		100	102	ng/L	102	(60-140)	30	1.9
MBLK	Meprobamate			<5	ng/L				
MRL_CHK	Meprobamate		5.0	5.48	ng/L	110	(50-150)		
MS_201407260039	Meprobamate	ND	100	101	ng/L	101	(60-140)		
MSD_201407260039	Meprobamate	ND	100	96.1	ng/L	96	(60-140)	40	5.0
LCS1	Metazachlor		100	116	ng/L	116	(60-140)		
LCS2	Metazachlor		100	98.4	ng/L	98	(60-140)	30	16
MBLK	Metazachlor			<5	ng/L				
MRL_CHK	Metazachlor		5.0	5.58	ng/L	112	(50-150)		
MS_201407260039	Metazachlor	ND	100	86.2	ng/L	86	(60-140)		
MSD_201407260039	Metazachlor	ND	100	94.0	ng/L	94	(60-140)	40	8.7
LCS1	Metolachlor		100	96.3	ng/L	96	(60-140)		
LCS2	Metolachlor		100	89.3	ng/L	89	(60-140)	30	7.5
MBLK	Metolachlor			<5	ng/L				
MRL_CHK	Metolachlor		5.0	4.56	ng/L	91	(50-150)		
MS_201407260039	Metolachlor	ND	100	94.6	ng/L	95	(60-140)		
MSD_201407260039	Metolachlor	ND	100	103	ng/L	103	(60-140)	40	8.5
LCS1	Nifedipine		400	374	ng/L	94	(60-140)		

Spike recovery is already corrected for native results.
Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
RPD not calculated for LCS2 when different a concentration than LCS1 is used.
RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
(S) - Indicates surrogate compound.
(I) - Indicates internal standard compound.

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory QC
Report: 491260

Carollo

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
LCS2	Nifedipine		400	340	ng/L	85	(60-140)	30	9.5
MBLK	Nifedipine			<20	ng/L				
MRL_CHK	Nifedipine		20	13.9	ng/L	70	(50-150)		
MS_201407260039	Nifedipine	ND	400	716	ng/L	**178**	(60-140)		
MSD_201407260039	Nifedipine	ND	400	688	ng/L	**171**	(60-140)	40	4.0
LCS1	Norethisterone		100	117	ng/L	117	(60-140)		
LCS2	Norethisterone		100	102	ng/L	103	(60-140)	30	13
MBLK	Norethisterone			<5	ng/L				
MRL_CHK	Norethisterone		5.0	7.28	ng/L	146	(50-150)		
MS_201407260039	Norethisterone	ND	100	89.1	ng/L	89	(60-140)		
MSD_201407260039	Norethisterone	ND	100	102	ng/L	102	(60-140)	40	14
LCS1	Oxolinic acid		100	108	ng/L	108	(60-140)		
LCS2	Oxolinic acid		100	108	ng/L	108	(60-140)	30	0.0
MBLK	Oxolinic acid			<5	ng/L				
MRL_CHK	Oxolinic acid		5.0	5.86	ng/L	117	(50-150)		
MS_201407260039	Oxolinic acid	ND	100	136	ng/L	136	(60-140)		
MSD_201407260039	Oxolinic acid	ND	100	137	ng/L	137	(60-140)	40	0.73
LCS1	Pentoxifylline		100	113	ng/L	113	(60-140)		
LCS2	Pentoxifylline		100	98.7	ng/L	99	(60-140)	30	14
MBLK	Pentoxifylline			<5	ng/L				
MRL_CHK	Pentoxifylline		5.0	5.53	ng/L	111	(50-150)		
MS_201407260039	Pentoxifylline	ND	100	80.1	ng/L	80	(60-140)		
MSD_201407260039	Pentoxifylline	ND	100	80.7	ng/L	81	(60-140)	40	0.75
LCS1	Phenazone		100	104	ng/L	104	(60-140)		
LCS2	Phenazone		100	92.2	ng/L	92	(60-140)	30	12
MBLK	Phenazone			<5	ng/L				
MRL_CHK	Phenazone		5.0	4.81	ng/L	96	(50-150)		
MS_201407260039	Phenazone	ND	100	62.2	ng/L	62	(60-140)		
MSD_201407260039	Phenazone	ND	100	60.7	ng/L	61	(60-140)	40	2.4
LCS1	Primidone		100	99.0	ng/L	99	(60-140)		
LCS2	Primidone		100	97.2	ng/L	97	(60-140)	30	1.8
MBLK	Primidone			<5	ng/L				
MRL_CHK	Primidone		5.0	5.53	ng/L	111	(50-150)		
MS_201407260039	Primidone	ND	100	119	ng/L	119	(60-140)		
MSD_201407260039	Primidone	ND	100	110	ng/L	110	(60-140)	40	7.9
LCS1	Progesterone		100	98.3	ng/L	98	(60-140)		
LCS2	Progesterone		100	90.4	ng/L	90	(60-140)	30	8.4
MBLK	Progesterone			<5	ng/L				

Spike recovery is already corrected for native results.
Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
RPD not calculated for LCS2 when different a concentration than LCS1 is used.
RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
(S) - Indicates surrogate compound.
(I) - Indicates internal standard compound.

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory QC
Report: 491260

Carollo

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MRL_CHK	Progesterone		5.0	5.44	ng/L	109	(50-150)		
MS_201407260039	Progesterone	ND	100	102	ng/L	101	(60-140)		
MSD_201407260039	Progesterone	ND	100	109	ng/L	109	(60-140)	40	6.6
LCS1	Propazine		100	110	ng/L	110	(60-140)		
LCS2	Propazine		100	105	ng/L	105	(60-140)	30	4.7
MBLK	Propazine			<5	ng/L				
MRL_CHK	Propazine		5.0	5.58	ng/L	112	(50-150)		
MS_201407260039	Propazine	ND	100	104	ng/L	104	(60-140)		
MSD_201407260039	Propazine	ND	100	115	ng/L	115	(60-140)	40	10
LCS1	Quinoline		100	114	ng/L	114	(60-140)		
LCS2	Quinoline		100	106	ng/L	106	(60-140)	30	7.3
MBLK	Quinoline			<5	ng/L				
MRL_CHK	Quinoline		5.0	6.92	ng/L	138	(50-150)		
MS_201407260039	Quinoline	ND	100	122	ng/L	122	(60-140)		
MSD_201407260039	Quinoline	ND	100	128	ng/L	128	(60-140)	40	4.8
LCS1	Simazine		100	112	ng/L	112	(60-140)		
LCS2	Simazine		100	107	ng/L	107	(60-140)	30	4.6
MBLK	Simazine			<5	ng/L				
MRL_CHK	Simazine		5.0	4.97	ng/L	100	(50-150)		
MS_201407260039	Simazine	ND	100	117	ng/L	116	(60-140)		
MSD_201407260039	Simazine	ND	100	128	ng/L	128	(60-140)	40	9.0
LCS1	Sulfachloropyridazine		100	104	ng/L	104	(60-140)		
LCS2	Sulfachloropyridazine		100	97.2	ng/L	97	(60-140)	30	6.8
MBLK	Sulfachloropyridazine			<5	ng/L				
MRL_CHK	Sulfachloropyridazine		5.0	4.89	ng/L	98	(50-150)		
MS_201407260039	Sulfachloropyridazine	ND	100	78.4	ng/L	78	(60-140)		
MSD_201407260039	Sulfachloropyridazine	ND	100	85.9	ng/L	86	(60-140)	40	9.1
LCS1	Sulfadiazine		100	98.5	ng/L	99	(60-140)		
LCS2	Sulfadiazine		100	94.6	ng/L	95	(60-140)	30	4.0
MBLK	Sulfadiazine			<5	ng/L				
MRL_CHK	Sulfadiazine		5.0	4.89	ng/L	98	(50-150)		
MS_201407260039	Sulfadiazine	ND	100	70.5	ng/L	71	(60-140)		
MSD_201407260039	Sulfadiazine	ND	100	67.4	ng/L	67	(60-140)	40	4.5
LCS1	Sulfadimethoxine		100	109	ng/L	109	(60-140)		
LCS2	Sulfadimethoxine		100	98.1	ng/L	98	(60-140)	30	11
MBLK	Sulfadimethoxine			<5	ng/L				
MRL_CHK	Sulfadimethoxine		5.0	4.96	ng/L	99	(50-150)		
MS_201407260039	Sulfadimethoxine	ND	100	107	ng/L	105	(60-140)		

Spike recovery is already corrected for native results.
Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
RPD not calculated for LCS2 when different a concentration than LCS1 is used.
RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
(S) - Indicates surrogate compound.
(I) - Indicates internal standard compound.

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory QC
Report: 491260

Carollo

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MSD_201407260039	Sulfadimethoxine	ND	100	115	ng/L	113	(60-140)	40	7.2
LCS1	Sulfamerazine		100	98.2	ng/L	98	(60-140)		
LCS2	Sulfamerazine		100	98.7	ng/L	99	(60-140)	30	0.51
MBLK	Sulfamerazine			<5	ng/L				
MRL_CHK	Sulfamerazine		5.0	5.77	ng/L	115	(50-150)		
MS_201407260039	Sulfamerazine	ND	100	45.2	ng/L	**45**	(60-140)		
MSD_201407260039	Sulfamerazine	ND	100	46.3	ng/L	**46**	(60-140)	40	2.4
LCS1	Sulfamethazine		100	108	ng/L	109	(60-140)		
LCS2	Sulfamethazine		100	112	ng/L	113	(60-140)	30	3.6
MBLK	Sulfamethazine			<5	ng/L				
MRL_CHK	Sulfamethazine		5.0	5.60	ng/L	112	(50-150)		
MS_201407260039	Sulfamethazine	ND	100	81.0	ng/L	81	(60-140)		
MSD_201407260039	Sulfamethazine	ND	100	82.0	ng/L	82	(60-140)	40	1.2
LCS1	Sulfamethizole		100	102	ng/L	103	(60-140)		
LCS2	Sulfamethizole		100	93.3	ng/L	93	(60-140)	30	9.9
MBLK	Sulfamethizole			<5	ng/L				
MRL_CHK	Sulfamethizole		5.0	5.58	ng/L	112	(50-150)		
MS_201407260039	Sulfamethizole	ND	100	53.8	ng/L	**54**	(60-140)		
MSD_201407260039	Sulfamethizole	ND	100	55.8	ng/L	**56**	(60-140)	40	3.5
LCS1	Sulfamethoxazole		100	106	ng/L	106	(70-130)		
LCS2	Sulfamethoxazole		100	98.4	ng/L	98	(70-130)	30	7.4
MBLK	Sulfamethoxazole			<5	ng/L				
MRL_CHK	Sulfamethoxazole		5.0	4.86	ng/L	97	(50-150)		
MS_201407260039	Sulfamethoxazole	ND	100	92.5	ng/L	90	(60-140)		
MSD_201407260039	Sulfamethoxazole	ND	100	97.9	ng/L	95	(60-140)	40	5.7
LCS1	Sulfathiazole		100	102	ng/L	102	(60-140)		
LCS2	Sulfathiazole		100	93.7	ng/L	94	(60-140)	30	8.5
MBLK	Sulfathiazole			<5	ng/L				
MRL_CHK	Sulfathiazole		5.0	4.87	ng/L	97	(50-150)		
MS_201407260039	Sulfathiazole	ND	100	40.1	ng/L	**40**	(60-140)		
MSD_201407260039	Sulfathiazole	ND	100	40.7	ng/L	**41**	(60-140)	40	1.5
LCS1	TCEP		100	97.2	ng/L	97	(60-140)		
LCS2	TCEP		100	98.7	ng/L	99	(60-140)	30	1.5
MBLK	TCEP			<10	ng/L				
MRL_CHK	TCEP		5.0	4.69	ng/L	94	(50-150)		
MS_201407260039	TCEP	ND	100	88.9	ng/L	86	(60-140)		
MSD_201407260039	TCEP	ND	100	91.0	ng/L	88	(60-140)	40	2.3
LCS1	TCPP		100	96.5	ng/L	97	(40-160)		

Spike recovery is already corrected for native results.
Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
RPD not calculated for LCS2 when different a concentration than LCS1 is used.
RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
(S) - Indicates surrogate compound.
(I) - Indicates internal standard compound.

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory QC
Report: 491260

Carollo

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
LCS2	TCPP		100	94.9	ng/L	95	(40-160)	30	1.7
MBLK	TCPP			<100	ng/L				
MRL_CHK	TCPP		5.0	6.47	ng/L	129	(40-160)		
MS_201407260039	TCPP	ND	100	103	ng/L	101	(40-160)		
MSD_201407260039	TCPP	ND	100	94.8	ng/L	93	(40-160)	60	8.3
LCS1	TDCPP		400	446	ng/L	111	(40-160)		
LCS2	TDCPP		400	367	ng/L	92	(40-160)	30	19
MBLK	TDCPP			<100	ng/L				
MRL_CHK	TDCPP		20	24.2	ng/L	121	(40-160)		
MS_201407260039	TDCPP	ND	400	4480	ng/L	**1110**	(40-160)		
MSD_201407260039	TDCPP	ND	400	548	ng/L	132	(40-160)	60	**160**
LCS1	Testosterone		100	110	ng/L	111	(60-140)		
LCS2	Testosterone		100	104	ng/L	104	(60-140)	30	6.5
MBLK	Testosterone			<5	ng/L				
MRL_CHK	Testosterone		5.0	5.14	ng/L	103	(50-150)		
MS_201407260039	Testosterone	ND	100	79.4	ng/L	79	(60-140)		
MSD_201407260039	Testosterone	ND	100	86.6	ng/L	86	(60-140)	40	8.7
LCS1	Theobromine		100	100	ng/L	101	(60-140)		
LCS2	Theobromine		100	90.1	ng/L	90	(60-140)	30	11
MBLK	Theobromine			<5	ng/L				
MRL_CHK	Theobromine		5.0	4.47	ng/L	89	(50-150)		
MS_201407260039	Theobromine	ND	100	78.2	ng/L	78	(60-140)		
MSD_201407260039	Theobromine	ND	100	87.7	ng/L	88	(60-140)	40	12
LCS1	Theophylline		200	216	ng/L	108	(60-140)		
LCS2	Theophylline		200	197	ng/L	98	(60-140)	30	9.2
MBLK	Theophylline			<10	ng/L				
MRL_CHK	Theophylline		10	9.72	ng/L	97	(50-150)		
MS_201407260039	Theophylline	ND	200	9.75	ng/L	**3.6**	(60-140)		
MSD_201407260039	Theophylline	ND	200	12.8	ng/L	**5.1**	(60-140)	40	27
LCS1	Trimethoprim		100	109	ng/L	109	(60-140)		
LCS2	Trimethoprim		100	98.1	ng/L	98	(60-140)	30	11
MBLK	Trimethoprim			<5	ng/L				
MRL_CHK	Trimethoprim		5.0	5.54	ng/L	111	(50-150)		
MS_201407260039	Trimethoprim	ND	100	103	ng/L	99	(60-140)		
MSD_201407260039	Trimethoprim	ND	100	108	ng/L	104	(60-140)	40	4.7

QC Ref# 784545 - Nitrosamines by GCMS by EPA 521 **Analysis Date: 08/02/2014**

MBLK	NDMA-D6 (S)		99.5	%	100	(70-130)	
MRL_CHK	NDMA-D6 (S)		94.1	%	94	(70-130)	

Spike recovery is already corrected for native results.
Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
RPD not calculated for LCS2 when different a concentration than LCS1 is used.
RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
(S) - Indicates surrogate compound.
(I) - Indicates internal standard compound.

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory QC
Report: 491260

Carollo

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MS1_201407240281	NDMA-D6 (S)			99.3	%	99	(70-130)		
MSD1_201407240281	NDMA-D6 (S)			91.8	%	92	(70-130)		
MBLK	N-Nitroso dimethylamine (NDMA)			<2	ng/L				
MRL_CHK	N-Nitroso dimethylamine (NDMA)		2.0	1.36	ng/L	68	(50-150)		
MS1_201407240281	N-Nitroso dimethylamine (NDMA)	ND	2.0	1.62	ng/L	66	(50-150)		
MSD1_201407240281	N-Nitroso dimethylamine (NDMA)	ND	2.0	2.05	ng/L	87	(50-150)	30	23
MBLK	N-Nitrosodibutylamine (NDBA)			<2	ng/L				
MRL_CHK	N-Nitrosodibutylamine (NDBA)		2.0	2.33	ng/L	116	(50-150)		
MS1_201407240281	N-Nitrosodibutylamine (NDBA)	ND	2.0	2.97	ng/L	85	(50-150)		
MSD1_201407240281	N-Nitrosodibutylamine (NDBA)	ND	2.0	2.92	ng/L	83	(50-150)	30	1.7
MBLK	N-Nitrosodiethylamine (NDEA)			<2	ng/L				
MRL_CHK	N-Nitrosodiethylamine (NDEA)		2.0	1.09	ng/L	54	(50-150)		
MS1_201407240281	N-Nitrosodiethylamine (NDEA)	ND	2.0	1.46	ng/L	62	(50-150)		
MSD1_201407240281	N-Nitrosodiethylamine (NDEA)	ND	2.0	1.51	ng/L	65	(50-150)	30	3.4
MBLK	N-Nitrosodi-n-propylamin(NDPA)			<2	ng/L				
MRL_CHK	N-Nitrosodi-n-propylamin(NDPA)		2.0	1.39	ng/L	70	(50-150)		
MS1_201407240281	N-Nitrosodi-n-propylamin(NDPA)	ND	2.0	3.02	ng/L	117	(50-150)		
MSD1_201407240281	N-Nitrosodi-n-propylamin(NDPA)	ND	2.0	2.89	ng/L	110	(50-150)	30	4.7
MBLK	N-Nitrosomethylethylamin(NMEA)			<2	ng/L				
MRL_CHK	N-Nitrosomethylethylamin(NMEA)		2.0	1.27	ng/L	64	(50-150)		
MS1_201407240281	N-Nitrosomethylethylamin(NMEA)	ND	2.0	1.42	ng/L	71	(50-150)		
MSD1_201407240281	N-Nitrosomethylethylamin(NMEA)	ND	2.0	1.25	ng/L	63	(50-150)	30	13
MBLK	N-Nitrosomorpholine			<2	ng/l				
MRL_CHK	N-Nitrosomorpholine		2.0	2.03	ng/l	102	(50-150)		
MS1_201407240281	N-Nitrosomorpholine		2.0	2.10	ng/l	105	(50-150)		
MSD1_201407240281	N-Nitrosomorpholine		2.0	1.92	ng/l	96	(50-150)	30	9.0
MBLK	N-Nitrosopiperidine (NPIP)			<2	ng/L				
MRL_CHK	N-Nitrosopiperidine (NPIP)		2.0	1.39	ng/L	69	(50-150)		
MS1_201407240281	N-Nitrosopiperidine (NPIP)		2.0	1.87	ng/L	93	(50-150)		
MSD1_201407240281	N-Nitrosopiperidine (NPIP)		2.0	2.18	ng/l	109	(50-150)	30	16
MBLK	N-Nitrosopyrollidine (NPYR)			<2	ng/L				
MRL_CHK	N-Nitrosopyrollidine (NPYR)		2.0	1.34	ng/L	67	(50-150)		
MS1_201407240281	N-Nitrosopyrollidine (NPYR)	ND	2.0	2.05	ng/L	102	(50-150)		
MSD1_201407240281	N-Nitrosopyrollidine (NPYR)	ND	2.0	1.84	ng/L	92	(50-150)	30	11
QC Ref# 784549 - Nitrosamines by GCMS by EPA 521						**Analysis Date: 08/04/2014**			
LCS1	NDMA-D6 (S)			98.6	%	99	(70-130)		
LCS1	N-Nitroso dimethylamine (NDMA)		40	32.1	ng/L	80	(70-130)		

Spike recovery is already corrected for native results.
Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
RPD not calculated for LCS2 when different a concentration than LCS1 is used.
RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
(S) - Indicates surrogate compound.
(I) - Indicates internal standard compound.

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory QC
Report: 491260

Carollo

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
LCS1	N-Nitrosodibutylamine (NDBA)		40	37.2	ng/L	93	(70-130)		
LCS1	N-Nitrosodiethylamine (NDEA)		40	34.0	ng/L	85	(70-130)		
LCS1	N-Nitrosodi-n-propylamin(NDPA)		40	32.8	ng/L	82	(70-130)		
LCS1	N-Nitrosomethylethylamin(NMEA)		40	35.4	ng/L	89	(70-130)		
LCS1	N-Nitrosomorpholine		40	41.6	ng/l	104	(70-130)		
LCS1	N-Nitrosopiperidine (NPIP)		40	35.0	ng/L	88	(70-130)		
LCS1	N-Nitrosopyrollidine (NPYR)		40	37.8	ng/L	94	(70-130)		
QC Ref# 785155 - Nitrosamines by GCMS by EPA 521						**Analysis Date: 08/06/2014**			
LCS3	NDMA-D6 (S)			89.2	%	89	(70-130)		
MBLK	NDMA-D6 (S)			92.5	%	93	(70-130)		
MRL_CHK	NDMA-D6 (S)			76.3	%	76	(70-130)		
MS2_201407280106	NDMA-D6 (S)			71.5	%	72	(70-130)		
MSD2_201407280106	NDMA-D6 (S)			91.0	%	91	(70-130)		
LCS3	N-Nitroso dimethylamine (NDMA)		80	62.2	ng/L	78	(70-130)		
MBLK	N-Nitroso dimethylamine (NDMA)			<2	ng/L				
MRL_CHK	N-Nitroso dimethylamine (NDMA)		2.0	1.68	ng/L	84	(50-150)		
MS2_201407280106	N-Nitroso dimethylamine (NDMA)	81	40	87.8	ng/L	**16**	(70-130)		
MSD2_201407280106	N-Nitroso dimethylamine (NDMA)	81	40	110	ng/l	71	(70-130)	30	22
LCS3	N-Nitrosodibutylamine (NDBA)		80	61.2	ng/L	77	(70-130)		
MBLK	N-Nitrosodibutylamine (NDBA)			<2	ng/L				
MRL_CHK	N-Nitrosodibutylamine (NDBA)		2.0	1.36	ng/L	68	(50-150)		
MS2_201407280106	N-Nitrosodibutylamine (NDBA)		40	26.0	ng/L	**65**	(70-130)		
MSD2_201407280106	N-Nitrosodibutylamine (NDBA)		40	33.4	ng/l	84	(70-130)	30	25
LCS3	N-Nitrosodiethylamine (NDEA)		80	62.1	ng/L	78	(70-130)		
MBLK	N-Nitrosodiethylamine (NDEA)			<2	ng/L				
MRL_CHK	N-Nitrosodiethylamine (NDEA)		2.0	1.50	ng/L	75	(50-150)		
MS2_201407280106	N-Nitrosodiethylamine (NDEA)		40	29.4	ng/L	74	(70-130)		
MSD2_201407280106	N-Nitrosodiethylamine (NDEA)		40	35.0	ng/L	88	(70-130)	30	17
LCS3	N-Nitrosodi-n-propylamin(NDPA)		80	64.2	ng/L	80	(70-130)		
MBLK	N-Nitrosodi-n-propylamin(NDPA)			<2	ng/L				
MRL_CHK	N-Nitrosodi-n-propylamin(NDPA)		2.0	1.97	ng/L	99	(50-150)		
MS2_201407280106	N-Nitrosodi-n-propylamin(NDPA)		40	31.0	ng/L	77	(70-130)		
MSD2_201407280106	N-Nitrosodi-n-propylamin(NDPA)		40	38.0	ng/l	95	(70-130)	30	21
LCS3	N-Nitrosomethylethylamin(NMEA)		80	62.4	ng/L	78	(70-130)		
MBLK	N-Nitrosomethylethylamin(NMEA)			<2	ng/L				
MRL_CHK	N-Nitrosomethylethylamin(NMEA)		2.0	1.28	ng/L	64	(50-150)		
MS2_201407280106	N-Nitrosomethylethylamin(NMEA)		40	28.4	ng/L	71	(70-130)		
MSD2_201407280106	N-Nitrosomethylethylamin(NMEA)		40	35.0	ng/L	87	(70-130)	30	21

Spike recovery is already corrected for native results.
Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
RPD not calculated for LCS2 when different a concentration than LCS1 is used.
RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
(S) - Indicates surrogate compound.
(I) - Indicates internal standard compound.

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (626) 386-1101
1 800 566 LABS (1 800 566 5227)

Laboratory QC
Report: 491260

Carollo

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
LCS3	N-Nitrosomorpholine		80	67.1	ng/l	84	(70-130)		
MBLK	N-Nitrosomorpholine			<2	ng/l				
MRL_CHK	N-Nitrosomorpholine		2.0	1.50	ng/l	75	(50-150)		
MS2_201407280106	N-Nitrosomorpholine		40	37.7	ng/l	94	(70-130)		
MSD2_201407280106	N-Nitrosomorpholine		40	47.2	ng/l	118	(70-130)	30	22
LCS3	N-Nitrosopiperidine (NPIP)		80	59.5	ng/L	74	(70-130)		
MBLK	N-Nitrosopiperidine (NPIP)			<2	ng/L				
MRL_CHK	N-Nitrosopiperidine (NPIP)		2.0	1.38	ng/L	69	(50-150)		
MS2_201407280106	N-Nitrosopiperidine (NPIP)		40	26.8	ng/L	**67**	(70-130)		
MSD2_201407280106	N-Nitrosopiperidine (NPIP)		40	32.9	ng/l	82	(70-130)	30	20
LCS3	N-Nitrosopyrollidine (NPYR)		80	59.2	ng/L	74	(70-130)		
MBLK	N-Nitrosopyrollidine (NPYR)			<2	ng/L				
MRL_CHK	N-Nitrosopyrollidine (NPYR)		2.0	1.71	ng/L	86	(50-150)		
MS2_201407280106	N-Nitrosopyrollidine (NPYR)		40	29.8	ng/L	75	(70-130)		
MSD2_201407280106	N-Nitrosopyrollidine (NPYR)		40	35.2	ng/L	88	(70-130)	30	17

Spike recovery is already corrected for native results.
Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
RPD not calculated for LCS2 when different a concentration than LCS1 is used.
RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
(S) - Indicates surrogate compound.
(I) - Indicates internal standard compound.

Appendix B

DRINKING WATER QUALITY LABORATORY REPORT

LEGEND
Technical Services, Inc.
www.legend-group.com

17631 North 25th Avenue • Phoenix, AZ 85023
P (602) 324-6100 • F (602) 324-6101

11 August 2014

Brad D, Jeppson
Carollo Engineers, Inc.
4600 E Washington St. #500
Phoenix, AZ 85034

RE: New Source

Laboratory Work Order No.: 4072270

Legend Technical Services of Arizona, Inc. is pleased to provide the enclosed analytical results for the aforementioned project. These results relate only to the items tested. This cover letter and the accompanying pages represent the full report for these analyses and should only be reproduced in full. Samples for this project were received by the laboratory on 07/25/14 09:10.

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

All samples will be retained by LEGEND for 30 days from the date of this report and then discarded unless other arrangements are made.

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

Sincerely,
LEGEND TECHNICAL SERVICES OF ARIZONA, INC.

Barbara Frank

Barbara Frank
Client Services Representative
(602) 324-6100

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Type	Date Sampled	Date Received
Oak Creek Page Springs (Page Springs)	4072270-01	Drinking Water	Grab	07/24/14 14:00	07/25/14 09:10

Sample Condition Upon Receipt:

Temperature: 5.90 C
All samples were received in acceptable condition unless noted otherwise in the case narrative.

Case Narrative:

Holding Times: All holding times were met unless otherwise qualified.
QA/QC Criteria: All analyses met method requirements unless otherwise qualified.
Certifications: AZ(PHX)0004, AZ(TUC)OOO4, AIHA#102982, CDC ELITE Member.
Accreditation is applicable only to the test methods specified on each scope of accreditation held by LEGEND.
Comments: There were no problems encountered during the processing of the samples, unless otherwise noted. All samples were analyzed on a "wet" basis unless designated as "dry weight".

This report contains data that were produced by a subcontracted laboratory certified for the fields of testing performed.

Eurofins Eaton Analytical, Inc. AZ0432
Jim Van Fleit
574.472-5535

Pace Analytica AZ0014
Nate Habte
612.607.6407

Legend Technical Services, St. Paul AZ0557
Bach Pham
651.221.4062

Radiation Safety AZ0462
Pierre Pouquette
480.897.9459

Fiberquant AZ0633
Karen Grant 602.276.6131
Kathy Townsend 602.276.6139

For the Total Coliform, the sample was received without adequate headspace. In order to be analyzed per the method, the sample was aseptically transferred into a larger sterile Colilert bottle and vigorously shaken. An appropriate volume was aseptically transferred back into the original bottle. Brad and Kelly were notified via email on 07/25/14. BF

Brad notified via micro analyst of the positive Total Colilert and E.coli via email on 07/26/14. BF

Noitified Kelly and Brad of the positive Total Colilert and E.coli via email on 07/28/14. BF

Notified Brad and Kelly of the MCL Violation for As via email on 07/30/14. BF

Oak Creek Page Springs (Page Springs) (4072270-01) Drinking Water (Grab) Sampled: 07/24/14 14:00 Received: 07/25/14 09:10

UL#AZ0432

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EPA 504.1									
1,2-Dibromo-3-chloropropane	<0.00002	0.00002	mg/L	1.03	193287	07/28/14 00:00	07/29/14 00:00	EPA 504.1	
1,2-Dibromoethane (EDB)	<0.00001	0.00001	mg/L	1.03	193287	07/28/14 00:00	07/29/14 00:00	EPA 504.1	
EPA 515.3									
2,4,5-TP (Silvex)	<0.0002	0.0002	mg/L	1	193510	07/31/14 00:00	08/04/14 00:00	EPA 515.3	
2,4-D	<0.0001	0.0001	mg/L	1	193510	07/31/14 00:00	08/04/14 00:00	EPA 515.3	
Dalapon	<0.0010	0.0010	mg/L	1	193510	07/31/14 00:00	08/04/14 00:00	EPA 515.3	
Dicamba	<0.0001	0.0001	mg/L	1	193510	07/31/14 00:00	08/04/14 00:00	EPA 515.3	
Dinoseb	<0.0002	0.0002	mg/L	1	193510	07/31/14 00:00	08/04/14 00:00	EPA 515.3	
Pentachlorophenol	<0.00004	0.00004	mg/L	1	193510	07/31/14 00:00	08/04/14 00:00	EPA 515.3	
Picloram	<0.0001	0.0001	mg/L	1	193510	07/31/14 00:00	08/04/14 00:00	EPA 515.3	
Surrogate: SS-2,4-Dichlorophenylacetic acid		*103 %*		*70-130*		*193510*	*07/31/14*	*08/04/14*	*EPA 515.3*
EPA 525.2									
Alachlor	<0.0002	0.0002	mg/L	0.99	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Aldrin	<0.0001	0.0001	mg/L	0.99	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Atrazine	<0.0001	0.0001	mg/L	0.99	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Benzo(a)pyrene	<0.00002	0.00002	mg/L	0.99	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Butachlor	<0.0001	0.0001	mg/L	0.99	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Di(2-ethylhexyl)adipate	<0.0006	0.0006	mg/L	0.99	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Di(2-ethylhexyl)phthalate	<0.0006	0.0006	mg/L	0.99	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Dieldrin	<0.0001	0.0001	mg/L	0.99	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Endrin	<0.00001	0.00001	mg/L	0.99	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
gamma-BHC (Lindane)	<0.00002	0.00002	mg/L	0.99	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Heptachlor	<0.00004	0.00004	mg/L	0.99	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Heptachlor epoxide	<0.00002	0.00002	mg/L	0.99	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Hexachlorobenzene	<0.0001	0.0001	mg/L	0.99	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Hexachlorocyclopentadiene	<0.0001	0.0001	mg/L	0.99	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Methoxychlor	<0.0001	0.0001	mg/L	0.99	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Metolachlor	<0.0001	0.0001	mg/L	0.99	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Metribuzin	<0.0001	0.0001	mg/L	0.99	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Propachlor	<0.0001	0.0001	mg/L	0.99	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Simazine	<0.00007	0.00007	mg/L	0.99	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Surrogate: SS-2,4,5,6-Tetrachloro-m-xylene		*96 %*		*70-130*		*193441*	*07/31/14*	*07/31/14*	*EPA 525.2*
Surrogate: SS-4,4'-Dichlorobiphenyl		*100 %*		*70-130*		*193441*	*07/31/14*	*07/31/14*	*EPA 525.2*
Surrogate: SS-Triphenylphosphate		*101 %*		*70-130*		*193441*	*07/31/14*	*07/31/14*	*EPA 525.2*

Oak Creek Page Springs (Page Springs) (4072270-01) Drinking Water (Grab) Sampled: 07/24/14 14:00 Received: 07/25/14 09:10

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			UL#AZ0432						
EPA 548.1									
Endothall	<0.0090	0.0090	mg/L	1	193402	07/30/14 00:00	07/31/14 00:00	EPA 548.1	
Surrogate: SS-2,4-Dichlorophenylacetic acid		*93 %*		*54-125*		*193402*	*07/30/14*	*07/31/14*	*EPA 548.1*
EPA 549.2									
Diquat	<0.0004	0.0004	mg/L	1	193311	07/29/14 00:00	07/30/14 00:00	EPA 549.2	
			Radiation Safety Engineering #AZ0462						
Calculation									
Combined Radium	<0.7		pCi/L	1	NA		08/01/14 00:00	Calculation	
EPA 600/00-02									
Gross Alpha Activity	**1.4 ± 0.5**		pCi/L	1	NA		07/28/14 00:00	EPA 600/00-02	
Gamma Ray HPGE									
Radium 226 Activity	<0.5		pCi/L	1	NA		08/01/14 00:00	Gamma Ray HPGE	
Radium 228 Activity	<0.7		pCi/L	1	NA		08/01/14 00:00	Gamma Ray HPGE	
			Pace Analytical Services, Inc.						
EPA-5 1613B-Tetras									
Dioxin	<0.0000000050	0.0000000050	mg/L	1	15180	08/04/14 18:35	08/06/14 05:04	EPA-5 1613B-Tetras	
Surrogate: 13C-2,3,7,8-TCDD		*78 %*		*31.0-137.0*		*15180*	*08/04/14*	*08/06/14*	*EPA-5 1613B-Tetras*
			Legend Technical Services, Inc. #AZ0557						
PESTICIDES/PCBS 505									
Aroclor 1016	<0.000080	0.000080	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 15:41	EPA 505	
Aroclor 1221	<0.020	0.020	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 15:41	EPA 505	
Aroclor 1232	<0.00050	0.00050	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 15:41	EPA 505	
Aroclor 1242	<0.00030	0.00030	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 15:41	EPA 505	
Aroclor 1248	<0.00010	0.00010	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 15:41	EPA 505	
Aroclor 1254	<0.00010	0.00010	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 15:41	EPA 505	
Aroclor 1260	<0.00020	0.00020	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 15:41	EPA 505	
Chlordane	<0.00020	0.00020	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 15:41	EPA 505	
Toxaphene	<0.0010	0.0010	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 15:41	EPA 505	
Surrogate: Decachlorobiphenyl		*107 %*		*66.7-131*		*B4H0406*	*08/04/14*	*08/04/14*	*EPA 505*

Oak Creek Page Springs (Page Springs) (4072270-01) Drinking Water (Grab) Sampled: 07/24/14 14:00 Received: 07/25/14 09:10

Legend Technical Services of Arizona, Inc.

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Microbiology									
E. coli	Present		P/A	1	B4G0824	07/25/14 12:35	07/25/14 12:35	SM 9223B	A7, N1
Total Coliforms	Present		P/A	1	B4G0824	07/25/14 12:35	07/25/14 12:35	SM 9223B	A7, N1
Total Metals									
Antimony	<0.0005	0.0005	mg/L	1	B4G0799	07/28/14 10:23	07/29/14 16:10	EPA 200.8	
Arsenic	**0.0128**	0.0010	mg/L	1	B4G0799	07/28/14 10:23	07/29/14 16:10	EPA 200.8	
Barium	**0.16**	0.01	mg/L	1	B4G0847	07/29/14 10:35	07/29/14 12:49	EPA 200.7	
Beryllium	<0.002	0.002	mg/L	1	B4G0847	07/29/14 10:35	07/29/14 12:49	EPA 200.7	
Cadmium	<0.0001	0.0001	mg/L	1	B4G0799	07/28/14 10:23	07/29/14 16:10	EPA 200.8	
Calcium	**47**	1	mg/L	1	B4G0847	07/29/14 10:35	07/29/14 12:49	EPA 200.7	
Chromium	<0.005	0.005	mg/L	1	B4G0847	07/29/14 10:35	07/29/14 12:49	EPA 200.7	
Copper	<0.01	0.01	mg/L	1	B4G0847	07/29/14 10:35	07/29/14 12:49	EPA 200.7	
Lead	<0.0010	0.0010	mg/L	1	B4G0799	07/28/14 10:23	07/29/14 16:10	EPA 200.8	
Magnesium	**21**	1	mg/L	1	B4G0847	07/29/14 10:35	07/29/14 12:49	EPA 200.7	
Mercury	<0.0002	0.0002	mg/L	1	B4H0017	08/01/14 09:18	08/01/14 15:01	EPA 245.1	
Nickel	<0.02	0.02	mg/L	1	B4G0847	07/29/14 10:35	07/29/14 12:49	EPA 200.7	
Selenium	<0.0020	0.0020	mg/L	1	B4G0799	07/28/14 10:23	07/29/14 16:10	EPA 200.8	
Sodium	**11**	1	mg/L	1	B4G0847	07/29/14 10:35	07/29/14 12:49	EPA 200.7	
Thallium	<0.0005	0.0005	mg/L	1	B4G0799	07/28/14 10:23	07/29/14 16:10	EPA 200.8	
Calcium Hardness as CaCO3	**117**	2	mg/L	1	[CALC]	07/29/14 10:35	07/29/14 12:49	SM2340B	
Magnesium Hardness as Ca(	**86**	4	mg/L	1	[CALC]	07/29/14 10:35	07/29/14 12:49	SM2340B	
Total Hardness as CaCO3	**204**	4	mg/L	1	[CALC]	07/29/14 10:35	07/29/14 12:49	SM2340B	
Inorganic Chemistry									
Total Alkalinity as CaCO3	**213**	10	mg/L	1	B4G0843	07/28/14 16:25	07/28/14 16:25	SM 2320 B	
Cyanide, Total	<0.010	0.010	mg/L	1	B4G0872	07/29/14 10:30	07/29/14 14:18	SM 4500 CN E	
Fluoride	**0.10**	0.10	mg/L	1	B4G0915	07/30/14 11:05	07/30/14 11:05	SM 4500 F C	
Nitrate as N	<0.20	0.20	mg/L	1	[CALC]	08/01/14 10:35	08/01/14 10:35	Calculation	
Nitrate + Nitrite as N	<0.20	0.20	mg/L	1	B4H0012	08/01/14 10:35	08/01/14 10:35	SM 4500 NO3 F	
Nitrite as N	<0.10	0.10	mg/L	1	B4G0790	07/25/14 15:25	07/25/14 15:25	SM 4500 NO2 B	
pH	**8.2**		pH Units	1	B4G0772	07/25/14 11:10	07/25/14 11:10	SM 4500H B	H5
Temperature	**16.0**		°C	1	B4G0772	07/25/14 11:10	07/25/14 11:10	pH Temperature	H5
Sulfate	<5.0	5.0	mg/L	1	B4H0005	07/31/14 12:19	07/31/14 12:19	EPA 300.0	
Total Dissolved Solids	**215**	1	mg/L	1	B4G0831	07/28/14 15:30	07/28/14 15:30	SM 2540 C	

Oak Creek Page Springs (Page Springs) (4072270-01) Drinking Water (Grab) Sampled: 07/24/14 14:00 Received: 07/25/14 09:10

Legend Technical Services of Arizona, Inc.

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds									
1,1,1-Trichloroethane	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
1,1,2-Trichloroethane	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
1,1-Dichloroethene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
1,2,4-Trichlorobenzene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
1,2-Dichlorobenzene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
1,2-Dichloroethane	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
1,2-Dichloropropane	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
1,4-Dichlorobenzene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
Benzene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
Bromodichloromethane	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
Bromoform	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
Carbon tetrachloride	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
Chlorobenzene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
Chloroform	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
cis-1,2-Dichloroethylene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
Dibromochloromethane	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
Dichloromethane	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
Ethylbenzene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
m,p-Xylene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
o-Xylene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
Styrene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
Tetrachloroethene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
Toluene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
Total THMs	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
trans-1,2-Dichloroethene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
Trichloroethene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
Vinyl chloride	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
Xylenes (total)	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 11:48	EPA 524.2	
Surrogate: 1,2-Dichlorobenzene-d4		*101 %*		*70-130*	*B4G0816*	*07/28/14*	*07/28/14*	*EPA 524.2*	
Surrogate: 1,2-Dichloroethane-d4		*95 %*		*70-130*	*B4G0816*	*07/28/14*	*07/28/14*	*EPA 524.2*	
Surrogate: 4-Bromofluorobenzene		*88 %*		*70-130*	*B4G0816*	*07/28/14*	*07/28/14*	*EPA 524.2*	
Surrogate: Pentafluorobenzene		*98 %*		*70-130*	*B4G0816*	*07/28/14*	*07/28/14*	*EPA 524.2*	

Oak Creek Page Springs (Page Springs) (4072270-01) Drinking Water (Grab) Sampled: 07/24/14 14:00 Received: 07/25/14 09:10

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services of Arizona, Inc.									
Miscellaneous									
Langlier Index	**0.568**	-5.00	N/A	1	B4G0707	07/28/14 12:48	07/31/14 14:07	Miscellaneous	
Semi-Volatile Organic Compounds									
3-Hydroxycarbofuran	<0.0005	0.0005	mg/L	1	B4G0954	07/31/14 10:00	08/04/14 18:27	EPA 531.2	
Aldicarb	<0.0005	0.0005	mg/L	1	B4G0954	07/31/14 10:00	08/04/14 18:27	EPA 531.2	
Aldicarb sulfone	<0.0008	0.0008	mg/L	1	B4G0954	07/31/14 10:00	08/04/14 18:27	EPA 531.2	
Aldicarb sulfoxide	<0.0005	0.0005	mg/L	1	B4G0954	07/31/14 10:00	08/04/14 18:27	EPA 531.2	
Carbaryl	<0.0005	0.0005	mg/L	1	B4G0954	07/31/14 10:00	08/04/14 18:27	EPA 531.2	
Carbofuran	<0.0009	0.0009	mg/L	1	B4G0954	07/31/14 10:00	08/04/14 18:27	EPA 531.2	
Methomyl	<0.0005	0.0005	mg/L	1	B4G0954	07/31/14 10:00	08/04/14 18:27	EPA 531.2	
Oxamyl	<0.0020	0.0020	mg/L	1	B4G0954	07/31/14 10:00	08/04/14 18:27	EPA 531.2	
Surrogate: 4-Bromo-3,5-dimethylphenyl-N-methylcarbam	*106 %*		*70-130*		*B4G0954*	*07/31/14*	*08/04/14*	*EPA 531.2*	
Herbicides									
Glyphosate	<0.006	0.006	mg/L	1	B4H0141	08/06/14 14:00	08/07/14 00:14	EPA 547	
Fiberquant Analytical Services #AZ0633									
EPA 100.1									
Asbestos	<0.2	0.2	MFL	1	N/A	07/25/14 00:00	08/01/14 00:00	EPA 100.1	

Microbiology - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0824 - micro_prep										
Blank (B4G0824-BLK1)				*Prepared & Analyzed: 07/25/14*						
E. coli	Absent		P/A							
Total Coliforms	Absent		P/A							

Total Metals - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0799 - EPA 200.8										
Blank (B4G0799-BLK1)				*Prepared: 07/25/14 Analyzed: 07/29/14*						
Antimony	<0.0005	0.0005	mg/L							
Arsenic	<0.0010	0.0010	mg/L							
Cadmium	<0.0001	0.0001	mg/L							
Lead	<0.0010	0.0010	mg/L							
Selenium	<0.0020	0.0020	mg/L							
Thallium	<0.0005	0.0005	mg/L							
LCS (B4G0799-BS1)				*Prepared: 07/25/14 Analyzed: 07/29/14*						
Antimony	0.0263	0.0005	mg/L	0.0250		105	85-115			
Arsenic	0.0270	0.0010	mg/L	0.0250		108	85-115			
Cadmium	0.0266	0.0001	mg/L	0.0250		106	85-115			
Lead	0.0260	0.0010	mg/L	0.0250		104	85-115			
Selenium	0.0271	0.0020	mg/L	0.0250		108	85-115			
Thallium	0.0272	0.0005	mg/L	0.0250		109	85-115			
LCS Dup (B4G0799-BSD1)				*Prepared: 07/25/14 Analyzed: 07/29/14*						
Antimony	0.0269	0.0005	mg/L	0.0250		108	85-115	2	20	
Arsenic	0.0270	0.0010	mg/L	0.0250		108	85-115	0.0007	20	
Cadmium	0.0274	0.0001	mg/L	0.0250		110	85-115	3	20	
Lead	0.0271	0.0010	mg/L	0.0250		109	85-115	4	20	
Selenium	0.0272	0.0020	mg/L	0.0250		109	85-115	0.5	20	
Thallium	0.0280	0.0005	mg/L	0.0250		112	85-115	3	20	
Matrix Spike (B4G0799-MS1)		**Source: 4072218-09**		*Prepared: 07/25/14 Analyzed: 07/29/14*						
Antimony	0.0263	0.0005	mg/L	0.0250	0.0003	104	70-130			
Arsenic	0.0316	0.0010	mg/L	0.0250	0.0031	114	70-130			
Cadmium	0.0277	0.0001	mg/L	0.0250	<0.0001	111	70-130			
Lead	0.0280	0.0010	mg/L	0.0250	0.0007	109	70-130			
Selenium	0.0322	0.0020	mg/L	0.0250	0.0041	113	70-130			
Thallium	0.0307	0.0005	mg/L	0.0250	<0.0005	123	70-130			

Total Metals - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0799 - EPA 200.8										
Matrix Spike (B4G0799-MS2)		**Source: 4072270-01**		*Prepared: 07/25/14*		*Analyzed: 07/29/14*				
Antimony	0.0274	0.0005	mg/L	0.0250	<0.0005	110	70-130			
Arsenic	0.0415	0.0010	mg/L	0.0250	0.0128	115	70-130			
Cadmium	0.0276	0.0001	mg/L	0.0250	<0.0001	110	70-130			
Lead	0.0274	0.0010	mg/L	0.0250	<0.0010	110	70-130			
Selenium	0.0306	0.0020	mg/L	0.0250	0.0013	117	70-130			
Thallium	0.0295	0.0005	mg/L	0.0250	<0.0005	118	70-130			
Matrix Spike Dup (B4G0799-MSD1)		**Source: 4072218-09**		*Prepared: 07/25/14*		*Analyzed: 07/29/14*				
Antimony	0.0269	0.0005	mg/L	0.0250	0.0003	106	70-130	2	20	
Arsenic	0.0308	0.0010	mg/L	0.0250	0.0031	111	70-130	2	20	
Cadmium	0.0270	0.0001	mg/L	0.0250	<0.0001	108	70-130	3	20	
Lead	0.0281	0.0010	mg/L	0.0250	0.0007	110	70-130	0.6	20	
Selenium	0.0313	0.0020	mg/L	0.0250	0.0041	109	70-130	3	20	
Thallium	0.0287	0.0005	mg/L	0.0250	<0.0005	115	70-130	7	20	
Matrix Spike Dup (B4G0799-MSD2)		**Source: 4072270-01**		*Prepared: 07/25/14*		*Analyzed: 07/29/14*				
Antimony	0.0264	0.0005	mg/L	0.0250	<0.0005	106	70-130	4	20	
Arsenic	0.0406	0.0010	mg/L	0.0250	0.0128	111	70-130	2	20	
Cadmium	0.0284	0.0001	mg/L	0.0250	<0.0001	114	70-130	3	20	
Lead	0.0269	0.0010	mg/L	0.0250	<0.0010	108	70-130	2	20	
Selenium	0.0297	0.0020	mg/L	0.0250	0.0013	113	70-130	3	20	
Thallium	0.0301	0.0005	mg/L	0.0250	<0.0005	120	70-130	2	20	
Batch B4G0847 - EPA 200.7										
Blank (B4G0847-BLK1)				*Prepared & Analyzed: 07/29/14*						
Barium	<0.01	0.01	mg/L							
Beryllium	<0.002	0.002	mg/L							
Calcium	<1	1	mg/L							
Chromium	<0.005	0.005	mg/L							
Copper	<0.01	0.01	mg/L							
Magnesium	<1	1	mg/L							
Nickel	<0.02	0.02	mg/L							
Sodium	<1	1	mg/L							

Total Metals - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0847 - EPA 200.7										
LCS (B4G0847-BS1)				*Prepared & Analyzed: 07/29/14*						
Barium	0.94	0.01	mg/L	1.00		94	85-115			
Beryllium	0.185	0.002	mg/L	0.200		93	85-115			
Calcium	20	1	mg/L	20.0		98	85-115			
Chromium	0.451	0.005	mg/L	0.500		90	85-115			
Copper	0.90	0.01	mg/L	1.00		90	85-115			
Magnesium	20	1	mg/L	20.0		98	85-115			
Nickel	0.90	0.02	mg/L	1.00		90	85-115			
Sodium	20	1	mg/L	20.0		98	85-115			
LCS Dup (B4G0847-BSD1)				*Prepared & Analyzed: 07/29/14*						
Barium	1.04	0.01	mg/L	1.00		104	85-115	10	20	
Beryllium	0.205	0.002	mg/L	0.200		103	85-115	10	20	
Calcium	20	1	mg/L	20.0		100	85-115	2	20	
Chromium	0.501	0.005	mg/L	0.500		100	85-115	10	20	
Copper	1.00	0.01	mg/L	1.00		100	85-115	10	20	
Magnesium	20	1	mg/L	20.0		100	85-115	2	20	
Nickel	0.99	0.02	mg/L	1.00		99	85-115	10	20	
Sodium	20	1	mg/L	20.0		99	85-115	1	20	
Matrix Spike (B4G0847-MS1)		**Source: 4072278-05**		*Prepared & Analyzed: 07/29/14*						
Barium	0.94	0.01	mg/L	1.00	0.05	89	70-130			
Beryllium	0.182	0.002	mg/L	0.200	<0.002	91	70-130			
Calcium	103	1	mg/L	20.0	85	92	70-130			
Chromium	0.432	0.005	mg/L	0.500	<0.005	86	70-130			
Copper	0.90	0.01	mg/L	1.00	0.03	87	70-130			
Magnesium	32	1	mg/L	20.0	13	95	70-130			
Nickel	0.85	0.02	mg/L	1.00	<0.02	85	75-125			
Sodium	113	1	mg/L	20.0	97	79	70-130			

Total Metals - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0847 - EPA 200.7										
Matrix Spike (B4G0847-MS2)		**Source: 4072437-01**		*Prepared & Analyzed: 07/29/14*						
Barium	0.89	0.01	mg/L	1.00	0.009	88	70-130			
Beryllium	0.180	0.002	mg/L	0.200	<0.002	90	70-130			
Calcium	32	1	mg/L	20.0	13	97	70-130			
Chromium	0.454	0.005	mg/L	0.500	0.023	86	70-130			
Copper	0.88	0.01	mg/L	1.00	0.03	86	70-130			
Magnesium	23	1	mg/L	20.0	4	94	70-130			
Nickel	0.85	0.02	mg/L	1.00	<0.02	85	75-125			
Sodium	110	1	mg/L	20.0	93	86	70-130			
Matrix Spike Dup (B4G0847-MSD1)		**Source: 4072278-05**		*Prepared & Analyzed: 07/29/14*						
Barium	0.94	0.01	mg/L	1.00	0.05	89	70-130	0.02	20	
Beryllium	0.183	0.002	mg/L	0.200	<0.002	91	70-130	0.3	20	
Calcium	103	1	mg/L	20.0	85	89	70-130	0.5	20	
Chromium	0.433	0.005	mg/L	0.500	<0.005	87	70-130	0.2	20	
Copper	0.90	0.01	mg/L	1.00	0.03	87	70-130	0.5	20	
Magnesium	32	1	mg/L	20.0	13	96	70-130	0.4	20	
Nickel	0.85	0.02	mg/L	1.00	<0.02	85	75-125	0.5	20	
Sodium	113	1	mg/L	20.0	97	81	70-130	0.2	20	
Matrix Spike Dup (B4G0847-MSD2)		**Source: 4072437-01**		*Prepared & Analyzed: 07/29/14*						
Barium	0.88	0.01	mg/L	1.00	0.009	87	70-130	1	20	
Beryllium	0.176	0.002	mg/L	0.200	<0.002	88	70-130	2	20	
Calcium	32	1	mg/L	20.0	13	95	70-130	2	20	
Chromium	0.444	0.005	mg/L	0.500	0.023	84	70-130	2	20	
Copper	0.87	0.01	mg/L	1.00	0.03	84	70-130	1	20	
Magnesium	23	1	mg/L	20.0	4	93	70-130	2	20	
Nickel	0.84	0.02	mg/L	1.00	<0.02	84	75-125	2	20	
Sodium	111	1	mg/L	20.0	93	92	70-130	1	20	

Total Metals - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4H0017 - EPA 245.1/245.2 Prep										
Blank (B4H0017-BLK1)				*Prepared & Analyzed: 08/01/14*						
Mercury	<0.0002	0.0002	mg/L							
LCS (B4H0017-BS1)				*Prepared & Analyzed: 08/01/14*						
Mercury	0.00099	0.0002	mg/L	0.00100		99	85-115			
LCS Dup (B4H0017-BSD1)				*Prepared & Analyzed: 08/01/14*						
Mercury	0.00099	0.0002	mg/L	0.00100		99	85-115	0	20	
Matrix Spike (B4H0017-MS1)		**Source: 4072280-01**		*Prepared & Analyzed: 08/01/14*						
Mercury	0.00099	0.0002	mg/L	0.00100	<0.0002	99	70-130			
Matrix Spike (B4H0017-MS2)		**Source: 4072403-01**		*Prepared & Analyzed: 08/01/14*						
Mercury	0.00098	0.0002	mg/L	0.00100	<0.0002	98	70-130			
Matrix Spike Dup (B4H0017-MSD1)		**Source: 4072280-01**		*Prepared & Analyzed: 08/01/14*						
Mercury	0.00101	0.0002	mg/L	0.00100	<0.0002	101	70-130	2	20	
Matrix Spike Dup (B4H0017-MSD2)		**Source: 4072403-01**		*Prepared & Analyzed: 08/01/14*						
Mercury	0.00098	0.0002	mg/L	0.00100	<0.0002	98	70-130	0	20	

Inorganic Chemistry - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0772 - NO PREP										
Duplicate (B4G0772-DUP1)		**Source: 4072275-01**		*Prepared & Analyzed: 07/25/14*						
pH	8.7		pH Units		8.7			0.1	10	H5
Batch B4G0790 - NO PREP										
Blank (B4G0790-BLK1)				*Prepared & Analyzed: 07/25/14*						
Nitrite as N	<0.10	0.10	mg/L							
LCS (B4G0790-BS1)				*Prepared & Analyzed: 07/25/14*						
Nitrite as N	0.200	0.10	mg/L	0.200		100	80-120			
LCS Dup (B4G0790-BSD1)				*Prepared & Analyzed: 07/25/14*						
Nitrite as N	0.200	0.10	mg/L	0.200		100	80-120	0	20	
Matrix Spike (B4G0790-MS1)		**Source: 4072321-02**		*Prepared & Analyzed: 07/25/14*						
Nitrite as N	0.088	0.10	mg/L	0.200	<0.10	44	80-120			M2
Matrix Spike Dup (B4G0790-MSD1)		**Source: 4072321-02**		*Prepared & Analyzed: 07/25/14*						
Nitrite as N	0.088	0.10	mg/L	0.200	<0.10	44	80-120	0	20	M2
Batch B4G0831 - NO PREP										
Blank (B4G0831-BLK1)				*Prepared & Analyzed: 07/28/14*						
Total Dissolved Solids	<1	1	mg/L							
Duplicate (B4G0831-DUP1)		**Source: 4072091-01**		*Prepared & Analyzed: 07/28/14*						
Total Dissolved Solids	543	1	mg/L		540			0.6	5	

Inorganic Chemistry - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0843 - NO PREP										
Blank (B4G0843-BLK1)				*Prepared & Analyzed: 07/28/14*						
Total Alkalinity as CaCO3	<10	10	mg/L							
LCS (B4G0843-BS1)				*Prepared & Analyzed: 07/28/14*						
Total Alkalinity as CaCO3	198	10	mg/L	200		99	80-120			
LCS Dup (B4G0843-BSD1)				*Prepared & Analyzed: 07/28/14*						
Total Alkalinity as CaCO3	198	10	mg/L	200		99	80-120	0.3	20	
Matrix Spike (B4G0843-MS1)		**Source: 4071741-01**		*Prepared & Analyzed: 07/28/14*						
Total Alkalinity as CaCO3	293	10	mg/L	200	141	76	80-120			M2
Matrix Spike Dup (B4G0843-MSD1)		**Source: 4071741-01**		*Prepared & Analyzed: 07/28/14*						
Total Alkalinity as CaCO3	313	10	mg/L	200	141	86	80-120	7	20	
Batch B4G0872 - NO PREP										
Blank (B4G0872-BLK1)				*Prepared & Analyzed: 07/29/14*						
Cyanide, Total	<0.010	0.010	mg/L							
LCS (B4G0872-BS1)				*Prepared & Analyzed: 07/29/14*						
Cyanide, Total	0.049	0.010	mg/L	0.0500		98	80-120			
LCS Dup (B4G0872-BSD1)				*Prepared & Analyzed: 07/29/14*						
Cyanide, Total	0.048	0.010	mg/L	0.0500		96	80-120	2	20	
Matrix Spike (B4G0872-MS1)		**Source: 4072245-01**		*Prepared & Analyzed: 07/29/14*						
Cyanide, Total	0.049	0.010	mg/L	0.0500	<0.010	98	80-120			

Inorganic Chemistry - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0872 - NO PREP										
Matrix Spike Dup (B4G0872-MSD1)		**Source: 4072245-01**		*Prepared & Analyzed: 07/29/14*						
Cyanide, Total	0.049	0.010	mg/L	0.0500	<0.010	98	80-120	0	20	
Batch B4G0915 - NO PREP										
Blank (B4G0915-BLK1)				*Prepared & Analyzed: 07/30/14*						
Fluoride	<0.10	0.10	mg/L							
LCS (B4G0915-BS1)				*Prepared & Analyzed: 07/30/14*						
Fluoride	2.00	0.10	mg/L	2.00		100	90-110			
LCS Dup (B4G0915-BSD1)				*Prepared & Analyzed: 07/30/14*						
Fluoride	1.99	0.10	mg/L	2.00		100	90-110	0.5	20	
Matrix Spike (B4G0915-MS1)		**Source: 4072101-01**		*Prepared & Analyzed: 07/30/14*						
Fluoride	2.23	0.10	mg/L	2.00	0.28	98	90-110			
Matrix Spike Dup (B4G0915-MSD1)		**Source: 4072101-01**		*Prepared & Analyzed: 07/30/14*						
Fluoride	2.24	0.10	mg/L	2.00	0.28	98	90-110	0.5	20	
Batch B4H0005 - NO PREP										
Blank (B4H0005-BLK1)				*Prepared & Analyzed: 07/31/14*						
Sulfate	<5.0	5.0	mg/L							
LCS (B4H0005-BS1)				*Prepared & Analyzed: 07/31/14*						
Sulfate	20.0	5.0	mg/L	20.0		100	90-110			

Inorganic Chemistry - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4H0005 - NO PREP										
LCS Dup (B4H0005-BSD1)				*Prepared & Analyzed: 07/31/14*						
Sulfate	20.0	5.0	mg/L	20.0		100	90-110	0	20	
Matrix Spike (B4H0005-MS1)		**Source: 4072238-01**		*Prepared & Analyzed: 07/31/14*						
Sulfate	20.1	5.0	mg/L	20.0	<5.0	100	90-110			
Matrix Spike Dup (B4H0005-MSD1)		**Source: 4072238-01**		*Prepared & Analyzed: 07/31/14*						
Sulfate	20.3	5.0	mg/L	20.0	<5.0	102	90-110	1	20	
Batch B4H0012 - NO PREP										
Blank (B4H0012-BLK1)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	<0.20	0.20	mg/L							
Blank (B4H0012-BLK2)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	<0.20	0.20	mg/L							
Blank (B4H0012-BLK3)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	<0.20	0.20	mg/L							
Blank (B4H0012-BLK4)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	<0.20	0.20	mg/L							
Blank (B4H0012-BLK5)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	<0.20	0.20	mg/L							
LCS (B4H0012-BS1)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.1	0.20	mg/L	10.0		101	90-110			

Inorganic Chemistry - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4H0012 - NO PREP										
LCS (B4H0012-BS2)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.2	0.20	mg/L	10.0		102	90-110			
LCS (B4H0012-BS3)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.1	0.20	mg/L	10.0		101	90-110			
LCS Dup (B4H0012-BSD1)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.2	0.20	mg/L	10.0		102	90-110	1	20	
LCS Dup (B4H0012-BSD2)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.1	0.20	mg/L	10.0		101	90-110	1	20	
LCS Dup (B4H0012-BSD3)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.1	0.20	mg/L	10.0		101	90-110	0	20	
Matrix Spike (B4H0012-MS1)		**Source: 4072258-02**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.2	0.20	mg/L	10.0	0.05	102	80-120			
Matrix Spike (B4H0012-MS2)		**Source: 4072443-04**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.7	0.20	mg/L	10.0	0.42	103	80-120			
Matrix Spike (B4H0012-MS3)		**Source: 4072443-05**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	16.6	0.20	mg/L	10.0	6.19	104	80-120			
Matrix Spike (B4H0012-MS4)		**Source: 4072443-06**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	17.3	0.20	mg/L	10.0	7.07	102	80-120			
Matrix Spike (B4H0012-MS5)		**Source: 4072558-06**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	15.0	0.20	mg/L	10.0	4.47	105	80-120			

Inorganic Chemistry - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4H0012 - NO PREP										
Matrix Spike Dup (B4H0012-MSD1)	**Source: 4072258-02**			*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.4	0.20	mg/L	10.0	0.05	104	80-120	2	20	
Matrix Spike Dup (B4H0012-MSD2)	**Source: 4072443-04**			*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.9	0.20	mg/L	10.0	0.42	105	80-120	2	20	
Matrix Spike Dup (B4H0012-MSD3)	**Source: 4072443-05**			*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	16.7	0.20	mg/L	10.0	6.19	105	80-120	0.6	20	
Matrix Spike Dup (B4H0012-MSD4)	**Source: 4072443-06**			*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	17.5	0.20	mg/L	10.0	7.07	104	80-120	1	20	
Matrix Spike Dup (B4H0012-MSD5)	**Source: 4072558-06**			*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	14.9	0.20	mg/L	10.0	4.47	104	80-120	0.7	20	

Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0816 - Default Prep VOC										
Blank (B4G0816-BLK1)				*Prepared & Analyzed: 07/28/14*						
1,1,1-Trichloroethane	<0.0005	0.0005	mg/L							
1,1,2-Trichloroethane	<0.0005	0.0005	mg/L							
1,1-Dichloroethene	<0.0005	0.0005	mg/L							
1,2,4-Trichlorobenzene	<0.0005	0.0005	mg/L							
1,2-Dichlorobenzene	<0.0005	0.0005	mg/L							
1,2-Dichloroethane	<0.0005	0.0005	mg/L							
1,2-Dichloropropane	<0.0005	0.0005	mg/L							
1,4-Dichlorobenzene	<0.0005	0.0005	mg/L							
Benzene	<0.0005	0.0005	mg/L							
Bromodichloromethane	<0.0005	0.0005	mg/L							
Bromoform	<0.0005	0.0005	mg/L							
Carbon tetrachloride	<0.0005	0.0005	mg/L							
Chlorobenzene	<0.0005	0.0005	mg/L							
Chloroform	<0.0005	0.0005	mg/L							
cis-1,2-Dichloroethylene	<0.0005	0.0005	mg/L							
Dibromochloromethane	<0.0005	0.0005	mg/L							
Dichloromethane	<0.0005	0.0005	mg/L							
Ethylbenzene	<0.0005	0.0005	mg/L							
m,p-Xylene	<0.0005	0.0005	mg/L							
o-Xylene	<0.0005	0.0005	mg/L							
Styrene	<0.0005	0.0005	mg/L							
Tetrachloroethene	<0.0005	0.0005	mg/L							
Toluene	<0.0005	0.0005	mg/L							
Total THMs	<0.0005	0.0005	mg/L							
trans-1,2-Dichloroethene	<0.0005	0.0005	mg/L							
Trichloroethene	<0.0005	0.0005	mg/L							
Vinyl chloride	<0.0005	0.0005	mg/L							
Xylenes (total)	<0.0005	0.0005	mg/L							

Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0816 - Default Prep VOC										
LCS (B4G0816-BS1)				*Prepared & Analyzed: 07/28/14*						
1,1,1-Trichloroethane	0.0019	0.0005	mg/L	0.00200		94	70-130			
1,1,2-Trichloroethane	0.0022	0.0005	mg/L	0.00200		110	70-130			
1,1-Dichloroethene	0.0020	0.0005	mg/L	0.00200		102	70-130			
1,2,4-Trichlorobenzene	0.0019	0.0005	mg/L	0.00200		94	70-130			
1,2-Dichlorobenzene	0.0021	0.0005	mg/L	0.00200		104	70-130			
1,2-Dichloroethane	0.0020	0.0005	mg/L	0.00200		97	70-130			
1,2-Dichloropropane	0.0020	0.0005	mg/L	0.00200		99	70-130			
1,4-Dichlorobenzene	0.0021	0.0005	mg/L	0.00200		105	70-130			
Benzene	0.0020	0.0005	mg/L	0.00200		98	70-130			
Bromodichloromethane	0.0021	0.0005	mg/L	0.00200		106	70-130			
Bromoform	0.0022	0.0005	mg/L	0.00200		108	70-130			
Carbon tetrachloride	0.0020	0.0005	mg/L	0.00200		102	70-130			
Chlorobenzene	0.0020	0.0005	mg/L	0.00200		102	70-130			
Chloroform	0.0019	0.0005	mg/L	0.00200		97	70-130			
cis-1,2-Dichloroethylene	0.0019	0.0005	mg/L	0.00200		97	70-130			
Dibromochloromethane	0.0021	0.0005	mg/L	0.00200		104	70-130			
Dichloromethane	0.0020	0.0005	mg/L	0.00200		102	70-130			
Ethylbenzene	0.0019	0.0005	mg/L	0.00200		96	70-130			
m,p-Xylene	0.0018	0.0005	mg/L	0.00200		92	70-130			
o-Xylene	0.0019	0.0005	mg/L	0.00200		94	70-130			
Styrene	0.0020	0.0005	mg/L	0.00200		98	70-130			
Tetrachloroethene	0.0021	0.0005	mg/L	0.00200		103	70-130			
Toluene	0.0019	0.0005	mg/L	0.00200		96	70-130			
Total THMs	0.0083	0.0005	mg/L	0.00800		104	0-200			
trans-1,2-Dichloroethene	0.0021	0.0005	mg/L	0.00200		104	70-130			
Trichloroethene	0.0020	0.0005	mg/L	0.00200		99	70-130			
Vinyl chloride	0.0019	0.0005	mg/L	0.00200		93	70-130			
Xylenes (total)	0.0037	0.0005	mg/L	0.00400		93	0-200			

Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0816 - Default Prep VOC										
LCS Dup (B4G0816-BSD1)				*Prepared & Analyzed: 07/28/14*						
1,1,1-Trichloroethane	0.0019	0.0005	mg/L	0.00200		94	70-130	0	20	
1,1,2-Trichloroethane	0.0021	0.0005	mg/L	0.00200		106	70-130	4	20	
1,1-Dichloroethene	0.0022	0.0005	mg/L	0.00200		112	70-130	9	20	
1,2,4-Trichlorobenzene	0.0019	0.0005	mg/L	0.00200		93	70-130	1	20	
1,2-Dichlorobenzene	0.0021	0.0005	mg/L	0.00200		103	70-130	0.5	20	
1,2-Dichloroethane	0.0019	0.0005	mg/L	0.00200		96	70-130	2	20	
1,2-Dichloropropane	0.0018	0.0005	mg/L	0.00200		92	70-130	7	20	
1,4-Dichlorobenzene	0.0021	0.0005	mg/L	0.00200		105	70-130	0	20	
Benzene	0.0020	0.0005	mg/L	0.00200		98	70-130	0.5	20	
Bromodichloromethane	0.0020	0.0005	mg/L	0.00200		100	70-130	6	20	
Bromoform	0.0018	0.0005	mg/L	0.00200		92	70-130	15	20	
Carbon tetrachloride	0.0021	0.0005	mg/L	0.00200		103	70-130	1	20	
Chlorobenzene	0.0020	0.0005	mg/L	0.00200		100	70-130	2	20	
Chloroform	0.0020	0.0005	mg/L	0.00200		99	70-130	2	20	
cis-1,2-Dichloroethylene	0.0020	0.0005	mg/L	0.00200		100	70-130	4	20	
Dibromochloromethane	0.0019	0.0005	mg/L	0.00200		94	70-130	9	20	
Dichloromethane	0.0021	0.0005	mg/L	0.00200		105	70-130	3	20	
Ethylbenzene	0.0019	0.0005	mg/L	0.00200		94	70-130	2	20	
m,p-Xylene	0.0019	0.0005	mg/L	0.00200		93	70-130	0.5	20	
o-Xylene	0.0018	0.0005	mg/L	0.00200		90	70-130	3	20	
Styrene	0.0019	0.0005	mg/L	0.00200		94	70-130	5	20	
Tetrachloroethene	0.0021	0.0005	mg/L	0.00200		106	70-130	2	20	
Toluene	0.0019	0.0005	mg/L	0.00200		93	70-130	3	20	
Total THMs	0.0077	0.0005	mg/L	0.00800		96	0-200	7	200	
trans-1,2-Dichloroethene	0.0022	0.0005	mg/L	0.00200		108	70-130	3	20	
Trichloroethene	0.0021	0.0005	mg/L	0.00200		103	70-130	4	20	
Vinyl chloride	0.0020	0.0005	mg/L	0.00200		97	70-130	5	20	
Xylenes (total)	0.0037	0.0005	mg/L	0.00400		92	0-200	1	200	

Semi-Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0954 - Default Prep GC-Semi										
Blank (B4G0954-BLK1)				*Prepared: 07/31/14 Analyzed: 08/01/14*						
3-Hydroxycarbofuran	<0.0005	0.0005	mg/L							
Aldicarb	<0.0005	0.0005	mg/L							
Aldicarb sulfone	<0.0008	0.0008	mg/L							
Aldicarb sulfoxide	<0.0005	0.0005	mg/L							
Carbaryl	<0.0005	0.0005	mg/L							
Carbofuran	<0.0009	0.0009	mg/L							
Methomyl	<0.0005	0.0005	mg/L							
Oxamyl	<0.0020	0.0020	mg/L							
LCS (B4G0954-BS1)				*Prepared: 07/31/14 Analyzed: 08/01/14*						
3-Hydroxycarbofuran	0.0020	0.0005	mg/L	0.00200		101	70-130			
Aldicarb	0.0020	0.0005	mg/L	0.00200		100	70-130			
Aldicarb sulfone	0.0020	0.0008	mg/L	0.00200		101	70-130			
Aldicarb sulfoxide	0.0020	0.0005	mg/L	0.00200		102	70-130			
Carbaryl	0.0020	0.0005	mg/L	0.00200		101	70-130			
Carbofuran	0.0020	0.0009	mg/L	0.00200		102	70-130			
Methomyl	0.0020	0.0005	mg/L	0.00200		102	70-130			
Oxamyl	0.0020	0.0020	mg/L	0.00200		101	70-130			
LCS Dup (B4G0954-BSD1)				*Prepared: 07/31/14 Analyzed: 08/01/14*						
3-Hydroxycarbofuran	0.0020	0.0005	mg/L	0.00200		100	70-130	0.6	20	
Aldicarb	0.0020	0.0005	mg/L	0.00200		100	70-130	0.3	20	
Aldicarb sulfone	0.0020	0.0008	mg/L	0.00200		101	70-130	0.1	20	
Aldicarb sulfoxide	0.0020	0.0005	mg/L	0.00200		101	70-130	1	20	
Carbaryl	0.0020	0.0005	mg/L	0.00200		101	70-130	0.3	20	
Carbofuran	0.0020	0.0009	mg/L	0.00200		102	70-130	0	20	
Methomyl	0.0020	0.0005	mg/L	0.00200		102	70-130	0.3	20	
Oxamyl	0.0020	0.0020	mg/L	0.00200		100	70-130	0.2	20	

Semi-Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0954 - Default Prep GC-Semi										
Matrix Spike (B4G0954-MS1)		**Source: 4071518-01**		*Prepared: 07/31/14 Analyzed: 08/01/14*						
3-Hydroxycarbofuran	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130			
Aldicarb	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130			
Aldicarb sulfone	0.0020	0.0008	mg/L	0.00200	<0.0008	100	70-130			
Aldicarb sulfoxide	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130			
Carbaryl	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130			
Carbofuran	0.0021	0.0009	mg/L	0.00200	<0.0009	103	70-130			
Methomyl	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130			
Oxamyl	0.0020	0.0020	mg/L	0.00200	<0.0020	100	70-130			
Matrix Spike (B4G0954-MS2)		**Source: 4072243-01**		*Prepared & Analyzed: 08/04/14*						
3-Hydroxycarbofuran	0.0021	0.0005	mg/L	0.00200	<0.0005	106	70-130			
Aldicarb	0.0022	0.0005	mg/L	0.00200	<0.0005	109	70-130			
Aldicarb sulfone	0.0021	0.0008	mg/L	0.00200	<0.0008	107	70-130			
Aldicarb sulfoxide	0.0021	0.0005	mg/L	0.00200	<0.0005	107	70-130			
Carbaryl	0.0021	0.0005	mg/L	0.00200	<0.0005	107	70-130			
Carbofuran	0.0022	0.0009	mg/L	0.00200	<0.0009	110	70-130			
Methomyl	0.0021	0.0005	mg/L	0.00200	<0.0005	107	70-130			
Oxamyl	0.0021	0.0020	mg/L	0.00200	<0.0020	106	70-130			
Matrix Spike Dup (B4G0954-MSD1)		**Source: 4071518-01**		*Prepared: 07/31/14 Analyzed: 08/01/14*						
3-Hydroxycarbofuran	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130	0.1	30	
Aldicarb	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130	0	30	
Aldicarb sulfone	0.0020	0.0008	mg/L	0.00200	<0.0008	100	70-130	0.8	30	
Aldicarb sulfoxide	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130	0.3	30	
Carbaryl	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130	1	30	
Carbofuran	0.0020	0.0009	mg/L	0.00200	<0.0009	102	70-130	0.7	30	
Methomyl	0.0020	0.0005	mg/L	0.00200	<0.0005	99	70-130	0.7	30	
Oxamyl	0.0020	0.0020	mg/L	0.00200	<0.0020	99	70-130	0.6	30	

Semi-Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0954 - Default Prep GC-Semi										
Matrix Spike Dup (B4G0954-MSD2)	**Source: 4072243-01**			*Prepared & Analyzed: 08/04/14*						
3-Hydroxycarbofuran	0.0021	0.0005	mg/L	0.00200	<0.0005	106	70-130	0.6	30	
Aldicarb	0.0022	0.0005	mg/L	0.00200	<0.0005	108	70-130	0.9	30	
Aldicarb sulfone	0.0021	0.0008	mg/L	0.00200	<0.0008	106	70-130	0.2	30	
Aldicarb sulfoxide	0.0021	0.0005	mg/L	0.00200	<0.0005	107	70-130	0.2	30	
Carbaryl	0.0021	0.0005	mg/L	0.00200	<0.0005	106	70-130	0.5	30	
Carbofuran	0.0022	0.0009	mg/L	0.00200	<0.0009	110	70-130	0.6	30	
Methomyl	0.0021	0.0005	mg/L	0.00200	<0.0005	106	70-130	0.3	30	
Oxamyl	0.0021	0.0020	mg/L	0.00200	<0.0020	107	70-130	0.3	30	

Herbicides - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4H0141 - Default Prep GC-Semi										
Blank (B4H0141-BLK1)				*Prepared & Analyzed: 08/06/14*						
Glyphosate	<0.006	0.006	mg/L							
LCS (B4H0141-BS1)				*Prepared & Analyzed: 08/06/14*						
Glyphosate	0.047	0.006	mg/L	0.0500		94	70-130			
LCS Dup (B4H0141-BSD1)				*Prepared & Analyzed: 08/06/14*						
Glyphosate	0.049	0.006	mg/L	0.0500		99	70-130	6	20	
Matrix Spike (B4H0141-MS1)		**Source: 4072243-01**		*Prepared & Analyzed: 08/06/14*						
Glyphosate	0.045	0.006	mg/L	0.0500	<0.006	91	70-130			
Matrix Spike Dup (B4H0141-MSD1)		**Source: 4072243-01**		*Prepared & Analyzed: 08/06/14*						
Glyphosate	0.047	0.006	mg/L	0.0500	<0.006	95	70-130	4	20	

PESTICIDES/PCBS 505 - Quality Control

Legend Technical Services, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4H0406 - EPA 500 Series										
Blank (B4H0406-BLK1)				*Prepared & Analyzed: 08/04/14*						
Aroclor 1016	<0.000080	0.000080	mg/L							
Aroclor 1221	<0.020	0.020	mg/L							
Aroclor 1232	<0.00050	0.00050	mg/L							
Aroclor 1242	<0.00030	0.00030	mg/L							
Aroclor 1248	<0.00010	0.00010	mg/L							
Aroclor 1254	<0.00010	0.00010	mg/L							
Aroclor 1260	<0.00020	0.00020	mg/L							
Chlordane	<0.00020	0.00020	mg/L							
Toxaphene	<0.0010	0.0010	mg/L							
LCS (B4H0406-BS1)				*Prepared & Analyzed: 08/04/14*						
Aroclor 1016	0.000478	0.000080	mg/L	0.000500		95.6	70-130			
Aroclor 1260	0.000539	0.00020	mg/L	0.000500		108	70-130			
LCS Dup (B4H0406-BSD1)				*Prepared & Analyzed: 08/04/14*						
Aroclor 1016	0.000500	0.000080	mg/L	0.000500		100	70-130	4.50	20	
Aroclor 1260	0.000583	0.00020	mg/L	0.000500		117	70-130	7.84	20	
Matrix Spike (B4H0406-MS1)		**Source: 4072270-01**		*Prepared & Analyzed: 08/04/14*						
Aroclor 1016	0.000444	0.000080	mg/L	0.000499	<0.00008(	89.1	65-135			
Aroclor 1260	0.000463	0.00020	mg/L	0.000499	<0.00020	92.9	65-135			

EPA 504.1 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193287 - MLLE										
Blank (3070204)		**Source: 45302**		*Prepared & Analyzed: 07/28/14*						
1,2-Dibromo-3-chloropropane (DBCP)	<0.00002	0.00002	mg/L				-			
1,2-Dibromoethane (EDB)	<0.00001	0.00001	mg/L				-			
Reference (3070205)		**Source: 45302**		*Prepared & Analyzed: 07/28/14*						
1,2-Dibromo-3-chloropropane (DBCP)	<0.00002	0.00002	mg/L	0.00002		100	60-140			
1,2-Dibromoethane (EDB)	0.00002	0.00001	mg/L	0.00002		120	60-140			
Reference (3070206)		**Source: 45302**		*Prepared & Analyzed: 07/28/14*						
1,2-Dibromo-3-chloropropane (DBCP)	0.00010	0.00002	mg/L	0.0001		100	70-130			
1,2-Dibromoethane (EDB)	0.00010	0.00001	mg/L	0.0001		101	70-130			
Reference (3070207)		**Source: 45302**		*Prepared: 07/28/14 Analyzed: 07/29/14*						
1,2-Dibromo-3-chloropropane (DBCP)	0.00010	0.00002	mg/L	0.0001		105	70-130			
1,2-Dibromoethane (EDB)	0.00009	0.00001	mg/L	0.0001		92	70-130			
LCS (3070208)		**Source: 45302**		*Prepared & Analyzed: 07/28/14*						
1,2-Dibromo-3-chloropropane (DBCP)	0.00025	0.00002	mg/L	0.000257		96	70-130			
1,2-Dibromoethane (EDB)	0.00023	0.00001	mg/L	0.000257		88	70-130			
LCS (3070209)		**Source: 45302**		*Prepared: 07/28/14 Analyzed: 07/29/14*						
1,2-Dibromo-3-chloropropane (DBCP)	0.00026	0.00002	mg/L	0.000257		99	70-130			
1,2-Dibromoethane (EDB)	0.00023	0.00001	mg/L	0.000257		89	70-130			
Matrix Spike (3070211)		**Source: 45302**		*Prepared: 07/28/14 Analyzed: 07/29/14*						
1,2-Dibromo-3-chloropropane (DBCP)	0.00011	0.00002	mg/L	0.0001	< MRL	106	65-135			
1,2-Dibromoethane (EDB)	0.00010	0.00001	mg/L	0.0001	< MRL	96	65-135			

EPA 515.3 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193510 - MLLE										
Reference (3072671)		**Source: 45359**		*Prepared: 07/31/14*		*Analyzed: 08/04/14*				
2,4,5-TP (Silvex)	0.0006	0.0002	mg/L	0.0005		127	70-130			
2,4-D	0.0013	0.0001	mg/L	0.001		127	70-130			
Dalapon	0.0012	0.0010	mg/L	0.001		116	70-130			
Dicamba	0.0012	0.0001	mg/L	0.001		115	70-130			
Dinoseb	0.0012	0.0002	mg/L	0.001		125	70-130			
Pentachlorophenol	0.00023	0.00004	mg/L	0.0002		117	70-130			
Picloram	0.0005	0.0001	mg/L	0.0005		90	70-130			
Reference (3072672)		**Source: 45359**		*Prepared: 07/31/14*		*Analyzed: 08/05/14*				
2,4,5-TP (Silvex)	0.0017	0.0002	mg/L	0.0015		113	70-130			
2,4-D	0.0033	0.0001	mg/L	0.003		108	70-130			
Dalapon	0.0032	0.0010	mg/L	0.003		108	70-130			
Dicamba	0.0032	0.0001	mg/L	0.003		106	70-130			
Dinoseb	0.0033	0.0002	mg/L	0.003		110	70-130			
Pentachlorophenol	0.00064	0.00004	mg/L	0.0006		107	70-130			
Picloram	0.0013	0.0001	mg/L	0.0015		85	70-130			
Reference (3072673)		**Source: 45359**		*Prepared: 07/31/14*		*Analyzed: 08/05/14*				
2,4,5-TP (Silvex)	0.0019	0.0002	mg/L	0.0015		124	70-130			
2,4-D	0.0038	0.0001	mg/L	0.003		125	70-130			
Dalapon	0.0036	0.0010	mg/L	0.003		119	70-130			
Dicamba	0.0036	0.0001	mg/L	0.003		120	70-130			
Dinoseb	0.0038	0.0002	mg/L	0.003		128	70-130			
Pentachlorophenol	0.00072	0.00004	mg/L	0.0006		120	70-130			
Picloram	0.0014	0.0001	mg/L	0.0015		92	70-130			

EPA 515.3 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193510 - MLLE										
Blank (3072675)		**Source: 45359**		*Prepared: 07/31/14 Analyzed: 08/04/14*						
2,4,5-TP (Silvex)	<0.0002	0.0002	mg/L				-			
2,4-D	<0.0001	0.0001	mg/L				-			
Dalapon	<0.0010	0.0010	mg/L				-			
Dicamba	<0.0001	0.0001	mg/L				-			
Dinoseb	<0.0002	0.0002	mg/L				-			
Pentachlorophenol	<0.00004	0.00004	mg/L				-			
Picloram	<0.0001	0.0001	mg/L				-			
LCS (3072677)		**Source: 45359**		*Prepared: 07/31/14 Analyzed: 08/04/14*						
2,4,5-TP (Silvex)	<0.0002	0.0002	mg/L	0.0001		143	48-148			
2,4-D	0.0003	0.0001	mg/L	0.0002		150	24-138			N4
Dinoseb	0.0003	0.0002	mg/L	0.0002		146	39-141			N4
Pentachlorophenol	0.00005	0.00004	mg/L	0.00004		131	30-171			
Picloram	0.0001	0.0001	mg/L	0.0001		104	24-150			
Matrix Spike (3072678)		**Source: 45359**		*Prepared: 07/31/14 Analyzed: 08/05/14*						
2,4,5-TP (Silvex)	0.0016	0.0002	mg/L	0.0015	< MRL	106	70-130			
2,4-D	0.0032	0.0001	mg/L	0.003	< MRL	107	70-130			
Dalapon	0.0033	0.0010	mg/L	0.003	< MRL	109	70-130			
Dicamba	0.0030	0.0001	mg/L	0.003	< MRL	101	70-130			
Dinoseb	0.0030	0.0002	mg/L	0.003	< MRL	101	70-130			
Pentachlorophenol	0.00055	0.00004	mg/L	0.0006	< MRL	91	70-130			
Picloram	0.0014	0.0001	mg/L	0.0015	< MRL	96	70-130			
Matrix Spike (3072679)		**Source: 45359**		*Prepared: 07/31/14 Analyzed: 08/05/14*						
2,4,5-TP (Silvex)	0.0016	0.0002	mg/L	0.0015	< MRL	110	70-130			
2,4-D	0.0032	0.0001	mg/L	0.003	< MRL	108	70-130			
Dalapon	0.0034	0.0010	mg/L	0.003	< MRL	115	70-130			
Dicamba	0.0031	0.0001	mg/L	0.003	< MRL	104	70-130			
Dinoseb	0.0033	0.0002	mg/L	0.003	< MRL	109	70-130			
Pentachlorophenol	0.00062	0.00004	mg/L	0.0006	< MRL	103	70-130			
Picloram	0.0014	0.0001	mg/L	0.0015	< MRL	96	70-130			

EPA 515.3 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193510 - MLLE										
Matrix Spike Dup (3072680)		**Source: 45359**		*Prepared: 07/31/14*		*Analyzed: 08/05/14*				
2,4,5-TP (Silvex)	0.0016	0.0002	mg/L	0.0015	< MRL	108	70-130			
2,4-D	0.0032	0.0001	mg/L	0.003	< MRL	107	70-130			
Dalapon	0.0032	0.0010	mg/L	0.003	< MRL	105	70-130			
Dicamba	0.0030	0.0001	mg/L	0.003	< MRL	101	70-130			
Dinoseb	0.0033	0.0002	mg/L	0.003	< MRL	108	70-130			
Pentachlorophenol	0.00062	0.00004	mg/L	0.0006	< MRL	104	70-130			
Picloram	0.0014	0.0001	mg/L	0.0015	< MRL	92	70-130			

EPA 525.2 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193441 - SPE										
Matrix Spike (3072571)		**Source: 45344**		*Prepared: 07/31/14*		*Analyzed: 08/01/14*				
Alachlor	0.0022	0.0002	mg/L	0.002	< MRL	113	70-130			
Aldrin	0.0020	0.0001	mg/L	0.002	< MRL	102	70-130			
Atrazine	0.0026	0.0001	mg/L	0.002	< MRL	132	70-130			
Benzo(a)pyrene	0.0019	0.00002	mg/L	0.002	< MRL	100	70-130			
Butachlor	0.0023	0.0001	mg/L	0.002	< MRL	118	70-130			
Di(2-ethylhexyl)adipate	0.0024	0.0006	mg/L	0.002	< MRL	123	70-130			
Di(2-ethylhexyl)phthalate	0.0022	0.0006	mg/L	0.002	< MRL	114	70-130			
Dieldrin	0.0022	0.0001	mg/L	0.002	< MRL	114	70-130			
Endrin	0.0022	0.00001	mg/L	0.002	< MRL	115	70-130			
gamma-BHC (Lindane)	0.0022	0.00002	mg/L	0.002	< MRL	112	70-130			
Heptachlor	0.0021	0.00004	mg/L	0.002	< MRL	110	70-130			
Heptachlor epoxide	0.0021	0.00002	mg/L	0.002	< MRL	106	70-130			
Hexachlorobenzene	0.0020	0.0001	mg/L	0.002	< MRL	105	70-130			
Hexachlorocyclopentadiene	0.0024	0.0001	mg/L	0.002	< MRL	124	70-130			
Methoxychlor	0.0023	0.0001	mg/L	0.002	< MRL	117	70-130			
Metolachlor	0.0023	0.0001	mg/L	0.002	< MRL	120	70-130			
Metribuzin	0.0026	0.0001	mg/L	0.002	< MRL	132	70-130			
Propachlor	0.0024	0.0001	mg/L	0.002	< MRL	124	70-130			
Simazine	0.0024	0.00007	mg/L	0.002	< MRL	123	70-130			
Blank (3072575)		**Source: 45344**		*Prepared & Analyzed: 07/31/14*						
Alachlor	<0.0002	0.0002	mg/L				-			
Aldrin	<0.0001	0.0001	mg/L				-			
Atrazine	<0.0001	0.0001	mg/L				-			
Benzo(a)pyrene	<0.00002	0.00002	mg/L				-			
Butachlor	<0.0001	0.0001	mg/L				-			
Di(2-ethylhexyl)adipate	<0.0006	0.0006	mg/L				-			
Di(2-ethylhexyl)phthalate	<0.0006	0.0006	mg/L				-			
Dieldrin	<0.0001	0.0001	mg/L				-			
Endrin	<0.00001	0.00001	mg/L				-			
gamma-BHC (Lindane)	<0.00002	0.00002	mg/L				-			
Heptachlor	<0.00004	0.00004	mg/L				-			
Heptachlor epoxide	<0.00002	0.00002	mg/L				-			
Hexachlorobenzene	<0.0001	0.0001	mg/L				-			
Hexachlorocyclopentadiene	<0.0001	0.0001	mg/L				-			
Methoxychlor	<0.0001	0.0001	mg/L				-			
Metolachlor	<0.0001	0.0001	mg/L				-			
Metribuzin	<0.0001	0.0001	mg/L				-			
Propachlor	<0.0001	0.0001	mg/L				-			
Simazine	<0.00007	0.00007	mg/L				-			

EPA 525.2 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193441 - SPE										
LCS (3072576)		**Source: 45344**		*Prepared & Analyzed: 07/31/14*						
Alachlor	<0.0002	0.0002	mg/L	0.0001		98	66-122			
Atrazine	0.0001	0.0001	mg/L	0.0001		114	73-138			
Benzo(a)pyrene	0.00002	0.00002	mg/L	0.00002		120	43-174			
Di(2-ethylhexyl)adipate	0.0007	0.0006	mg/L	0.0006		115	75-147			
Di(2-ethylhexyl)phthalate	0.0007	0.0006	mg/L	0.0006		117	54-149			
Endrin	0.00002	0.00001	mg/L	0.00001		210	42-294			
gamma-BHC (Lindane)	0.00002	0.00002	mg/L	0.00002		110	73-150			
Heptachlor	0.00004	0.00004	mg/L	0.00004		100	65-124			
Heptachlor epoxide	0.00002	0.00002	mg/L	0.00002		105	46-163			
Hexachlorobenzene	<0.0001	0.0001	mg/L	0.0001		83	62-114			
Hexachlorocyclopentadiene	<0.0001	0.0001	mg/L	0.0001		97	51-102			
Methoxychlor	0.0001	0.0001	mg/L	0.0001		109	51-111			
Metolachlor	0.0001	0.0001	mg/L	0.0001		102	61-116			
LCS (3072577)		**Source: 45344**		*Prepared & Analyzed: 07/31/14*						
Alachlor	0.0023	0.0002	mg/L	0.002		113	70-130			
Aldrin	0.0019	0.0001	mg/L	0.002		96	70-130			
Atrazine	0.0026	0.0001	mg/L	0.002		128	70-130			
Benzo(a)pyrene	0.0019	0.00002	mg/L	0.002		95	70-130			
Butachlor	0.0023	0.0001	mg/L	0.002		113	70-130			
Di(2-ethylhexyl)adipate	0.0023	0.0006	mg/L	0.002		114	70-130			
Di(2-ethylhexyl)phthalate	0.0022	0.0006	mg/L	0.002		111	70-130			
Dieldrin	0.0021	0.0001	mg/L	0.002		107	70-130			
Endrin	0.0020	0.00001	mg/L	0.002		100	70-130			
gamma-BHC (Lindane)	0.0021	0.00002	mg/L	0.002		106	70-130			
Heptachlor	0.0020	0.00004	mg/L	0.002		102	70-130			
Heptachlor epoxide	0.0019	0.00002	mg/L	0.002		94	70-130			
Hexachlorobenzene	0.0020	0.0001	mg/L	0.002		100	70-130			
Hexachlorocyclopentadiene	0.0019	0.0001	mg/L	0.002		97	70-130			
Methoxychlor	0.0019	0.0001	mg/L	0.002		94	70-130			
Metolachlor	0.0024	0.0001	mg/L	0.002		118	70-130			
Metribuzin	0.0025	0.0001	mg/L	0.002		127	70-130			
Propachlor	0.0025	0.0001	mg/L	0.002		125	70-130			
Simazine	0.0024	0.00007	mg/L	0.002		120	70-130			

EPA 525.2 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193441 - SPE										
Reference (3072578)		**Source: 45357**		*Prepared & Analyzed: 07/31/14*						
Alachlor	0.0010	0.0002	mg/L	0.001		95	70-130			
Aldrin	0.0009	0.0001	mg/L	0.001		92	70-130			
Atrazine	0.0011	0.0001	mg/L	0.001		112	70-130			
Benzo(a)pyrene	0.00095	0.00002	mg/L	0.001		95	70-130			
Butachlor	0.0010	0.0001	mg/L	0.001		105	70-130			
Di(2-ethylhexyl)adipate	0.0012	0.0006	mg/L	0.001		123	70-130			
Di(2-ethylhexyl)phthalate	0.0011	0.0006	mg/L	0.001		112	70-130			
Dieldrin	0.0010	0.0001	mg/L	0.001		98	70-130			
Endrin	0.00090	0.00001	mg/L	0.001		90	70-130			
gamma-BHC (Lindane)	0.00093	0.00002	mg/L	0.001		93	70-130			
Heptachlor	0.00092	0.00004	mg/L	0.001		92	70-130			
Heptachlor epoxide	0.00086	0.00002	mg/L	0.001		86	70-130			
Hexachlorobenzene	0.0010	0.0001	mg/L	0.001		98	70-130			
Hexachlorocyclopentadiene	0.0012	0.0001	mg/L	0.001		116	70-130			
Methoxychlor	0.0008	0.0001	mg/L	0.001		83	70-130			
Metolachlor	0.0010	0.0001	mg/L	0.001		102	70-130			
Metribuzin	0.0010	0.0001	mg/L	0.001		95	70-130			
Propachlor	0.0011	0.0001	mg/L	0.001		114	70-130			
Simazine	0.0011	0.00007	mg/L	0.001		108	70-130			
Reference (3072579)		**Source: 45357**		*Prepared: 07/31/14 Analyzed: 08/01/14*						
Alachlor	0.0010	0.0002	mg/L	0.001		98	70-130			
Aldrin	0.0010	0.0001	mg/L	0.001		97	70-130			
Atrazine	0.0011	0.0001	mg/L	0.001		113	70-130			
Benzo(a)pyrene	0.0010	0.00002	mg/L	0.001		102	70-130			
Butachlor	0.0010	0.0001	mg/L	0.001		105	70-130			
Di(2-ethylhexyl)adipate	0.0012	0.0006	mg/L	0.001		121	70-130			
Di(2-ethylhexyl)phthalate	0.0011	0.0006	mg/L	0.001		112	70-130			
Dieldrin	0.0010	0.0001	mg/L	0.001		101	70-130			
Endrin	0.0010	0.00001	mg/L	0.001		101	70-130			
gamma-BHC (Lindane)	0.00099	0.00002	mg/L	0.001		99	70-130			
Heptachlor	0.0010	0.00004	mg/L	0.001		102	70-130			
Heptachlor epoxide	0.00095	0.00002	mg/L	0.001		95	70-130			
Hexachlorobenzene	0.0010	0.0001	mg/L	0.001		101	70-130			
Hexachlorocyclopentadiene	0.0013	0.0001	mg/L	0.001		126	70-130			
Methoxychlor	0.0010	0.0001	mg/L	0.001		97	70-130			
Metolachlor	0.0010	0.0001	mg/L	0.001		104	70-130			
Metribuzin	0.0010	0.0001	mg/L	0.001		99	70-130			
Propachlor	0.0011	0.0001	mg/L	0.001		109	70-130			
Simazine	0.0011	0.00007	mg/L	0.001		107	70-130			

EPA 525.2 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193441 - SPE										
LCS (3073307)		**Source: 45344**		*Prepared: 07/31/14*		*Analyzed: 08/01/14*				
Simazine	0.00008	0.00007	mg/L	0.00007		116	66-118			

EPA 548.1 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193402 - SPE										
Matrix Spike (3071975)		**Source: 45336**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	0.10	0.0090	mg/L	0.1	< MRL	100	70-142			
Matrix Spike (3071976)		**Source: 45336**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	0.11	0.0090	mg/L	0.1	< MRL	108	70-142			
Matrix Spike Dup (3071977)		**Source: 45336**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	0.10	0.0090	mg/L	0.1	< MRL	103	70-142			
Blank (3071978)		**Source: 45336**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	<0.0090	0.0090	mg/L							
LCS (3071979)		**Source: 45336**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	<0.0090	0.0090	mg/L	0.009		96	38-161			
LCS (3071980)		**Source: 45336**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	0.12	0.0090	mg/L	0.1		115	70-142			
Reference (3071981)		**Source: 45337**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	0.054	0.0090	mg/L	0.05		108	70-130			
Reference (3071982)		**Source: 45337**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	0.049	0.0090	mg/L	0.05		98	70-130			

EPA 548.1 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193402 - SPE										
Reference (3071983)		**Source: 45337**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	0.054	0.0090	mg/L	0.05		107	70-130			

EPA 549.2 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193311 - SPE										
Reference (3070648)		**Source: 45201**		*Prepared: 07/21/14*		*Analyzed: 07/30/14*				
Diquat	0.0019	0.0004	mg/L	0.002		96	80-120			
Reference (3070649)		**Source: 45201**		*Prepared: 07/21/14*		*Analyzed: 07/30/14*				
Diquat	0.0048	0.0004	mg/L	0.005		96	80-120			
LCS (3070650)		**Source: 45316**		*Prepared: 07/29/14*		*Analyzed: 07/30/14*				
Diquat	0.0040	0.0004	mg/L	0.005		79	70-130			
Blank (3070652)		**Source: 45316**		*Prepared: 07/29/14*		*Analyzed: 07/30/14*				
Diquat	<0.0004	0.0004	mg/L							
LCS (3070653)		**Source: 45316**		*Prepared: 07/29/14*		*Analyzed: 07/30/14*				
Diquat	<0.0004	0.0004	mg/L	0.0004		45	21-161			
Matrix Spike (3070654)		**Source: 45316**		*Prepared: 07/29/14*		*Analyzed: 07/30/14*				
Diquat	0.0039	0.0004	mg/L	0.005	< MRL	78	70-130			
Matrix Spike (3070655)		**Source: 45316**		*Prepared: 07/29/14*		*Analyzed: 07/30/14*				
Diquat	0.0033	0.0004	mg/L	0.005	< MRL	66	70-130			
Matrix Spike Dup (3070656)		**Source: 45316**		*Prepared: 07/29/14*		*Analyzed: 07/30/14*				
Diquat	0.0037	0.0004	mg/L	0.005	< MRL	73	70-130			

EPA-5 1613B-Tetras - Quality Control

Pace Analytical Services, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 15180 - 1613										
Blank (BLANK-41575)				*Prepared: 08/04/14 Analyzed: 08/05/14*						
Dioxin	ND	0.0000000050	mg/L							
LCS (LCS-41576)				*Prepared: 08/04/14 Analyzed: 08/05/14*						
Dioxin	0.00000019	0.0000000050	mg/L	200			73.0-146.0			
LCSD (LCSD-41577)		**Source: ALCS-41578**		*Prepared: 08/04/14 Analyzed: 08/05/14*						
Dioxin	0.00000019	0.0000000050	mg/L	200	0.0000001		73.0-146.0	186.1	0	

Notes and Definitions

N4	[Undefined]
N1	See case narrative.
M2	Matrix spike recovery was low; the associated blank spike recovery was acceptable.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
A7	Micro sample received without adequate headspace.
BLK	Method Blank
LCS/Dup	Laboratory Control Sample/Laboratory Fortified Blank/Duplicate
MS/Dup	Matrix Spike/Duplicate
Dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Legend Technical Services of Arizona, Inc.

PO Number: 4072270
Sampled By: Chao AuChiu
Compliance?: Yes No

SUBCONTRACT ORDER
4072270

SENDING LABORATORY:

Legend Technical Services of Arizona, Inc.
17631 North 25th Avenue
Phoenix, AZ 85023
Phone: 602-324-6100
Fax: 602-324-6101
Project Manager: Barbara Frank

RECEIVING LABORATORY:

Radiation Safety Engineering
3245 N. Washington
Chandler, AZ 85225
Phone :(480) 897-9459
Fax: (480) 892-5446

Analysis	Due	Expires	Sample Type (circle one)	Sample Comments
Sample ID: 4072270-01	**Drinking W**	**Sampled:07/24/14 14:00**	**Grab Composite N/A**	
Radium 228	08/05/14 09:00	01/20/15 14:00		
Radium 226	08/05/14 09:00	01/20/15 14:00		
Gross Alpha	08/05/14 09:00	08/03/14 14:00		

Containers Supplied:
06_1000mL Plastic pH <2 w/ HNO3 (E)
06_1000mL Plastic pH <2 w/ HNO3 (F)
06_1000mL Plastic pH <2 w/ HNO3 (G)
06_1000mL Plastic pH <2 w/ HNO3 (H)

Released By (Print & Sign)	Date	Time	Received By (Print & Sign)	Date	Time
Heather Ward x HWard	7/25/14	1240	C. Crawford x Cecil Crawford	7-25-14	1240
C. Crawford x Cecil Crawford	7-25-14	1502	Michelle Harmon	7/25/14	1502

Page 2 of

Legend Technical Services of Arizona, Inc.

PO Number: 4072270

SUBCONTRACT ORDER
4072270

SENDING LABORATORY:

Legend Technical Services of Arizona, Inc
17631 North 25th Avenue
Phoenix, AZ 85023
Phone: 602-324-6100
Fax: 602-324-6101
Project Manager: Barbara Frank

RECEIVING LABORATORY:

Eurofins Eaton Analytical, Inc.
110 S. Hill Street
South Bend, IN 46617
Phone :(800) 332-4345
Fax: (574) 233-8207

Analysis	Due	Expires	Sample Type (circle one)	Sample Comments
Sample ID: 4072270-01	**Drinking W**	**Sampled: 07/24/14 14:00**	**Grab Composite**	**N/A**
549-Subcontract	08/05/14 09:00	07/31/14 14:00		
548-Subcontract	08/05/14 09:00	07/31/14 14:00		
525-Subcontract	08/05/14 09:00	08/07/14 14:00		
515-Subcontract	08/05/14 09:00	08/07/14 14:00		
504-Subcontract	08/05/14 09:00	08/07/14 14:00		

Containers Supplied:
07_1000mL Amber Glass pH <2 w/ SS & HCl (C)
07_1000mL Amber Glass pH <2 w/ SS & HCl (D)
20_500mL Amber Plastic w/ S.T. & H2SO4 (I)
11_125mL Amber Glass Bottle w/ Sodium Sulfite (J)
11_125mL Amber Glass Bottle w/ Sodium Sulfite (K)
10_40mL Sodium Thiosulfate Clear Vial Cool to 4° C (T)
10_40mL Sodium Thiosulfate Clear Vial Cool to 4° C (U)
10_40mL Sodium Thiosulfate Clear Vial Cool to 4° C (V)
10_40mL Sodium Thiosulfate Clear Vial Cool to 4° C (W)

Heather Ward	X HWard	7/25/14	1630	FEDEX	X	7/25/14	1630
Released By (Print & Sign)		Date	Time	Received By (Print & Sign)		Date	Time
FEDEX	X						
Released By (Print & Sign)		Date	Time	Received By (Print & Sign)		Date	Time

Page 1 of 2

Legend Technical Services of Arizona, Inc.

SUBCONTRACT ORDER
4072270

PO Number: 4072270
Sampled By: Chao AuChiu
Compliance?: Yes No

SENDING LABORATORY:

Legend Technical Services of Arizona, Inc.
17631 North 25th Avenue
Phoenix, AZ 85023
Phone: 602-324-6100
Fax: 602-324-6101
Project Manager: Barbara Frank

RECEIVING LABORATORY:

Fiberquant Analytical Services
5025 S. 33rd Street
Phoenix, AZ 85040
Phone :(602) 276-6139
Fax: (602) 276-4558

Analysis	Due	Expires	Sample Type (circle one)	Sample Comments
Sample ID: 4072270-01 Drinking W:	Sampled: 07/24/14 14:00		Grab Composite N/A	
Asbestos	08/05/14 09:00	07/26/14 14:00		
Containers Supplied: 03_1000mL Plastic Cool to 4° C (M)				

Heather Ward × HWard 7/25/14 1240 C. Crawford × Ceci Crawford 7-25-14 1240
Released By (Print & Sign) Date Time Received By (Print & Sign) Date Time

C. Crawford × Ceci Crawford 7-25-14 1400 [signature] 7-25-14 1400
Released By (Print & Sign) Date Time Received By (Print & Sign) Date Time

Review of Analysis Request (Initials) [initials]

Page 1 of 2

4072270

CHAIN OF CUSTODY RECORD

LEGEND Technical Services, Inc
www.legend-group.com

☐ 17631 N. 25th Avenue • Phoenix, AZ 85023 • (602) 324-6100 • Fax (602) 324-6101
☐ 4585 S. Palo Verde Rd, Ste 423 • Tucson, AZ 85706 • (520) 327-1234 • Fax (520) 327-0518

7/25/14 AK

Page 1 of 1

Please Print Clearly

CLIENT INFORMATION

Client Name	Address	City	State	Zip	Phone	Fax Number or Email Address
Carollo Engineers	4600 E Washington Street Suite 500	Phoenix	AZ	85034	602-236-2500	bjeppson@carollo.com

Project Name	Project Number/PWS	Contact	P.O No	Fax Results ☐	QC Report ☐ EDD ☐
New Source	9363 C.00	Brad Jeppson		Email Results ☐	Special Detection Limits ☐

SAMPLE TYPE CODES

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

TURN AROUND TIME

Laboratory Authorization Required for Rush

☐ Standard 15-20 Working Days
☐ Other _____ (Laboratory Authorization Required)

Client's Sample Identification	Date	Time	Sample Location/POE/DWR	Composite	Grab	Sample Type	Compliance	No. of Containers	Lab Use Only	Metals*	Asbestos	Cyanide	Nitrate, Nitrite	Langlier Index**	Total Coliform	Sulfate	Fluoride	Total Hardness***	505, 515, 525	531, 547, 548	549, Dioxin	524 , 504	Gross Alpha	Radium 226/228	
Oak Creek ~~Page Springs~~	7/24	1200	Page Springs		X	DW		32		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-01
Travel Blank (Do Not Open)	7/24				X	DI		3														X				-02

TO ENSURE COMPLETION OF ANALYSIS, SAMPLES MUST BE RECEIVED AT LEAST 2 HOURS PRIOR TO THE HOLD TIME EXPIRATION

Comments / Special Instructions: *Metals= Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Hg, Ni, Se, Na, Tl **Langlier Index= Ca, Alkalinity, TDS, pH ***Total Hardness= Ca, Mg

If sample source is chlorinated, different sample containers/preservatives must be used for dechlorination.

SAMPLE CONDITION UPON RECEIPT (Lab Use)		
No. of Containers	35	
Temperature	5.9°C	
Custody Seals	Y	(N)
Seals Intact	Y	N
Preserved	(Y)	N

	RELINQUISHED BY			SAMPLES RECEIVED BY	
①	Sampler Signature: Chao An Chiu	Date: 7-25	Signature: Mike Lavis	Date: 7/25/14	
	Sampler Printed Name	Time: 910	Printed Name	Time: 910	
②	Signature	Date	Signature	Date	
	Printed Name	Time	Printed Name	Time	
③	Signature	Date	Signature	Date	
	Printed Name	Time	Printed Name	Time	

WHITE-LAB YELLOW-CLIENT

FORM GEN-170 (05/06)

Legend Technical Services of Arizona, Inc. **PO Number:** 4072270

SUBCONTRACT ORDER
4072270

SENDING LABORATORY:

Legend Technical Services of Arizona, Inc.
17631 North 25th Avenue
Phoenix, AZ 85023
Phone: 602-324-6100
Fax: 602-324-6101
Project Manager: Barbara Frank

RECEIVING LABORATORY:

Legend Technical Services, St. Paul AZ0557
88 Empire Drive
Saint Paul, MN 55103
Phone :(800) 826-8553
Fax: (651) 642-1239

Project: New source

Client: City of Sedona

Analysis	Due	Expires	Leach Date & Time	Sample Comments
Sample ID: 4072270-01 Drinking Wat		**Sampled: 07/24/14 14:00**		
505-Subcontract	08/05/14 09:00	08/07/14 14:00		

Containers Supplied:
10_40mL Sodium Thiosulfate Clear Vial Cool to 4° C (AA)
10_40mL Sodium Thiosulfate Clear Vial Cool to 4° C (AB)
10_40mL Sodium Thiosulfate Clear Vial Cool to 4° C (AC)

For method 608: _____pH check _____Cl2 check
Special Instructions/Comments:

* The sample matrix for leachates supplied to the MN laboratory reflects the matrix of the original sample received by LEGEND AZ.
**For matrices other than Drinking Water requiring drinking water methods (such as EPA 505, etc.), a 10x dilution is acceptable. Appropriate data qualifiers are to be used.

Released By (Print & Sign)	Date	Time	Received By (Print & Sign)	Date	Time
Heather Ward	7/28/14	1630	FedEx	7/28/14	1630

Legend Technical Services of Arizona, Inc. **PO Number:** 4072270

SUBCONTRACT ORDER
4072270

SENDING LABORATORY:

Legend Technical Services of Arizona, Inc.
17631 North 25th Avenue
Phoenix, AZ 85023
Phone: 602-324-6100
Fax: 602-324-6101
Project Manager: Barbara Frank

RECEIVING LABORATORY:

Pace Analytical Services, Inc.
1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone :(612) 607-1700
Fax: (612) 607-6444

Analysis	Due	Expires	Sample Type (circle one)	Sample Comments
Sample ID: 4072270-01	**Drinking W.**	**Sampled:07/24/14 14:00**	**Grab Composite**	**N/A**
1613-Subcontract	08/05/14 09:00	10/22/14 14:00		
Containers Supplied:				
13_1000mL Amber Glass pH <2 w/ HCl (A)				

Heather Ward	x HWard	7/28/14	1630	FEDEX	x	7/28/14	1630
Released By (Print & Sign)		Date	Time	Received By (Print & Sign)		Date	Time
FEDEX	x						
Released By (Print & Sign)		Date	Time	Received By (Print & Sign)		Date	Time

Page 2 of 2

LEGEND
Technical Services, Inc.
www.legend-group.com

MISCELLANEOUS REPORT DOCUMENTS NOT SCANNED IN

- SUB-CONTRACTOR'S ORIGINAL REPORTS FOR QC
- STATE FORMS
- INVOICE COPY
- PAYMENT FORMS OR RECEIPTS

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. · CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5448

Radiochemical Activity in Water (pCi/L)

Legend Technical Services of Arizona
17631 N. 25th Avenue
PHOENIX, AZ 85023

Sampling Date: July 25, 2014
Sample Received: July 25, 2014
Analysis Completed: August 08, 2014

Sample ID	Gross Alpha Activity Method 600/00-02 (pCi/L)	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
4072270-01	1.4 ± 0.5	< 0.5	< 0.7	< 0.7

Date of Analysis	7/28/2014	8/1/2014	8/1/2014	8/1/2014

Robert L. Metzger, Ph.D., C.H.P.

Laboratory License Number: AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

July 24, 2014 (Sample Date) 14:00 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring Date Q1 collected: _____

☐ Quarterly Date Q2 collected: _____

☐ Composite of four quarterly samples Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002	7/28/2014	1.4 ± 0.5		
7500 - Rn			Radon	4004				
00-07	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	8/1/2014	< 0.7		
GammaRay HPGE		1 pCi/L	Radium 226	4020	8/1/2014	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	8/1/2014	< 0.7		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE49757

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: 4072270-01

Authorized Signature: Robert L. Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

Legend Technical Services of Arizona, Inc.

PO Number: 4072270
Sampled By: Chao AuChiu
Compliance?: Yes No

SUBCONTRACT ORDER
4072270

SENDING LABORATORY:

Legend Technical Services of Arizona, Inc.
17631 North 25th Avenue
Phoenix, AZ 85023
Phone: 602-324-6100
Fax: 602-324-6101
Project Manager: Barbara Frank

RECEIVING LABORATORY:

Radiation Safety Engineering
3245 N. Washington
Chandler, AZ 85225
Phone :(480) 897-9459
Fax: (480) 892-5446

Analysis	Due	Expires	Sample Type (circle one)	Sample Comments
Sample ID: 4072270-01	**Drinking W**	**Sampled: 07/24/14 14:00**	**Grab Composite N/A**	
Radium 228	08/05/14 09:00	01/20/15 14:00		
Radium 226	08/05/14 09:00	01/20/15 14:00		
Gross Alpha	08/05/14 09:00	08/03/14 14:00		

Containers Supplied:
06_1000mL Plastic pH <2 w/ HNO3 (E)
06_1000mL Plastic pH <2 w/ HNO3 (F)
06_1000mL Plastic pH <2 w/ HNO3 (G)
06_1000mL Plastic pH <2 w/ HNO3 (H)

49757

Released By (Print & Sign)	Date	Time	Received By (Print & Sign)	Date	Time
Heather Ward X HWard	7/25/14	1240	C. Crawford X Cruf Crawford	7-25-14	1240
C. Crawford X Cruf Crawford	7-25-14	1502	Michelle Hayworth	7/25/14	1502

FIBERQUANT ANALYTICAL SERVICES

Determination of Asbestos in Water using TEM

JobNumber: 201407363

Client: LEGEND TECHNICAL SVC of AZ

BOLIN LABORATORIES INC
17631 N 25TH AVE
PHOENIX, AZ 85023-0000
Office Phone: (602) 324-6100
FAX: (602) 324-6101

 # Samples: 1 TEM **Rec:** 7/25/2014 **Method:** EPA 100.1 TEM Water
Client Job: 4072270 **PO Number:** 4072270
Report Date: 8/1/2014 **Date Analyzed:** 8/1/2014 **Routing Number:** -

Method and Analysis Information: **Fiberquant Internal SOP:** TEMw

Samples are analyzed using the protocols given in EPA method 100.1, as amended by the 1993 EPA guidence. Samples should be un-preserved water in 1 L containers having about 200 ml headspace for shaking. There is a 48 hr deadline between the time the sample is taken and the time it is filtered to minimize loss of asbestos fibers due to biological interference. Each sample is shook for 1 minute, and ultrasonicated for at least 10 minutes, shaking every 5 minutes to disperse any fibers that are present. A measured amount of sample is then filtered through a 0.1 um pore size polycarbonate filter, backed by a 5 um pore size MCE filter and a glass frit. Several volumes of liquid may be filtered for each sample in order to assure that a properly loaded sample is obtained. A portion of each resulting filter (and blanks) is then coated with 100-200 um of carbon in a Denton 502A Carbon Evaporator. The carbon encapsulates all of the larger and most of the smaller particulate on the filter. Three mm square pieces of the coated filter are placed on three or more copper TEM grids, and the original filter material is dissolved away in a Jaffe wick and/or condensation washer. The finished replica in carbon containing the particulate is then examined on a JEOL 1200 or Phillips CM 10 transmission electrom microscope at 10,000 to 20,000x magnification. All asbestos fibers >10um in length are tabulated and characterized as asbestos or non-asbestos using a combination of morphology, electron diffraction characteristics, and elemental composition. The result is calculated in millions of fibers per liter (MFL). The grid is scanned until 20 grid openings have been observed, or until an analytical sensitivity (the hypothetical observation of one fiber) of 0.2 MFL has been reached. The nominal 20 grid opening cut-off is used for those samples containing so much non-asbestos particulate that the desired analytical sensitivity is impractical to attain.

The method was designed to determine EPA drinking water compliance. The standard for drinking water is <7 MFL as measured by this method. Fiberquant maintains Arizona Environmental Laboratory license #AZ0633 covering EPA Method 100.1.

Overall, the coefficient of variation can be expected to be approximately 0.5 for analyses in which >20 asbestos fibers have been counted, ranging up to 1.00 for analyses in which only a few asbestos fibers are counted.

The analysis was performed under an ongoing quality assurance program which includes: Lab blanks, prepared with each set of samples and analyzed. Each analyst has suitable background credentials, such as at least a bachelor's degree in geology or chemistry, and has undergone extensive 2-6 month training in TEM techniques and mineralogy specific to TEM asbestos analysis before being allowed to perform client analyses. Unknown reference samples are routinely identified to ensure that each analyst can collect and correctly interpret TEM information. The TEM is aligned and its performance checked daily. Magnification, electron diffraction pattern size, and analytical performance characteristics are calibrated routinely. Samples are re-analyzed sometimes by the same analyst and sometimes by a different analyst in order to determine accuracy and precision. The total of QC analyses (blanks + recounts) are greater than 10% of analyzed samples. Each analyst participates in interlab round robins and proficiency testing in order to show correlation to other lab's analyses. Because TEM samples are not analyzed in batches, which would be traditional for most water analyses, and not every sample has a duplicate or replicate analysis associated with it, it is not possible to include a traditional QC report with the analysis. QC reports are produced monthly, and are available on request. All quality checks performed for these samples were in control except as detailed in the "Analytical Notes" below. Fiberquant is accredited by NVLAP to perform TEM analysis of asbestos in air samples, and has been found to be proficient in the EPA water proficiency program. Accreditation or proficiency does not imply endorsement by the EPA, any other United States governmental agency or any private agency or association. Each lab analysis refers only to the sample tested, and may not, due to the sampling process, be representative of the material sampled. This report may not be reproduced except in full, without the approval of Fiberquant Analytical Services.

Some results may have been calculated using client supplied data, such as volume or area sampled, for which Fiberquant assumes no liability for accuracy.

Job Analysis Notes:

Sampled:	7/24/2014	14:00	**By:**	AuChiu, Chao
Received:	7/25/2014	14:02		
Filtered:	7/25/2014	14:30		
Analyzed:	8/1/2014	14:05		

Analysis Results:

Lab Number	Client Number	Date	Condition	Filtered Vol (ml)	#GOs	GO Area	MFL>10um	AsbestosType	Sensitivity (MFL>10um)
							Job Number:		201407363
2014-07363-1	4072270-01	7/24/2014	acceptable	20	20	0.00993	<0.2	-	0.2

Uwe Steimle

Analyst: UWE .. STEIMLE

Printed: 01-Aug-14

Original Print Date: 01-Aug-14

Larry S. Pierce

Larry S. Pierce, Approved Accreditation Signatory

Job Number:	201407363

QA Report: Job Number: 201407363

1. Calibrations	
TEM magnification. date of last.	7/18/2014
TEM camera constant. date of last.	7/29/2014
EDS performance check (k-factors, resolution, low-e perf.). date of last.	4/1/2014
TEM stage drift, minimum beam size. date of last.	4/1/2014
plasma asher. date of last.	3/12/2014

2. Blanks (1/25 samples required)	Not Requred This Job

3. Recounts (1/17 samples required)	Not Requred This Job

4. Analyst Performance	
NVLAP proficiency testing	Current
verified counts. cum. % true positives	92.6
verification of diffraction pattern identifications. cum. % correct	100.0
verification of EDS spectra. cum. % correct	100.0

Fiberquant Analytical Services

Fiberquant, Inc. 5025 S. 33rd St., Phoenix, Arizona 85040 602-276-6139 Fax 602-276-4558

TEM Water Sample Count Sheet

Method: EPA 100.1 (600/4-84-043)

Sample Information

Client: LEGEND TECHNICAL SVC of AZ

Client Smp #: **4072270-01**

Lab #: **2014-07363- 1** Vol Filtered (ml) 20

___ MCE ✓ PC Pore um: ___ 0.4 ___ 0.22 ✓ 0.1

Grid Orientation
Draw Asym Spot

Grid Information

#Grids Prepped: 3 GO Area: 0.00993 #GOs to Count 20

System Information

Est. % Loading 5

TEM: ___ Jeol N ✓ Jeol S Mag: 20K or 12K Alignment: ✓ checked EDS: ___ calib ✓ not used

Ac. Volatage: ___100keV ✓ 120keV ___ keV

~~E6~~	E7	E8	E9	E10	E11	E12	E13	E14	E15
F6	F7	F8	F9	F10	F11	F12	F13	F14	F15
G6	~~G7~~	G8	G9	G10	G11	G12	G13	G14	G15
H6	H7	H8	H9	H10	H11	H12	H13	H14	H15
I6	I7	~~I8~~	I9			I12	I13	*I14*	*I15*
J6	J7	J8	~~J9~~			J12	J13	J14	J15
K6	~~K7~~	K8	~~K9~~	K10	K11	~~K12~~	K13	K14	K15
L6	L7	L8	L9	~~L10~~	L11	L12	L13	L14	L15
M6	M7	~~M8~~	M9	~~M10~~	M11	M12	M13	M14	M15
~~N6~~	N7	N8	N9	N10	N11	~~N12~~	N13	N14	N15

Grid Map
X denotes GO's on 1st grid; O denotes GO's on 2nd

Fiber Counts:

Grid Storage # 1346 C3 Acceptable Prep ✓ (>50% coverage, >50% intact, no folds, <5% opaque, 20 good GOs

Location		Str. Type				Size		Morphology			Diffraction Data							EDXA Data							Ident.'n	
GO #	STR #	FIBER	BUNDLE	MATRIX	CLUSTER	Length	Width	TUBULAR	BLOCKY	Negative #	5.2 A Row Spacing	Estimated In-Row Spacing	CHRY	AMPH	NONASB	NO PATT	Negative #	Na	Mg	Si	Ca	Fe	Other	File #	ASBTYPE	NONASB
N6	N5																									
M8	↓																									
L10																										
K12																										
J15																										
J9																										
K7	↓																									

Grid Storage # 1346 C5 Acceptable Prep ✓ (>50% coverage, >50% intact, no folds, <5% opaque, 20 good GOs

N15	N5																									
L14	↓																									
J13																										
H12																										
F11																										
F9																										
G8	↓																									

Grid Storage # 1346 C7 Acceptable Prep ✓ (>50% coverage, >50% intact, no folds, <5% opaque, 20 good GOs

E6	N5																									
G7	↓																									
I8																										
K9																										
M10																										
N8	↓																									

Abbreviations: NSD=No structures Detected; CH=chrysotile; GR=grunnerite; AN=anthophyllite; TR=tremolite; AP=amphibole; GO=grid opening; NA=non-asbestos

Notes:

Totals:	CH > 10	0	AP > 10	0	GOs Counted	20	*Results:*	Str/mm2	<5	MFL	<0.2

Analyst: Uwe Steimle ***Date:*** 8-1-14

Legend Technical Services of Arizona, Inc.

PO Number: 4072270
Sampled By: Chao AuChiu
Compliance?: Yes No

SUBCONTRACT ORDER
4072270

SENDING LABORATORY:

Legend Technical Services of Arizona, Inc.
17631 North 25th Avenue
Phoenix, AZ 85023
Phone: 602-324-6100
Fax: 602-324-6101
Project Manager: Barbara Frank

RECEIVING LABORATORY:

Fiberquant Analytical Services
5025 S. 33rd Street
Phoenix, AZ 85040
Phone :(602) 276-6139
Fax: (602) 276-4558

Analysis	Due	Expires	Sample Type (circle one)	Sample Comments
Sample ID: 4072270-01	**Drinking W**	**Sampled:07/24/14 14:00**	**Grab Composite N/A**	
Asbestos	08/05/14 09:00	07/26/14 14:00		

Containers Supplied:
03_1000mL Plastic Cool to 4° C (M)

2014073 63

Released By (Print & Sign)	Date	Time	Received By (Print & Sign)	Date	Time
Heather Ward X Heather Ward	7/25/14	1240	C. Crawford X Cecil Crawford	7-25-14	1240
C. Crawford X Cecil Crawford	7-25-14	1400		7-25-14	1400

Review of Analysis Request (Initials)

LEGEND
Technical Services, Inc.
www.legend-group.com

17631 North 25th Avenue • Phoenix, AZ 85023
P (602) 324-6100 • F (602) 324-6101

11 August 2014

Brad D, Jeppson
Carollo Engineers, Inc.
4600 E Washington St. #500
Phoenix, AZ 85034

RE: New Source

Laboratory Work Order No.: 4072275

Legend Technical Services of Arizona, Inc. is pleased to provide the enclosed analytical results for the aforementioned project. These results relate only to the items tested. This cover letter and the accompanying pages represent the full report for these analyses and should only be reproduced in full. Samples for this project were received by the laboratory on 07/25/14 09:10.

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

All samples will be retained by LEGEND for 30 days from the date of this report and then discarded unless other arrangements are made.

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

Sincerely,
LEGEND TECHNICAL SERVICES OF ARIZONA, INC.

Barbara Frank

Barbara Frank
Client Services Representative
(602) 324-6100

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Type	Date Sampled	Date Received
Oak Creek Upstream of WWRP	4072275-01	Drinking Water	Grab	07/24/14 16:00	07/25/14 09:10

Sample Condition Upon Receipt:

Temperature: 5.90 C
All samples were received in acceptable condition unless noted otherwise in the case narrative.

Case Narrative:

Holding Times: All holding times were met unless otherwise qualified.
QA/QC Criteria: All analyses met method requirements unless otherwise qualified.
Certifications: AZ(PHX)0004, AZ(TUC)OOO4, AIHA#102982, CDC ELITE Member.
Accreditation is applicable only to the test methods specified on each scope of accreditation held by LEGEND.
Comments: There were no problems encountered during the processing of the samples, unless otherwise noted. All samples were analyzed on a "wet" basis unless designated as "dry weight".

This report contains data that were produced by a subcontracted laboratory certified for the fields of testing performed.

Eurofins Eaton Analytical, Inc. AZ0432
Jim Van Fleit
574.472-5535

Pace Analytica AZ0014
Nate Habte
612.607.6407

Legend Technical Services, St. Paul AZ0557
Bach Pham
651.221.4062

Radiation Safety AZ0462
Pierre Pouquette
480.897.9459

Fiberquant AZ0633
Karen Grant 602.276.6131
Kathy Townsend 602.276.6139

For the Total Coliform, the sample was received without adequate headspace. In order to be analyzed per the method, the sample was aseptically transferred into a larger sterile Colilert bottle and vigorously shaken. An appropriate volume was aseptically transferred back into the original bottle. Brad and Kelly were notified via email on 07/25/14. BF

Brad notified via micro analyst of the positive Total Colilert via email on 07/26/14. BF

Notified Kelly and Brad of the positive Total Colilert via email on 07/28/14. BF

Oak Creek Upstream of WWRP (4072275-01) Drinking Water (Grab) Sampled: 07/24/14 16:00 Received: 07/25/14 09:10

UL#AZ0432

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EPA 504.1									
1,2-Dibromo-3-chloropropane	<0.00002	0.00002	mg/L	1.02	193287	07/28/14 00:00	07/29/14 00:00	EPA 504.1	
1,2-Dibromoethane (EDB)	<0.00001	0.00001	mg/L	1.02	193287	07/28/14 00:00	07/29/14 00:00	EPA 504.1	
EPA 515.3									
2,4,5-TP (Silvex)	<0.0002	0.0002	mg/L	1	193510	07/31/14 00:00	08/04/14 00:00	EPA 515.3	
2,4-D	<0.0001	0.0001	mg/L	1	193510	07/31/14 00:00	08/04/14 00:00	EPA 515.3	
Dalapon	<0.0010	0.0010	mg/L	1	193510	07/31/14 00:00	08/04/14 00:00	EPA 515.3	
Dicamba	<0.0001	0.0001	mg/L	1	193510	07/31/14 00:00	08/04/14 00:00	EPA 515.3	
Dinoseb	<0.0002	0.0002	mg/L	1	193510	07/31/14 00:00	08/04/14 00:00	EPA 515.3	
Pentachlorophenol	<0.00004	0.00004	mg/L	1	193510	07/31/14 00:00	08/04/14 00:00	EPA 515.3	
Picloram	<0.0001	0.0001	mg/L	1	193510	07/31/14 00:00	08/04/14 00:00	EPA 515.3	
Surrogate: SS-2,4-Dichlorophenylacetic acid		*101 %*		*70-130*	*193510*	*07/31/14*	*08/04/14*	*EPA 515.3*	
EPA 525.2									
Alachlor	<0.0002	0.0002	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Aldrin	<0.0001	0.0001	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Atrazine	<0.0001	0.0001	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Benzo(a)pyrene	<0.00002	0.00002	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Butachlor	<0.0001	0.0001	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Di(2-ethylhexyl)adipate	<0.0006	0.0006	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Di(2-ethylhexyl)phthalate	<0.0006	0.0006	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Dieldrin	<0.0001	0.0001	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Endrin	<0.00001	0.00001	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
gamma-BHC (Lindane)	<0.00002	0.00002	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Heptachlor	<0.00004	0.00004	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Heptachlor epoxide	<0.00002	0.00002	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Hexachlorobenzene	<0.0001	0.0001	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Hexachlorocyclopentadiene	<0.0001	0.0001	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Methoxychlor	<0.0001	0.0001	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Metolachlor	<0.0001	0.0001	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Metribuzin	<0.0001	0.0001	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Propachlor	<0.0001	0.0001	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Simazine	<0.00007	0.00007	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Surrogate: SS-2,4,5,6-Tetrachloro-m-xylene		*91 %*		*70-130*	*193441*	*07/31/14*	*07/31/14*	*EPA 525.2*	
Surrogate: SS-4,4'-Dichlorobiphenyl		*100 %*		*70-130*	*193441*	*07/31/14*	*07/31/14*	*EPA 525.2*	
Surrogate: SS-Triphenylphosphate		*99 %*		*70-130*	*193441*	*07/31/14*	*07/31/14*	*EPA 525.2*	

Oak Creek Upstream of WWRP (4072275-01) Drinking Water (Grab) Sampled: 07/24/14 16:00 Received: 07/25/14 09:10

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			UL#AZ0432						
EPA 548.1									
Endothall	<0.0090	0.0090	mg/L	1	193402	07/30/14 00:00	07/31/14 00:00	EPA 548.1	
Surrogate: SS-2,4-Dichlorophenylacetic acid		*80 %*		*54-125*	*193402*	*07/30/14*	*07/31/14*	*EPA 548.1*	
EPA 549.2									
Diquat	<0.0004	0.0004	mg/L	1	193311	07/29/14 00:00	07/30/14 00:00	EPA 549.2	
			Radiation Safety Engineering #AZ0462						
Calculation									
Combined Radium	<0.7		pCi/L	1	NA		08/01/14 00:00	Calculation	
EPA 600/00-02									
Gross Alpha Activity	**1.9 ± 0.7**		pCi/L	1	NA		07/28/14 00:00	EPA 600/00-02	
Gamma Ray HPGE									
Radium 226 Activity	<0.5		pCi/L	1	NA		08/01/14 00:00	Gamma Ray HPGE	
Radium 228 Activity	<0.7		pCi/L	1	NA		08/01/14 00:00	Gamma Ray HPGE	
			Pace Analytical Services, Inc.						
EPA-5 1613B-Tetras									
Dioxin	<0.000000005	0.0000000050	mg/L	1	15169	07/31/14 13:45	08/02/14 05:10	EPA-5 1613B-Tetras	
Surrogate: 13C-2,3,7,8-TCDD		*75 %*		*31.0-137.0*	*15169*	*07/31/14*	*08/02/14*	*EPA-5 1613B-Tetras*	
			Legend Technical Services, Inc. #AZ0557						
PESTICIDES/PCBS 505									
Aroclor 1016	<0.000080	0.000080	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 16:40	EPA 505	
Aroclor 1221	<0.020	0.020	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 16:40	EPA 505	
Aroclor 1232	<0.00050	0.00050	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 16:40	EPA 505	
Aroclor 1242	<0.00030	0.00030	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 16:40	EPA 505	
Aroclor 1248	<0.00010	0.00010	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 16:40	EPA 505	
Aroclor 1254	<0.00010	0.00010	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 16:40	EPA 505	
Aroclor 1260	<0.00020	0.00020	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 16:40	EPA 505	
Chlordane	<0.00020	0.00020	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 16:40	EPA 505	
Toxaphene	<0.0010	0.0010	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 16:40	EPA 505	
Surrogate: Decachlorobiphenyl		*102 %*		*66.7-131*	*B4H0406*	*08/04/14*	*08/04/14*	*EPA 505*	

Carollo Engineers, Inc.	Project: New Source	
4600 E Washington St. #500	Project Number: 07/24/14	**Reported:**
Phoenix, AZ 85034	Project Manager: Brad D, Jeppson	08/11/14 10:41

Oak Creek Upstream of WWRP (4072275-01) Drinking Water (Grab) Sampled: 07/24/14 16:00 Received: 07/25/14 09:10

Legend Technical Services of Arizona, Inc.

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Microbiology									
E. coli	Present		P/A	1	B4G0824	07/25/14 12:35	07/25/14 12:35	SM 9223B	A7, N1
Total Coliforms	Present		P/A	1	B4G0824	07/25/14 12:35	07/25/14 12:35	SM 9223B	A7, N1
Total Metals									
Antimony	<0.0005	0.0005	mg/L	1	B4G0894	07/29/14 16:55	08/01/14 13:22	EPA 200.8	
Arsenic	**0.0059**	0.0010	mg/L	1	B4G0894	07/29/14 16:55	08/01/14 13:22	EPA 200.8	
Barium	**0.23**	0.01	mg/L	1	B4G0895	07/29/14 16:55	07/30/14 13:13	EPA 200.7	
Beryllium	<0.002	0.002	mg/L	1	B4G0895	07/29/14 16:55	07/30/14 13:13	EPA 200.7	
Cadmium	<0.0001	0.0001	mg/L	1	B4G0894	07/29/14 16:55	08/01/14 13:22	EPA 200.8	
Calcium	**34**	1	mg/L	1	B4G0895	07/29/14 16:55	07/30/14 13:13	EPA 200.7	
Chromium	<0.005	0.005	mg/L	1	B4G0895	07/29/14 16:55	07/30/14 13:13	EPA 200.7	
Copper	<0.01	0.01	mg/L	1	B4G0895	07/29/14 16:55	07/30/14 13:13	EPA 200.7	
Lead	<0.0010	0.0010	mg/L	1	B4G0894	07/29/14 16:55	08/01/14 13:22	EPA 200.8	
Magnesium	**17**	1	mg/L	1	B4G0895	07/29/14 16:55	07/30/14 13:13	EPA 200.7	
Mercury	<0.0002	0.0002	mg/L	1	B4H0017	08/01/14 09:18	08/01/14 15:01	EPA 245.1	
Nickel	<0.02	0.02	mg/L	1	B4G0895	07/29/14 16:55	07/30/14 13:13	EPA 200.7	
Selenium	<0.0020	0.0020	mg/L	1	B4G0894	07/29/14 16:55	08/01/14 13:22	EPA 200.8	
Sodium	**5**	1	mg/L	1	B4G0895	07/29/14 16:55	07/30/14 13:13	EPA 200.7	
Thallium	<0.0005	0.0005	mg/L	1	B4G0894	07/29/14 16:55	08/01/14 13:22	EPA 200.8	
Calcium Hardness as CaCO3	**85**	2	mg/L	1	[CALC]	07/29/14 16:55	07/30/14 13:13	SM2340B	
Magnesium Hardness as Ca(	**70**	4	mg/L	1	[CALC]	07/29/14 16:55	07/30/14 13:13	SM2340B	
Total Hardness as CaCO3	**155**	4	mg/L	1	[CALC]	07/29/14 16:55	07/30/14 13:13	SM2340B	
Inorganic Chemistry									
Total Alkalinity as CaCO3	**169**	10	mg/L	1	B4G0843	07/28/14 16:25	07/28/14 16:25	SM 2320 B	
Cyanide, Total	<0.010	0.010	mg/L	1	B4G0872	07/29/14 10:30	07/29/14 14:18	SM 4500 CN E	
Fluoride	<0.10	0.10	mg/L	1	B4G0915	07/30/14 11:05	07/30/14 11:05	SM 4500 F C	
Nitrate as N	<0.20	0.20	mg/L	1	[CALC]	08/01/14 10:35	08/01/14 10:35	Calculation	
Nitrate + Nitrite as N	<0.20	0.20	mg/L	1	B4H0012	08/01/14 10:35	08/01/14 10:35	SM 4500 NO3 F	
Nitrite as N	<0.10	0.10	mg/L	1	B4G0790	07/25/14 15:25	07/25/14 15:25	SM 4500 NO2 B	
pH	**8.7**		pH Units	1	B4G0772	07/25/14 10:55	07/25/14 10:55	SM 4500H B	H5
Temperature	**15.5**		°C	1	B4G0772	07/25/14 10:55	07/25/14 10:55	pH Temperature	H5
Sulfate	<5.0	5.0	mg/L	1	B4H0005	07/31/14 12:19	07/31/14 12:19	EPA 300.0	
Total Dissolved Solids	**180**	1	mg/L	1	B4G0831	07/28/14 15:30	07/28/14 15:30	SM 2540 C	

Oak Creek Upstream of WWRP (4072275-01) Drinking Water (Grab) Sampled: 07/24/14 16:00 Received: 07/25/14 09:10

Legend Technical Services of Arizona, Inc.

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds									
1,1,1-Trichloroethane	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
1,1,2-Trichloroethane	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
1,1-Dichloroethene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
1,2,4-Trichlorobenzene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
1,2-Dichlorobenzene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
1,2-Dichloroethane	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
1,2-Dichloropropane	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
1,4-Dichlorobenzene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
Benzene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
Bromodichloromethane	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
Bromoform	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
Carbon tetrachloride	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
Chlorobenzene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
Chloroform	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
cis-1,2-Dichloroethylene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
Dibromochloromethane	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
Dichloromethane	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
Ethylbenzene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
m,p-Xylene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
o-Xylene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
Styrene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
Tetrachloroethene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
Toluene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
Total THMs	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
trans-1,2-Dichloroethene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
Trichloroethene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
Vinyl chloride	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
Xylenes (total)	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:49	EPA 524.2	
Surrogate: 1,2-Dichlorobenzene-d4		*101 %*		*70-130*	*B4G0816*	*07/28/14*	*07/28/14*	*EPA 524.2*	
Surrogate: 1,2-Dichloroethane-d4		*94 %*		*70-130*	*B4G0816*	*07/28/14*	*07/28/14*	*EPA 524.2*	
Surrogate: 4-Bromofluorobenzene		*88 %*		*70-130*	*B4G0816*	*07/28/14*	*07/28/14*	*EPA 524.2*	
Surrogate: Pentafluorobenzene		*98 %*		*70-130*	*B4G0816*	*07/28/14*	*07/28/14*	*EPA 524.2*	

Oak Creek Upstream of WWRP (4072275-01) Drinking Water (Grab) Sampled: 07/24/14 16:00 Received: 07/25/14 09:10

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services of Arizona, Inc.									
Miscellaneous									
Langlier Index	**0.827**	-5.00	N/A	1	B4G0707	07/28/14 12:48	07/31/14 14:07	Miscellaneous	
Semi-Volatile Organic Compounds									
3-Hydroxycarbofuran	<0.0005	0.0005	mg/L	1	B4G0954	07/31/14 10:00	08/04/14 19:29	EPA 531.2	
Aldicarb	<0.0005	0.0005	mg/L	1	B4G0954	07/31/14 10:00	08/04/14 19:29	EPA 531.2	
Aldicarb sulfone	<0.0008	0.0008	mg/L	1	B4G0954	07/31/14 10:00	08/04/14 19:29	EPA 531.2	
Aldicarb sulfoxide	<0.0005	0.0005	mg/L	1	B4G0954	07/31/14 10:00	08/04/14 19:29	EPA 531.2	
Carbaryl	<0.0005	0.0005	mg/L	1	B4G0954	07/31/14 10:00	08/04/14 19:29	EPA 531.2	
Carbofuran	<0.0009	0.0009	mg/L	1	B4G0954	07/31/14 10:00	08/04/14 19:29	EPA 531.2	
Methomyl	<0.0005	0.0005	mg/L	1	B4G0954	07/31/14 10:00	08/04/14 19:29	EPA 531.2	
Oxamyl	<0.0020	0.0020	mg/L	1	B4G0954	07/31/14 10:00	08/04/14 19:29	EPA 531.2	
Surrogate: 4-Bromo-3,5-dimethylphenyl-N-methylcarbam		*109 %*		*70-130*	*B4G0954*	*07/31/14*	*08/04/14*	*EPA 531.2*	
Herbicides									
Glyphosate	<0.006	0.006	mg/L	1	B4H0141	08/06/14 14:00	08/07/14 01:16	EPA 547	
Fiberquant Analytical Services #AZ0633									
EPA 100.1									
Asbestos	<1.	1.	MFL	1	N/A	07/25/14 00:00	08/01/14 00:00	EPA 100.1	

Microbiology - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0824 - micro_prep										
Blank (B4G0824-BLK1)				*Prepared & Analyzed: 07/25/14*						
E. coli	Absent		P/A							
Total Coliforms	Absent		P/A							

Total Metals - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0894 - EPA 200.8										
Blank (B4G0894-BLK1)				*Prepared: 07/29/14 Analyzed: 08/01/14*						
Antimony	<0.0005	0.0005	mg/L							
Arsenic	<0.0010	0.0010	mg/L							
Cadmium	<0.0001	0.0001	mg/L							
Lead	<0.0010	0.0010	mg/L							
Selenium	<0.0020	0.0020	mg/L							
Thallium	<0.0005	0.0005	mg/L							
LCS (B4G0894-BS1)				*Prepared: 07/29/14 Analyzed: 08/01/14*						
Antimony	0.0257	0.0005	mg/L	0.0250		103	85-115			
Arsenic	0.0257	0.0010	mg/L	0.0250		103	85-115			
Cadmium	0.0245	0.0001	mg/L	0.0250		98	85-115			
Lead	0.0247	0.0010	mg/L	0.0250		99	85-115			
Selenium	0.0265	0.0020	mg/L	0.0250		106	85-115			
Thallium	0.0242	0.0005	mg/L	0.0250		97	85-115			
LCS Dup (B4G0894-BSD1)				*Prepared: 07/29/14 Analyzed: 08/01/14*						
Antimony	0.0275	0.0005	mg/L	0.0250		110	85-115	7	20	
Arsenic	0.0262	0.0010	mg/L	0.0250		105	85-115	2	20	
Cadmium	0.0253	0.0001	mg/L	0.0250		101	85-115	3	20	
Lead	0.0252	0.0010	mg/L	0.0250		101	85-115	2	20	
Selenium	0.0264	0.0020	mg/L	0.0250		106	85-115	0.2	20	
Thallium	0.0250	0.0005	mg/L	0.0250		100	85-115	3	20	
Matrix Spike (B4G0894-MS1)		**Source: 4072275-01**		*Prepared: 07/29/14 Analyzed: 08/01/14*						
Antimony	0.0270	0.0005	mg/L	0.0250	0.0001	108	70-130			
Arsenic	0.0325	0.0010	mg/L	0.0250	0.0059	106	70-130			
Cadmium	0.0259	0.0001	mg/L	0.0250	<0.0001	104	70-130			
Lead	0.0258	0.0010	mg/L	0.0250	0.0001	103	70-130			
Selenium	0.0276	0.0020	mg/L	0.0250	<0.0020	110	70-130			
Thallium	0.0261	0.0005	mg/L	0.0250	<0.0005	105	70-130			

Total Metals - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0894 - EPA 200.8										
Matrix Spike Dup (B4G0894-MSD1)		**Source: 4072275-01**		*Prepared: 07/29/14*		*Analyzed: 08/01/14*				
Antimony	0.0268	0.0005	mg/L	0.0250	0.0001	107	70-130	0.9	20	
Arsenic	0.0327	0.0010	mg/L	0.0250	0.0059	107	70-130	0.7	20	
Cadmium	0.0252	0.0001	mg/L	0.0250	<0.0001	101	70-130	3	20	
Lead	0.0261	0.0010	mg/L	0.0250	0.0001	104	70-130	1	20	
Selenium	0.0274	0.0020	mg/L	0.0250	<0.0020	110	70-130	0.4	20	
Thallium	0.0264	0.0005	mg/L	0.0250	<0.0005	106	70-130	0.9	20	
Batch B4G0895 - EPA 200.7										
Blank (B4G0895-BLK1)				*Prepared: 07/29/14*		*Analyzed: 07/30/14*				
Barium	<0.01	0.01	mg/L							
Beryllium	<0.002	0.002	mg/L							
Calcium	<1	1	mg/L							
Chromium	<0.005	0.005	mg/L							
Copper	<0.01	0.01	mg/L							
Magnesium	<1	1	mg/L							
Nickel	<0.02	0.02	mg/L							
Sodium	<1	1	mg/L							
LCS (B4G0895-BS1)				*Prepared: 07/29/14*		*Analyzed: 07/30/14*				
Barium	1.01	0.01	mg/L	1.00		101	85-115			
Beryllium	0.200	0.002	mg/L	0.200		100	85-115			
Calcium	20	1	mg/L	20.0		100	85-115			
Chromium	0.495	0.005	mg/L	0.500		99	85-115			
Copper	1.01	0.01	mg/L	1.00		101	85-115			
Magnesium	20	1	mg/L	20.0		102	85-115			
Nickel	1.00	0.02	mg/L	1.00		100	85-115			
Sodium	20	1	mg/L	20.0		100	85-115			

Total Metals - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0895 - EPA 200.7										
LCS Dup (B4G0895-BSD1)				*Prepared: 07/29/14 Analyzed: 07/30/14*						
Barium	1.01	0.01	mg/L	1.00		101	85-115	0.3	20	
Beryllium	0.200	0.002	mg/L	0.200		100	85-115	0.1	20	
Calcium	20	1	mg/L	20.0		100	85-115	0.04	20	
Chromium	0.495	0.005	mg/L	0.500		99	85-115	0.06	20	
Copper	1.01	0.01	mg/L	1.00		101	85-115	0.01	20	
Magnesium	20	1	mg/L	20.0		102	85-115	0.04	20	
Nickel	1.00	0.02	mg/L	1.00		100	85-115	0.06	20	
Sodium	20	1	mg/L	20.0		100	85-115	0.2	20	
Matrix Spike (B4G0895-MS1)		**Source: 4072275-01**		*Prepared: 07/29/14 Analyzed: 07/30/14*						
Barium	1.24	0.01	mg/L	1.00	0.23	102	70-130			
Beryllium	0.202	0.002	mg/L	0.200	0.0004	101	70-130			
Calcium	54	1	mg/L	20.0	34	101	70-130			
Chromium	0.497	0.005	mg/L	0.500	0.001	99	70-130			
Copper	1.03	0.01	mg/L	1.00	<0.01	103	70-130			
Magnesium	38	1	mg/L	20.0	17	102	70-130			
Nickel	0.99	0.02	mg/L	1.00	<0.02	99	75-125			
Sodium	26	1	mg/L	20.0	5	103	70-130			
Matrix Spike Dup (B4G0895-MSD1)		**Source: 4072275-01**		*Prepared: 07/29/14 Analyzed: 07/30/14*						
Barium	1.24	0.01	mg/L	1.00	0.23	101	70-130	0.4	20	
Beryllium	0.202	0.002	mg/L	0.200	0.0004	101	70-130	0.04	20	
Calcium	54	1	mg/L	20.0	34	102	70-130	0.5	20	
Chromium	0.497	0.005	mg/L	0.500	0.001	99	70-130	0.06	20	
Copper	1.03	0.01	mg/L	1.00	<0.01	103	70-130	0.8	20	
Magnesium	38	1	mg/L	20.0	17	103	70-130	0.2	20	
Nickel	0.99	0.02	mg/L	1.00	<0.02	99	75-125	0.5	20	
Sodium	26	1	mg/L	20.0	5	103	70-130	0.4	20	

Total Metals - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4H0017 - EPA 245.1/245.2 Prep										
Blank (B4H0017-BLK1)				*Prepared & Analyzed: 08/01/14*						
Mercury	<0.0002	0.0002	mg/L							
LCS (B4H0017-BS1)				*Prepared & Analyzed: 08/01/14*						
Mercury	0.00099	0.0002	mg/L	0.00100		99	85-115			
LCS Dup (B4H0017-BSD1)				*Prepared & Analyzed: 08/01/14*						
Mercury	0.00099	0.0002	mg/L	0.00100		99	85-115	0	20	
Matrix Spike (B4H0017-MS1)		**Source: 4072280-01**		*Prepared & Analyzed: 08/01/14*						
Mercury	0.00099	0.0002	mg/L	0.00100	<0.0002	99	70-130			
Matrix Spike (B4H0017-MS2)		**Source: 4072403-01**		*Prepared & Analyzed: 08/01/14*						
Mercury	0.00098	0.0002	mg/L	0.00100	<0.0002	98	70-130			
Matrix Spike Dup (B4H0017-MSD1)		**Source: 4072280-01**		*Prepared & Analyzed: 08/01/14*						
Mercury	0.00101	0.0002	mg/L	0.00100	<0.0002	101	70-130	2	20	
Matrix Spike Dup (B4H0017-MSD2)		**Source: 4072403-01**		*Prepared & Analyzed: 08/01/14*						
Mercury	0.00098	0.0002	mg/L	0.00100	<0.0002	98	70-130	0	20	

Inorganic Chemistry - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0772 - NO PREP										
Duplicate (B4G0772-DUP1)		**Source: 4072275-01**		*Prepared & Analyzed: 07/25/14*						
pH	8.7		pH Units		8.7			0.1	10	H5
Batch B4G0790 - NO PREP										
Blank (B4G0790-BLK1)				*Prepared & Analyzed: 07/25/14*						
Nitrite as N	<0.10	0.10	mg/L							
LCS (B4G0790-BS1)				*Prepared & Analyzed: 07/25/14*						
Nitrite as N	0.200	0.10	mg/L	0.200		100	80-120			
LCS Dup (B4G0790-BSD1)				*Prepared & Analyzed: 07/25/14*						
Nitrite as N	0.200	0.10	mg/L	0.200		100	80-120	0	20	
Matrix Spike (B4G0790-MS1)		**Source: 4072321-02**		*Prepared & Analyzed: 07/25/14*						
Nitrite as N	0.088	0.10	mg/L	0.200	<0.10	44	80-120			M2
Matrix Spike Dup (B4G0790-MSD1)		**Source: 4072321-02**		*Prepared & Analyzed: 07/25/14*						
Nitrite as N	0.088	0.10	mg/L	0.200	<0.10	44	80-120	0	20	M2
Batch B4G0831 - NO PREP										
Blank (B4G0831-BLK1)				*Prepared & Analyzed: 07/28/14*						
Total Dissolved Solids	<1	1	mg/L							
Duplicate (B4G0831-DUP1)		**Source: 4072091-01**		*Prepared & Analyzed: 07/28/14*						
Total Dissolved Solids	543	1	mg/L		540			0.6	5	

Inorganic Chemistry - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0843 - NO PREP										
Blank (B4G0843-BLK1)				*Prepared & Analyzed: 07/28/14*						
Total Alkalinity as CaCO3	<10	10	mg/L							
LCS (B4G0843-BS1)				*Prepared & Analyzed: 07/28/14*						
Total Alkalinity as CaCO3	198	10	mg/L	200		99	80-120			
LCS Dup (B4G0843-BSD1)				*Prepared & Analyzed: 07/28/14*						
Total Alkalinity as CaCO3	198	10	mg/L	200		99	80-120	0.3	20	
Matrix Spike (B4G0843-MS1)		**Source: 4071741-01**		*Prepared & Analyzed: 07/28/14*						
Total Alkalinity as CaCO3	293	10	mg/L	200	141	76	80-120			M2
Matrix Spike Dup (B4G0843-MSD1)		**Source: 4071741-01**		*Prepared & Analyzed: 07/28/14*						
Total Alkalinity as CaCO3	313	10	mg/L	200	141	86	80-120	7	20	
Batch B4G0872 - NO PREP										
Blank (B4G0872-BLK1)				*Prepared & Analyzed: 07/29/14*						
Cyanide, Total	<0.010	0.010	mg/L							
LCS (B4G0872-BS1)				*Prepared & Analyzed: 07/29/14*						
Cyanide, Total	0.049	0.010	mg/L	0.0500		98	80-120			
LCS Dup (B4G0872-BSD1)				*Prepared & Analyzed: 07/29/14*						
Cyanide, Total	0.048	0.010	mg/L	0.0500		96	80-120	2	20	
Matrix Spike (B4G0872-MS1)		**Source: 4072245-01**		*Prepared & Analyzed: 07/29/14*						
Cyanide, Total	0.049	0.010	mg/L	0.0500	<0.010	98	80-120			

Inorganic Chemistry - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0872 - NO PREP										
Matrix Spike Dup (B4G0872-MSD1)		**Source: 4072245-01**		*Prepared & Analyzed: 07/29/14*						
Cyanide, Total	0.049	0.010	mg/L	0.0500	<0.010	98	80-120	0	20	
Batch B4G0915 - NO PREP										
Blank (B4G0915-BLK1)				*Prepared & Analyzed: 07/30/14*						
Fluoride	<0.10	0.10	mg/L							
LCS (B4G0915-BS1)				*Prepared & Analyzed: 07/30/14*						
Fluoride	2.00	0.10	mg/L	2.00		100	90-110			
LCS Dup (B4G0915-BSD1)				*Prepared & Analyzed: 07/30/14*						
Fluoride	1.99	0.10	mg/L	2.00		100	90-110	0.5	20	
Matrix Spike (B4G0915-MS1)		**Source: 4072101-01**		*Prepared & Analyzed: 07/30/14*						
Fluoride	2.23	0.10	mg/L	2.00	0.28	98	90-110			
Matrix Spike Dup (B4G0915-MSD1)		**Source: 4072101-01**		*Prepared & Analyzed: 07/30/14*						
Fluoride	2.24	0.10	mg/L	2.00	0.28	98	90-110	0.5	20	
Batch B4H0005 - NO PREP										
Blank (B4H0005-BLK1)				*Prepared & Analyzed: 07/31/14*						
Sulfate	<5.0	5.0	mg/L							
LCS (B4H0005-BS1)				*Prepared & Analyzed: 07/31/14*						
Sulfate	20.0	5.0	mg/L	20.0		100	90-110			

Inorganic Chemistry - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4H0005 - NO PREP										
LCS Dup (B4H0005-BSD1)				*Prepared & Analyzed: 07/31/14*						
Sulfate	20.0	5.0	mg/L	20.0		100	90-110	0	20	
Matrix Spike (B4H0005-MS1)		**Source: 4072238-01**		*Prepared & Analyzed: 07/31/14*						
Sulfate	20.1	5.0	mg/L	20.0	<5.0	100	90-110			
Matrix Spike Dup (B4H0005-MSD1)		**Source: 4072238-01**		*Prepared & Analyzed: 07/31/14*						
Sulfate	20.3	5.0	mg/L	20.0	<5.0	102	90-110	1	20	
Batch B4H0012 - NO PREP										
Blank (B4H0012-BLK1)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	<0.20	0.20	mg/L							
Blank (B4H0012-BLK2)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	<0.20	0.20	mg/L							
Blank (B4H0012-BLK3)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	<0.20	0.20	mg/L							
Blank (B4H0012-BLK4)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	<0.20	0.20	mg/L							
Blank (B4H0012-BLK5)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	<0.20	0.20	mg/L							
LCS (B4H0012-BS1)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.1	0.20	mg/L	10.0		101	90-110			

Inorganic Chemistry - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4H0012 - NO PREP										
LCS (B4H0012-BS2)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.2	0.20	mg/L	10.0		102	90-110			
LCS (B4H0012-BS3)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.1	0.20	mg/L	10.0		101	90-110			
LCS Dup (B4H0012-BSD1)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.2	0.20	mg/L	10.0		102	90-110	1	20	
LCS Dup (B4H0012-BSD2)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.1	0.20	mg/L	10.0		101	90-110	1	20	
LCS Dup (B4H0012-BSD3)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.1	0.20	mg/L	10.0		101	90-110	0	20	
Matrix Spike (B4H0012-MS1)		**Source: 4072258-02**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.2	0.20	mg/L	10.0	0.05	102	80-120			
Matrix Spike (B4H0012-MS2)		**Source: 4072443-04**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.7	0.20	mg/L	10.0	0.42	103	80-120			
Matrix Spike (B4H0012-MS3)		**Source: 4072443-05**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	16.6	0.20	mg/L	10.0	6.19	104	80-120			
Matrix Spike (B4H0012-MS4)		**Source: 4072443-06**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	17.3	0.20	mg/L	10.0	7.07	102	80-120			
Matrix Spike (B4H0012-MS5)		**Source: 4072558-06**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	15.0	0.20	mg/L	10.0	4.47	105	80-120			

Inorganic Chemistry - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4H0012 - NO PREP										
Matrix Spike Dup (B4H0012-MSD1)		**Source: 4072258-02**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.4	0.20	mg/L	10.0	0.05	104	80-120	2	20	
Matrix Spike Dup (B4H0012-MSD2)		**Source: 4072443-04**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.9	0.20	mg/L	10.0	0.42	105	80-120	2	20	
Matrix Spike Dup (B4H0012-MSD3)		**Source: 4072443-05**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	16.7	0.20	mg/L	10.0	6.19	105	80-120	0.6	20	
Matrix Spike Dup (B4H0012-MSD4)		**Source: 4072443-06**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	17.5	0.20	mg/L	10.0	7.07	104	80-120	1	20	
Matrix Spike Dup (B4H0012-MSD5)		**Source: 4072558-06**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	14.9	0.20	mg/L	10.0	4.47	104	80-120	0.7	20	

Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0816 - Default Prep VOC										
Blank (B4G0816-BLK1)				*Prepared & Analyzed: 07/28/14*						
1,1,1-Trichloroethane	<0.0005	0.0005	mg/L							
1,1,2-Trichloroethane	<0.0005	0.0005	mg/L							
1,1-Dichloroethene	<0.0005	0.0005	mg/L							
1,2,4-Trichlorobenzene	<0.0005	0.0005	mg/L							
1,2-Dichlorobenzene	<0.0005	0.0005	mg/L							
1,2-Dichloroethane	<0.0005	0.0005	mg/L							
1,2-Dichloropropane	<0.0005	0.0005	mg/L							
1,4-Dichlorobenzene	<0.0005	0.0005	mg/L							
Benzene	<0.0005	0.0005	mg/L							
Bromodichloromethane	<0.0005	0.0005	mg/L							
Bromoform	<0.0005	0.0005	mg/L							
Carbon tetrachloride	<0.0005	0.0005	mg/L							
Chlorobenzene	<0.0005	0.0005	mg/L							
Chloroform	<0.0005	0.0005	mg/L							
cis-1,2-Dichloroethylene	<0.0005	0.0005	mg/L							
Dibromochloromethane	<0.0005	0.0005	mg/L							
Dichloromethane	<0.0005	0.0005	mg/L							
Ethylbenzene	<0.0005	0.0005	mg/L							
m,p-Xylene	<0.0005	0.0005	mg/L							
o-Xylene	<0.0005	0.0005	mg/L							
Styrene	<0.0005	0.0005	mg/L							
Tetrachloroethene	<0.0005	0.0005	mg/L							
Toluene	<0.0005	0.0005	mg/L							
Total THMs	<0.0005	0.0005	mg/L							
trans-1,2-Dichloroethene	<0.0005	0.0005	mg/L							
Trichloroethene	<0.0005	0.0005	mg/L							
Vinyl chloride	<0.0005	0.0005	mg/L							
Xylenes (total)	<0.0005	0.0005	mg/L							

Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0816 - Default Prep VOC										
LCS (B4G0816-BS1)				*Prepared & Analyzed: 07/28/14*						
1,1,1-Trichloroethane	0.0019	0.0005	mg/L	0.00200		94	70-130			
1,1,2-Trichloroethane	0.0022	0.0005	mg/L	0.00200		110	70-130			
1,1-Dichloroethene	0.0020	0.0005	mg/L	0.00200		102	70-130			
1,2,4-Trichlorobenzene	0.0019	0.0005	mg/L	0.00200		94	70-130			
1,2-Dichlorobenzene	0.0021	0.0005	mg/L	0.00200		104	70-130			
1,2-Dichloroethane	0.0020	0.0005	mg/L	0.00200		97	70-130			
1,2-Dichloropropane	0.0020	0.0005	mg/L	0.00200		99	70-130			
1,4-Dichlorobenzene	0.0021	0.0005	mg/L	0.00200		105	70-130			
Benzene	0.0020	0.0005	mg/L	0.00200		98	70-130			
Bromodichloromethane	0.0021	0.0005	mg/L	0.00200		106	70-130			
Bromoform	0.0022	0.0005	mg/L	0.00200		108	70-130			
Carbon tetrachloride	0.0020	0.0005	mg/L	0.00200		102	70-130			
Chlorobenzene	0.0020	0.0005	mg/L	0.00200		102	70-130			
Chloroform	0.0019	0.0005	mg/L	0.00200		97	70-130			
cis-1,2-Dichloroethylene	0.0019	0.0005	mg/L	0.00200		97	70-130			
Dibromochloromethane	0.0021	0.0005	mg/L	0.00200		104	70-130			
Dichloromethane	0.0020	0.0005	mg/L	0.00200		102	70-130			
Ethylbenzene	0.0019	0.0005	mg/L	0.00200		96	70-130			
m,p-Xylene	0.0018	0.0005	mg/L	0.00200		92	70-130			
o-Xylene	0.0019	0.0005	mg/L	0.00200		94	70-130			
Styrene	0.0020	0.0005	mg/L	0.00200		98	70-130			
Tetrachloroethene	0.0021	0.0005	mg/L	0.00200		103	70-130			
Toluene	0.0019	0.0005	mg/L	0.00200		96	70-130			
Total THMs	0.0083	0.0005	mg/L	0.00800		104	0-200			
trans-1,2-Dichloroethene	0.0021	0.0005	mg/L	0.00200		104	70-130			
Trichloroethene	0.0020	0.0005	mg/L	0.00200		99	70-130			
Vinyl chloride	0.0019	0.0005	mg/L	0.00200		93	70-130			
Xylenes (total)	0.0037	0.0005	mg/L	0.00400		93	0-200			

Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0816 - Default Prep VOC										
LCS Dup (B4G0816-BSD1)				*Prepared & Analyzed: 07/28/14*						
1,1,1-Trichloroethane	0.0019	0.0005	mg/L	0.00200		94	70-130	0	20	
1,1,2-Trichloroethane	0.0021	0.0005	mg/L	0.00200		106	70-130	4	20	
1,1-Dichloroethene	0.0022	0.0005	mg/L	0.00200		112	70-130	9	20	
1,2,4-Trichlorobenzene	0.0019	0.0005	mg/L	0.00200		93	70-130	1	20	
1,2-Dichlorobenzene	0.0021	0.0005	mg/L	0.00200		103	70-130	0.5	20	
1,2-Dichloroethane	0.0019	0.0005	mg/L	0.00200		96	70-130	2	20	
1,2-Dichloropropane	0.0018	0.0005	mg/L	0.00200		92	70-130	7	20	
1,4-Dichlorobenzene	0.0021	0.0005	mg/L	0.00200		105	70-130	0	20	
Benzene	0.0020	0.0005	mg/L	0.00200		98	70-130	0.5	20	
Bromodichloromethane	0.0020	0.0005	mg/L	0.00200		100	70-130	6	20	
Bromoform	0.0018	0.0005	mg/L	0.00200		92	70-130	15	20	
Carbon tetrachloride	0.0021	0.0005	mg/L	0.00200		103	70-130	1	20	
Chlorobenzene	0.0020	0.0005	mg/L	0.00200		100	70-130	2	20	
Chloroform	0.0020	0.0005	mg/L	0.00200		99	70-130	2	20	
cis-1,2-Dichloroethylene	0.0020	0.0005	mg/L	0.00200		100	70-130	4	20	
Dibromochloromethane	0.0019	0.0005	mg/L	0.00200		94	70-130	9	20	
Dichloromethane	0.0021	0.0005	mg/L	0.00200		105	70-130	3	20	
Ethylbenzene	0.0019	0.0005	mg/L	0.00200		94	70-130	2	20	
m,p-Xylene	0.0019	0.0005	mg/L	0.00200		93	70-130	0.5	20	
o-Xylene	0.0018	0.0005	mg/L	0.00200		90	70-130	3	20	
Styrene	0.0019	0.0005	mg/L	0.00200		94	70-130	5	20	
Tetrachloroethene	0.0021	0.0005	mg/L	0.00200		106	70-130	2	20	
Toluene	0.0019	0.0005	mg/L	0.00200		93	70-130	3	20	
Total THMs	0.0077	0.0005	mg/L	0.00800		96	0-200	7	200	
trans-1,2-Dichloroethene	0.0022	0.0005	mg/L	0.00200		108	70-130	3	20	
Trichloroethene	0.0021	0.0005	mg/L	0.00200		103	70-130	4	20	
Vinyl chloride	0.0020	0.0005	mg/L	0.00200		97	70-130	5	20	
Xylenes (total)	0.0037	0.0005	mg/L	0.00400		92	0-200	1	200	

Semi-Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0954 - Default Prep GC-Semi										
Blank (B4G0954-BLK1)				*Prepared: 07/31/14 Analyzed: 08/01/14*						
3-Hydroxycarbofuran	<0.0005	0.0005	mg/L							
Aldicarb	<0.0005	0.0005	mg/L							
Aldicarb sulfone	<0.0008	0.0008	mg/L							
Aldicarb sulfoxide	<0.0005	0.0005	mg/L							
Carbaryl	<0.0005	0.0005	mg/L							
Carbofuran	<0.0009	0.0009	mg/L							
Methomyl	<0.0005	0.0005	mg/L							
Oxamyl	<0.0020	0.0020	mg/L							
LCS (B4G0954-BS1)				*Prepared: 07/31/14 Analyzed: 08/01/14*						
3-Hydroxycarbofuran	0.0020	0.0005	mg/L	0.00200		101	70-130			
Aldicarb	0.0020	0.0005	mg/L	0.00200		100	70-130			
Aldicarb sulfone	0.0020	0.0008	mg/L	0.00200		101	70-130			
Aldicarb sulfoxide	0.0020	0.0005	mg/L	0.00200		102	70-130			
Carbaryl	0.0020	0.0005	mg/L	0.00200		101	70-130			
Carbofuran	0.0020	0.0009	mg/L	0.00200		102	70-130			
Methomyl	0.0020	0.0005	mg/L	0.00200		102	70-130			
Oxamyl	0.0020	0.0020	mg/L	0.00200		101	70-130			
LCS Dup (B4G0954-BSD1)				*Prepared: 07/31/14 Analyzed: 08/01/14*						
3-Hydroxycarbofuran	0.0020	0.0005	mg/L	0.00200		100	70-130	0.6	20	
Aldicarb	0.0020	0.0005	mg/L	0.00200		100	70-130	0.3	20	
Aldicarb sulfone	0.0020	0.0008	mg/L	0.00200		101	70-130	0.1	20	
Aldicarb sulfoxide	0.0020	0.0005	mg/L	0.00200		101	70-130	1	20	
Carbaryl	0.0020	0.0005	mg/L	0.00200		101	70-130	0.3	20	
Carbofuran	0.0020	0.0009	mg/L	0.00200		102	70-130	0	20	
Methomyl	0.0020	0.0005	mg/L	0.00200		102	70-130	0.3	20	
Oxamyl	0.0020	0.0020	mg/L	0.00200		100	70-130	0.2	20	

Semi-Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0954 - Default Prep GC-Semi										
Matrix Spike (B4G0954-MS1)		**Source: 4071518-01**		*Prepared: 07/31/14 Analyzed: 08/01/14*						
3-Hydroxycarbofuran	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130			
Aldicarb	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130			
Aldicarb sulfone	0.0020	0.0008	mg/L	0.00200	<0.0008	100	70-130			
Aldicarb sulfoxide	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130			
Carbaryl	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130			
Carbofuran	0.0021	0.0009	mg/L	0.00200	<0.0009	103	70-130			
Methomyl	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130			
Oxamyl	0.0020	0.0020	mg/L	0.00200	<0.0020	100	70-130			
Matrix Spike (B4G0954-MS2)		**Source: 4072243-01**		*Prepared & Analyzed: 08/04/14*						
3-Hydroxycarbofuran	0.0021	0.0005	mg/L	0.00200	<0.0005	106	70-130			
Aldicarb	0.0022	0.0005	mg/L	0.00200	<0.0005	109	70-130			
Aldicarb sulfone	0.0021	0.0008	mg/L	0.00200	<0.0008	107	70-130			
Aldicarb sulfoxide	0.0021	0.0005	mg/L	0.00200	<0.0005	107	70-130			
Carbaryl	0.0021	0.0005	mg/L	0.00200	<0.0005	107	70-130			
Carbofuran	0.0022	0.0009	mg/L	0.00200	<0.0009	110	70-130			
Methomyl	0.0021	0.0005	mg/L	0.00200	<0.0005	107	70-130			
Oxamyl	0.0021	0.0020	mg/L	0.00200	<0.0020	106	70-130			
Matrix Spike Dup (B4G0954-MSD1)		**Source: 4071518-01**		*Prepared: 07/31/14 Analyzed: 08/01/14*						
3-Hydroxycarbofuran	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130	0.1	30	
Aldicarb	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130	0	30	
Aldicarb sulfone	0.0020	0.0008	mg/L	0.00200	<0.0008	100	70-130	0.8	30	
Aldicarb sulfoxide	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130	0.3	30	
Carbaryl	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130	1	30	
Carbofuran	0.0020	0.0009	mg/L	0.00200	<0.0009	102	70-130	0.7	30	
Methomyl	0.0020	0.0005	mg/L	0.00200	<0.0005	99	70-130	0.7	30	
Oxamyl	0.0020	0.0020	mg/L	0.00200	<0.0020	99	70-130	0.6	30	

Semi-Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0954 - Default Prep GC-Semi										
Matrix Spike Dup (B4G0954-MSD2)		**Source: 4072243-01**		*Prepared & Analyzed: 08/04/14*						
3-Hydroxycarbofuran	0.0021	0.0005	mg/L	0.00200	<0.0005	106	70-130	0.6	30	
Aldicarb	0.0022	0.0005	mg/L	0.00200	<0.0005	108	70-130	0.9	30	
Aldicarb sulfone	0.0021	0.0008	mg/L	0.00200	<0.0008	106	70-130	0.2	30	
Aldicarb sulfoxide	0.0021	0.0005	mg/L	0.00200	<0.0005	107	70-130	0.2	30	
Carbaryl	0.0021	0.0005	mg/L	0.00200	<0.0005	106	70-130	0.5	30	
Carbofuran	0.0022	0.0009	mg/L	0.00200	<0.0009	110	70-130	0.6	30	
Methomyl	0.0021	0.0005	mg/L	0.00200	<0.0005	106	70-130	0.3	30	
Oxamyl	0.0021	0.0020	mg/L	0.00200	<0.0020	107	70-130	0.3	30	

Herbicides - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4H0141 - Default Prep GC-Semi										
Blank (B4H0141-BLK1)				*Prepared & Analyzed: 08/06/14*						
Glyphosate	<0.006	0.006	mg/L							
LCS (B4H0141-BS1)				*Prepared & Analyzed: 08/06/14*						
Glyphosate	0.047	0.006	mg/L	0.0500		94	70-130			
LCS Dup (B4H0141-BSD1)				*Prepared & Analyzed: 08/06/14*						
Glyphosate	0.049	0.006	mg/L	0.0500		99	70-130	6	20	
Matrix Spike (B4H0141-MS1)		**Source: 4072243-01**		*Prepared & Analyzed: 08/06/14*						
Glyphosate	0.045	0.006	mg/L	0.0500	<0.006	91	70-130			
Matrix Spike Dup (B4H0141-MSD1)		**Source: 4072243-01**		*Prepared & Analyzed: 08/06/14*						
Glyphosate	0.047	0.006	mg/L	0.0500	<0.006	95	70-130	4	20	

PESTICIDES/PCBS 505 - Quality Control

Legend Technical Services, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4H0406 - EPA 500 Series										
Blank (B4H0406-BLK1)				*Prepared & Analyzed: 08/04/14*						
Aroclor 1016	<0.000080	0.000080	mg/L							
Aroclor 1221	<0.020	0.020	mg/L							
Aroclor 1232	<0.00050	0.00050	mg/L							
Aroclor 1242	<0.00030	0.00030	mg/L							
Aroclor 1248	<0.00010	0.00010	mg/L							
Aroclor 1254	<0.00010	0.00010	mg/L							
Aroclor 1260	<0.00020	0.00020	mg/L							
Chlordane	<0.00020	0.00020	mg/L							
Toxaphene	<0.0010	0.0010	mg/L							
LCS (B4H0406-BS1)				*Prepared & Analyzed: 08/04/14*						
Aroclor 1016	0.000478	0.000080	mg/L	0.000500		95.6	70-130			
Aroclor 1260	0.000539	0.00020	mg/L	0.000500		108	70-130			
LCS Dup (B4H0406-BSD1)				*Prepared & Analyzed: 08/04/14*						
Aroclor 1016	0.000500	0.000080	mg/L	0.000500		100	70-130	4.50	20	
Aroclor 1260	0.000583	0.00020	mg/L	0.000500		117	70-130	7.84	20	
Matrix Spike (B4H0406-MS1)		**Source: 1403362-01**		*Prepared & Analyzed: 08/04/14*						
Aroclor 1016	0.000444	0.000080	mg/L	0.000499	<0.00008C	89.1	65-135			
Aroclor 1260	0.000463	0.00020	mg/L	0.000499	<0.00020	92.9	65-135			

EPA-5 1613B-Tetras - Quality Control

Pace Analytical Services, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 15169 - 1613										
Blank (BLANK-41543)				*Prepared: 07/31/14 Analyzed: 08/01/14*						
Dioxin	ND	0.0000000050	mg/L				-			
LCS (LCS-41544)				*Prepared: 07/31/14 Analyzed: 08/01/14*						
Dioxin	0.00000019	0.0000000050	mg/L	200			73.0-146.0			
LCSD (LCSD-41545)		**Source: LCS-41544**		*Prepared: 07/31/14 Analyzed: 08/01/14*						
Dioxin	0.00000019	0.0000000050	mg/L	200	0.0000001		73.0-146.0	1.5	0	

EPA 504.1 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193287 - MLLE										
Blank (3070204)		**Source: 45302**		*Prepared & Analyzed: 07/28/14*						
1,2-Dibromo-3-chloropropane (DBCP)	<0.00002	0.00002	mg/L				-			
1,2-Dibromoethane (EDB)	<0.00001	0.00001	mg/L				-			
Reference (3070205)		**Source: 45302**		*Prepared & Analyzed: 07/28/14*						
1,2-Dibromo-3-chloropropane (DBCP)	<0.00002	0.00002	mg/L	0.00002		100	60-140			
1,2-Dibromoethane (EDB)	0.00002	0.00001	mg/L	0.00002		120	60-140			
Reference (3070206)		**Source: 45302**		*Prepared & Analyzed: 07/28/14*						
1,2-Dibromo-3-chloropropane (DBCP)	0.00010	0.00002	mg/L	0.0001		100	70-130			
1,2-Dibromoethane (EDB)	0.00010	0.00001	mg/L	0.0001		101	70-130			
Reference (3070207)		**Source: 45302**		*Prepared: 07/28/14 Analyzed: 07/29/14*						
1,2-Dibromo-3-chloropropane (DBCP)	0.00010	0.00002	mg/L	0.0001		105	70-130			
1,2-Dibromoethane (EDB)	0.00009	0.00001	mg/L	0.0001		92	70-130			
LCS (3070208)		**Source: 45302**		*Prepared & Analyzed: 07/28/14*						
1,2-Dibromo-3-chloropropane (DBCP)	0.00025	0.00002	mg/L	0.000257		96	70-130			
1,2-Dibromoethane (EDB)	0.00023	0.00001	mg/L	0.000257		88	70-130			
LCS (3070209)		**Source: 45302**		*Prepared: 07/28/14 Analyzed: 07/29/14*						
1,2-Dibromo-3-chloropropane (DBCP)	0.00026	0.00002	mg/L	0.000257		99	70-130			
1,2-Dibromoethane (EDB)	0.00023	0.00001	mg/L	0.000257		89	70-130			
Matrix Spike (3070211)		**Source: 45302**		*Prepared: 07/28/14 Analyzed: 07/29/14*						
1,2-Dibromo-3-chloropropane (DBCP)	0.00011	0.00002	mg/L	0.0001	< MRL	106	65-135			
1,2-Dibromoethane (EDB)	0.00010	0.00001	mg/L	0.0001	< MRL	96	65-135			

EPA 515.3 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193510 - MLLE										
Reference (3072671)		**Source: 45359**		*Prepared: 07/31/14*		*Analyzed: 08/04/14*				
2,4,5-TP (Silvex)	0.0006	0.0002	mg/L	0.0005		127	70-130			
2,4-D	0.0013	0.0001	mg/L	0.001		127	70-130			
Dalapon	0.0012	0.0010	mg/L	0.001		116	70-130			
Dicamba	0.0012	0.0001	mg/L	0.001		115	70-130			
Dinoseb	0.0012	0.0002	mg/L	0.001		125	70-130			
Pentachlorophenol	0.00023	0.00004	mg/L	0.0002		117	70-130			
Picloram	0.0005	0.0001	mg/L	0.0005		90	70-130			
Reference (3072672)		**Source: 45359**		*Prepared: 07/31/14*		*Analyzed: 08/05/14*				
2,4,5-TP (Silvex)	0.0017	0.0002	mg/L	0.0015		113	70-130			
2,4-D	0.0033	0.0001	mg/L	0.003		108	70-130			
Dalapon	0.0032	0.0010	mg/L	0.003		108	70-130			
Dicamba	0.0032	0.0001	mg/L	0.003		106	70-130			
Dinoseb	0.0033	0.0002	mg/L	0.003		110	70-130			
Pentachlorophenol	0.00064	0.00004	mg/L	0.0006		107	70-130			
Picloram	0.0013	0.0001	mg/L	0.0015		85	70-130			
Reference (3072673)		**Source: 45359**		*Prepared: 07/31/14*		*Analyzed: 08/05/14*				
2,4,5-TP (Silvex)	0.0019	0.0002	mg/L	0.0015		124	70-130			
2,4-D	0.0038	0.0001	mg/L	0.003		125	70-130			
Dalapon	0.0036	0.0010	mg/L	0.003		119	70-130			
Dicamba	0.0036	0.0001	mg/L	0.003		120	70-130			
Dinoseb	0.0038	0.0002	mg/L	0.003		128	70-130			
Pentachlorophenol	0.00072	0.00004	mg/L	0.0006		120	70-130			
Picloram	0.0014	0.0001	mg/L	0.0015		92	70-130			

EPA 515.3 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193510 - MLLE										
Blank (3072675)		**Source: 45359**		*Prepared: 07/31/14 Analyzed: 08/04/14*						
2,4,5-TP (Silvex)	<0.0002	0.0002	mg/L				-			
2,4-D	<0.0001	0.0001	mg/L				-			
Dalapon	<0.0010	0.0010	mg/L				-			
Dicamba	<0.0001	0.0001	mg/L				-			
Dinoseb	<0.0002	0.0002	mg/L				-			
Pentachlorophenol	<0.00004	0.00004	mg/L				-			
Picloram	<0.0001	0.0001	mg/L				-			
LCS (3072677)		**Source: 45359**		*Prepared: 07/31/14 Analyzed: 08/04/14*						
2,4,5-TP (Silvex)	<0.0002	0.0002	mg/L	0.0001		143	48-148			
2,4-D	0.0003	0.0001	mg/L	0.0002		150	24-138			N4
Dinoseb	0.0003	0.0002	mg/L	0.0002		146	39-141			N4
Pentachlorophenol	0.00005	0.00004	mg/L	0.00004		131	30-171			
Picloram	0.0001	0.0001	mg/L	0.0001		104	24-150			
Matrix Spike (3072678)		**Source: 45359**		*Prepared: 07/31/14 Analyzed: 08/05/14*						
2,4,5-TP (Silvex)	0.0016	0.0002	mg/L	0.0015	< MRL	106	70-130			
2,4-D	0.0032	0.0001	mg/L	0.003	< MRL	107	70-130			
Dalapon	0.0033	0.0010	mg/L	0.003	< MRL	109	70-130			
Dicamba	0.0030	0.0001	mg/L	0.003	< MRL	101	70-130			
Dinoseb	0.0030	0.0002	mg/L	0.003	< MRL	101	70-130			
Pentachlorophenol	0.00055	0.00004	mg/L	0.0006	< MRL	91	70-130			
Picloram	0.0014	0.0001	mg/L	0.0015	< MRL	96	70-130			
Matrix Spike (3072679)		**Source: 45359**		*Prepared: 07/31/14 Analyzed: 08/05/14*						
2,4,5-TP (Silvex)	0.0016	0.0002	mg/L	0.0015	< MRL	110	70-130			
2,4-D	0.0032	0.0001	mg/L	0.003	< MRL	108	70-130			
Dalapon	0.0034	0.0010	mg/L	0.003	< MRL	115	70-130			
Dicamba	0.0031	0.0001	mg/L	0.003	< MRL	104	70-130			
Dinoseb	0.0033	0.0002	mg/L	0.003	< MRL	109	70-130			
Pentachlorophenol	0.00062	0.00004	mg/L	0.0006	< MRL	103	70-130			
Picloram	0.0014	0.0001	mg/L	0.0015	< MRL	96	70-130			

EPA 515.3 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193510 - MLLE										
Matrix Spike Dup (3072680)		**Source: 45359**		*Prepared: 07/31/14 Analyzed: 08/05/14*						
2,4,5-TP (Silvex)	0.0016	0.0002	mg/L	0.0015	< MRL	108	70-130			
2,4-D	0.0032	0.0001	mg/L	0.003	< MRL	107	70-130			
Dalapon	0.0032	0.0010	mg/L	0.003	< MRL	105	70-130			
Dicamba	0.0030	0.0001	mg/L	0.003	< MRL	101	70-130			
Dinoseb	0.0033	0.0002	mg/L	0.003	< MRL	108	70-130			
Pentachlorophenol	0.00062	0.00004	mg/L	0.0006	< MRL	104	70-130			
Picloram	0.0014	0.0001	mg/L	0.0015	< MRL	92	70-130			

EPA 525.2 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193441 - SPE										
Matrix Spike (3072571)		**Source: 45344**		*Prepared: 07/31/14 Analyzed: 08/01/14*						
Alachlor	0.0022	0.0002	mg/L	0.002	< MRL	113	70-130			
Aldrin	0.0020	0.0001	mg/L	0.002	< MRL	102	70-130			
Atrazine	0.0026	0.0001	mg/L	0.002	< MRL	132	70-130			
Benzo(a)pyrene	0.0019	0.00002	mg/L	0.002	< MRL	100	70-130			
Butachlor	0.0023	0.0001	mg/L	0.002	< MRL	118	70-130			
Di(2-ethylhexyl)adipate	0.0024	0.0006	mg/L	0.002	< MRL	123	70-130			
Di(2-ethylhexyl)phthalate	0.0022	0.0006	mg/L	0.002	< MRL	114	70-130			
Dieldrin	0.0022	0.0001	mg/L	0.002	< MRL	114	70-130			
Endrin	0.0022	0.00001	mg/L	0.002	< MRL	115	70-130			
gamma-BHC (Lindane)	0.0022	0.00002	mg/L	0.002	< MRL	112	70-130			
Heptachlor	0.0021	0.00004	mg/L	0.002	< MRL	110	70-130			
Heptachlor epoxide	0.0021	0.00002	mg/L	0.002	< MRL	106	70-130			
Hexachlorobenzene	0.0020	0.0001	mg/L	0.002	< MRL	105	70-130			
Hexachlorocyclopentadiene	0.0024	0.0001	mg/L	0.002	< MRL	124	70-130			
Methoxychlor	0.0023	0.0001	mg/L	0.002	< MRL	117	70-130			
Metolachlor	0.0023	0.0001	mg/L	0.002	< MRL	120	70-130			
Metribuzin	0.0026	0.0001	mg/L	0.002	< MRL	132	70-130			
Propachlor	0.0024	0.0001	mg/L	0.002	< MRL	124	70-130			
Simazine	0.0024	0.00007	mg/L	0.002	< MRL	123	70-130			
Blank (3072575)		**Source: 45344**		*Prepared & Analyzed: 07/31/14*						
Alachlor	<0.0002	0.0002	mg/L				-			
Aldrin	<0.0001	0.0001	mg/L				-			
Atrazine	<0.0001	0.0001	mg/L				-			
Benzo(a)pyrene	<0.00002	0.00002	mg/L				-			
Butachlor	<0.0001	0.0001	mg/L				-			
Di(2-ethylhexyl)adipate	<0.0006	0.0006	mg/L				-			
Di(2-ethylhexyl)phthalate	<0.0006	0.0006	mg/L				-			
Dieldrin	<0.0001	0.0001	mg/L				-			
Endrin	<0.00001	0.00001	mg/L				-			
gamma-BHC (Lindane)	<0.00002	0.00002	mg/L				-			
Heptachlor	<0.00004	0.00004	mg/L				-			
Heptachlor epoxide	<0.00002	0.00002	mg/L				-			
Hexachlorobenzene	<0.0001	0.0001	mg/L				-			
Hexachlorocyclopentadiene	<0.0001	0.0001	mg/L				-			
Methoxychlor	<0.0001	0.0001	mg/L				-			
Metolachlor	<0.0001	0.0001	mg/L				-			
Metribuzin	<0.0001	0.0001	mg/L				-			
Propachlor	<0.0001	0.0001	mg/L				-			
Simazine	<0.00007	0.00007	mg/L				-			

EPA 525.2 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193441 - SPE										
LCS (3072576)		**Source: 45344**		*Prepared & Analyzed: 07/31/14*						
Alachlor	<0.0002	0.0002	mg/L	0.0001		98	66-122			
Atrazine	0.0001	0.0001	mg/L	0.0001		114	73-138			
Benzo(a)pyrene	0.00002	0.00002	mg/L	0.00002		120	43-174			
Di(2-ethylhexyl)adipate	0.0007	0.0006	mg/L	0.0006		115	75-147			
Di(2-ethylhexyl)phthalate	0.0007	0.0006	mg/L	0.0006		117	54-149			
Endrin	0.00002	0.00001	mg/L	0.00001		210	42-294			
gamma-BHC (Lindane)	0.00002	0.00002	mg/L	0.00002		110	73-150			
Heptachlor	0.00004	0.00004	mg/L	0.00004		100	65-124			
Heptachlor epoxide	0.00002	0.00002	mg/L	0.00002		105	46-163			
Hexachlorobenzene	<0.0001	0.0001	mg/L	0.0001		83	62-114			
Hexachlorocyclopentadiene	<0.0001	0.0001	mg/L	0.0001		97	51-102			
Methoxychlor	0.0001	0.0001	mg/L	0.0001		109	51-111			
Metolachlor	0.0001	0.0001	mg/L	0.0001		102	61-116			
LCS (3072577)		**Source: 45344**		*Prepared & Analyzed: 07/31/14*						
Alachlor	0.0023	0.0002	mg/L	0.002		113	70-130			
Aldrin	0.0019	0.0001	mg/L	0.002		96	70-130			
Atrazine	0.0026	0.0001	mg/L	0.002		128	70-130			
Benzo(a)pyrene	0.0019	0.00002	mg/L	0.002		95	70-130			
Butachlor	0.0023	0.0001	mg/L	0.002		113	70-130			
Di(2-ethylhexyl)adipate	0.0023	0.0006	mg/L	0.002		114	70-130			
Di(2-ethylhexyl)phthalate	0.0022	0.0006	mg/L	0.002		111	70-130			
Dieldrin	0.0021	0.0001	mg/L	0.002		107	70-130			
Endrin	0.0020	0.00001	mg/L	0.002		100	70-130			
gamma-BHC (Lindane)	0.0021	0.00002	mg/L	0.002		106	70-130			
Heptachlor	0.0020	0.00004	mg/L	0.002		102	70-130			
Heptachlor epoxide	0.0019	0.00002	mg/L	0.002		94	70-130			
Hexachlorobenzene	0.0020	0.0001	mg/L	0.002		100	70-130			
Hexachlorocyclopentadiene	0.0019	0.0001	mg/L	0.002		97	70-130			
Methoxychlor	0.0019	0.0001	mg/L	0.002		94	70-130			
Metolachlor	0.0024	0.0001	mg/L	0.002		118	70-130			
Metribuzin	0.0025	0.0001	mg/L	0.002		127	70-130			
Propachlor	0.0025	0.0001	mg/L	0.002		125	70-130			
Simazine	0.0024	0.00007	mg/L	0.002		120	70-130			

EPA 525.2 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193441 - SPE										
Reference (3072578)		**Source: 45357**		*Prepared & Analyzed: 07/31/14*						
Alachlor	0.0010	0.0002	mg/L	0.001		95	70-130			
Aldrin	0.0009	0.0001	mg/L	0.001		92	70-130			
Atrazine	0.0011	0.0001	mg/L	0.001		112	70-130			
Benzo(a)pyrene	0.00095	0.00002	mg/L	0.001		95	70-130			
Butachlor	0.0010	0.0001	mg/L	0.001		105	70-130			
Di(2-ethylhexyl)adipate	0.0012	0.0006	mg/L	0.001		123	70-130			
Di(2-ethylhexyl)phthalate	0.0011	0.0006	mg/L	0.001		112	70-130			
Dieldrin	0.0010	0.0001	mg/L	0.001		98	70-130			
Endrin	0.00090	0.00001	mg/L	0.001		90	70-130			
gamma-BHC (Lindane)	0.00093	0.00002	mg/L	0.001		93	70-130			
Heptachlor	0.00092	0.00004	mg/L	0.001		92	70-130			
Heptachlor epoxide	0.00086	0.00002	mg/L	0.001		86	70-130			
Hexachlorobenzene	0.0010	0.0001	mg/L	0.001		98	70-130			
Hexachlorocyclopentadiene	0.0012	0.0001	mg/L	0.001		116	70-130			
Methoxychlor	0.0008	0.0001	mg/L	0.001		83	70-130			
Metolachlor	0.0010	0.0001	mg/L	0.001		102	70-130			
Metribuzin	0.0010	0.0001	mg/L	0.001		95	70-130			
Propachlor	0.0011	0.0001	mg/L	0.001		114	70-130			
Simazine	0.0011	0.00007	mg/L	0.001		108	70-130			
Reference (3072579)		**Source: 45357**		*Prepared: 07/31/14 Analyzed: 08/01/14*						
Alachlor	0.0010	0.0002	mg/L	0.001		98	70-130			
Aldrin	0.0010	0.0001	mg/L	0.001		97	70-130			
Atrazine	0.0011	0.0001	mg/L	0.001		113	70-130			
Benzo(a)pyrene	0.0010	0.00002	mg/L	0.001		102	70-130			
Butachlor	0.0010	0.0001	mg/L	0.001		105	70-130			
Di(2-ethylhexyl)adipate	0.0012	0.0006	mg/L	0.001		121	70-130			
Di(2-ethylhexyl)phthalate	0.0011	0.0006	mg/L	0.001		112	70-130			
Dieldrin	0.0010	0.0001	mg/L	0.001		101	70-130			
Endrin	0.0010	0.00001	mg/L	0.001		101	70-130			
gamma-BHC (Lindane)	0.00099	0.00002	mg/L	0.001		99	70-130			
Heptachlor	0.0010	0.00004	mg/L	0.001		102	70-130			
Heptachlor epoxide	0.00095	0.00002	mg/L	0.001		95	70-130			
Hexachlorobenzene	0.0010	0.0001	mg/L	0.001		101	70-130			
Hexachlorocyclopentadiene	0.0013	0.0001	mg/L	0.001		126	70-130			
Methoxychlor	0.0010	0.0001	mg/L	0.001		97	70-130			
Metolachlor	0.0010	0.0001	mg/L	0.001		104	70-130			
Metribuzin	0.0010	0.0001	mg/L	0.001		99	70-130			
Propachlor	0.0011	0.0001	mg/L	0.001		109	70-130			
Simazine	0.0011	0.00007	mg/L	0.001		107	70-130			

EPA 525.2 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193441 - SPE										
LCS (3073307)		**Source: 45344**		*Prepared: 07/31/14 Analyzed: 08/01/14*						
Simazine	0.00008	0.00007	mg/L	0.00007		116	66-118			

EPA 548.1 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193402 - SPE										
Matrix Spike (3071975)		**Source: 45336**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	0.10	0.0090	mg/L	0.1	< MRL	100	70-142			
Matrix Spike (3071976)		**Source: 45336**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	0.11	0.0090	mg/L	0.1	< MRL	108	70-142			
Matrix Spike Dup (3071977)		**Source: 45336**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	0.10	0.0090	mg/L	0.1	< MRL	103	70-142			
Blank (3071978)		**Source: 45336**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	<0.0090	0.0090	mg/L							
LCS (3071979)		**Source: 45336**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	<0.0090	0.0090	mg/L	0.009		96	38-161			
LCS (3071980)		**Source: 45336**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	0.12	0.0090	mg/L	0.1		115	70-142			
Reference (3071981)		**Source: 45337**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	0.054	0.0090	mg/L	0.05		108	70-130			
Reference (3071982)		**Source: 45337**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	0.049	0.0090	mg/L	0.05		98	70-130			

EPA 548.1 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193402 - SPE										
Reference (3071983)		**Source: 45337**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	0.054	0.0090	mg/L	0.05		107	70-130			

EPA 549.2 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193311 - SPE										
Reference (3070648)		**Source: 45201**		*Prepared: 07/21/14*		*Analyzed: 07/30/14*				
Diquat	0.0019	0.0004	mg/L	0.002		96	80-120			
Reference (3070649)		**Source: 45201**		*Prepared: 07/21/14*		*Analyzed: 07/30/14*				
Diquat	0.0048	0.0004	mg/L	0.005		96	80-120			
LCS (3070650)		**Source: 45316**		*Prepared: 07/29/14*		*Analyzed: 07/30/14*				
Diquat	0.0040	0.0004	mg/L	0.005		79	70-130			
Blank (3070652)		**Source: 45316**		*Prepared: 07/29/14*		*Analyzed: 07/30/14*				
Diquat	<0.0004	0.0004	mg/L				-			
LCS (3070653)		**Source: 45316**		*Prepared: 07/29/14*		*Analyzed: 07/30/14*				
Diquat	<0.0004	0.0004	mg/L	0.0004		45	21-161			
Matrix Spike (3070654)		**Source: 45316**		*Prepared: 07/29/14*		*Analyzed: 07/30/14*				
Diquat	0.0039	0.0004	mg/L	0.005	< MRL	78	70-130			
Matrix Spike (3070655)		**Source: 45316**		*Prepared: 07/29/14*		*Analyzed: 07/30/14*				
Diquat	0.0033	0.0004	mg/L	0.005	< MRL	66	70-130			
Matrix Spike Dup (3070656)		**Source: 45316**		*Prepared: 07/29/14*		*Analyzed: 07/30/14*				
Diquat	0.0037	0.0004	mg/L	0.005	< MRL	73	70-130			

Notes and Definitions

N4	[Undefined]
N1	See case narrative.
M2	Matrix spike recovery was low; the associated blank spike recovery was acceptable.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
A7	Micro sample received without adequate headspace.
BLK	Method Blank
LCS/Dup	Laboratory Control Sample/Laboratory Fortified Blank/Duplicate
MS/Dup	Matrix Spike/Duplicate
Dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Legend Technical Services of Arizona, Inc.

SUBCONTRACT ORDER
4072275

PO Number:4072275
Sampled By: Chao AuChiu
Compliance?: **Yes** **No**

SENDING LABORATORY:

Legend Technical Services of Arizona, Inc.
17631 North 25th Avenue
Phoenix, AZ 85023
Phone: 602-324-6100
Fax: 602-324-6101
Project Manager: Barbara Frank

RECEIVING LABORATORY:

Fiberquant Analytical Services
5025 S. 33rd Street
Phoenix, AZ 85040
Phone :(602) 276-6139
Fax: (602) 276-4558

Analysis	Due	Expires	Sample Type (circle one)	Sample Comments
Sample ID: 4072275-01	**Drinking W**	**Sampled:07/24/14 16:00**	**Grab Composite**	**N/A**
Asbestos	08/05/14 09:00	07/26/14 16:00		

Containers Supplied:
03_1000mL Plastic Cool to 4° C (M)

Released By (Print & Sign)	Date	Time	Received By (Print & Sign)	Date	Time
Heather Ward x HWard	7/25/14	1240	G Crawford x Craig Crawford	7-25-14	1240
G Crawford x Craig Crawford	7-25-14	1400	[signature]	7.25.14	1400

Review of Analysis Request (Initials) [illegible]

Page 1 of 2

Legend Technical Services of Arizona, Inc. **PO Number:** 4072275

SUBCONTRACT ORDER
4072275

SENDING LABORATORY:

Legend Technical Services of Arizona, Inc.
17631 North 25th Avenue
Phoenix, AZ 85023
Phone: 602-324-6100
Fax: 602-324-6101
Project Manager: Barbara Frank

RECEIVING LABORATORY:

Eurofins Eaton Analytical, Inc.
110 S. Hill Street
South Bend, IN 46617
Phone :(800) 332-4345
Fax: (574) 233-8207

Analysis	Due	Expires	Sample Type (circle one)	Sample Comments
Sample ID: 4072275-01	**Drinking W**	**Sampled:07/24/14 16:00**	**Grab Composite**	**N/A**
549-Subcontract	08/05/14 09:00	07/31/14 16:00		
548-Subcontract	08/05/14 09:00	07/31/14 16:00		
525-Subcontract	08/05/14 09:00	08/07/14 16:00		
515-Subcontract	08/05/14 09:00	08/07/14 16:00		
504-Subcontract	08/05/14 09:00	08/07/14 16:00		

Containers Supplied:
07_1000mL Amber Glass pH <2 w/ SS & HCl (C)
07_1000mL Amber Glass pH <2 w/ SS & HCl (D)
20_500mL Amber Plastic w/ S T & H2SO4 (I)
11_125mL Amber Glass Bottle w/ Sodium Sulfite (J)
11_125mL Amber Glass Bottle w/ Sodium Sulfite (K)
10_40mL Sodium Thiosulfate Clear Vial Cool to 4° C (T)
10_40mL Sodium Thiosulfate Clear Vial Cool to 4° C (U)
10_40mL Sodium Thiosulfate Clear Vial Cool to 4° C (V)
10_40mL Sodium Thiosulfate Clear Vial Cool to 4° C (W)

heather Ward	x HWard	7/25/14	1630	FEDEX	x	7/25/14	1630
Released By (Print & Sign)		Date	Time	Received By (Print & Sign)		Date	Time
FEDEX	x						
Released By (Print & Sign)		Date	Time	Received By (Print & Sign)		Date	Time

Page 1 of 2

Legend Technical Services of Arizona, Inc.

SUBCONTRACT ORDER
4072275

PO Number: 4072275
Sampled By: Chao AuChiu
Compliance?: Yes No

SENDING LABORATORY:

Legend Technical Services of Arizona, Inc.
17631 North 25th Avenue
Phoenix, AZ 85023
Phone: 602-324-6100
Fax: 602-324-6101
Project Manager: Barbara Frank

RECEIVING LABORATORY:

Radiation Safety Engineering
3245 N. Washington
Chandler, AZ 85225
Phone :(480) 897-9459
Fax: (480) 892-5446

Analysis	Due	Expires	Sample Type (circle one)	Sample Comments
Sample ID: 4072275-01	**Drinking W**	**Sampled: 07/24/14 16:00**	**Grab Composite**	**N/A**
Radium 228	08/05/14 09:00	01/20/15 16:00		
Radium 226	08/05/14 09:00	01/20/15 16:00		
Gross Alpha	08/05/14 09:00	08/03/14 16:00		

Containers Supplied:
06_1000mL Plastic pH <2 w/ HNO3 (E)
06_1000mL Plastic pH <2 w/ HNO3 (F)
06_1000mL Plastic pH <2 w/ HNO3 (G)
06_1000mL Plastic pH <2 w/ HNO3 (H)

Released By (Print & Sign)	Date	Time	Received By (Print & Sign)	Date	Time
Heather Ward x HWard	7/25/14	1240	C. Crawford x Craig Crawford	7-25-14	1240
C. Crawford x Craig Crawford	7-25-14	1502	Michelle Hanson	7/25/14	1502

Page 2 of

4072275

CHAIN OF CUSTODY RECORD

LEGEND Technical Services, Inc.
www.legend-group.com

7/25/14

☐ 17631 N. 25th Avenue • Phoenix, AZ 85023 • (602) 324-6100 • Fax (602) 324-6101
☐ 4585 S. Palo Verde Rd, Ste 423 • Tucson, AZ 85706 • (520) 327-1234 • Fax (520) 327-0518

Page 1 of 2

Please Print Clearly

CLIENT INFORMATION

Client Name	Address	City	State	Zip	Phone	Fax Number or Email Address
Carollo Engineers	4600 E Washington Street Suite 320	Phoenix	AZ	85034	602-236-9800	

Project Name	Project Number/PWS	Contact	P O No	Fax Results ☐ Email Results ☐	QC Report ☐ EDD ☐ Special Detection Limits ☐
New Source					

SAMPLE TYPE CODES

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

TURN AROUND TIME

Laboratory Authorization Required for Rush

☐ Standard 15-20 Working Days
☐ Other _____ (Laboratory Authorization Required)

Client's Sample Identification	Date	Time	Sample Location/POE/DWR	Composite	Grab	Sample Type	Compliance	No. of Containers	pH* (Lab Only)	Metals*	Asbestos	Cyanide	Nitrate, Nitrite	Langlier Index**	Total Coliform***	Sulfate	Fluoride	Total Hardness***	505, 515, 525	531, 547, 548	549, Dioxin	524, 504	Gross Alpha	Radium 226/228	LAB NO.
Oak Creek upstream of WWTP	7/24	09:00			X	DW		32		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-01
Travel Blank (Do Not Open)	7/24				X	DI		3													X				-02

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

Comments / Special Instructions: *Metals= Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Hg, Ni, Se, Na, Tl **Langlier Index= Ca, Alkalinity, TDS, pH ***Total Hardness= Ca, Mg

If sample source is chlorinated, different sample containers/preservatives must be used for dechlorination.

SAMPLE CONDITION UPON RECEIPT (Lab Use)		
No. of Containers	35	
Temperature	5.9°	
Custody Seals	Y	(N)
Seals Intact	Y	N
Preserved	(Y)	N

RELINQUISHED BY			SAMPLES RECEIVED BY		
① Sampler Signature		Date 7-25	Signature		Date 7/25/14
Sampler Printed Name	Chad Tomlin	Time 910	Printed Name		Time 910
② Signature		Date	Signature		Date
Printed Name		Time	Printed Name		Time
③ Signature		Date	Signature		Date
Printed Name		Time	Printed Name		Time

WHITE-LAB YELLOW-CLIENT

FORM GEN-170 (05/06)

Legend Technical Services of Arizona, Inc. **PO Number:** 4072275

SUBCONTRACT ORDER
4072275

SENDING LABORATORY:

Legend Technical Services of Arizona, Inc.
17631 North 25th Avenue
Phoenix, AZ 85023
Phone: 602-324-6100
Fax: 602-324-6101
Project Manager: Barbara Frank

RECEIVING LABORATORY:

Legend Technical Services, St. Paul AZ0557
88 Empire Drive
Saint Paul, MN 55103
Phone :(800) 826-8553
Fax: (651) 642-1239

Project: New source

Client: City of Sedona

Analysis	Due	Expires	Leach Date & Time	Sample Comments
Sample ID: 4072275-01 Drinking Wat	**Sampled:07/24/14 16:00**			
505-Subcontract	08/05/14 09:00	08/07/14 16:00		

Containers Supplied:
10_40mL Sodium Thiosulfate Clear Vial Cool to 4° C (AA)
10_40mL Sodium Thiosulfate Clear Vial Cool to 4° C (AB)
10_40mL Sodium Thiosulfate Clear Vial Cool to 4° C (AC)

For method 608: _____pH check _____Cl2 check
Special Instructions/Comments:

* The sample matrix for leachates supplied to the MN laboratory reflects the matrix of the original sample received by LEGEND AZ.
**For matrices other than Drinking Water requiring drinking water methods (such as EPA 505, etc.), a 10x dilution is acceptable. Appropriate data qualifiers are to be used.

Released By (Print & Sign)	Date	Time	Received By (Print & Sign)	Date	Time
x Heather Ward HWard	7/28/14	1630	x FEDEX	7/28/14	1630
x					

Legend Technical Services of Arizona, Inc. **PO Number:** 4072275

SUBCONTRACT ORDER
4072275

SENDING LABORATORY:

Legend Technical Services of Arizona, Inc
17631 North 25th Avenue
Phoenix, AZ 85023
Phone: 602-324-6100
Fax: 602-324-6101
Project Manager: Barbara Frank

RECEIVING LABORATORY:

Pace Analytical Services, Inc.
1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone :(612) 607-1700
Fax: (612) 607-6444

Analysis	Due	Expires	Sample Type (circle one)	Sample Comments
Sample ID: 4072275-01	**Drinking W.**	**Sampled: 07/24/14 16:00**	**Grab Composite**	**N/A**
1613-Subcontract	08/05/14 09:00	10/22/14 16:00		
Containers Supplied: 13_1000mL Amber Glass pH <2 w/ HCl (A)				

heather Ward	x Heather Ward	7/25/14	1630	FEDEX	x	7/25/14	1630
Released By (Print & Sign)		Date	Time	Received By (Print & Sign)		Date	Time
FEDEX	x						
Released By (Print & Sign)		Date	Time	Received By (Print & Sign)		Date	Time

Page 2 of 2

LEGEND
Technical Services, Inc.
www.legend-group.com

MISCELLANEOUS REPORT

DOCUMENTS NOT SCANNED IN

- SUB-CONTRACTOR'S ORIGINAL REPORTS FOR QC
- STATE FORMS
- INVOICE COPY
- PAYMENT FORMS OR RECEIPTS

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. · CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Legend Technical Services of Arizona
17631 N. 25th Avenue
PHOENIX, AZ 85023

Sampling Date: July 25, 2014
Sample Received: July 25, 2014
Analysis Completed: August 08, 2014

Sample ID	Gross Alpha Activity Method 600/00-02 (pCi/L)	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
4072275-01	1.9 ± 0.7	< 0.5	< 0.7	< 0.7
Date of Analysis	7/28/2014	8/1/2014	8/1/2014	8/1/2014

Robert L. Metzger, Ph.D., C.H.P.

Laboratory License Number: AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

July 24, 2014 (Sample Date) 16:00 (Sample Time, 24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002	7/28/2014	1.9 ± 0.7		
7500 - Rn			Radon	4004				
00-07	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	8/1/2014	< 0.7		
GammaRay HPGE		1 pCi/L	Radium 226	4020	8/1/2014	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	8/1/2014	< 0.7		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE49753

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: 4072275-01

Authorized Signature: [signature]

Date Public Water System Notified: _____

DWAR 6: 11/2007

Legend Technical Services of Arizona, Inc.

PO Number: 4072275
Sampled By: Chao AuChiu
Compliance?: Yes No

SUBCONTRACT ORDER

4072275

SENDING LABORATORY:

Legend Technical Services of Arizona, Inc.
17631 North 25th Avenue
Phoenix, AZ 85023
Phone: 602-324-6100
Fax: 602-324-6101
Project Manager: Barbara Frank

RECEIVING LABORATORY:

Radiation Safety Engineering
3245 N. Washington
Chandler, AZ 85225
Phone :(480) 897-9459
Fax: (480) 892-5446

Analysis	Due	Expires	Sample Type (circle one)	Sample Comments
Sample ID: 4072275-01	**Drinking W**	**Sampled: 07/24/14 16:00**	**Grab Composite N/A**	
Radium 228	08/05/14 09:00	01/20/15 16:00		
Radium 226	08/05/14 09:00	01/20/15 16:00		
Gross Alpha	08/05/14 09:00	08/03/14 16:00		

49753

Containers Supplied:
06_1000mL Plastic pH <2 w/ HNO3 (E)
06_1000mL Plastic pH <2 w/ HNO3 (F)
06_1000mL Plastic pH <2 w/ HNO3 (G)
06_1000mL Plastic pH <2 w/ HNO3 (H)

Released By (Print & Sign)	Date	Time	Received By (Print & Sign)	Date	Time
Heather Ward X HWard	7/25/14	1240	C. Crawford X Craig Crawford	7-25-14	1240
C. Crawford X Craig Crawford	7-25-14	1502	Michelle Hanson	7/25/14	1502

FIBERQUANT ANALYTICAL SERVICES

Determination of Asbestos in Water using TEM

JobNumber: 201407365

Client: LEGEND TECHNICAL SVC of AZ

BOLIN LABORATORIES INC
17631 N 25TH AVE
PHOENIX, AZ 85023-0000
Office Phone: (602) 324-6100
FAX: (602) 324-6101

 # Samples: 1 TEM **Rec:** 7/25/2014 **Method:** EPA 100.1 TEM Water
Client Job: 4072275 **PO Number:** 4072275
Report Date: 8/1/2014 **Date Analyzed:** 8/1/2014 **Routing Number:** -

Method and Analysis Information: **Fiberquant Internal SOP:** TEMw

Samples are analyzed using the protocols given in EPA method 100.1, as amended by the 1993 EPA guidence. Samples should be un-preserved water in 1 L containers having about 200 ml headspace for shaking. There is a 48 hr deadline between the time the sample is taken and the time it is filtered to minimize loss of asbestos fibers due to biological interference. Each sample is shook for 1 minute, and ultrasonicated for at least 10 minutes, shaking every 5 minutes to disperse any fibers that are present. A measured amount of sample is then filtered through a 0.1 um pore size polycarbonate filter, backed by a 5 um pore size MCE filter and a glass frit. Several volumes of liquid may be filtered for each sample in order to assure that a properly loaded sample is obtained. A portion of each resulting filter (and blanks) is then coated with 100-200 um of carbon in a Denton 502A Carbon Evaporator. The carbon encapsulates all of the larger and most of the smaller particulate on the filter. Three mm square pieces of the coated filter are placed on three or more copper TEM grids, and the original filter material is dissolved away in a Jaffe wick and/or condensation washer. The finished replica in carbon containing the particulate is then examined on a JEOL 1200 or Phillips CM 10 transmission electrom microscope at 10,000 to 20,000x magnification. All asbestos fibers >10um in length are tabulated and characterized as asbestos or non-asbestos using a combination of morphology, electron diffraction characteristics, and elemental composition. The result is calculated in millions of fibers per liter (MFL). The grid is scanned until 20 grid openings have been observed, or until an analytical sensitivity (the hypothetical observation of one fiber) of 0.2 MFL has been reached. The nominal 20 grid opening cut-off is used for those samples containing so much non-asbestos particulate that the desired analytical sensitivity is impractical to attain.

The method was designed to determine EPA drinking water compliance. The standard for drinking water is <7 MFL as measured by this method. Fiberquant maintains Arizona Environmental Laboratory license #AZ0633 covering EPA Method 100.1.

Overall, the coefficient of variation can be expected to be approximately 0.5 for analyses in which >20 asbestos fibers have been counted, ranging up to 1.00 for analyses in which only a few asbestos fibers are counted.

The analysis was performed under an ongoing quality assurance program which includes: Lab blanks, prepared with each set of samples and analyzed. Each analyst has suitable background credentials, such as at least a bachelor's degree in geology or chemistry, and has undergone extensive 2-6 month training in TEM techniques and mineralogy specific to TEM asbestos analysis before being allowed to perform client analyses. Unknown reference samples are routinely identified to ensure that each analyst can collect and correctly interpret TEM information. The TEM is aligned and its performance checked daily. Magnification, electron diffraction pattern size, and analytical performance characteristics are calibrated routinely. Samples are re-analyzed sometimes by the same analyst and sometimes by a different analyst in order to determine accuracy and precision. The total of QC analyses (blanks + recounts) are greater than 10% of analyzed samples. Each analyst participates in interlab round robins and proficiency testing in order to show correlation to other lab's analyses. Because TEM samples are not analyzed in batches, which would be traditional for most water analyses, and not every sample has a duplicate or replicate analysis associated with it, it is not possible to include a traditional QC report with the analysis. QC reports are produced monthly, and are available on request. All quality checks performed for these samples were in control except as detailed in the "Analytical Notes" below. Fiberquant is accredited by NVLAP to perform TEM analysis of asbestos in air samples, and has been found to be proficient in the EPA water proficiency program. Accreditation or proficiency does not imply endorsement by the EPA, any other United States governmental agency or any private agency or association. Each lab analysis refers only to the sample tested, and may not, due to the sampling process, be representative of the material sampled. This report may not be reproduced except in full, without the approval of Fiberquant Analytical Services.

Some results may have been calculated using client supplied data, such as volume or area sampled, for which Fiberquant assumes no liability for accuracy.

Job Analysis Notes:

High levels of particulate material in the water did not permit analysis to the desired sensitivity of 0.2 million fibers per liter (MFL).

Sampled:	7/24/2014	16:00	**By:**	AuChiu, Chao
Received:	7/25/2014	14:13		
Filtered:	7/25/2014	15:30		
Analyzed:	8/1/2014	15:20		

Analysis Results:

Lab Number	Client Number	Date	Condition	Filtered Vol (ml)	#GOs	GO Area	MFL>10um	AsbestosType	Sensitivity (MFL>10um)
							Job Number:		201407365
2014-07365- 1	4072275-01	7/24/2014	acceptable	5	20	0.00993	<1.	-	1.

Uwe Steimle

Analyst: UWE .. STEIMLE

Printed: 01-Aug-14

Original Print Date: 01-Aug-14

Larry S. Pierce

Larry S. Pierce, Approved Accreditation Signatory

Job Number:	201407365

QA Report: Job Number:	201407365

1. Calibrations	
TEM magnification. date of last.	7/18/2014
TEM camera constant. date of last.	7/29/2014
EDS performance check (k-factors, resolution, low-e perf.). date of last.	4/1/2014
TEM stage drift, minimum beam size. date of last.	4/1/2014
plasma asher. date of last.	3/12/2014

2. Blanks (1/25 samples required)	Not Required This Job

3. Recounts (1/17 samples required)	In Control

4. Analyst Performance	
NVLAP proficiency testing	Current
verified counts. cum. % true positives	92.6
verification of diffraction pattern identifications. cum. % correct	100.0
verification of EDS spectra. cum. % correct	100.0

Fiberquant Analytical Services

Fiberquant, Inc. 5025 S. 33rd St., Phoenix, Arizona 85040 602-276-6139 Fax 602-276-4558

TEM Water Sample Count Sheet

Method: EPA 100.1 (600/4-84-043)

Sample Information

Client: LEGEND TECHNICAL SVC of AZ

Client Smp #: **4072275-01**

Lab #: **2014-07365- 1** Vol Filtered (ml) 20

___ MCE X PC Pore um: ___ 0.4 ___ 0.22 X 0.1

Grid Orientation Draw Asym Spot

Grid Information

#Grids Prepped: 3 GO Area: 0.00993 #GOs to Count 20

System Information

Est. % Loading 8

TEM: ___ Jeol N X Jeol S Mag: 20K or 2K Alignment: X checked EDS: ___ calib X not used

Ac. Volatage: ___100keV X120keV ___ keV

E6	E7	E8	E9	E10	E11	E12	E13	E14	E15
F6	F7	F8	F9	F10	F11	F12	F13	F14	F15
G6	G7	G8	G9	G10	G11	G12	G13	G14	G15
H6	H7	H8	H9	H10	H11	H12	H13	H14	H15
I6	I7	I8	I9			I12	I13	I14	I15
J6	J7	J8	J9			J12	J13	J14	J15
K6	K7	K8	K9	K10	K11	K12	K13	K14	K15
L6	L7	L8	L9	L10	L11	L12	L13	L14	L15
M6	M7	M8	M9	M10	M11	M12	M13	M14	M15
N6	N7	N8	N9	N10	N11	N12	N13	N14	N15

Grid Map

X denotes GO's on 1st grid; O denotes GO's on 2nd

Fiber Counts:

Grid Storage # 1346 R9 Acceptable Prep X (>50% coverage, >50% intact, no folds, <5% opaque, 20 good GOs

Location		Str. Type				Size		Morphology			Diffraction Data							EDXA Data							Ident.'n	
GO #	STR #	FIBER	BUNDLE	MATRIX	CLUSTER	Length	Width	TUBULAR	BLOCKY	Negative #	5.2 A Row Spacing	Estimated In-Row Spacing	CHRY	AMPH	NONASB	NO PATT	Negative #	Na	Mg	Si	Ca	Fe	Other	File #	ASBTYPE	NONASB
N15	N5																									
M8	↓																									
M11																										
K9																										
J7																										
H6																										
G8	↓																									

Grid Storage # 1346 S2 Acceptable Prep X (>50% coverage, >50% intact, no folds, <5% opaque, 20 good GOs

N6	N5																									
L7	↓																									
J8																										
H9																										
F10																										
E12																										
G13	↓																									

Grid Storage # 1346 S4 Acceptable Prep X (>50% coverage, >50% intact, no folds, <5% opaque, 20 good GOs

E15	N5																									
G14	↓																									
I13																										
K12																										
M11																										
N9	↓																									

Abbreviations: NSD=No structures Detected; CH=chrysotile; GR=grunnerite; AN=anthophyllite; TR=tremolite; AP=amphibole; GO=grid opening; NA=non-asbestos

Notes:

Totals:	CH > 10	0	AP > 10	0	GOs Counted	20	*Results:*	Str/mm2	<5	MFL	<0.2

Analyst: Uwe Steinle ***Date:*** 8-1-14

Legend Technical Services of Arizona, Inc.

PO Number:4072275
Sampled By: Chao AuChiu
Compliance?: Yes No

SUBCONTRACT ORDER
4072275

SENDING LABORATORY:

Legend Technical Services of Arizona, Inc.
17631 North 25th Avenue
Phoenix, AZ 85023
Phone: 602-324-6100
Fax: 602-324-6101
Project Manager: Barbara Frank

RECEIVING LABORATORY:

Fiberquant Analytical Services
5025 S. 33rd Street
Phoenix, AZ 85040
Phone :(602) 276-6139
Fax: (602) 276-4558

Analysis	Due	Expires	Sample Type (circle one)	Sample Comments
Sample ID: 4072275-01	**Drinking W**	**Sampled:07/24/14 16:00**	**Grab Composite N/A**	
Asbestos	08/05/14 09:00	07/26/14 16:00		
Containers Supplied: 03_1000mL Plastic Cool to 4° C (M)				

201407365

Released By (Print & Sign)	Date	Time	Received By (Print & Sign)	Date	Time
Heather Ward X Ward	7/25/14	1240	C. Crawford X Craig Crawford	7-25-14	1240
C. Crawford X Craig Crawford	7-25-14	1400		7.25.14	1400

Review of Analysis Request (Initials)

LEGEND
Technical Services, Inc.
www.legend-group.com

17631 North 25th Avenue • Phoenix, AZ 85023
P (602) 324-6100 • F (602) 324-6101

11 August 2014

Brad D, Jeppson
Carollo Engineers, Inc.
4600 E Washington St. #500
Phoenix, AZ 85034

RE: New Source

Laboratory Work Order No.: 4072274

Legend Technical Services of Arizona, Inc. is pleased to provide the enclosed analytical results for the aforementioned project. These results relate only to the items tested. This cover letter and the accompanying pages represent the full report for these analyses and should only be reproduced in full. Samples for this project were received by the laboratory on 07/25/14 09:10.

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

All samples will be retained by LEGEND for 30 days from the date of this report and then discarded unless other arrangements are made.

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

Sincerely,
LEGEND TECHNICAL SERVICES OF ARIZONA, INC.

Barbara Frank

Barbara Frank
Client Services Representative
(602) 324-6100

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

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Type	Date Sampled	Date Received
WWRP Effluent (COS UV Channel)	4072274-01	Drinking Water	Grab	07/24/14 13:15	07/25/14 09:10

Sample Condition Upon Receipt:

Temperature: 5.90 C
All samples were received in acceptable condition unless noted otherwise in the case narrative.

Case Narrative:

Holding Times: All holding times were met unless otherwise qualified.
QA/QC Criteria: All analyses met method requirements unless otherwise qualified.
Certifications: AZ(PHX)0004, AZ(TUC)OOO4, AIHA#102982, CDC ELITE Member.
Accreditation is applicable only to the test methods specified on each scope of accreditation held by LEGEND.
Comments: There were no problems encountered during the processing of the samples, unless otherwise noted. All samples were analyzed on a "wet" basis unless designated as "dry weight".

This report contains data that were produced by a subcontracted laboratory certified for the fields of testing performed.

Eurofins Eaton Analytical, Inc. AZ0432
Jim Van Fleit
574.472-5535

Pace Analytica AZ0014
Nate Habte
612.607.6407

Legend Technical Services, St. Paul AZ0557
Bach Pham
651.221.4062

Radiation Safety AZ0462
Pierre Pouquette
480.897.9459

Fiberquant AZ0633
Karen Grant 602.276.6131
Kathy Townsend 602.276.6139

Brad notified via micro analyst of the positive Total Colilert via email on 07/26/14. BF

Notified Kelly and Brad of the positive Total Colilert via email on 07/28/14. BF

Notified Kelly and Brad of the MCL Violation for TDS via email on 07/31/14. BF

For Method 531 and 547, the sample required 10x dilution due to too much suspended particulate. Brad and Kelly were notified via email on 08/04/14. BF

WWRP Effluent (COS UV Channel) (4072274-01) Drinking Water (Grab) Sampled: 07/24/14 13:15 Received: 07/25/14 09:10

UL#AZ0432

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EPA 504.1									
1,2-Dibromo-3-chloropropane	<0.00002	0.00002	mg/L	1.03	193287	07/28/14 00:00	07/29/14 00:00	EPA 504.1	
1,2-Dibromoethane (EDB)	<0.00001	0.00001	mg/L	1.03	193287	07/28/14 00:00	07/29/14 00:00	EPA 504.1	
EPA 515.3									
2,4,5-TP (Silvex)	<0.0002	0.0002	mg/L	1	193510	07/31/14 00:00	08/04/14 00:00	EPA 515.3	
2,4-D	<0.0001	0.0001	mg/L	1	193510	07/31/14 00:00	08/04/14 00:00	EPA 515.3	
Dalapon	<0.0010	0.0010	mg/L	1	193510	07/31/14 00:00	08/04/14 00:00	EPA 515.3	
Dicamba	<0.0001	0.0001	mg/L	1	193510	07/31/14 00:00	08/04/14 00:00	EPA 515.3	
Dinoseb	<0.0002	0.0002	mg/L	1	193510	07/31/14 00:00	08/04/14 00:00	EPA 515.3	
Pentachlorophenol	<0.00004	0.00004	mg/L	1	193510	07/31/14 00:00	08/04/14 00:00	EPA 515.3	
Picloram	<0.0001	0.0001	mg/L	1	193510	07/31/14 00:00	08/04/14 00:00	EPA 515.3	
Surrogate: SS-2,4-Dichlorophenylacetic acid		*114 %*		*70-130*	*193510*	*07/31/14*	*08/04/14*	*EPA 515.3*	
EPA 525.2									
Alachlor	<0.0002	0.0002	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Aldrin	<0.0001	0.0001	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Atrazine	<0.0001	0.0001	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Benzo(a)pyrene	<0.00002	0.00002	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Butachlor	<0.0001	0.0001	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Di(2-ethylhexyl)adipate	<0.0006	0.0006	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Di(2-ethylhexyl)phthalate	<0.0006	0.0006	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Dieldrin	<0.0001	0.0001	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Endrin	<0.00001	0.00001	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
gamma-BHC (Lindane)	<0.00002	0.00002	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Heptachlor	<0.00004	0.00004	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Heptachlor epoxide	<0.00002	0.00002	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Hexachlorobenzene	<0.0001	0.0001	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Hexachlorocyclopentadiene	<0.0001	0.0001	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Methoxychlor	<0.0001	0.0001	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Metolachlor	<0.0001	0.0001	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Metribuzin	<0.0001	0.0001	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Propachlor	<0.0001	0.0001	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Simazine	<0.00007	0.00007	mg/L	0.98	193441	07/31/14 00:00	07/31/14 00:00	EPA 525.2	
Surrogate: SS-2,4,5,6-Tetrachloro-m-xylene		*92 %*		*70-130*	*193441*	*07/31/14*	*07/31/14*	*EPA 525.2*	
Surrogate: SS-4,4'-Dichlorobiphenyl		*99 %*		*70-130*	*193441*	*07/31/14*	*07/31/14*	*EPA 525.2*	
Surrogate: SS-Triphenylphosphate		*99 %*		*70-130*	*193441*	*07/31/14*	*07/31/14*	*EPA 525.2*	

WWRP Effluent (COS UV Channel) (4072274-01) Drinking Water (Grab) Sampled: 07/24/14 13:15 Received: 07/25/14 09:10

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			UL#AZ0432						
EPA 548.1									
Endothall	<0.0090	0.0090	mg/L	1	193402	07/30/14 00:00	07/31/14 00:00	EPA 548.1	
Surrogate: SS-2,4-Dichlorophenylacetic acid		*85 %*		*54-125*		*193402*	*07/30/14*	*07/31/14*	*EPA 548.1*
EPA 549.2									
Diquat	<0.0004	0.0004	mg/L	1	193311	07/29/14 00:00	07/30/14 00:00	EPA 549.2	
			Radiation Safety Engineering #AZ0462						
Calculation									
Combined Radium	<0.7		pCi/L	1	NA		08/01/14 00:00	Calculation	
EPA 600/00-02									
Gross Alpha Activity	**1.9 ± 0.9**		pCi/L	1	NA		07/28/14 00:00	EPA 600/00-02	
Gamma Ray HPGE									
Radium 226 Activity	<0.5		pCi/L	1	NA		08/01/14 00:00	Gamma Ray HPGE	
Radium 228 Activity	<0.7		pCi/L	1	NA		08/01/14 00:00	Gamma Ray HPGE	
			Pace Analytical Services, Inc.						
EPA-5 1613B-Tetras									
Dioxin	<0.0000000050	0.0000000050	mg/L	1	15180	08/04/14 18:35	08/06/14 04:29	EPA-5 1613B-Tetras	
Surrogate: 13C-2,3,7,8-TCDD		*68 %*		*31.0-137.0*		*15180*	*08/04/14*	*08/06/14*	*EPA-5 1613B-Tetras*
			Legend Technical Services, Inc. #AZ0557						
PESTICIDES/PCBS 505									
Aroclor 1016	<0.000080	0.000080	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 16:11	EPA 505	
Aroclor 1221	<0.020	0.020	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 16:11	EPA 505	
Aroclor 1232	<0.00050	0.00050	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 16:11	EPA 505	
Aroclor 1242	<0.00030	0.00030	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 16:11	EPA 505	
Aroclor 1248	<0.00010	0.00010	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 16:11	EPA 505	
Aroclor 1254	<0.00010	0.00010	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 16:11	EPA 505	
Aroclor 1260	<0.00020	0.00020	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 16:11	EPA 505	
Chlordane	<0.00020	0.00020	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 16:11	EPA 505	
Toxaphene	<0.0010	0.0010	mg/L	1	B4H0406	08/04/14 07:16	08/04/14 16:11	EPA 505	
Surrogate: Decachlorobiphenyl		*71.3 %*		*66.7-131*		*B4H0406*	*08/04/14*	*08/04/14*	*EPA 505*

Carollo Engineers, Inc. 4600 E Washington St. #500 Phoenix, AZ 85034	Project: New Source Project Number: 07/24/14 Project Manager: Brad D, Jeppson	**Reported:** 08/11/14 09:37

WWRP Effluent (COS UV Channel) (4072274-01) Drinking Water (Grab) Sampled: 07/24/14 13:15 Received: 07/25/14 09:10

Legend Technical Services of Arizona, Inc.

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Microbiology									
E. coli	Absent		P/A	1	B4G0824	07/25/14 12:35	07/25/14 12:35	SM 9223B	
Total Coliforms	Present		P/A	1	B4G0824	07/25/14 12:35	07/25/14 12:35	SM 9223B	
Total Metals									
Antimony	<0.0005	0.0005	mg/L	1	B4G0894	07/29/14 16:55	08/01/14 13:19	EPA 200.8	
Arsenic	**0.0057**	0.0010	mg/L	1	B4G0894	07/29/14 16:55	08/01/14 13:19	EPA 200.8	
Barium	**0.15**	0.01	mg/L	1	B4G0895	07/29/14 16:55	07/30/14 12:58	EPA 200.7	
Beryllium	<0.002	0.002	mg/L	1	B4G0895	07/29/14 16:55	07/30/14 12:58	EPA 200.7	
Cadmium	<0.0001	0.0001	mg/L	1	B4G0894	07/29/14 16:55	08/01/14 13:19	EPA 200.8	
Calcium	**58**	1	mg/L	1	B4G0895	07/29/14 16:55	07/30/14 12:58	EPA 200.7	
Chromium	<0.005	0.005	mg/L	1	B4G0895	07/29/14 16:55	07/30/14 12:58	EPA 200.7	
Copper	**0.02**	0.01	mg/L	1	B4G0895	07/29/14 16:55	07/30/14 12:58	EPA 200.7	
Lead	<0.0010	0.0010	mg/L	1	B4G0894	07/29/14 16:55	08/01/14 13:19	EPA 200.8	
Magnesium	**27**	1	mg/L	1	B4G0895	07/29/14 16:55	07/30/14 12:58	EPA 200.7	
Mercury	<0.0002	0.0002	mg/L	1	B4H0017	08/01/14 09:18	08/01/14 15:01	EPA 245.1	
Nickel	<0.02	0.02	mg/L	1	B4G0895	07/29/14 16:55	07/30/14 12:58	EPA 200.7	
Selenium	<0.0020	0.0020	mg/L	1	B4G0894	07/29/14 16:55	08/01/14 13:19	EPA 200.8	
Sodium	**114**	1	mg/L	1	B4G0895	07/29/14 16:55	07/30/14 12:58	EPA 200.7	
Thallium	<0.0005	0.0005	mg/L	1	B4G0894	07/29/14 16:55	08/01/14 13:19	EPA 200.8	
Calcium Hardness as CaCO3	**144**	2	mg/L	1	[CALC]	07/29/14 16:55	07/30/14 12:58	SM2340B	
Magnesium Hardness as Ca(	**109**	4	mg/L	1	[CALC]	07/29/14 16:55	07/30/14 12:58	SM2340B	
Total Hardness as CaCO3	**254**	4	mg/L	1	[CALC]	07/29/14 16:55	07/30/14 12:58	SM2340B	
Inorganic Chemistry									
Total Alkalinity as CaCO3	**264**	10	mg/L	1	B4G0843	07/28/14 16:25	07/28/14 16:25	SM 2320 B	
Cyanide, Total	<0.010	0.010	mg/L	1	B4G0872	07/29/14 10:30	07/29/14 14:18	SM 4500 CN E	
Fluoride	**0.40**	0.10	mg/L	1	B4G0915	07/30/14 11:05	07/30/14 11:05	SM 4500 F C	
Nitrate as N	**5.85**	0.20	mg/L	1	[CALC]	08/01/14 10:35	08/01/14 10:35	Calculation	
Nitrate + Nitrite as N	**5.85**	0.20	mg/L	1	B4H0012	08/01/14 10:35	08/01/14 10:35	SM 4500 NO3 F	
Nitrite as N	<0.10	0.10	mg/L	1	B4G0790	07/25/14 15:25	07/25/14 15:25	SM 4500 NO2 B	
pH	**7.5**		pH Units	1	B4G0772	07/25/14 11:10	07/25/14 11:10	SM 4500H B	H5
Temperature	**17.6**		°C	1	B4G0772	07/25/14 11:10	07/25/14 11:10	pH Temperature	H5
Sulfate	**18.1**	5.0	mg/L	1	B4H0005	07/31/14 12:19	07/31/14 12:19	EPA 300.0	
Total Dissolved Solids	**537**	1	mg/L	1	B4G0831	07/28/14 15:30	07/28/14 15:30	SM 2540 C	

WWRP Effluent (COS UV Channel) (4072274-01) Drinking Water (Grab) Sampled: 07/24/14 13:15 Received: 07/25/14 09:10

Legend Technical Services of Arizona, Inc.

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds									
1,1,1-Trichloroethane	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
1,1,2-Trichloroethane	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
1,1-Dichloroethene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
1,2,4-Trichlorobenzene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
1,2-Dichlorobenzene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
1,2-Dichloroethane	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
1,2-Dichloropropane	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
1,4-Dichlorobenzene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
Benzene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
Bromodichloromethane	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
Bromoform	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
Carbon tetrachloride	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
Chlorobenzene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
Chloroform	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
cis-1,2-Dichloroethylene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
Dibromochloromethane	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
Dichloromethane	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
Ethylbenzene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
m,p-Xylene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
o-Xylene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
Styrene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
Tetrachloroethene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
Toluene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
Total THMs	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
trans-1,2-Dichloroethene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
Trichloroethene	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
Vinyl chloride	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
Xylenes (total)	<0.0005	0.0005	mg/L	1	B4G0816	07/28/14 09:00	07/28/14 12:18	EPA 524.2	
Surrogate: 1,2-Dichlorobenzene-d4		*99 %*		*70-130*	*B4G0816*	*07/28/14*	*07/28/14*	*EPA 524.2*	
Surrogate: 1,2-Dichloroethane-d4		*93 %*		*70-130*	*B4G0816*	*07/28/14*	*07/28/14*	*EPA 524.2*	
Surrogate: 4-Bromofluorobenzene		*85 %*		*70-130*	*B4G0816*	*07/28/14*	*07/28/14*	*EPA 524.2*	
Surrogate: Pentafluorobenzene		*97 %*		*70-130*	*B4G0816*	*07/28/14*	*07/28/14*	*EPA 524.2*	

WWRP Effluent (COS UV Channel) (4072274-01) Drinking Water (Grab) Sampled: 07/24/14 13:15 Received: 07/25/14 09:10

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services of Arizona, Inc.									
Miscellaneous									
Langlier Index	**0.0220**	-5.00	N/A	1	B4G0707	07/28/14 12:48	07/31/14 14:07	Miscellaneous	
Semi-Volatile Organic Compounds									**D6**
3-Hydroxycarbofuran	<0.0050	0.0050	mg/L	10	B4G0954	07/31/14 10:00	08/04/14 18:58	EPA 531.2	
Aldicarb	<0.0050	0.0050	mg/L	10	B4G0954	07/31/14 10:00	08/04/14 18:58	EPA 531.2	
Aldicarb sulfone	<0.0080	0.0080	mg/L	10	B4G0954	07/31/14 10:00	08/04/14 18:58	EPA 531.2	
Aldicarb sulfoxide	<0.0050	0.0050	mg/L	10	B4G0954	07/31/14 10:00	08/04/14 18:58	EPA 531.2	
Carbaryl	<0.0050	0.0050	mg/L	10	B4G0954	07/31/14 10:00	08/04/14 18:58	EPA 531.2	
Carbofuran	<0.0090	0.0090	mg/L	10	B4G0954	07/31/14 10:00	08/04/14 18:58	EPA 531.2	
Methomyl	<0.0050	0.0050	mg/L	10	B4G0954	07/31/14 10:00	08/04/14 18:58	EPA 531.2	
Oxamyl	<0.0200	0.0200	mg/L	10	B4G0954	07/31/14 10:00	08/04/14 18:58	EPA 531.2	
Surrogate: 4-Bromo-3,5-dimethylphenyl-N-methylcarbam		*112 %*		*70-130*		*B4G0954*	*07/31/14*	*08/04/14*	*EPA 531.2*
Herbicides									**D6**
Glyphosate	<0.060	0.060	mg/L	10	B4H0141	08/06/14 14:00	08/07/14 00:45	EPA 547	
Fiberquant Analytical Services #AZ0633									
EPA 100.1									
Asbestos	<0.2	0.2	MFL	1	N/A	07/25/14 00:00	08/01/14 00:00	EPA 100.1	

Microbiology - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0824 - micro_prep										
Blank (B4G0824-BLK1)				*Prepared & Analyzed: 07/25/14*						
E. coli	Absent		P/A							
Total Coliforms	Absent		P/A							

Total Metals - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0894 - EPA 200.8										
Blank (B4G0894-BLK1)				*Prepared: 07/29/14 Analyzed: 08/01/14*						
Antimony	<0.0005	0.0005	mg/L							
Arsenic	<0.0010	0.0010	mg/L							
Cadmium	<0.0001	0.0001	mg/L							
Lead	<0.0010	0.0010	mg/L							
Selenium	<0.0020	0.0020	mg/L							
Thallium	<0.0005	0.0005	mg/L							
LCS (B4G0894-BS1)				*Prepared: 07/29/14 Analyzed: 08/01/14*						
Antimony	0.0257	0.0005	mg/L	0.0250		103	85-115			
Arsenic	0.0257	0.0010	mg/L	0.0250		103	85-115			
Cadmium	0.0245	0.0001	mg/L	0.0250		98	85-115			
Lead	0.0247	0.0010	mg/L	0.0250		99	85-115			
Selenium	0.0265	0.0020	mg/L	0.0250		106	85-115			
Thallium	0.0242	0.0005	mg/L	0.0250		97	85-115			
LCS Dup (B4G0894-BSD1)				*Prepared: 07/29/14 Analyzed: 08/01/14*						
Antimony	0.0275	0.0005	mg/L	0.0250		110	85-115	7	20	
Arsenic	0.0262	0.0010	mg/L	0.0250		105	85-115	2	20	
Cadmium	0.0253	0.0001	mg/L	0.0250		101	85-115	3	20	
Lead	0.0252	0.0010	mg/L	0.0250		101	85-115	2	20	
Selenium	0.0264	0.0020	mg/L	0.0250		106	85-115	0.2	20	
Thallium	0.0250	0.0005	mg/L	0.0250		100	85-115	3	20	
Matrix Spike (B4G0894-MS1)		**Source: 4072275-01**		*Prepared: 07/29/14 Analyzed: 08/01/14*						
Antimony	0.0270	0.0005	mg/L	0.0250	0.0001	108	70-130			
Arsenic	0.0325	0.0010	mg/L	0.0250	0.0059	106	70-130			
Cadmium	0.0259	0.0001	mg/L	0.0250	<0.0001	104	70-130			
Lead	0.0258	0.0010	mg/L	0.0250	0.0001	103	70-130			
Selenium	0.0276	0.0020	mg/L	0.0250	<0.0020	110	70-130			
Thallium	0.0261	0.0005	mg/L	0.0250	<0.0005	105	70-130			

Total Metals - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0894 - EPA 200.8										
Matrix Spike Dup (B4G0894-MSD1)		**Source: 4072275-01**		*Prepared: 07/29/14*		*Analyzed: 08/01/14*				
Antimony	0.0268	0.0005	mg/L	0.0250	0.0001	107	70-130	0.9	20	
Arsenic	0.0327	0.0010	mg/L	0.0250	0.0059	107	70-130	0.7	20	
Cadmium	0.0252	0.0001	mg/L	0.0250	<0.0001	101	70-130	3	20	
Lead	0.0261	0.0010	mg/L	0.0250	0.0001	104	70-130	1	20	
Selenium	0.0274	0.0020	mg/L	0.0250	<0.0020	110	70-130	0.4	20	
Thallium	0.0264	0.0005	mg/L	0.0250	<0.0005	106	70-130	0.9	20	
Batch B4G0895 - EPA 200.7										
Blank (B4G0895-BLK1)				*Prepared: 07/29/14*		*Analyzed: 07/30/14*				
Barium	<0.01	0.01	mg/L							
Beryllium	<0.002	0.002	mg/L							
Calcium	<1	1	mg/L							
Chromium	<0.005	0.005	mg/L							
Copper	<0.01	0.01	mg/L							
Magnesium	<1	1	mg/L							
Nickel	<0.02	0.02	mg/L							
Sodium	<1	1	mg/L							
LCS (B4G0895-BS1)				*Prepared: 07/29/14*		*Analyzed: 07/30/14*				
Barium	1.01	0.01	mg/L	1.00		101	85-115			
Beryllium	0.200	0.002	mg/L	0.200		100	85-115			
Calcium	20	1	mg/L	20.0		100	85-115			
Chromium	0.495	0.005	mg/L	0.500		99	85-115			
Copper	1.01	0.01	mg/L	1.00		101	85-115			
Magnesium	20	1	mg/L	20.0		102	85-115			
Nickel	1.00	0.02	mg/L	1.00		100	85-115			
Sodium	20	1	mg/L	20.0		100	85-115			

Total Metals - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0895 - EPA 200.7										
LCS Dup (B4G0895-BSD1)				*Prepared: 07/29/14 Analyzed: 07/30/14*						
Barium	1.01	0.01	mg/L	1.00		101	85-115	0.3	20	
Beryllium	0.200	0.002	mg/L	0.200		100	85-115	0.1	20	
Calcium	20	1	mg/L	20.0		100	85-115	0.04	20	
Chromium	0.495	0.005	mg/L	0.500		99	85-115	0.06	20	
Copper	1.01	0.01	mg/L	1.00		101	85-115	0.01	20	
Magnesium	20	1	mg/L	20.0		102	85-115	0.04	20	
Nickel	1.00	0.02	mg/L	1.00		100	85-115	0.06	20	
Sodium	20	1	mg/L	20.0		100	85-115	0.2	20	
Matrix Spike (B4G0895-MS1)		**Source: 4072275-01**		*Prepared: 07/29/14 Analyzed: 07/30/14*						
Barium	1.24	0.01	mg/L	1.00	0.23	102	70-130			
Beryllium	0.202	0.002	mg/L	0.200	0.0004	101	70-130			
Calcium	54	1	mg/L	20.0	34	101	70-130			
Chromium	0.497	0.005	mg/L	0.500	0.001	99	70-130			
Copper	1.03	0.01	mg/L	1.00	<0.01	103	70-130			
Magnesium	38	1	mg/L	20.0	17	102	70-130			
Nickel	0.99	0.02	mg/L	1.00	<0.02	99	75-125			
Sodium	26	1	mg/L	20.0	5	103	70-130			
Matrix Spike Dup (B4G0895-MSD1)		**Source: 4072275-01**		*Prepared: 07/29/14 Analyzed: 07/30/14*						
Barium	1.24	0.01	mg/L	1.00	0.23	101	70-130	0.4	20	
Beryllium	0.202	0.002	mg/L	0.200	0.0004	101	70-130	0.04	20	
Calcium	54	1	mg/L	20.0	34	102	70-130	0.5	20	
Chromium	0.497	0.005	mg/L	0.500	0.001	99	70-130	0.06	20	
Copper	1.03	0.01	mg/L	1.00	<0.01	103	70-130	0.8	20	
Magnesium	38	1	mg/L	20.0	17	103	70-130	0.2	20	
Nickel	0.99	0.02	mg/L	1.00	<0.02	99	75-125	0.5	20	
Sodium	26	1	mg/L	20.0	5	103	70-130	0.4	20	

Total Metals - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4H0017 - EPA 245.1/245.2 Prep										
Blank (B4H0017-BLK1)				*Prepared & Analyzed: 08/01/14*						
Mercury	<0.0002	0.0002	mg/L							
LCS (B4H0017-BS1)				*Prepared & Analyzed: 08/01/14*						
Mercury	0.00099	0.0002	mg/L	0.00100		99	85-115			
LCS Dup (B4H0017-BSD1)				*Prepared & Analyzed: 08/01/14*						
Mercury	0.00099	0.0002	mg/L	0.00100		99	85-115	0	20	
Matrix Spike (B4H0017-MS1)		**Source: 4072280-01**		*Prepared & Analyzed: 08/01/14*						
Mercury	0.00099	0.0002	mg/L	0.00100	<0.0002	99	70-130			
Matrix Spike (B4H0017-MS2)		**Source: 4072403-01**		*Prepared & Analyzed: 08/01/14*						
Mercury	0.00098	0.0002	mg/L	0.00100	<0.0002	98	70-130			
Matrix Spike Dup (B4H0017-MSD1)		**Source: 4072280-01**		*Prepared & Analyzed: 08/01/14*						
Mercury	0.00101	0.0002	mg/L	0.00100	<0.0002	101	70-130	2	20	
Matrix Spike Dup (B4H0017-MSD2)		**Source: 4072403-01**		*Prepared & Analyzed: 08/01/14*						
Mercury	0.00098	0.0002	mg/L	0.00100	<0.0002	98	70-130	0	20	

Inorganic Chemistry - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0772 - NO PREP										
Duplicate (B4G0772-DUP1)		**Source: 4072275-01**		*Prepared & Analyzed: 07/25/14*						
pH	8.7		pH Units		8.7			0.1	10	H5
Batch B4G0790 - NO PREP										
Blank (B4G0790-BLK1)				*Prepared & Analyzed: 07/25/14*						
Nitrite as N	<0.10	0.10	mg/L							
LCS (B4G0790-BS1)				*Prepared & Analyzed: 07/25/14*						
Nitrite as N	0.200	0.10	mg/L	0.200		100	80-120			
LCS Dup (B4G0790-BSD1)				*Prepared & Analyzed: 07/25/14*						
Nitrite as N	0.200	0.10	mg/L	0.200		100	80-120	0	20	
Matrix Spike (B4G0790-MS1)		**Source: 4072321-02**		*Prepared & Analyzed: 07/25/14*						
Nitrite as N	0.088	0.10	mg/L	0.200	<0.10	44	80-120			M2
Matrix Spike Dup (B4G0790-MSD1)		**Source: 4072321-02**		*Prepared & Analyzed: 07/25/14*						
Nitrite as N	0.088	0.10	mg/L	0.200	<0.10	44	80-120	0	20	M2
Batch B4G0831 - NO PREP										
Blank (B4G0831-BLK1)				*Prepared & Analyzed: 07/28/14*						
Total Dissolved Solids	<1	1	mg/L							
Duplicate (B4G0831-DUP1)		**Source: 4072091-01**		*Prepared & Analyzed: 07/28/14*						
Total Dissolved Solids	543	1	mg/L		540			0.6	5	

Inorganic Chemistry - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0843 - NO PREP										
Blank (B4G0843-BLK1)				*Prepared & Analyzed: 07/28/14*						
Total Alkalinity as CaCO3	<10	10	mg/L							
LCS (B4G0843-BS1)				*Prepared & Analyzed: 07/28/14*						
Total Alkalinity as CaCO3	198	10	mg/L	200		99	80-120			
LCS Dup (B4G0843-BSD1)				*Prepared & Analyzed: 07/28/14*						
Total Alkalinity as CaCO3	198	10	mg/L	200		99	80-120	0.3	20	
Matrix Spike (B4G0843-MS1)		**Source: 4071741-01**		*Prepared & Analyzed: 07/28/14*						
Total Alkalinity as CaCO3	293	10	mg/L	200	141	76	80-120			M2
Matrix Spike Dup (B4G0843-MSD1)		**Source: 4071741-01**		*Prepared & Analyzed: 07/28/14*						
Total Alkalinity as CaCO3	313	10	mg/L	200	141	86	80-120	7	20	
Batch B4G0872 - NO PREP										
Blank (B4G0872-BLK1)				*Prepared & Analyzed: 07/29/14*						
Cyanide, Total	<0.010	0.010	mg/L							
LCS (B4G0872-BS1)				*Prepared & Analyzed: 07/29/14*						
Cyanide, Total	0.049	0.010	mg/L	0.0500		98	80-120			
LCS Dup (B4G0872-BSD1)				*Prepared & Analyzed: 07/29/14*						
Cyanide, Total	0.048	0.010	mg/L	0.0500		96	80-120	2	20	
Matrix Spike (B4G0872-MS1)		**Source: 4072245-01**		*Prepared & Analyzed: 07/29/14*						
Cyanide, Total	0.049	0.010	mg/L	0.0500	<0.010	98	80-120			

Inorganic Chemistry - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0872 - NO PREP										
Matrix Spike Dup (B4G0872-MSD1)		**Source: 4072245-01**		*Prepared & Analyzed: 07/29/14*						
Cyanide, Total	0.049	0.010	mg/L	0.0500	<0.010	98	80-120	0	20	
Batch B4G0915 - NO PREP										
Blank (B4G0915-BLK1)				*Prepared & Analyzed: 07/30/14*						
Fluoride	<0.10	0.10	mg/L							
LCS (B4G0915-BS1)				*Prepared & Analyzed: 07/30/14*						
Fluoride	2.00	0.10	mg/L	2.00		100	90-110			
LCS Dup (B4G0915-BSD1)				*Prepared & Analyzed: 07/30/14*						
Fluoride	1.99	0.10	mg/L	2.00		100	90-110	0.5	20	
Matrix Spike (B4G0915-MS1)		**Source: 4072101-01**		*Prepared & Analyzed: 07/30/14*						
Fluoride	2.23	0.10	mg/L	2.00	0.28	98	90-110			
Matrix Spike Dup (B4G0915-MSD1)		**Source: 4072101-01**		*Prepared & Analyzed: 07/30/14*						
Fluoride	2.24	0.10	mg/L	2.00	0.28	98	90-110	0.5	20	
Batch B4H0005 - NO PREP										
Blank (B4H0005-BLK1)				*Prepared & Analyzed: 07/31/14*						
Sulfate	<5.0	5.0	mg/L							
LCS (B4H0005-BS1)				*Prepared & Analyzed: 07/31/14*						
Sulfate	20.0	5.0	mg/L	20.0		100	90-110			

Inorganic Chemistry - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4H0005 - NO PREP										
LCS Dup (B4H0005-BSD1)				*Prepared & Analyzed: 07/31/14*						
Sulfate	20.0	5.0	mg/L	20.0		100	90-110	0	20	
Matrix Spike (B4H0005-MS1)		**Source: 4072238-01**		*Prepared & Analyzed: 07/31/14*						
Sulfate	20.1	5.0	mg/L	20.0	<5.0	100	90-110			
Matrix Spike Dup (B4H0005-MSD1)		**Source: 4072238-01**		*Prepared & Analyzed: 07/31/14*						
Sulfate	20.3	5.0	mg/L	20.0	<5.0	102	90-110	1	20	
Batch B4H0012 - NO PREP										
Blank (B4H0012-BLK1)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	<0.20	0.20	mg/L							
Blank (B4H0012-BLK2)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	<0.20	0.20	mg/L							
Blank (B4H0012-BLK3)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	<0.20	0.20	mg/L							
Blank (B4H0012-BLK4)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	<0.20	0.20	mg/L							
Blank (B4H0012-BLK5)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	<0.20	0.20	mg/L							
LCS (B4H0012-BS1)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.1	0.20	mg/L	10.0		101	90-110			

Inorganic Chemistry - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4H0012 - NO PREP										
LCS (B4H0012-BS2)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.2	0.20	mg/L	10.0		102	90-110			
LCS (B4H0012-BS3)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.1	0.20	mg/L	10.0		101	90-110			
LCS Dup (B4H0012-BSD1)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.2	0.20	mg/L	10.0		102	90-110	1	20	
LCS Dup (B4H0012-BSD2)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.1	0.20	mg/L	10.0		101	90-110	1	20	
LCS Dup (B4H0012-BSD3)				*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.1	0.20	mg/L	10.0		101	90-110	0	20	
Matrix Spike (B4H0012-MS1)		**Source: 4072258-02**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.2	0.20	mg/L	10.0	0.05	102	80-120			
Matrix Spike (B4H0012-MS2)		**Source: 4072443-04**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.7	0.20	mg/L	10.0	0.42	103	80-120			
Matrix Spike (B4H0012-MS3)		**Source: 4072443-05**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	16.6	0.20	mg/L	10.0	6.19	104	80-120			
Matrix Spike (B4H0012-MS4)		**Source: 4072443-06**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	17.3	0.20	mg/L	10.0	7.07	102	80-120			
Matrix Spike (B4H0012-MS5)		**Source: 4072558-06**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	15.0	0.20	mg/L	10.0	4.47	105	80-120			

Inorganic Chemistry - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4H0012 - NO PREP										
Matrix Spike Dup (B4H0012-MSD1)		**Source: 4072258-02**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.4	0.20	mg/L	10.0	0.05	104	80-120	2	20	
Matrix Spike Dup (B4H0012-MSD2)		**Source: 4072443-04**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	10.9	0.20	mg/L	10.0	0.42	105	80-120	2	20	
Matrix Spike Dup (B4H0012-MSD3)		**Source: 4072443-05**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	16.7	0.20	mg/L	10.0	6.19	105	80-120	0.6	20	
Matrix Spike Dup (B4H0012-MSD4)		**Source: 4072443-06**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	17.5	0.20	mg/L	10.0	7.07	104	80-120	1	20	
Matrix Spike Dup (B4H0012-MSD5)		**Source: 4072558-06**		*Prepared & Analyzed: 08/01/14*						
Nitrate + Nitrite as N	14.9	0.20	mg/L	10.0	4.47	104	80-120	0.7	20	

Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0816 - Default Prep VOC										
Blank (B4G0816-BLK1)				*Prepared & Analyzed: 07/28/14*						
1,1,1-Trichloroethane	<0.0005	0.0005	mg/L							
1,1,2-Trichloroethane	<0.0005	0.0005	mg/L							
1,1-Dichloroethene	<0.0005	0.0005	mg/L							
1,2,4-Trichlorobenzene	<0.0005	0.0005	mg/L							
1,2-Dichlorobenzene	<0.0005	0.0005	mg/L							
1,2-Dichloroethane	<0.0005	0.0005	mg/L							
1,2-Dichloropropane	<0.0005	0.0005	mg/L							
1,4-Dichlorobenzene	<0.0005	0.0005	mg/L							
Benzene	<0.0005	0.0005	mg/L							
Bromodichloromethane	<0.0005	0.0005	mg/L							
Bromoform	<0.0005	0.0005	mg/L							
Carbon tetrachloride	<0.0005	0.0005	mg/L							
Chlorobenzene	<0.0005	0.0005	mg/L							
Chloroform	<0.0005	0.0005	mg/L							
cis-1,2-Dichloroethylene	<0.0005	0.0005	mg/L							
Dibromochloromethane	<0.0005	0.0005	mg/L							
Dichloromethane	<0.0005	0.0005	mg/L							
Ethylbenzene	<0.0005	0.0005	mg/L							
m,p-Xylene	<0.0005	0.0005	mg/L							
o-Xylene	<0.0005	0.0005	mg/L							
Styrene	<0.0005	0.0005	mg/L							
Tetrachloroethene	<0.0005	0.0005	mg/L							
Toluene	<0.0005	0.0005	mg/L							
Total THMs	<0.0005	0.0005	mg/L							
trans-1,2-Dichloroethene	<0.0005	0.0005	mg/L							
Trichloroethene	<0.0005	0.0005	mg/L							
Vinyl chloride	<0.0005	0.0005	mg/L							
Xylenes (total)	<0.0005	0.0005	mg/L							

Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0816 - Default Prep VOC										
LCS (B4G0816-BS1)				*Prepared & Analyzed: 07/28/14*						
1,1,1-Trichloroethane	0.0019	0.0005	mg/L	0.00200		94	70-130			
1,1,2-Trichloroethane	0.0022	0.0005	mg/L	0.00200		110	70-130			
1,1-Dichloroethene	0.0020	0.0005	mg/L	0.00200		102	70-130			
1,2,4-Trichlorobenzene	0.0019	0.0005	mg/L	0.00200		94	70-130			
1,2-Dichlorobenzene	0.0021	0.0005	mg/L	0.00200		104	70-130			
1,2-Dichloroethane	0.0020	0.0005	mg/L	0.00200		97	70-130			
1,2-Dichloropropane	0.0020	0.0005	mg/L	0.00200		99	70-130			
1,4-Dichlorobenzene	0.0021	0.0005	mg/L	0.00200		105	70-130			
Benzene	0.0020	0.0005	mg/L	0.00200		98	70-130			
Bromodichloromethane	0.0021	0.0005	mg/L	0.00200		106	70-130			
Bromoform	0.0022	0.0005	mg/L	0.00200		108	70-130			
Carbon tetrachloride	0.0020	0.0005	mg/L	0.00200		102	70-130			
Chlorobenzene	0.0020	0.0005	mg/L	0.00200		102	70-130			
Chloroform	0.0019	0.0005	mg/L	0.00200		97	70-130			
cis-1,2-Dichloroethylene	0.0019	0.0005	mg/L	0.00200		97	70-130			
Dibromochloromethane	0.0021	0.0005	mg/L	0.00200		104	70-130			
Dichloromethane	0.0020	0.0005	mg/L	0.00200		102	70-130			
Ethylbenzene	0.0019	0.0005	mg/L	0.00200		96	70-130			
m,p-Xylene	0.0018	0.0005	mg/L	0.00200		92	70-130			
o-Xylene	0.0019	0.0005	mg/L	0.00200		94	70-130			
Styrene	0.0020	0.0005	mg/L	0.00200		98	70-130			
Tetrachloroethene	0.0021	0.0005	mg/L	0.00200		103	70-130			
Toluene	0.0019	0.0005	mg/L	0.00200		96	70-130			
Total THMs	0.0083	0.0005	mg/L	0.00800		104	0-200			
trans-1,2-Dichloroethene	0.0021	0.0005	mg/L	0.00200		104	70-130			
Trichloroethene	0.0020	0.0005	mg/L	0.00200		99	70-130			
Vinyl chloride	0.0019	0.0005	mg/L	0.00200		93	70-130			
Xylenes (total)	0.0037	0.0005	mg/L	0.00400		93	0-200			

Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0816 - Default Prep VOC										
LCS Dup (B4G0816-BSD1)				*Prepared & Analyzed: 07/28/14*						
1,1,1-Trichloroethane	0.0019	0.0005	mg/L	0.00200		94	70-130	0	20	
1,1,2-Trichloroethane	0.0021	0.0005	mg/L	0.00200		106	70-130	4	20	
1,1-Dichloroethene	0.0022	0.0005	mg/L	0.00200		112	70-130	9	20	
1,2,4-Trichlorobenzene	0.0019	0.0005	mg/L	0.00200		93	70-130	1	20	
1,2-Dichlorobenzene	0.0021	0.0005	mg/L	0.00200		103	70-130	0.5	20	
1,2-Dichloroethane	0.0019	0.0005	mg/L	0.00200		96	70-130	2	20	
1,2-Dichloropropane	0.0018	0.0005	mg/L	0.00200		92	70-130	7	20	
1,4-Dichlorobenzene	0.0021	0.0005	mg/L	0.00200		105	70-130	0	20	
Benzene	0.0020	0.0005	mg/L	0.00200		98	70-130	0.5	20	
Bromodichloromethane	0.0020	0.0005	mg/L	0.00200		100	70-130	6	20	
Bromoform	0.0018	0.0005	mg/L	0.00200		92	70-130	15	20	
Carbon tetrachloride	0.0021	0.0005	mg/L	0.00200		103	70-130	1	20	
Chlorobenzene	0.0020	0.0005	mg/L	0.00200		100	70-130	2	20	
Chloroform	0.0020	0.0005	mg/L	0.00200		99	70-130	2	20	
cis-1,2-Dichloroethylene	0.0020	0.0005	mg/L	0.00200		100	70-130	4	20	
Dibromochloromethane	0.0019	0.0005	mg/L	0.00200		94	70-130	9	20	
Dichloromethane	0.0021	0.0005	mg/L	0.00200		105	70-130	3	20	
Ethylbenzene	0.0019	0.0005	mg/L	0.00200		94	70-130	2	20	
m,p-Xylene	0.0019	0.0005	mg/L	0.00200		93	70-130	0.5	20	
o-Xylene	0.0018	0.0005	mg/L	0.00200		90	70-130	3	20	
Styrene	0.0019	0.0005	mg/L	0.00200		94	70-130	5	20	
Tetrachloroethene	0.0021	0.0005	mg/L	0.00200		106	70-130	2	20	
Toluene	0.0019	0.0005	mg/L	0.00200		93	70-130	3	20	
Total THMs	0.0077	0.0005	mg/L	0.00800		96	0-200	7	200	
trans-1,2-Dichloroethene	0.0022	0.0005	mg/L	0.00200		108	70-130	3	20	
Trichloroethene	0.0021	0.0005	mg/L	0.00200		103	70-130	4	20	
Vinyl chloride	0.0020	0.0005	mg/L	0.00200		97	70-130	5	20	
Xylenes (total)	0.0037	0.0005	mg/L	0.00400		92	0-200	1	200	

Semi-Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0954 - Default Prep GC-Semi										
Blank (B4G0954-BLK1)				*Prepared: 07/31/14 Analyzed: 08/01/14*						
3-Hydroxycarbofuran	<0.0005	0.0005	mg/L							
Aldicarb	<0.0005	0.0005	mg/L							
Aldicarb sulfone	<0.0008	0.0008	mg/L							
Aldicarb sulfoxide	<0.0005	0.0005	mg/L							
Carbaryl	<0.0005	0.0005	mg/L							
Carbofuran	<0.0009	0.0009	mg/L							
Methomyl	<0.0005	0.0005	mg/L							
Oxamyl	<0.0020	0.0020	mg/L							
LCS (B4G0954-BS1)				*Prepared: 07/31/14 Analyzed: 08/01/14*						
3-Hydroxycarbofuran	0.0020	0.0005	mg/L	0.00200		101	70-130			
Aldicarb	0.0020	0.0005	mg/L	0.00200		100	70-130			
Aldicarb sulfone	0.0020	0.0008	mg/L	0.00200		101	70-130			
Aldicarb sulfoxide	0.0020	0.0005	mg/L	0.00200		102	70-130			
Carbaryl	0.0020	0.0005	mg/L	0.00200		101	70-130			
Carbofuran	0.0020	0.0009	mg/L	0.00200		102	70-130			
Methomyl	0.0020	0.0005	mg/L	0.00200		102	70-130			
Oxamyl	0.0020	0.0020	mg/L	0.00200		101	70-130			
LCS Dup (B4G0954-BSD1)				*Prepared: 07/31/14 Analyzed: 08/01/14*						
3-Hydroxycarbofuran	0.0020	0.0005	mg/L	0.00200		100	70-130	0.6	20	
Aldicarb	0.0020	0.0005	mg/L	0.00200		100	70-130	0.3	20	
Aldicarb sulfone	0.0020	0.0008	mg/L	0.00200		101	70-130	0.1	20	
Aldicarb sulfoxide	0.0020	0.0005	mg/L	0.00200		101	70-130	1	20	
Carbaryl	0.0020	0.0005	mg/L	0.00200		101	70-130	0.3	20	
Carbofuran	0.0020	0.0009	mg/L	0.00200		102	70-130	0	20	
Methomyl	0.0020	0.0005	mg/L	0.00200		102	70-130	0.3	20	
Oxamyl	0.0020	0.0020	mg/L	0.00200		100	70-130	0.2	20	

Semi-Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0954 - Default Prep GC-Semi										
Matrix Spike (B4G0954-MS1)		**Source: 4071518-01**		*Prepared: 07/31/14 Analyzed: 08/01/14*						
3-Hydroxycarbofuran	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130			
Aldicarb	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130			
Aldicarb sulfone	0.0020	0.0008	mg/L	0.00200	<0.0008	100	70-130			
Aldicarb sulfoxide	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130			
Carbaryl	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130			
Carbofuran	0.0021	0.0009	mg/L	0.00200	<0.0009	103	70-130			
Methomyl	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130			
Oxamyl	0.0020	0.0020	mg/L	0.00200	<0.0020	100	70-130			
Matrix Spike (B4G0954-MS2)		**Source: 4072243-01**		*Prepared & Analyzed: 08/04/14*						
3-Hydroxycarbofuran	0.0021	0.0005	mg/L	0.00200	<0.0005	106	70-130			
Aldicarb	0.0022	0.0005	mg/L	0.00200	<0.0005	109	70-130			
Aldicarb sulfone	0.0021	0.0008	mg/L	0.00200	<0.0008	107	70-130			
Aldicarb sulfoxide	0.0021	0.0005	mg/L	0.00200	<0.0005	107	70-130			
Carbaryl	0.0021	0.0005	mg/L	0.00200	<0.0005	107	70-130			
Carbofuran	0.0022	0.0009	mg/L	0.00200	<0.0009	110	70-130			
Methomyl	0.0021	0.0005	mg/L	0.00200	<0.0005	107	70-130			
Oxamyl	0.0021	0.0020	mg/L	0.00200	<0.0020	106	70-130			
Matrix Spike Dup (B4G0954-MSD1)		**Source: 4071518-01**		*Prepared: 07/31/14 Analyzed: 08/01/14*						
3-Hydroxycarbofuran	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130	0.1	30	
Aldicarb	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130	0	30	
Aldicarb sulfone	0.0020	0.0008	mg/L	0.00200	<0.0008	100	70-130	0.8	30	
Aldicarb sulfoxide	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130	0.3	30	
Carbaryl	0.0020	0.0005	mg/L	0.00200	<0.0005	100	70-130	1	30	
Carbofuran	0.0020	0.0009	mg/L	0.00200	<0.0009	102	70-130	0.7	30	
Methomyl	0.0020	0.0005	mg/L	0.00200	<0.0005	99	70-130	0.7	30	
Oxamyl	0.0020	0.0020	mg/L	0.00200	<0.0020	99	70-130	0.6	30	

Semi-Volatile Organic Compounds - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4G0954 - Default Prep GC-Semi										
Matrix Spike Dup (B4G0954-MSD2)		**Source: 4072243-01**		*Prepared & Analyzed: 08/04/14*						
3-Hydroxycarbofuran	0.0021	0.0005	mg/L	0.00200	<0.0005	106	70-130	0.6	30	
Aldicarb	0.0022	0.0005	mg/L	0.00200	<0.0005	108	70-130	0.9	30	
Aldicarb sulfone	0.0021	0.0008	mg/L	0.00200	<0.0008	106	70-130	0.2	30	
Aldicarb sulfoxide	0.0021	0.0005	mg/L	0.00200	<0.0005	107	70-130	0.2	30	
Carbaryl	0.0021	0.0005	mg/L	0.00200	<0.0005	106	70-130	0.5	30	
Carbofuran	0.0022	0.0009	mg/L	0.00200	<0.0009	110	70-130	0.6	30	
Methomyl	0.0021	0.0005	mg/L	0.00200	<0.0005	106	70-130	0.3	30	
Oxamyl	0.0021	0.0020	mg/L	0.00200	<0.0020	107	70-130	0.3	30	

Herbicides - Quality Control

Legend Technical Services of Arizona, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4H0141 - Default Prep GC-Semi										
Blank (B4H0141-BLK1)				*Prepared & Analyzed: 08/06/14*						
Glyphosate	<0.006	0.006	mg/L							
LCS (B4H0141-BS1)				*Prepared & Analyzed: 08/06/14*						
Glyphosate	0.047	0.006	mg/L	0.0500		94	70-130			
LCS Dup (B4H0141-BSD1)				*Prepared & Analyzed: 08/06/14*						
Glyphosate	0.049	0.006	mg/L	0.0500		99	70-130	6	20	
Matrix Spike (B4H0141-MS1)		**Source: 4072243-01**		*Prepared & Analyzed: 08/06/14*						
Glyphosate	0.045	0.006	mg/L	0.0500	<0.006	91	70-130			
Matrix Spike Dup (B4H0141-MSD1)		**Source: 4072243-01**		*Prepared & Analyzed: 08/06/14*						
Glyphosate	0.047	0.006	mg/L	0.0500	<0.006	95	70-130	4	20	

PESTICIDES/PCBS 505 - Quality Control

Legend Technical Services, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4H0406 - EPA 500 Series										
Blank (B4H0406-BLK1)				*Prepared & Analyzed: 08/04/14*						
Aroclor 1016	<0.000080	0.000080	mg/L							
Aroclor 1221	<0.020	0.020	mg/L							
Aroclor 1232	<0.00050	0.00050	mg/L							
Aroclor 1242	<0.00030	0.00030	mg/L							
Aroclor 1248	<0.00010	0.00010	mg/L							
Aroclor 1254	<0.00010	0.00010	mg/L							
Aroclor 1260	<0.00020	0.00020	mg/L							
Chlordane	<0.00020	0.00020	mg/L							
Toxaphene	<0.0010	0.0010	mg/L							
LCS (B4H0406-BS1)				*Prepared & Analyzed: 08/04/14*						
Aroclor 1016	0.000478	0.000080	mg/L	0.000500		95.6	70-130			
Aroclor 1260	0.000539	0.00020	mg/L	0.000500		108	70-130			
LCS Dup (B4H0406-BSD1)				*Prepared & Analyzed: 08/04/14*						
Aroclor 1016	0.000500	0.000080	mg/L	0.000500		100	70-130	4.50	20	
Aroclor 1260	0.000583	0.00020	mg/L	0.000500		117	70-130	7.84	20	
Matrix Spike (B4H0406-MS1)		**Source: 1403362-01**		*Prepared & Analyzed: 08/04/14*						
Aroclor 1016	0.000444	0.000080	mg/L	0.000499	<0.00008C	89.1	65-135			
Aroclor 1260	0.000463	0.00020	mg/L	0.000499	<0.00020	92.9	65-135			

EPA-5 1613B-Tetras - Quality Control

Pace Analytical Services, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 15180 - 1613										
Blank (BLANK-41575)				*Prepared: 08/04/14*		*Analyzed: 08/05/14*				
Dioxin	ND	0.0000000050	mg/L							
LCS (LCS-41576)				*Prepared: 08/04/14*		*Analyzed: 08/05/14*				
Dioxin	0.00000019	0.0000000050	mg/L	200			73.0-146.0			
LCSD (LCSD-41577)		**Source: ALCS-41578**		*Prepared: 08/04/14*		*Analyzed: 08/05/14*				
Dioxin	0.00000019	0.0000000050	mg/L	200	0.0000001		73.0-146.0	186.1	0	

EPA 504.1 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193287 - MLLE										
Blank (3070204)		**Source: 45302**		*Prepared & Analyzed: 07/28/14*						
1,2-Dibromo-3-chloropropane (DBCP)	<0.00002	0.00002	mg/L					-		
1,2-Dibromoethane (EDB)	<0.00001	0.00001	mg/L					-		
Reference (3070205)		**Source: 45302**		*Prepared & Analyzed: 07/28/14*						
1,2-Dibromo-3-chloropropane (DBCP)	<0.00002	0.00002	mg/L	0.00002		100	60-140			
1,2-Dibromoethane (EDB)	0.00002	0.00001	mg/L	0.00002		120	60-140			
Reference (3070206)		**Source: 45302**		*Prepared & Analyzed: 07/28/14*						
1,2-Dibromo-3-chloropropane (DBCP)	0.00010	0.00002	mg/L	0.0001		100	70-130			
1,2-Dibromoethane (EDB)	0.00010	0.00001	mg/L	0.0001		101	70-130			
Reference (3070207)		**Source: 45302**		*Prepared: 07/28/14 Analyzed: 07/29/14*						
1,2-Dibromo-3-chloropropane (DBCP)	0.00010	0.00002	mg/L	0.0001		105	70-130			
1,2-Dibromoethane (EDB)	0.00009	0.00001	mg/L	0.0001		92	70-130			
LCS (3070208)		**Source: 45302**		*Prepared & Analyzed: 07/28/14*						
1,2-Dibromo-3-chloropropane (DBCP)	0.00025	0.00002	mg/L	0.000257		96	70-130			
1,2-Dibromoethane (EDB)	0.00023	0.00001	mg/L	0.000257		88	70-130			
LCS (3070209)		**Source: 45302**		*Prepared: 07/28/14 Analyzed: 07/29/14*						
1,2-Dibromo-3-chloropropane (DBCP)	0.00026	0.00002	mg/L	0.000257		99	70-130			
1,2-Dibromoethane (EDB)	0.00023	0.00001	mg/L	0.000257		89	70-130			
Matrix Spike (3070211)		**Source: 45302**		*Prepared: 07/28/14 Analyzed: 07/29/14*						
1,2-Dibromo-3-chloropropane (DBCP)	0.00011	0.00002	mg/L	0.0001	< MRL	106	65-135			
1,2-Dibromoethane (EDB)	0.00010	0.00001	mg/L	0.0001	< MRL	96	65-135			

EPA 515.3 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193510 - MLLE										
Reference (3072671)		**Source: 45359**		*Prepared: 07/31/14*		*Analyzed: 08/04/14*				
2,4,5-TP (Silvex)	0.0006	0.0002	mg/L	0.0005		127	70-130			
2,4-D	0.0013	0.0001	mg/L	0.001		127	70-130			
Dalapon	0.0012	0.0010	mg/L	0.001		116	70-130			
Dicamba	0.0012	0.0001	mg/L	0.001		115	70-130			
Dinoseb	0.0012	0.0002	mg/L	0.001		125	70-130			
Pentachlorophenol	0.00023	0.00004	mg/L	0.0002		117	70-130			
Picloram	0.0005	0.0001	mg/L	0.0005		90	70-130			
Reference (3072672)		**Source: 45359**		*Prepared: 07/31/14*		*Analyzed: 08/05/14*				
2,4,5-TP (Silvex)	0.0017	0.0002	mg/L	0.0015		113	70-130			
2,4-D	0.0033	0.0001	mg/L	0.003		108	70-130			
Dalapon	0.0032	0.0010	mg/L	0.003		108	70-130			
Dicamba	0.0032	0.0001	mg/L	0.003		106	70-130			
Dinoseb	0.0033	0.0002	mg/L	0.003		110	70-130			
Pentachlorophenol	0.00064	0.00004	mg/L	0.0006		107	70-130			
Picloram	0.0013	0.0001	mg/L	0.0015		85	70-130			
Reference (3072673)		**Source: 45359**		*Prepared: 07/31/14*		*Analyzed: 08/05/14*				
2,4,5-TP (Silvex)	0.0019	0.0002	mg/L	0.0015		124	70-130			
2,4-D	0.0038	0.0001	mg/L	0.003		125	70-130			
Dalapon	0.0036	0.0010	mg/L	0.003		119	70-130			
Dicamba	0.0036	0.0001	mg/L	0.003		120	70-130			
Dinoseb	0.0038	0.0002	mg/L	0.003		128	70-130			
Pentachlorophenol	0.00072	0.00004	mg/L	0.0006		120	70-130			
Picloram	0.0014	0.0001	mg/L	0.0015		92	70-130			

EPA 515.3 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193510 - MLLE										
Blank (3072675)		**Source: 45359**		*Prepared: 07/31/14*		*Analyzed: 08/04/14*				
2,4,5-TP (Silvex)	<0.0002	0.0002	mg/L				-			
2,4-D	<0.0001	0.0001	mg/L				-			
Dalapon	<0.0010	0.0010	mg/L				-			
Dicamba	<0.0001	0.0001	mg/L				-			
Dinoseb	<0.0002	0.0002	mg/L				-			
Pentachlorophenol	<0.00004	0.00004	mg/L				-			
Picloram	<0.0001	0.0001	mg/L				-			
LCS (3072677)		**Source: 45359**		*Prepared: 07/31/14*		*Analyzed: 08/04/14*				
2,4,5-TP (Silvex)	<0.0002	0.0002	mg/L	0.0001		143	48-148			
2,4-D	0.0003	0.0001	mg/L	0.0002		150	24-138			N4
Dinoseb	0.0003	0.0002	mg/L	0.0002		146	39-141			N4
Pentachlorophenol	0.00005	0.00004	mg/L	0.00004		131	30-171			
Picloram	0.0001	0.0001	mg/L	0.0001		104	24-150			
Matrix Spike (3072678)		**Source: 45359**		*Prepared: 07/31/14*		*Analyzed: 08/05/14*				
2,4,5-TP (Silvex)	0.0016	0.0002	mg/L	0.0015	< MRL	106	70-130			
2,4-D	0.0032	0.0001	mg/L	0.003	< MRL	107	70-130			
Dalapon	0.0033	0.0010	mg/L	0.003	< MRL	109	70-130			
Dicamba	0.0030	0.0001	mg/L	0.003	< MRL	101	70-130			
Dinoseb	0.0030	0.0002	mg/L	0.003	< MRL	101	70-130			
Pentachlorophenol	0.00055	0.00004	mg/L	0.0006	< MRL	91	70-130			
Picloram	0.0014	0.0001	mg/L	0.0015	< MRL	96	70-130			
Matrix Spike (3072679)		**Source: 45359**		*Prepared: 07/31/14*		*Analyzed: 08/05/14*				
2,4,5-TP (Silvex)	0.0016	0.0002	mg/L	0.0015	< MRL	110	70-130			
2,4-D	0.0032	0.0001	mg/L	0.003	< MRL	108	70-130			
Dalapon	0.0034	0.0010	mg/L	0.003	< MRL	115	70-130			
Dicamba	0.0031	0.0001	mg/L	0.003	< MRL	104	70-130			
Dinoseb	0.0033	0.0002	mg/L	0.003	< MRL	109	70-130			
Pentachlorophenol	0.00062	0.00004	mg/L	0.0006	< MRL	103	70-130			
Picloram	0.0014	0.0001	mg/L	0.0015	< MRL	96	70-130			

EPA 515.3 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193510 - MLLE										
Matrix Spike Dup (3072680)		**Source: 45359**		*Prepared: 07/31/14*		*Analyzed: 08/05/14*				
2,4,5-TP (Silvex)	0.0016	0.0002	mg/L	0.0015	< MRL	108	70-130			
2,4-D	0.0032	0.0001	mg/L	0.003	< MRL	107	70-130			
Dalapon	0.0032	0.0010	mg/L	0.003	< MRL	105	70-130			
Dicamba	0.0030	0.0001	mg/L	0.003	< MRL	101	70-130			
Dinoseb	0.0033	0.0002	mg/L	0.003	< MRL	108	70-130			
Pentachlorophenol	0.00062	0.00004	mg/L	0.0006	< MRL	104	70-130			
Picloram	0.0014	0.0001	mg/L	0.0015	< MRL	92	70-130			

EPA 525.2 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193441 - SPE										
Matrix Spike (3072571)		**Source: 45344**		*Prepared: 07/31/14*		*Analyzed: 08/01/14*				
Alachlor	0.0022	0.0002	mg/L	0.002	< MRL	113	70-130			
Aldrin	0.0020	0.0001	mg/L	0.002	< MRL	102	70-130			
Atrazine	0.0026	0.0001	mg/L	0.002	< MRL	132	70-130			
Benzo(a)pyrene	0.0019	0.00002	mg/L	0.002	< MRL	100	70-130			
Butachlor	0.0023	0.0001	mg/L	0.002	< MRL	118	70-130			
Di(2-ethylhexyl)adipate	0.0024	0.0006	mg/L	0.002	< MRL	123	70-130			
Di(2-ethylhexyl)phthalate	0.0022	0.0006	mg/L	0.002	< MRL	114	70-130			
Dieldrin	0.0022	0.0001	mg/L	0.002	< MRL	114	70-130			
Endrin	0.0022	0.00001	mg/L	0.002	< MRL	115	70-130			
gamma-BHC (Lindane)	0.0022	0.00002	mg/L	0.002	< MRL	112	70-130			
Heptachlor	0.0021	0.00004	mg/L	0.002	< MRL	110	70-130			
Heptachlor epoxide	0.0021	0.00002	mg/L	0.002	< MRL	106	70-130			
Hexachlorobenzene	0.0020	0.0001	mg/L	0.002	< MRL	105	70-130			
Hexachlorocyclopentadiene	0.0024	0.0001	mg/L	0.002	< MRL	124	70-130			
Methoxychlor	0.0023	0.0001	mg/L	0.002	< MRL	117	70-130			
Metolachlor	0.0023	0.0001	mg/L	0.002	< MRL	120	70-130			
Metribuzin	0.0026	0.0001	mg/L	0.002	< MRL	132	70-130			
Propachlor	0.0024	0.0001	mg/L	0.002	< MRL	124	70-130			
Simazine	0.0024	0.00007	mg/L	0.002	< MRL	123	70-130			
Blank (3072575)		**Source: 45344**		*Prepared & Analyzed: 07/31/14*						
Alachlor	<0.0002	0.0002	mg/L				-			
Aldrin	<0.0001	0.0001	mg/L				-			
Atrazine	<0.0001	0.0001	mg/L				-			
Benzo(a)pyrene	<0.00002	0.00002	mg/L				-			
Butachlor	<0.0001	0.0001	mg/L				-			
Di(2-ethylhexyl)adipate	<0.0006	0.0006	mg/L				-			
Di(2-ethylhexyl)phthalate	<0.0006	0.0006	mg/L				-			
Dieldrin	<0.0001	0.0001	mg/L				-			
Endrin	<0.00001	0.00001	mg/L				-			
gamma-BHC (Lindane)	<0.00002	0.00002	mg/L				-			
Heptachlor	<0.00004	0.00004	mg/L				-			
Heptachlor epoxide	<0.00002	0.00002	mg/L				-			
Hexachlorobenzene	<0.0001	0.0001	mg/L				-			
Hexachlorocyclopentadiene	<0.0001	0.0001	mg/L				-			
Methoxychlor	<0.0001	0.0001	mg/L				-			
Metolachlor	<0.0001	0.0001	mg/L				-			
Metribuzin	<0.0001	0.0001	mg/L				-			
Propachlor	<0.0001	0.0001	mg/L				-			
Simazine	<0.00007	0.00007	mg/L				-			

EPA 525.2 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193441 - SPE										
LCS (3072576)		**Source: 45344**		*Prepared & Analyzed: 07/31/14*						
Alachlor	<0.0002	0.0002	mg/L	0.0001		98	66-122			
Atrazine	0.0001	0.0001	mg/L	0.0001		114	73-138			
Benzo(a)pyrene	0.00002	0.00002	mg/L	0.00002		120	43-174			
Di(2-ethylhexyl)adipate	0.0007	0.0006	mg/L	0.0006		115	75-147			
Di(2-ethylhexyl)phthalate	0.0007	0.0006	mg/L	0.0006		117	54-149			
Endrin	0.00002	0.00001	mg/L	0.00001		210	42-294			
gamma-BHC (Lindane)	0.00002	0.00002	mg/L	0.00002		110	73-150			
Heptachlor	0.00004	0.00004	mg/L	0.00004		100	65-124			
Heptachlor epoxide	0.00002	0.00002	mg/L	0.00002		105	46-163			
Hexachlorobenzene	<0.0001	0.0001	mg/L	0.0001		83	62-114			
Hexachlorocyclopentadiene	<0.0001	0.0001	mg/L	0.0001		97	51-102			
Methoxychlor	0.0001	0.0001	mg/L	0.0001		109	51-111			
Metolachlor	0.0001	0.0001	mg/L	0.0001		102	61-116			
LCS (3072577)		**Source: 45344**		*Prepared & Analyzed: 07/31/14*						
Alachlor	0.0023	0.0002	mg/L	0.002		113	70-130			
Aldrin	0.0019	0.0001	mg/L	0.002		96	70-130			
Atrazine	0.0026	0.0001	mg/L	0.002		128	70-130			
Benzo(a)pyrene	0.0019	0.00002	mg/L	0.002		95	70-130			
Butachlor	0.0023	0.0001	mg/L	0.002		113	70-130			
Di(2-ethylhexyl)adipate	0.0023	0.0006	mg/L	0.002		114	70-130			
Di(2-ethylhexyl)phthalate	0.0022	0.0006	mg/L	0.002		111	70-130			
Dieldrin	0.0021	0.0001	mg/L	0.002		107	70-130			
Endrin	0.0020	0.00001	mg/L	0.002		100	70-130			
gamma-BHC (Lindane)	0.0021	0.00002	mg/L	0.002		106	70-130			
Heptachlor	0.0020	0.00004	mg/L	0.002		102	70-130			
Heptachlor epoxide	0.0019	0.00002	mg/L	0.002		94	70-130			
Hexachlorobenzene	0.0020	0.0001	mg/L	0.002		100	70-130			
Hexachlorocyclopentadiene	0.0019	0.0001	mg/L	0.002		97	70-130			
Methoxychlor	0.0019	0.0001	mg/L	0.002		94	70-130			
Metolachlor	0.0024	0.0001	mg/L	0.002		118	70-130			
Metribuzin	0.0025	0.0001	mg/L	0.002		127	70-130			
Propachlor	0.0025	0.0001	mg/L	0.002		125	70-130			
Simazine	0.0024	0.00007	mg/L	0.002		120	70-130			

EPA 525.2 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193441 - SPE										
Reference (3072578)		**Source: 45357**		*Prepared & Analyzed: 07/31/14*						
Alachlor	0.0010	0.0002	mg/L	0.001		95	70-130			
Aldrin	0.0009	0.0001	mg/L	0.001		92	70-130			
Atrazine	0.0011	0.0001	mg/L	0.001		112	70-130			
Benzo(a)pyrene	0.00095	0.00002	mg/L	0.001		95	70-130			
Butachlor	0.0010	0.0001	mg/L	0.001		105	70-130			
Di(2-ethylhexyl)adipate	0.0012	0.0006	mg/L	0.001		123	70-130			
Di(2-ethylhexyl)phthalate	0.0011	0.0006	mg/L	0.001		112	70-130			
Dieldrin	0.0010	0.0001	mg/L	0.001		98	70-130			
Endrin	0.00090	0.00001	mg/L	0.001		90	70-130			
gamma-BHC (Lindane)	0.00093	0.00002	mg/L	0.001		93	70-130			
Heptachlor	0.00092	0.00004	mg/L	0.001		92	70-130			
Heptachlor epoxide	0.00086	0.00002	mg/L	0.001		86	70-130			
Hexachlorobenzene	0.0010	0.0001	mg/L	0.001		98	70-130			
Hexachlorocyclopentadiene	0.0012	0.0001	mg/L	0.001		116	70-130			
Methoxychlor	0.0008	0.0001	mg/L	0.001		83	70-130			
Metolachlor	0.0010	0.0001	mg/L	0.001		102	70-130			
Metribuzin	0.0010	0.0001	mg/L	0.001		95	70-130			
Propachlor	0.0011	0.0001	mg/L	0.001		114	70-130			
Simazine	0.0011	0.00007	mg/L	0.001		108	70-130			
Reference (3072579)		**Source: 45357**		*Prepared: 07/31/14 Analyzed: 08/01/14*						
Alachlor	0.0010	0.0002	mg/L	0.001		98	70-130			
Aldrin	0.0010	0.0001	mg/L	0.001		97	70-130			
Atrazine	0.0011	0.0001	mg/L	0.001		113	70-130			
Benzo(a)pyrene	0.0010	0.00002	mg/L	0.001		102	70-130			
Butachlor	0.0010	0.0001	mg/L	0.001		105	70-130			
Di(2-ethylhexyl)adipate	0.0012	0.0006	mg/L	0.001		121	70-130			
Di(2-ethylhexyl)phthalate	0.0011	0.0006	mg/L	0.001		112	70-130			
Dieldrin	0.0010	0.0001	mg/L	0.001		101	70-130			
Endrin	0.0010	0.00001	mg/L	0.001		101	70-130			
gamma-BHC (Lindane)	0.00099	0.00002	mg/L	0.001		99	70-130			
Heptachlor	0.0010	0.00004	mg/L	0.001		102	70-130			
Heptachlor epoxide	0.00095	0.00002	mg/L	0.001		95	70-130			
Hexachlorobenzene	0.0010	0.0001	mg/L	0.001		101	70-130			
Hexachlorocyclopentadiene	0.0013	0.0001	mg/L	0.001		126	70-130			
Methoxychlor	0.0010	0.0001	mg/L	0.001		97	70-130			
Metolachlor	0.0010	0.0001	mg/L	0.001		104	70-130			
Metribuzin	0.0010	0.0001	mg/L	0.001		99	70-130			
Propachlor	0.0011	0.0001	mg/L	0.001		109	70-130			
Simazine	0.0011	0.00007	mg/L	0.001		107	70-130			

EPA 525.2 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193441 - SPE										
LCS (3073307)		**Source: 45344**		*Prepared: 07/31/14*		*Analyzed: 08/01/14*				
Simazine	0.00008	0.00007	mg/L	0.00007		116	66-118			

EPA 548.1 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193402 - SPE										
Matrix Spike (3071975)		**Source: 45336**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	0.10	0.0090	mg/L	0.1	< MRL	100	70-142			
Matrix Spike (3071976)		**Source: 45336**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	0.11	0.0090	mg/L	0.1	< MRL	108	70-142			
Matrix Spike Dup (3071977)		**Source: 45336**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	0.10	0.0090	mg/L	0.1	< MRL	103	70-142			
Blank (3071978)		**Source: 45336**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	<0.0090	0.0090	mg/L							
LCS (3071979)		**Source: 45336**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	<0.0090	0.0090	mg/L	0.009		96	38-161			
LCS (3071980)		**Source: 45336**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	0.12	0.0090	mg/L	0.1		115	70-142			
Reference (3071981)		**Source: 45337**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	0.054	0.0090	mg/L	0.05		108	70-130			
Reference (3071982)		**Source: 45337**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	0.049	0.0090	mg/L	0.05		98	70-130			

EPA 548.1 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193402 - SPE										
Reference (3071983)		**Source: 45337**		*Prepared: 07/30/14*		*Analyzed: 07/31/14*				
Endothall	0.054	0.0090	mg/L	0.05		107	70-130			

EPA 549.2 - Quality Control

UL#AZ0432

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 193311 - SPE										
Reference (3070648)		**Source: 45201**		*Prepared: 07/21/14*		*Analyzed: 07/30/14*				
Diquat	0.0019	0.0004	mg/L	0.002		96	80-120			
Reference (3070649)		**Source: 45201**		*Prepared: 07/21/14*		*Analyzed: 07/30/14*				
Diquat	0.0048	0.0004	mg/L	0.005		96	80-120			
LCS (3070650)		**Source: 45316**		*Prepared: 07/29/14*		*Analyzed: 07/30/14*				
Diquat	0.0040	0.0004	mg/L	0.005		79	70-130			
Blank (3070652)		**Source: 45316**		*Prepared: 07/29/14*		*Analyzed: 07/30/14*				
Diquat	<0.0004	0.0004	mg/L							
LCS (3070653)		**Source: 45316**		*Prepared: 07/29/14*		*Analyzed: 07/30/14*				
Diquat	<0.0004	0.0004	mg/L	0.0004		45	21-161			
Matrix Spike (3070654)		**Source: 45316**		*Prepared: 07/29/14*		*Analyzed: 07/30/14*				
Diquat	0.0039	0.0004	mg/L	0.005	< MRL	78	70-130			
Matrix Spike (3070655)		**Source: 45316**		*Prepared: 07/29/14*		*Analyzed: 07/30/14*				
Diquat	0.0033	0.0004	mg/L	0.005	< MRL	66	70-130			
Matrix Spike Dup (3070656)		**Source: 45316**		*Prepared: 07/29/14*		*Analyzed: 07/30/14*				
Diquat	0.0037	0.0004	mg/L	0.005	< MRL	73	70-130			

Notes and Definitions

N4	[Undefined]
M2	Matrix spike recovery was low; the associated blank spike recovery was acceptable.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
D6	Minimum Reporting Limit (MRL) adjusted due to an automatic 10X dilution performed on this sample for the purpose of reporting traditional drinking water analytes for wastewater requirements.
BLK	Method Blank
LCS/Dup	Laboratory Control Sample/Laboratory Fortified Blank/Duplicate
MS/Dup	Matrix Spike/Duplicate
Dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Legend Technical Services of Arizona, Inc.

SUBCONTRACT ORDER
4072274

PO Number: 4072274
Sampled By: Chao AuChiu
Compliance?: Yes No

SENDING LABORATORY:

Legend Technical Services of Arizona, Inc.
17631 North 25th Avenue
Phoenix, AZ 85023
Phone: 602-324-6100
Fax: 602-324-6101
Project Manager: Barbara Frank

RECEIVING LABORATORY:

Fiberquant Analytical Services
5025 S. 33rd Street
Phoenix, AZ 85040
Phone :(602) 276-6139
Fax: (602) 276-4558

Analysis	Due	Expires	Sample Type (circle one)	Sample Comments
Sample ID: 4072274-01	**Drinking W.**	**Sampled: 07/24/14 13:15**	**Grab Composite**	**N/A**
Asbestos	08/05/14 09:00	07/26/14 13:15		

Containers Supplied:
03_1000mL Plastic Cool to 4° C (M)

Heather Ward	X	H Ward	7/25/14	1240	C. Crawford	X	Carl Crawford	7-25-14	1240
Released By (Print & Sign)			Date	Time	Received By (Print & Sign)			Date	Time
C. Crawford	X	Carl Crawford	7-25-14	1400				7.25.14	@ 1400
Released By (Print & Sign)			Date	Time	Received By (Print & Sign)			Date	Time

Review of Analysis Request (Initials)

Legend Technical Services of Arizona, Inc. **PO Number:** 4072274

SUBCONTRACT ORDER
4072274

SENDING LABORATORY:

Legend Technical Services of Arizona, Inc.
17631 North 25th Avenue
Phoenix, AZ 85023
Phone: 602-324-6100
Fax: 602-324-6101
Project Manager: Barbara Frank

RECEIVING LABORATORY:

Eurofins Eaton Analytical, Inc.
110 S. Hill Street
South Bend, IN 46617
Phone :(800) 332-4345
Fax: (574) 233-8207

Analysis	Due	Expires	Sample Type (circle one)	Sample Comments
Sample ID: 4072274-01	**Drinking W**	**Sampled:07/24/14 13:15**	**Grab Composite**	**N/A**
549-Subcontract	08/05/14 09:00	07/31/14 13:15		
548-Subcontract	08/05/14 09:00	07/31/14 13:15		
526-Subcontract	08/05/14 09:00	08/07/14 13:15		
515-Subcontract	08/05/14 09:00	08/07/14 13:15		
504-Subcontract	08/05/14 09:00	08/07/14 13:15		

Containers Supplied:
07_1000mL Amber Glass pH <2 w/ SS & HCl (C)
07_1000mL Amber Glass pH <2 w/ SS & HCl (D)
20_500mL Amber Plastic w/ S T & H2SO4 (I)
11_125mL Amber Glass Bottle w/ Sodium Sulfite (J)
11_125mL Amber Glass Bottle w/ Sodium Sulfite (K)
10_40mL Sodium Thiosulfate Clear Vial Cool to 4° C (T)
10_40mL Sodium Thiosulfate Clear Vial Cool to 4° C (U)
10_40mL Sodium Thiosulfate Clear Vial Cool to 4° C (V)
10_40mL Sodium Thiosulfate Clear Vial Cool to 4° C (W)

Heather Ward	X HWard	7/25/14	1630	FEDEX	X FEDEX	7/25/14	1630
Released By (Print & Sign)		Date	Time	Received By (Print & Sign)		Date	Time
FEDEX	X						
Released By (Print & Sign)		Date	Time	Received By (Print & Sign)		Date	Time

Page 1 of 2

Legend Technical Services of Arizona, Inc.

SUBCONTRACT ORDER
4072274

PO Number: 4072274
Sampled By: Chao AuChiu
Compliance?: Yes No

SENDING LABORATORY:

Legend Technical Services of Arizona, Inc.
17631 North 25th Avenue
Phoenix, AZ 85023
Phone: 602-324-6100
Fax: 602-324-6101
Project Manager: Barbara Frank

RECEIVING LABORATORY:

Radiation Safety Engineering
3245 N. Washington
Chandler, AZ 85225
Phone :(480) 897-9459
Fax: (480) 892-5446

Analysis	Due	Expires	Sample Type (circle one)	Sample Comments
Sample ID: 4072274-01	**Drinking W**	**Sampled: 07/24/14 13:15**	**Grab Composite**	**N/A**
Radium 228	08/05/14 09:00	01/20/15 13:15		
Radium 226	08/05/14 09:00	01/20/15 13:15		
Gross Alpha	08/05/14 09:00	08/03/14 13:15		

Containers Supplied:
06_1000mL Plastic pH <2 w/ HNO3 (E)
06_1000mL Plastic pH <2 w/ HNO3 (F)
06_1000mL Plastic pH <2 w/ HNO3 (G)
06_1000mL Plastic pH <2 w/ HNO3 (H)

Heather Ward	x		7/25/14	1240	E. Crawford	x Craig Crawford 7-25-14	1240
Released By (Print & Sign)		Date	Time		Received By (Print & Sign)	Date	Time
E. Crawford	x Craig Crawford	7-25-14	1502			7/25-14	1502
Released By (Print & Sign)		Date	Time		Received By (Print & Sign)	Date	Time

Page 2 of 2

4072274

CHAIN OF CUSTODY RECORD

LEGEND Technical Services, Inc.
www.legend-group.com

☒ 17831 N. 25th Avenue • Phoenix, AZ 85023 • (602) 324-6100 • Fax (602) 324-6101
☐ 4585 S. Palo Verde Rd, Ste 423 • Tucson, AZ 85706 • (520) 327-1234 • Fax (520) 327-0516

7/25/14

Page 1 of 1

Please Print Clearly

CLIENT INFORMATION

Client Name	Address	City	State	Zip	Phone	Fax Number or Email Address
Carollo Engineering	4600 E Washington St Suite 500	Phoenix	AZ	85034	602-236-9500	

Project Name	Project Number/PWS	Contact	P.O. No.	Fax Results ☐ Email Results ☐	QC Report ☐ EDD ☐ Special Detection Limits ☐
New Source		Brad Jeppson			

SAMPLE TYPE CODES

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

TURN AROUND TIME

Laboratory Authorization Required for Rush

☒ Standard 15-20 Working Days

☐ Other _____ (Laboratory Authorization Required)

REQUESTED ANALYSES

Client's Sample Identification	Date	Time	Sample Location/POE/DWR	Composite	Grab	Sample Type	Compliance	No. of Containers	Preserved (Lab Use Only)	Metals*	Asbestos	Cyanide	Nitrate, Nitrite	Langlier Index**	Total Coliform	Sulfate	Fluoride	Total Hardness***	505, 515, 525	531, 547, 548	549, Dioxin	524, 504	Gross Alpha	Radium 226/228	LAB NO.
WRRP Effluent	7/24/14	1115	CCR UV Channel		X	DW		32		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-01
Travel Blank (Do Not Open)	7/24/14				X	DI		3													X				-02

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

Comments / Special Instructions: *Metals= Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Hg, Ni, Se, Na, Tl **Langlier Index= Ca, Alkalinity, TDS, pH ***Total Hardness= Ca, Mg

If sample source is chlorinated, different sample containers/preservatives must be used for dechlorination.

SAMPLE CONDITION UPON RECEIPT (Lab Use)

No. of Containers	35	
Temperature	5.9 C	
Custody Seals	Y	(N)
Seals Intact	Y	N
Preserved	(Y)	N

RELINQUISHED BY

		Date	SAMPLES RECEIVED BY	Date
①	Sampler Signature: [signature]	7/25	Signature: [signature]	7/25/14
	Sampler Printed Name: Chad Collins	Time 910	Printed Name: [illegible]	Time 910
②	Signature	Date	Signature	Date
	Printed Name	Time	Printed Name	Time
③	Signature	Date	Signature	Date
	Printed Name	Time	Printed Name	Time

WHITE-LAB YELLOW-CLIENT

FORM GEN-170 (05/06)

Legend Technical Services of Arizona, Inc. **PO Number:** 4072274

SUBCONTRACT ORDER
4072274

SENDING LABORATORY:

Legend Technical Services of Arizona, Inc.
17631 North 25th Avenue
Phoenix, AZ 85023
Phone: 602-324-6100
Fax: 602-324-6101
Project Manager: Barbara Frank

RECEIVING LABORATORY:

Pace Analytical Services, Inc.
1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone :(612) 607-1700
Fax: (612) 607-6444

Analysis	Due	Expires	Sample Type (circle one)	Sample Comments
Sample ID: 4072274-01	**Drinking W**	**Sampled: 07/24/14 13:15**	**Grab Composite**	**N/A**
1613-Subcontract	08/05/14 09:00	10/22/14 13:15		
Containers Supplied: 13_1000mL Amber Glass pH <2 w/ HCl (A)				

Heather Ward	x HWard	7/28/14	1630	FEDEX	x	7/28/14	1630
Released By (Print & Sign)		Date	Time	Received By (Print & Sign)		Date	Time
FEDEX	x						
Released By (Print & Sign)		Date	Time	Received By (Print & Sign)		Date	Time

Page 2 of 2

Legend Technical Services of Arizona, Inc. **PO Number:** 4072274

SUBCONTRACT ORDER
4072274

SENDING LABORATORY:

Legend Technical Services of Arizona, Inc.
17631 North 25th Avenue
Phoenix, AZ 85023
Phone: 602-324-6100
Fax: 602-324-6101
Project Manager: Barbara Frank

RECEIVING LABORATORY:

Legend Technical Services, St. Paul AZ0557
88 Empire Drive
Saint Paul, MN 55103
Phone :(800) 826-8553
Fax: (651) 642-1239

Project: New source

Client: City of Sedona

Analysis	Due	Expires	Leach Date & Time	Sample Comments
Sample ID: 4072274-01 Drinking Wat		**Sampled:07/24/14 13:15**		
505-Subcontract	08/05/14 09:00	08/07/14 13:15		

Containers Supplied:
10_40mL Sodium Thiosulfate Clear Vial Cool to 4° C (AA)
10_40mL Sodium Thiosulfate Clear Vial Cool to 4° C (AB)
10_40mL Sodium Thiosulfate Clear Vial Cool to 4° C (AC)

For method 608: _____pH check _____Cl2 check
Special Instructions/Comments:

* The sample matrix for leachates supplied to the MN laboratory reflects the matrix of the original sample received by LEGEND AZ
**For matrices other than Drinking Water requiring drinking water methods (such as EPA 505, etc.), a 10x dilution is acceptable. Appropriate data qualifiers are to be used.

Released By (Print & Sign)	Date	Time	Received By (Print & Sign)	Date	Time
Heather Ward x [signature]	7/28/14	1630	x FEDEX	7/28/14	1630
x					

LEGEND
Technical Services, Inc.
www.legend-group.com

MISCELLANEOUS REPORT

DOCUMENTS NOT SCANNED IN

- SUB-CONTRACTOR'S ORIGINAL REPORTS FOR QC
- STATE FORMS
- INVOICE COPY
- PAYMENT FORMS OR RECEIPTS

FIBERQUANT ANALYTICAL SERVICES

Determination of Asbestos in Water using TEM

JobNumber: **201407364**

Client: **LEGEND TECHNICAL SVC of AZ**

BOLIN LABORATORIES INC
17631 N 25TH AVE
PHOENIX, AZ 85023-0000
Office Phone: (602) 324-6100
FAX: (602) 324-6101

 # Samples: 1 TEM **Rec:** 7/25/2014 **Method:** EPA 100.1 TEM Water
Client Job: 4072274 **PO Number:** 4072274
Report Date: 8/1/2014 **Date Analyzed:** 8/1/2014 **Routing Number:** -

Method and Analysis Information: **Fiberquant Internal SOP:** TEMw

Samples are analyzed using the protocols given in EPA method 100.1, as amended by the 1993 EPA guidence. Samples should be un-preserved water in 1 L containers having about 200 ml headspace for shaking. There is a 48 hr deadline between the time the sample is taken and the time it is filtered to minimize loss of asbestos fibers due to biological interference. Each sample is shook for 1 minute, and ultrasonicated for at least 10 minutes, shaking every 5 minutes to disperse any fibers that are present. A measured amount of sample is then filtered through a 0.1 um pore size polycarbonate filter, backed by a 5 um pore size MCE filter and a glass frit. Several volumes of liquid may be filtered for each sample in order to assure that a properly loaded sample is obtained. A portion of each resulting filter (and blanks) is then coated with 100-200 um of carbon in a Denton 502A Carbon Evaporator. The carbon encapsulates all of the larger and most of the smaller particulate on the filter. Three mm square pieces of the coated filter are placed on three or more copper TEM grids, and the original filter material is dissolved away in a Jaffe wick and/or condensation washer. The finished replica in carbon containing the particulate is then examined on a JEOL 1200 or Phillips CM 10 transmission electrom microscope at 10,000 to 20,000x magnification. All asbestos fibers >10um in length are tabulated and characterized as asbestos or non-asbestos using a combination of morphology, electron diffraction characteristics, and elemental composition. The result is calculated in millions of fibers per liter (MFL). The grid is scanned until 20 grid openings have been observed, or until an analytical sensitivity (the hypothetical observation of one fiber) of 0.2 MFL has been reached. The nominal 20 grid opening cut-off is used for those samples containing so much non-asbestos particulate that the desired analytical sensitivity is impractical to attain.

The method was designed to determine EPA drinking water compliance. The standard for drinking water is <7 MFL as measured by this method. Fiberquant maintains Arizona Environmental Laboratory license #AZ0633 covering EPA Method 100.1.

Overall, the coefficient of variation can be expected to be approximately 0.5 for analyses in which >20 asbestos fibers have been counted, ranging up to 1.00 for analyses in which only a few asbestos fibers are counted.

The analysis was performed under an ongoing quality assurance program which includes: Lab blanks, prepared with each set of samples and analyzed. Each analyst has suitable background credentials, such as at least a bachelor's degree in geology or chemistry, and has undergone extensive 2-6 month training in TEM techniques and mineralogy specific to TEM asbestos analysis before being allowed to perform client analyses. Unknown reference samples are routinely identified to ensure that each analyst can collect and correctly interpret TEM information. The TEM is aligned and its performance checked daily. Magnification, electron diffraction pattern size, and analytical performance characteristics are calibrated routinely. Samples are re-analyzed sometimes by the same analyst and sometimes by a different analyst in order to determine accuracy and precision. The total of QC analyses (blanks + recounts) are greater than 10% of analyzed samples. Each analyst participates in interlab round robins and proficiency testing in order to show correlation to other lab's analyses. Because TEM samples are not analyzed in batches, which would be traditional for most water analyses, and not every sample has a duplicate or replicate analysis associated with it, it is not possible to include a traditional QC report with the analysis. QC reports are produced monthly, and are available on request. All quality checks performed for these samples were in control except as detailed in the "Analytical Notes" below. Fiberquant is accredited by NVLAP to perform TEM analysis of asbestos in air samples, and has been found to be proficient in the EPA water proficiency program. Accreditation or proficiency does not imply endorsement by the EPA, any other United States governmental agency or any private agency or association. Each lab analysis refers only to the sample tested, and may not, due to the sampling process, be representative of the material sampled. This report may not be reproduced except in full, without the approval of Fiberquant Analytical Services.

Some results may have been calculated using client supplied data, such as volume or area sampled, for which Fiberquant assumes no liability for accuracy.

Job Analysis Notes:

Sampled:	7/24/2014	13:15	**By:**	AuChiu, Chao
Received:	7/25/2014	14:06		
Filtered:	7/25/2014	14:50		
Analyzed:	8/1/2014	14:20		

Analysis Results:

Lab Number	Client Number	Date	Condition	Filtered Vol (ml)	#GOs	GO Area	MFL>10um	AsbestosType	Sensitivity (MFL>10um)
							Job Number:		201407364
2014-07364- 1	4072274-1	7/24/2014	acceptable	20	20	0.00993	<0.2	-	0.2

Uwe Steimle

Analyst: UWE .. STEIMLE

Printed: 01-Aug-14

Original Print Date: 01-Aug-14

Larry S. Pierce

Larry S. Pierce, Approved Accreditation Signatory

Job Number:	201407364

QA Report:	Job Number:	201407364

1. Calibrations	
TEM magnification. date of last.	7/18/2014
TEM camera constant. date of last.	7/29/2014
EDS performance check (k-factors, resolution, low-e perf.). date of last.	4/1/2014
TEM stage drift, minimum beam size. date of last.	4/1/2014
plasma asher. date of last.	3/12/2014

2. Blanks (1/25 samples required)	Not Requred This Job

3. Recounts (1/17 samples required)	Not Requred This Job

4. Analyst Performance	
NVLAP proficiency testing	Current
verified counts. cum. % true positives	92.6
verification of diffraction pattern identifications. cum. % correct	100.0
verification of EDS spectra. cum. % correct	100.0

Fiberquant Analytical Services

Fiberquant, Inc. 5025 S. 33rd St., Phoenix, Arizona 85040 602-276-6139 Fax 602-276-4558

TEM Water Sample Count Sheet

Method: EPA 100.1 (600/4-84-043)

Sample Information

Client: LEGEND TECHNICAL SVC of AZ

Client Smp #: **4072274-1**

Lab #: **2014-07364- 1** Vol Filtered (ml) 5

___ MCE X PC Pore um: ___ 0.4 ___ 0.22 X 0.1

Grid Orientation Draw Asym Spot

Grid Information

#Grids Prepped: 3 GO Area: 0.00993 #GOs to Count 20

System Information

Est. % Loading 1

TEM: ___ Jeol N X Jeol S Mag: 20K or 12K Alignment: X checked EDS: ___ calib X not used

Ac. Volatage: ___ 100keV X 120keV ___ keV

E6	E7	E8	E9	E10	E11	E12	E13	E14	E15
F6	F7	F8	F9	F10	F11	F12	F13	F14	F15
G6	G7	G8	G9	G10	G11	G12	G13	G14	G15
H6	H7	H8	H9	H10	H11	H12	H13	H14	H15
I6	I7	I8	I9			I12	I13	I14	I15
J6	J7	J8	J9			J12	J13	J14	J15
K6	K7	K8	K9	K10	K11	K12	K13	K14	K15
L6	L7	L8	L9	L10	L11	L12	L13	L14	L15
M6	M7	M8	M9	M10	M11	M12	M13	M14	M15
N6	N7	N8	N9	N10	N11	N12	N13	N14	N15

Grid Map

X denotes GO's on 1st grid; O denotes GO's on 2nd

Fiber Counts:

Grid Storage # 1346 C9 Acceptable Prep X (>50% coverage, >50% intact, no folds, <5% opaque, 20 good GOs

Location		Str. Type				Size		Morphology			Diffraction Data							EDXA Data							Ident.'n	
GO #	STR #	FIBER	BUNDLE	MATRIX	CLUSTER	Length	Width	TUBULAR	BLOCKY	Negative #	5.2 A Row Spacing	Estimated In-Row Spacing	CHRY	AMPH	NONASB	NO PATT	Negative #	Na	Mg	Si	Ca	Fe	Other	File #	ASBTYPE	NONASB
N6	NSD																									
K8																										
L10																										
K12																										
J14																										
L15																										
H14	↓																									

Grid Storage # 1346 D2 Acceptable Prep X (>50% coverage, >50% intact, no folds, <5% opaque, 20 good GOs

E6	NSD																									
G7																										
L8																										
K9																										
K11																										
J12																										
H14	↓																									

Grid Storage # 1346 D4 Acceptable Prep X (>50% coverage, >50% intact, no folds, <5% opaque, 20 good GOs

E15	NSD																									
G14																										
L13																										
K13																										
M12																										
L9	↓																									

Abbreviations: NSD=No structures Detected; CH=chrysotile; GR=grunnerite; AN=anthophyllite; TR=tremolite; AP=amphibole; GO=grid opening; NA=non-asbestos

Notes:

Totals:	CH > 10	0	AP > 10	0	GOs Counted	20	***Results:***	Str/mm2	< 5	MFL	< 1

Analyst: Uwe Steimle ***Date:*** 8-1-14

Legend Technical Services of Arizona, Inc.

PO Number:4072274
Sampled By: Chao AuChiu
Compliance?: Yes No

SUBCONTRACT ORDER
4072274

SENDING LABORATORY:

Legend Technical Services of Arizona, Inc.
17631 North 25th Avenue
Phoenix, AZ 85023
Phone: 602-324-6100
Fax: 602-324-6101
Project Manager: Barbara Frank

RECEIVING LABORATORY:

Fiberquant Analytical Services
5025 S. 33rd Street
Phoenix, AZ 85040
Phone :(602) 276-6139
Fax: (602) 276-4558

Analysis	Due	Expires	Sample Type (circle one)	Sample Comments
Sample ID: 4072274-01	**Drinking W.**	**Sampled:07/24/14 13:15**	**Grab Composite N/A**	
Asbestos	08/05/14 09:00	07/26/14 13:15		
Containers Supplied: 03_1000mL Plastic Cool to 4° C (M)				

20140736 4

Heather Ward X HWard 7/25/14 1240 C.Crawford X Camp Crawford 7-25-14 1240
Released By (Print & Sign) Date Time Received By (Print & Sign) Date Time

C.Crawford X Camp Crawford 7-25-14 1400 7.25.14 @ 1400
Released By (Print & Sign) Date Time Received By (Print & Sign) Date Time

Review of Analysis Request (Initials)

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. · CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

Legend Technical Services of Arizona
17631 N. 25th Avenue
PHOENIX, AZ 85023

Sampling Date: July 25, 2014
Sample Received: July 25, 2014
Analysis Completed: August 08, 2014

Sample ID	Gross Alpha Activity Method 600/00-02 (pCi/L)	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
4072274-01	1.9 ± 0.9	< 0.5	< 0.7	< 0.7

Date of Analysis	7/28/2014	8/1/2014	8/1/2014	8/1/2014

Robert L. Metzger, Ph.D., C.H.P.

Laboratory License Number: AZ0462

Arizona Department of Environmental Quality

Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report

Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only

PWS ID#: AZ04 _____ PWS Name: _____

July 24, 2014 (Sample Date) 13:15 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring — Date Q1 collected: _____

☐ Quarterly — Date Q2 collected: _____

☐ Composite of four quarterly samples — Date Q3 collected: _____

Date Q4 collected: _____

*****RADIOCHEMICAL ANALYSIS*****

>>>To be filled out by laboratory personnel<<<

*****Combined Uranium must be reported in micrograms per liter*****

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result		Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000				
600/00-02		3 pCi/L	Gross Alpha	4002	7/28/2014	1.9 ± 0.9		
7500 - Rn			Radon	4004				
00-07	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L	
			Uranium 234	4007				
			Uranium 235	4008				
			Uranium 238	4009				
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	8/1/2014	< 0.7		
GammaRay HPGE		1 pCi/L	Radium 226	4020	8/1/2014	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	8/1/2014	< 0.7		

*****LABORATORY INFORMATION*****

>>>To be filled out by laboratory personnel<<<

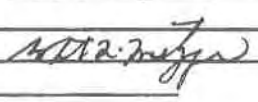
Specimen Number: RSE49758

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: 4072274-01

Authorized Signature: 

Date Public Water System Notified: _____

DWAR 6: 11/2007

Legend Technical Services of Arizona, Inc.

PO Number: 4072274
Sampled By: Chao AuChiu
Compliance?: Yes No

SUBCONTRACT ORDER
4072274

SENDING LABORATORY:

Legend Technical Services of Arizona, Inc.
17631 North 25th Avenue
Phoenix, AZ 85023
Phone: 602-324-6100
Fax: 602-324-6101
Project Manager: Barbara Frank

RECEIVING LABORATORY:

Radiation Safety Engineering
3245 N. Washington
Chandler, AZ 85225
Phone :(480) 897-9459
Fax: (480) 892-5446

Analysis	Due	Expires	Sample Type (circle one)	Sample Comments
Sample ID: 4072274-01	**Drinking W**	**Sampled: 07/24/14 13:15**	**Grab Composite N/A**	
Radium 228	08/05/14 09:00	01/20/15 13:15		
Radium 226	08/05/14 09:00	01/20/15 13:15		49758
Gross Alpha	08/05/14 09:00	08/03/14 13:15		

Containers Supplied:
06_1000mL Plastic pH <2 w/ HNO3 (E)
06_1000mL Plastic pH <2 w/ HNO3 (F)
06_1000mL Plastic pH <2 w/ HNO3 (G)
06_1000mL Plastic pH <2 w/ HNO3 (H)

Released By (Print & Sign)	Date	Time	Received By (Print & Sign)	Date	Time
Heather Ward X Heward	7/25/14	1240	C. Crawford X Craig Crawford	7-25-14	1240
C. Crawford X Craig Crawford	7-25-14	1502	Michelle Hawk	7/25-14	1502